Customer Engagement and Consumer Well-Being in Online Brand Communities

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To my roots…

Mummy & Daddy

&

My wings…

Ishani & Sia

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"There's no possible way; I could ever repay.
How I wish, there were more I could do, but I thank you."

– Jim Thistle

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Abstract

Customer engagement (CE) has been widely studied, but is often approached as something observable, with less attention to its underlying processes. At the same time, interest has grown in how participation relates to consumer well-being (CWB), especially within socially intensive digital contexts. These interactions increasingly take place in online brand communities (OBCs), where customers engage with brands and with each other on an ongoing basis. However, less is known about how psychological experiences develop through participation and how they relate to both engagement and well-being.

To explore this, the study examines how engagement and well-being are experienced and how they develop through psychological processes within OBC participation. It examines how individuals make sense of their participation and how brand- and community-related cues shape these experiences.

A sequential exploratory mixed-method design was used. The first phase involved qualitative interviews (26 first + 12 second wave), analysed using Straussian Grounded Theory. The findings show that engagement and well-being develop through two broad mechanisms. Some experiences lead to connection and alignment with the brand, while others introduce pressure or fatigue. These were

interpreted as identity (self-brand connection) and strain (emotional exhaustion leading to negative brand experience) pathways.

The second phase built on these insights into a quantitative model, tested using survey data (n=278) and Structural Equation Modelling. The results indicate that these psychological processes shape both engagement and well-being. The identity-based pathway shows a consistent positive relationship with engagement and well-being, while the strain-based pathway influences engagement more selectively, particularly affective and behavioural engagement.

In summary, the study shows engagement and well-being develop through how individuals experience and interpret their participation. By bringing together qualitative insights with quantitative testing, it offers a more grounded understanding of both within OBCs.

Keywords: Customer Engagement, Consumer Well-being, Self-brand Connection, Emotional Exhaustion, Negative Brand Experience, Online Brand Communities

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Table of Contents

Contents

Abstract **4**

List of Abbreviations **14**

List of Tables **15**

List of Figures **17**

Chapter 1: Introduction **18**

1.1. Introduction **18**

1.2. Online Brand Communities as a Contemporary Marketing Context **20**

1.3. Customer Engagement in Online Brand Communities **23**

1.4. Consumer Well-Being in Digital and Community-Based Contexts **25**

1.5. Psychological Experiences in Online Brand Communities **27**

1.6. Research Gaps and Justification **30**

1.7. Research Aim, Objectives, and Questions **43**

1.8. Research Context **45**

1.8.1. The Rise and Scope of Online Brand Communities 46

1.8.2. Online Brand Communities as Interactive Service Ecosystems 47

1.8.3. Psychological and Relational Dynamics in OBC Participation 48

1.8.4. Empirical Scope of the Present Study 50

1.8.5. Summary of Research Context 50

1.9. Theoretical Foundation **51**

1.10. Philosophical Positioning and Methodological Approach **53**

1.11. Prospective Contributions of the Study **58**

1.11.1. Prospective Theoretical Contributions 59

1.11.2. Prospective Methodological Contributions 63

1.11.3. Prospective Practical Contributions 65

1.12. Structure of the Thesis **66**

Chapter 2: Literature Review **69**

2.1. Introduction **69**

2.2. Literature Search Strategy **72**

2.3. Overview of the Field: Findings from the Review **75**

2.3.1. Descriptive Overview 75

2.3.2. Thematic Synthesis: Customer Engagement in Online Brand Communities Contexts 76
2.3.3. Well-Being within OBC Contexts 79
2.4. Context of the Study: Online Brand Communities 80
2.4.1. Definition, Structure, and Role of Online Brand Communities 80
2.4.2. Customer Behaviour within Online Brand Communities 84
2.4.3. Empirical Studies on Online Brand Communities 85
2.4.4. Key Research Gaps in Online Brand Community Literature 91
2.5 Customer Engagement 95
2.5.1. Introduction 95
2.5.2 Evolution of Customer Engagement 96
2.5.3. Importance of Customer Engagement 97
2.5.4. Conceptualization of Customer Engagement 102
2.5.5. What Customer Engagement is not? 108
2.5.6. Theoretical Perspectives Underpinning Customer Engagement 110
2.5.7. Online Customer Engagement 113
2.5.8. Empirical Studies on Customer Engagement 116
2.5.9. Key Research Gaps in Customer Engagement Literature 121
2.6. Consumer Well-Being 125
2.6.1. Conceptual Foundations of Consumer Well-Being 125
2.6.2. Consumer Well-Being in Brand and Consumption Contexts 130
2.6.3. Consumer Well-Being in Online Brand Communities 131
2.6.4. Empirical Studies on Consumer Well-Being 132
2.6.5. Scope of Consumer Well-Being and Participation Differences 136
2.6.6. Research Gaps in Consumer Well-Being Literature 138
2.7. Integrated Research Gaps 179
2.7.1. Addressed Research Gap 181
2.7.2. Research Questions 183
2.8. Chapter Summary 184
Chapter 3: Mixed Methods Methodology 185
3.1. Chapter Outline 185
3.2. Research Paradigm and Philosophical Assumptions 187
3.2.1. Ontology: Critical Realist View of Reality 188

3.2.2. Epistemology: Epistemological Relativism and Methodological Pluralism 193
3.2.3. Axiology: Reflexivity and Value-Laden Inquiry.....196
3.2.4. Metatheoretical Positioning of Critical Realism.....198
3.3. Logic of Enquiry 199
3.4. Role of Researcher 200
3.5. Research Approach: Mixed Method Research.....201
3.6. Research Design: Sequential Exploratory Design 204
3.7. Research Method 208
3.8. Integration 212
3.9. Sampling Design.....215
3.10. Time Horizon.....220
3.11. Data Collection 221
3.12. Data Analysis 222
3.13. Ethical Considerations 227
3.14. Methodological Limitations 229
3.15. Summary.....233
Chapter 4: Qualitative Study.....235
4.1. Introduction.....235
4.2. Research Design and Participants.....236
4.2.1. Sampling Strategy.....236
4.2.2. Sample Characteristics.....237
4.3. Data Collection and Data Analysis 238
4.3.1. Interview Approach.....238
4.3.2. Interview Guide and Data Collection Approach.....239
4.3.3. Interview Procedure.....241
4.3.4. Data Analysis 241
4.3.5. Memo Writing and Reflexivity 260
4.3.6. Ensuring Trustworthiness.....261
4.3.7. Ethical Considerations 262
4.4. Findings.....262
4.4.1. Customer Engagement.....263
4.4.2. Consumer Well-Being.....269
4.4.3. Antecedents of Engagement and Well-Being.....272

4.4.4. Mediating Mechanisms....277
4.5. Integrative Theoretical Model....283
4.5.1. Overview of the Model....285
4.6. Summary....291
4.6.1. Conceptual Constructs Emerging from the Straussian Grounded Analysis....291
Chapter 5: Theoretical Underpinning and Conceptual Framework....295
5.1. Introduction....295
5.2. The Overarching Framework: S-O-R Paradigm....296
5.3. Theoretical Underpinning of Each Relationship Cycle....299
5.3.1. Emotional Exhaustion and Negative Brand Experience....301
5.3.2. From Negative Brand Experience to Engagement and Well-Being....304
5.3.3. Self-Brand Connection and Customer Responses....305
5.3.4. From Self-Brand Connection to Engagement and Well-Being....307
5.4. Conceptual Framework....308
5.4.1. Global Mediator-Outcome Hypotheses....310
5.4.2. Development of Antecedents-Mediator-Outcome Relationships....323
5.5. Chapter Summary....347
Chapter 6: Quantitative Study....349
6.1. Introduction....349
6.1.1. Quantitative Research Objectives....349
6.1.2. Quantitative Research Design....350
6.1.3. Context of the study....351
6.1.4. Sampling Procedure:....352
6.1.5. Data Collection....354
6.2. Quantitative Data Analysis....361
6.2.1. Data Preparation and Screening....361
6.2.2. Reliability and Validity Testing (EFA and CFA)....362
6.2.3. Measurement Model Testing....364
6.2.4. Structural Model Testing....366
6.3. Descriptive Analysis and Measurement Validation....368
6.3.1 Data Preparation and Examination....369
6.3.2. Sample Characteristics....370
6.3.3. Assumption Testing....372

6.3.4. Analysis of Multi-Item Constructs....374
6.4. Structural Equation Modelling....424
6.4.1. Overview of Path Analysis....424
6.4.2. Structural Model Specification....425
6.4.3. Model Comparison: Fully vs. Partially Mediated Models....426
6.4.4 Hypotheses Testing....430
6.4.5. Supplementary PLS-SEM Robustness Check....443
6.4.6. Multigroup Analysis....447
6.5. Conclusion....449
Chapter 7: Discussion....453
7.1. Introduction: Revisiting the Purpose of the Study....453
7.2. Research Questions and Answers....454
7.2.1. RQ1. How is Customer Engagement experienced as a psychological process across cognitive, affective, and behavioural dimensions within Online Brand Communities?....454
7.2.2. RQ2. How is Consumer Well-Being experienced from a psychological perspective within Online Brand Communities?....458
7.2.3. RQ3. How and why do brand-related and community-related cues influence Customer Engagement and Consumer Well-Being within Online Brand Communities?....461
7.2.4. Discussion....469
7.3. Theoretical Contributions....476
7.3.1. Understanding Customer Engagement as a Process....476
7.3.2. Integrating Customer Engagement and Consumer Well-Being Through Psychological Processes....477
7.3.3. Extending S-O-R and COR through Identity and Strain Pathways....478
7.3.4. Providing a Context-Specific Understanding of OBC Experiences....481
7.4. Methodological Contributions....482
7.4.1. Using a Sequential Approach to Study Engagement as a Process....482
7.4.2. Using Straussian Grounded Theory and SEM to Capture and Test Psychological Processes....483
7.5. Practical / Managerial Implications....484
7.5.1. Supporting Identity and Connection....484
7.5.2. Creating a Psychologically Safe Environment....485
7.5.3. Managing Information Load and Avoiding Fatigue....486

7.5.4. Reducing Negative Experiences and Value Misalignment 487
7.5.5. Balancing Engagement and Well-Being 488
7.6. Chapter Summary 488
Chapter 8: Conclusion 490
8.1. Overview of the Study 490
8.2. Summary of the Research Design and Approach 492
8.3. Conclusions 493
8.4. Final Reflection 495
8.5. Limitations 496
8.5.1. Contextual and Sample-Related Limitations 496
8.5.2. Methodological and Measurement Limitations 499
8.5.3. Theoretical Boundaries of the Process Model 500
8.5.4. Mixed-Methods Integration Considerations 501
8.5.5. Summary of Limitations 502
8.6. Future Research 502
8.7. Chapter Summary 505
References 507
Appendices 543
Appendix 1. SLR Searches conducted in Scopus and Web of Science 543
Appendix 2 (A). Ethical approval – Qualitative Study 545
Appendix 2 (B). Ethical approval – Quantitative Study 546
Appendix 3 Participant information sheet 547
Appendix 4. Consent Form 549
Appendix 5. Interview Guide 550
Appendix 6. Example of a Memo 552
Appendix 7. Open Coding Exhibits 553
Appendix 8. NVivo Coding Output for Customer Engagement 554
Appendix 9. Survey Questionnaire 555
Appendix 10. Variance Inflation Factor 564
Appendix 11. Regression Weights (Unstandardized Estimates) 565
Appendix 12. Standardized Regression Weights 566
Appendix 13. User-defined Estimands 567
Appendix 14. Model Fit Summary Output (AMOS) 569

Appendix 15. Supplementary PLS-SEM Robustness Check 570
Appendix 16. Supplementary PLS-SEM Robustness Check 571
Appendix 17. Supplementary PLS-SEM Construct Reliability and Validity.....572
Appendix 18. Supplementary PLS-SEM Discriminant Validity.....573
Appendix 19. Specific Indirect Effects from the PLS-SEM Robustness Check.....574
Appendix 20. Age-Based PLS-MGA Results + Age MICOM 575
Appendix 21. Gender-Based PLS-MGA Results + Gender MICOM.....576
Appendix 22. Education-Based PLS-MGA Results +Education MICOM 577

List of Abbreviations

AVE	Average variance extracted
CE	Customer Engagement
CFA	Confirmatory Factor Analysis
CFI	Comparative fit index
CMB	Common Method Bias
COR	Conservation of Resources
CR	Composite/construct reliability
CWB	Consumer Well-being
EFA	Exploratory Factor Analysis
e.g.	for example,
GOF	Goodness of fit
HTMT	Heterotrait-Monotrait Ratio
IPA	Interpretative Phenomenological Analysis
MMD	Mixed-Method Design
MMR	Mixed-Method Research
MTurk	Amazon Mechanical Turk
OBC	Online Brand Community
PLS-SEM	Partial Least Squares Structural Equation Modeling
RMSEA	Root mean square error of approximation
RQ	Research Question
SD	Standard deviation
SEM	Structural Equation Modelling
SGT	Straussian Grounded Theory
S-O-R	Stimulus-Organism-Response
TLI	Tucker-Lewis index
UK	United Kingdom
USA	United States of America
VIF	Variance Inflation Facto

List of Tables

Table 1: Research Questions 45
Table 2: Key Contextual Statistics and Implications for the Present Study 46
Table 3: Key Conceptualizations and Definitions of Customer Engagement 105
Table 4:Summary of Key Empirical Studies on Online Brand Communities, Customer Engagement, and Consumer Well-Being 142
Table 5: Addressed Research Gaps and Study Contributions 182
Table 6: Research Questions and Alignment with Identified Research Gaps 183
Table 7: Philosophical and Methodological Framework of the Study 186
Table 8: Comparison of Ontological Assumptions Across Research Paradigms 189
Table 9: Matrix of Scientific Philosophies and Approaches within Academic Research 192
Table 10: Comparison of Epistemological Assumptions Across Research Paradigms 194
Table 11: Comparison of Axiological Assumptions Across Research Paradigms 197
Table 12: Comparison of Research Approach 203
Table 13: Typology of Mixed-Method Research 205
Table 14:Comparison of Qualitative Research Methods 209
Table 15: Comparison of Quantitative Research Methods 211
Table 16: Comparison of Sampling Strategy 216
Table 17: Types of Non- Probability Sampling 217
Table 18: Summary of Qualitative Tools, Alternative Options and Justifications 223
Table 19: Summary of Quantitative Tools, Alternative Options and Justifications 225
Table 20: Ethical considerations and measures taken 227
Table 21: Participant demographics, pseudonyms 237
Table 22: Axial Coding Structure for Psychological Safety in OBCs 245
Table 23: Axial Coding Structure for Identity Reinforcement and Engagement Development 246
Table 24: Axial Coding Structure for Engagement Intensification Processes 248
Table 25: Axial Coding Structure for Strain-Inducing Conditions and Emotional Responses 249
Table 26: Conceptual Constructs Emerging from the Straussian Grounded Analysis 292
Table 27: Summary of the constructs included in the quantitative survey, the number of items used for each, and their corresponding measurement sources 355
Table 28:Demographic characteristics of the respondents (n=278) 371
Table 29: EFA and reliability results for Information Overload 379
Table 30: EFA and reliability results for Value Incongruity 380
Table 31: EFA and reliability results for Perceived Brand Wastefulness 381
Table 32: EFA and reliability results for Privacy Concerns 382
Table 33: EFA and reliability results for Psychological Safety 383
Table 34: EFA and reliability results for Customer Engagement-Cognitive 384
Table 35: EFA and reliability results for Customer Engagement-Affective 385

Table 36: EFA and reliability results for Customer Engagement-Behavioural.....386
Table 37: EFA and reliability results for Consumer Well-Being 387
Table 38: EFA and reliability results for Emotional Exhaustion.....388
Table 39: EFA and reliability results for Negative Brand Experience 389
Table 40: EFA and reliability results for Self-Brand Connection.....390
Table 41: EFA Group 1 392
Table 42: EFA Group 2.....394
Table 43: EFA Group 3.....396
Table 44:Heterotrait-Monotrait Ratio (HTMT) Matrix for Discriminant Validity.....403
Table 45: Comparison of Initial and Refined CFA Model Fit Indices (Group 1) 407
Table 46: Comparison of Initial and Refined CFA Model Fit Indices (Group 2) 414
Table 47: Comparison of Structural Model Fit Indices (With and Without Controls) .428
Table 48: Results of Mediator-Outcome Relationships (H1–H3) 431
Table 49: Direct Effects of Antecedents on Mediators.....433
Table 50: Unstandardised Specific Indirect Effects of Antecedents on Customer Engagement and Consumer Well-Being 438
Table 51: PLS-SEM Robustness Check of the Structural Relationships.....445
Table 52:Summary of Hypothesis Testing Results 450
Table 53: Experiencing Customer Engagement as a Psychological Process in OBCs ...457
Table 54:Experiencing Consumer Well-Being as a Psychological Process in OBCs.....461
Table 55:Interpreting the Influence of OBC Cues on CE and CWB through Identity and Strain Mechanisms.....468

List of Figures

Figure 1: Thesis Layout..... 67
Figure 2: A vision of three-dimensional pluralism..... 195
Figure 3: Four combinations of Fit with Qualitative & Quantitative findings 214
Figure 4: Four interconnected categories that emerged through axial-coding 244
Figure 5: Conceptual framework. 309
Figure 6: Confirmatory Factor Analysis (Group 1)..... 408
Figure 7: Confirmatory Factor Analysis (Group 2)..... 414
Figure 8: Histogram plot for Information Overload 416
Figure 9: Histogram plot for Value Incongruity..... 416
Figure 10: Histogram plot for Perceived Brand Wastefulness..... 417
Figure 11: Histogram plot for Privacy Concerns 418
Figure 12: Histogram plot for Psychological Safety 418
Figure 13: Histogram plot for Customer Engagement-Cognitive 419
Figure 14: Histogram plot for Customer Engagement-Affective 420
Figure 15: Histogram plot for Customer Engagement-Behavioural 420
Figure 16: Histogram plot for Consumer Well-being 421
Figure 17: Histogram plot for Emotional Exhaustion..... 422
Figure 18: Histogram plot for Negative Brand Experience..... 422
Figure 19: Histogram plot for Self-Brand Connection..... 423
Figure 20: Structural model with control variables..... 429
Figure 21: Simple mediation process. Adapted from Preacher and Hayes (2008)..... 435
Figure 22: Serial mediation process. Adapted from Preacher and Hayes (2008) 436
Figure 23: Integrated Mixed-Methods Model of Identity and Strain Pathways in OBCs.
..... 471

Chapter 1: Introduction

1.1. Introduction

Customer engagement (CE) within online brand communities (OBCs) has become strategically important because these communities allow firms to build ongoing emotional and cognitive connections with customers (Brodie et al., 2013; Dessart, 2017; Kumar, 2021).

The importance of CE in OBCs is also reflected in managerial perspectives on CE. Recent work suggests that instead of relying solely on traditional marketing approaches, some of the fastest-growing brands actively participate in digital communities to build engagement and loyalty (McKinsey & Company, 2023). In addition, organisations that prioritise understanding and responding to customer needs tend to outperform others in terms of growth, retention and profitability (Forrester, 2023). Within this context, OBCs are increasingly viewed as valuable tools that help firms better understand, retain, serve and manage their customers.

This growing emphasis is also evident in the level of investment firms allocate to community-based engagement. Industry evidence suggests that community is increasingly viewed as critical to business, with around 85% of organisations reporting a positive impact of community initiatives on their objectives, more than two-thirds planning to increase investment in community-building activities, and most allocating dedicated personnel to manage these initiatives (CMX,

2021). Taken together, this indicates that OBCs represent a growing area of strategic investment, reinforcing the importance of understanding how CE develops within these settings. This growing investment is also reflected in how some brands approach communities. For example, firms such as Nike, LEGO, Samsung and Sephora have developed their own spaces where customers can interact and stay involved over time. Despite this, as Kumar (2021, p. 970) notes, *"engagement in OBCs received focused attention in recognition of the fact that customers can easily switch communities by merely touching a few buttons in the digital age."*

This highlights a key challenge for marketers. While OBCs offer rich spaces for interaction and connection, the same digital features that enable engagement also make leaving fast and effortless. As a result, engagement in OBCs cannot be assumed to persist on its own. It therefore needs careful attention, as poorly managed engagement can weaken or even lead to negative responses (Hollebeek & Macky, 2019; Sim et al., 2022; Kumar & Kaushik, 2022; Dessart, Veloutsou & Morgan-Thomas, 2023).

Real-world cases also show why engagement cannot be treated as a fixed achievement. Dell's IdeaStorm initially attracted considerable customer participation, but company involvement later declined and customer ideas received limited responses. Some members left, while others became dissatisfied

with the lack of continued interaction. Dell subsequently redesigned the platform to increase staff participation and dialogue with community members (Di Gangi, Wasko and Hooker, 2010; Israel, 2012). More recently, Bodybuilding.com closed its long-running online forum in 2024 (Heffernan, 2025). The company's forum page now states that the forums are returning and that users' feedback influenced this decision (Bodybuilding.com, n.d.). The two cases suggest that earlier participation does not guarantee continued engagement. Ongoing listening and response are needed to maintain relationships with community members.

1.2. Online Brand Communities as a Contemporary Marketing Context

OBCs have become a prominent feature of the contemporary marketing landscape. Enabled by digital platforms, these communities provide spaces where customers interact not only with brands but also with other customers through ongoing discussion and shared experiences (Muniz & O'Guinn, 2001; Brodie et al., 2013). Unlike traditional brand touchpoints, OBCs support continuous participation and peer-to-peer exchange, allowing brands and customers to remain connected beyond individual transactions (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017).

The growing importance of OBCs is closely linked to wider digital transformation in markets. Advances in social media and platform technologies, have made

participation in brand communities easier and more persistent (Dessart, 2017; Mousavi & Roper, 2023). As a result, OBCs increasingly function as digitally mediated ecosystems in which customers share knowledge and solve problems through interaction and participation (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017). Within these spaces, customers are not passive audiences but active participants who influence community dynamics and brand meaning (McAlexander, Schouten & Koenig, 2002; Dessart, 2017).

This shift has important implications for how relationships between customers and brand are understood. Firms now recognise that value is created not only through purchase and loyalty, but also through non-transactional forms of participation such as advocacy, feedback, community involvement and content contribution (van Doorn et al., 2010; Pansari & Kumar, 2017). Consequently, OBCs have become strategically important settings for cultivating CE, as engagement within these communities can be continuously reinforced or weakened, through everyday interaction. At the same time, the ease with which customers can reduce participation or leave digital communities highlights the fragile and evolving nature of engagement in such contexts (Kumar, 2021; Sim et al., 2022).

Beyond their relevance for engagement, OBCs also represent socially intensive environments with potential implications for CWB. Participation in OBCs often involves sustained interaction and emotional investment, which can influence how consumers feel when taking part in these spaces. Recent work in transformative service and consumer research has emphasised that participation in interactive and technology-enabled contexts may support connection and empowerment, while also introducing psychological demands linked to expectations and visibility (Anderson & Ostrom, 2015; Ostrom et al., 2015; Mende, & van Doorn, 2015). This suggests that OBCs are an important context not only for understanding CE, but also for examining CWB from a psychological perspective.

Taken together, these features position OBCs as a distinctive and theoretically meaningful context for marketing research. Their interactive and participatory nature creates conditions in which CE and CWB both become relevant areas of inquiry, instead of being examined in isolation. Understanding how consumers experience participation within OBCs therefore requires attention to both engagement processes and the psychological implications of involvement in these digitally mediated community environments.

1.3. Customer Engagement in Online Brand Communities

CE has become a central concept in marketing and service research, reflecting a move away from viewing customers as passive recipients toward recognising their active involvement with brands (Brodie et al., 2011; Hollebeek, Glynn, & Brodie, 2014). Engagement captures how customers think about, feel toward and act in relation to a brand through ongoing interaction instead of isolated exchanges. As such, CE is commonly understood as a multidimensional construct comprising cognitive, affective and behavioural dimensions (Brodie et al., 2011; Dessart, 2017).

The cognitive dimension of engagement refers to the level of attention and mental involvement customers direct toward a brand. The affective dimension reflects emotional responses, such as enthusiasm or attachment, that arise through brand-related interactions. The behavioural dimension captures observable actions, including participation, contribution and interactions beyond purchase (Vivek, Beatty, & Morgan, 2012; Hollebeek, Srivastava, & Chen, 2019). Together, these dimensions show that engagement develops through interaction instead of existing as a single outcome.

OBCs provide a particularly relevant context for examining CE because they support continuous interaction between customers and brands, as well as among

customers themselves (Muniz & O'Guinn, 2001; Brodie et al., 2013). Within OBCs, engagement is expressed not only through direct brand interaction but also through participation in discussions, sharing experiences, contributing to community activity and supporting other members (Dessart, 2017). This means that engagement in OBCs often unfolds gradually and is shaped through repeated exposure to brand-related and community-related cues.

Importantly, engagement in OBCs is not fixed or guaranteed. The ease of participation in digital environments allows customers to increase, reduce or withdraw their involvement with relatively little effort (Kumar, 2021). As a result, engagement within OBCs may strengthen through meaningful interactions or weaken when participation becomes less rewarding or less relevant. This suggests that engagement within these settings may shift in response to ongoing participation experiences.

Taken together, existing research establishes CE as a multidimensional and interaction-based construct that is particularly salient within OBCs (Brodie et al., 2011; Hollebeek, Glynn, & Brodie, 2014; Brodie et al., 2013; Dessart, 2017). But, understanding how engagement develops within these settings requires closer attention to the psychological experiences through which customers interpret and

respond to ongoing interactions. This provides a foundation for examining engagement processes more closely within OBCs.

1.4. Consumer Well-Being in Digital and Community-Based Contexts

CWB has become an increasingly important concern within contemporary marketing and service research. Moving beyond narrow economic outcomes, scholars have argued that marketplace activities shape how consumers feel and function in their daily lives (Anderson et al., 2013; Anderson & Ostrom, 2015). From this perspective, well-being is not treated as a short-lived emotion or momentary satisfaction, but as a broader psychological state influenced by what consumers experience within market systems and service environments.

Within transformative service and consumer research, particular attention has been given to contexts characterised by sustained interaction and social involvement. Such contexts are thought to be especially relevant for understanding well-being because they require ongoing participation and personal investment from consumers (Ostrom et al., 2015; Mende & van Doorn, 2015). Instead of viewing consumers as passive recipients of value, this stream of research highlights how participation and social interaction can influence consumers' psychological experiences in both supportive and demanding ways (Ostrom et al., 2015; Mende & van Doorn, 2015; Mende, & Scott, 2021). Digital

and platform-based environments have further intensified these dynamics. Technology-enabled participation often blurs the boundaries between consumption and social interaction, making consumer involvement more visible and persistent (Mende & van Doorn, 2015; Chandy et al., 2021). While such environments may offer opportunities for connection and support, they can also introduce pressures linked to social comparison and ongoing involvement (Mende, & Scott, 2021; Weaver et al., 2023). This has led recent research to emphasise the need to examine well-being outcomes within digitally mediated participation contexts more closely (Weaver et al., 2023).

OBCs represent a clear example of such contexts. As socially interactive and digitally mediated spaces, these communities encourage repeated participation and emotional involvement through ongoing interaction with brands and other members (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017). These features make OBCs a meaningful setting for examining CWB from a psychological perspective, as experiences within these spaces may shape how consumers perceive themselves and relate to others (Anderson & Ostrom, 2015; Mende, & van Doorn, 2015). Despite this relevance, CWB has not been a primary focus within research on OBCs, particularly in relation to the psychological experiences associated with participation (Ostrom et al., 2015; Weaver et al., 2023).

Positioning CWB within the context of OBCs therefore, provides an opportunity to extend existing marketing and service research by examining how socially intensive digital participation shapes consumers' psychological experiences. This perspective recognises well-being as a justifiable outcome of interest alongside CE.

1.5. Psychological Experiences in Online Brand Communities

Participation in OBCs involves more than observable behaviours or visible interactions. Alongside engagement activity, consumers also experience internal psychological responses as they interpret and respond to ongoing participation within these communities (Brodie et al., 2011; Dessart, 2017). Marketing and service scholars have increasingly recognised that such psychological experiences form an important part of how consumers relate to brands and communities (Brodie et al., 2011; Dessart, 2017).

In socially interactive digital settings, these experiences often arise through ongoing interaction and repeated exposure to community activity (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017). Research suggests that sustained participation in interactive market and service settings can influence consumers' self-perceptions and social experiences (Anderson & Ostrom, 2015; Muniz & O'Guinn, 2001). These experiences are not uniform and are not

inherently positive or negative; instead, they reflect how individuals make sense of participation within a given context.

Within OBCs, psychological experiences may be shaped by both brand-related and community-related conditions. Brand communications and shared meanings can influence how consumers connect with a brand at a personal level (Escalas & Bettman, 2003; Dessart, 2017). At the same time, interaction with other members and exposure to community norms may influence how comfortable or strained individuals feel within the community (Brodie et al., 2013; Mende, & van Doorn, 2015). These influences coexist within the same participation space, shaping how consumers experience their interactions over time.

Importantly, prior research indicates that participation in socially intensive service contexts can involve both supportive and demanding psychological experiences (Ostrom et al., 2015; Mende, & van Doorn, 2015). While interaction and belonging may offer connection or affirmation, sustained involvement may also introduce pressures related to expectations or continued contribution (Ostrom et al., 2015; Mende, & van Doorn, 2015). These psychological experiences do not necessarily result from engagement itself, but from how consumers experience and interpret the conditions surrounding participation (Brodie et al., 2011; Dessart, 2017).

Despite growing recognition of the importance of such internal experiences, research on OBCs has often emphasised observable behaviours and engagement outcomes, with comparatively less attention to the psychological processes that accompany participation (Brodie et al., 2013; Dessart, 2017). As a result, there remains scope to examine how consumers' internal experiences within OBCs develop and vary in response to ongoing interaction. Attending to these psychological experiences provides a foundation for understanding how participation is interpreted and experienced by consumers within community-based brand settings.

Within OBCs, CE has clear relevance for firms, as it reflects customers' willingness to invest cognitive, emotional and behavioural resources in brand-related interaction (Brodie et al., 2013; Kumar & Kaushik, 2022). At the same time, participation in these communities also carries implications for consumers themselves, as repeated interaction and involvement form part of consumers' broader marketplace experiences (Anderson et al., 2013; Ostrom et al., 2015).

Focusing only on engagement outcomes may overlook how the same participation conditions also shape consumers' psychological experiences. From a theoretical perspective, this suggests the value of considering both CE and CWB as related, but distinct, outcomes of participation within OBCs. A psychological

perspective offers a helpful way to consider how consumers experience and interpret brand- and community-related conditions, without presuming a fixed or uniform link between engagement and well-being.

1.6. Research Gaps and Justification

CE has become a central concept in marketing and service research because it offers a way to understand customer-brand relationships beyond one-off transactions. Existing research has established engagement as a multidimensional construct that reflects consumers' cognitive, affective and behavioural investment in their interactions with brands and communities (Brodie et al., 2011; Vivek, Beatty, & Morgan, 2012; Dessart, 2017). This body of work has helped clarify what engagement involves and why it is important for firms in interactive and digital environments.

At the same time, growing attention within marketing research has been directed toward CWB, particularly from psychological perspectives that emphasise how marketplace participation shapes consumers' experiences (Anderson et al., 2013; Anderson & Ostrom, 2015). Instead of focusing solely on performance outcomes, this body of work highlights that participation in contemporary consumption and service contexts can influence how consumers experience and interpret ongoing involvement (Anderson et al., 2013; Ostrom et al., 2015).

OBCs represent a setting in which these concerns intersect. As digitally mediated environments characterised by sustained interaction, OBCs bring together brand-related communication and community-based participation within a single participation space (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017). Engagement within these communities is therefore shaped not only by firm actions, but also by peer interaction and shared norms, making OBCs a particularly relevant context for examining engagement and well-being as outcomes of participation.

Despite substantial conceptual and empirical progress, existing research has not fully addressed how engagement and well-being are shaped within such socially intensive digital environments. Prior studies have acknowledged the complexity of engagement and participation, yet important questions remain regarding the psychological experiences through which consumers engage with brands and communities and how these experiences unfold within OBC contexts (Hollebeek & Macky, 2019; Kumar & Kaushik, 2022). In light of this, the following research gaps outline specific areas where further theoretical and empirical attention is required to advance understanding of CE and CWB within OBCs.

Research Gap 1: Limited understanding of Customer Engagement as a psychological process unfolding across cognitive, affective and behavioural dimensions.

Early research on CE has established it as a multidimensional construct encompassing cognitive, affective and behavioural elements (Brodie et al., 2011; Vivek, Beatty, & Morgan, 2012; Hollebeek & Macky, 2019). Building on this foundation, subsequent work has described engagement as a psychological state that emerges from consumers' interactive experiences with brands and other community members (Dessart, 2017; Brodie et al., 2013). Collectively, this body of research has clarified what engagement involves and how it may be expressed across different forms of interaction.

Despite these advances, several scholars have noted that CE is still not fully understood as a psychological process that unfolds gradually (Connell et al., 2019; Jaakkola & Alexander, 2014; Hollebeek, Srivastava & Chen, 2019). Instead of focusing only on engagement outcomes or observable behaviours, several authors have called for closer attention to *how* engagement develops through ongoing interaction. For example, Connell et al. (2019, p. 19) emphasise the need for "*dedicated consideration to identify the process through which firms foster customer engagement."* Similarly, Jaakkola and Alexander (2014, p. 258) urge researchers to "*elaborate further on the interplay between the drivers for CEB*

and its outcomes at the system level." These calls suggest that engagement is widely recognised as multidimensional, yet its development remains only partially understood.

In much of the existing literature, engagement continues to be operationalised as a relatively stable outcome or as a set of behavioural indicators, and not as a psychological experience that evolves through repeated interaction (Brodie et al., 2013; Hollebeek, Srivastava, & Chen, 2019; Lim, 2022). This tendency limits insight into how engagement may be initiated, strengthened, weakened, or reshaped as participation conditions change. Scholars have therefore noted that key questions remain about how engagement is sustained or eroded, particularly in contexts characterised by frequent interaction and ongoing involvement (Islam, Rahman, & Hollebeek, 2018; Marbach, Lages & Nunan, 2019).

This limitation is particularly relevant to OBCs, which are digitally mediated environments in which consumers are repeatedly exposed to brand communications alongside peer interaction and shared community norms (Muniz & O'Guinn, 2001; Algesheimer, Dholakia, & Herrmann, 2005; Brodie et al., 2013). Participation in these communities is rarely one-off, instead, it involves continued interaction and evolving relationships with both brands and fellow members. In such settings, treating engagement as a static outcome risks

overlooking how consumers' cognitive, affective and behavioural engagement experiences develop through sustained participation.

Addressing this gap is important for advancing engagement theory in two ways. First, it allows engagement to be examined as a psychological process and not simply as an end state, offering a more realistic account of how engagement unfolds within socially intensive digital environments. Second, focusing on engagement as a process within OBCs provides a stronger foundation for understanding how engagement experiences are shaped by ongoing interaction, thereby supporting more context-sensitive theorisation of engagement in contemporary marketing environments. Consequently, theoretical understanding of how engagement is initiated, sustained or eroded remains under-explored, particularly in interactive digital contexts (Islam, Rahman, & Hollebeek, 2018; Marbach, Lages & Nunan, 2019).

Research Gap 2: Limited understanding of consumer well-being from a psychological perspective within socially intensive digital participation contexts such as online brand communities.

CWB has become an important concern in marketing and service research, particularly within Transformative Service Research, which explicitly examines how consumption and service systems affect people's lives beyond economic

outcomes (Anderson et al., 2013; Anderson & Ostrom, 2015). This stream of research highlights that participation and interaction in service and consumption contexts can shape consumers' psychological functioning, not only traditional outcomes such as satisfaction or loyalty (Anderson et al., 2013; Anderson & Ostrom, 2015; Ostrom et al., 2015; Rosenbaum et al., 2011).

Over time, scholars have questioned whether traditional service outcomes fully capture what participation in service systems means for consumers. While measures such as satisfaction and loyalty remain important, they offer only a partial view of how services intersect with people's lives. Work within Transformative Service Research highlights that ongoing participation with services has consequences that extend into consumers' broader psychological and social experiences. To explain this, Anderson and Ostrom (2015, p. 243) observe:

"Our continuous connection with and usage of services and the implications they have for our lives go far beyond questions related to traditional service dependent measures such as service quality, customer satisfaction, and loyalty. Service fundamentally affects our lives and our well-being as individuals, employees, families and communities."

This observation is critical because it points to participation itself as a potential source of psychological demand, and not assuming that engagement and involvement are inherently beneficial.

Building on this idea, subsequent work in Transformative Service Research suggests that participatory environments may generate both value and strain for consumers, depending on how individuals experience and manage their involvement (Mende & van Doorn, 2015; Mende, & Scott, 2021). Recent discussions further emphasise that digitally enabled contexts characterised by ongoing interaction and collaboration can create mixed well-being outcomes, particularly when participation becomes persistent or socially demanding (Weaver et al., 2023). This perspective provides a useful lens for considering participation in OBCs, where consumers engage repeatedly with brands and peers over time.

Despite these insights, much of the well-being literature in marketing has centred on service systems, healthcare and specific transformative interventions, and not on ongoing, digitally mediated participation contexts (Anderson et al., 2013; Anderson & Ostrom, 2015; Ostrom et al., 2015; Weaver et al, 2023).This leaves limited empirical understanding of how CWB is experienced and shaped as a psychological phenomenon within OBCs, where participation is repeated and socially embedded (Muniz & O'Guinn, 2001; McAlexander, Schouten, & Koenig, 2002).

Taken together, while Transformative Service Research has clearly established the importance of studying well-being in relation to service participation, CWB

remains underexplored from a psychological perspective within OBCs. Addressing this gap is necessary to better understand how digitally mediated participation environments may simultaneously support positive experiences and introduce psychological demands that are relevant to CWB.

Research Gap 3: Limited understanding of how brand-related and community-related cues jointly shape Customer Engagement and Consumer Well-being processes within Online brand communities.

OBCs are organised around both brand presence and peer interaction. Within these spaces, customers encounter firm-generated communication alongside peer discussion and community norms created by other members (Muniz & O'Guinn, 2001; McAlexander, Schouten & Koenig, 2002; Brodie et al., 2013; Dessart, 2017). Participation therefore unfolds within an environment where official brand messaging and community interpretation operate at the same time.

Existing research has examined these influences, but often through separate lenses. Studies grounded in relationship marketing and engagement theory emphasise the role of brand initiatives and firm-customer relationships in encouraging engagement (Hollebeek, Glynn & Brodie, 2014; Pansari & Kumar, 2017; Kumar & Kaushik, 2022). Other work draws on social identity and community theory to explain how peer interaction and collective identification

shape participation (Algesheimer, Dholakia & Herrmann, 2005; Bagozzi & Dholakia, 2006; Mousavi & Roper, 2023). While each stream contributes important insights, they rarely examine how these influences in the same community setting.

However, in practice, brand-related cues and community-related cues are encountered simultaneously. Brand communication unfolds within interactive community environments where customers engage with both firm-generated and member-generated content (Brodie et al., 2013; Dessart, Veloutsou & Morgan-Thomas, 2016). This layered environment suggests that engagement within OBCs is formed through multiple overlapping influences and not through a single relational channel (Islam, Rahman & Hollebeek, 2018; Hollebeek, Srivastava & Chen, 2019).

This has implications not only for how CE develops, but also for how consumers experience participation psychologically. In socially interactive digital settings, expectations of responsiveness and contribution may influence how individuals feel within the community (Ostrom et al., 2015; Mende, & van Doorn, 2015; Weaver et al., 2023). Yet existing research provides limited empirical understanding of how the joint presence of brand and community cues shapes both CE and CWB within OBCs.

Research Gap 4: Limited understanding of how both enabling and constraining psychological experiences shape engagement and consumer well-being.

Research on CE has frequently examined psychological experiences that support participation, including trust, satisfaction and identification (Vivek, Beatty & Morgan, 2012; Hollebeek, Srivastava & Chen, 2019). This work has been important in explaining how engagement can be encouraged and sustained. At the same time, more recent studies suggest that engagement is not always experienced in uniformly positive ways (Marbach, Lages & Nunan, 2019; Santini et al., 2020). Further, Santini et al. (2020, p. 1224) explicitly called for research to

"*evaluate the role of emotions in the customer engagement framework more specifically,*"

while Sim et al. (2022, p. 1948) urged scholars to

"*analyze how factors that constitute a customer's disposition to engage blend to affect engagement processes.*"

These perspectives indicate that engagement may involve different psychological experiences, some of which support participation and others that may make it more demanding.

Empirical findings reinforce this view. Engagement processes unfold through varied psychological responses that are influenced by conditions of participation (Hollebeek, Srivastava & Chen, 2019). Sim et al., (2022) suggested that multiple psychological factors may interact to influence engagement in ways that are not always wholly positive. Additionally, Marbach, Lages & Nunan (2019) show that while interactive features can enhance engagement, high levels of participation may also lead to fatigue. Such findings suggest that engagement can draw on psychological resources in ways that influence how consumers experience participation more broadly.

These considerations are particularly relevant within OBCs, where participation unfolds through ongoing interaction within socially embedded community contexts (Brodie et al., 2013; Dessart, 2017). In such settings, psychological experiences may shape both how engagement develops and how consumers feel about their involvement in the community. Such psychological experiences may not only influence how engagement develops but may also shape how consumers experience participation more broadly within the community.

Despite emerging recognition of these dynamics, there remains limited empirical understanding of how enabling and constraining psychological experiences within OBCs relate to both CE and CWB. Such psychological experiences may

not only influence how engagement develops but may also shape how consumers experience participation more broadly within the community.

Research Gap 5: Limited understanding of Online Brand Communities as socially embedded environments in which interactive and identity-based features shape both Customer Engagement and Consumer Well-Being.

OBCs are not merely digital spaces for information exchange. Early research established them as socially embedded environments where members develop shared meanings and form connections through ongoing interaction (Muniz & O'Guinn, 2001; McAlexander, Schouten & Koenig, 2002). Later work describes engagement within OBCs as emerging through interactive exchanges between customers and brands; and among customers themselves (Brodie et al., 2013; Dessart, 2017).

In OBCs, participation is socially visible and ongoing and not simply limited to isolated brand touchpoints, reflecting the networked nature of these communities (Muniz & O'Guinn, 2001; McAlexander, Schouten & Koenig, 2002; Brodie et al., 2013; Dessart, 2017). In such spaces, members interact not only with firm communication but also with the contributions of other community members and these interactions shape how individuals participate (Brodie et al., 2013; Dessart, 2017; Algesheimer, Dholakia & Herrmann, 2005). As a result, engagement in

OBCs reflects a socially interactive environment instead of a direct one-to-one interaction between the brand and the customer (Brodie et al., 2013; Dessart, 2017).

Recent studies have encouraged closer examination of OBC contexts across sectors and brand types, recognising that engagement experiences may vary across different community contexts (Bowden & Mirzaei, 2021; Mousavi & Roper, 2023). However, less attention has been given to how the socially embedded nature of OBCs may shape members' psychological experiences of participation (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017).

Identity expression and shared meaning are central features of OBC participation (Muniz & O'Guinn, 2001; McAlexander, Schouten & Koenig, 2002), and engagement in these visible, participatory settings may carry both supportive and demanding psychological elements (Ostrom et al., 2015; Mende, & van Doorn, 2015). While interactive participation conditions may enhance CE (Brodie et al., 2013; Dessart, 2017), participatory environments can also carry implications for consumers' psychological well-being (Anderson & Ostrom, 2015; Ostrom et al., 2015; Mende, & van Doorn, 2015).

Despite the growing recognition of OBCs as important engagement environments, there remains limited understanding of how their socially embedded features shape both engagement experiences and CWB.

Taken together, these gaps highlight the need for a clearer understanding of how participation in OBCs shapes both CE and CWB through underlying psychological experiences. Addressing these gaps will contribute to engagement research by situating it firmly within socially embedded digital contexts and by examining how brand-related and community-related conditions influence consumers' lived experiences of participation. In doing so, this study aims to offer a more balanced account of OBC participation, recognising both its capacity to foster involvement and its potential to introduce psychological demands.

1.7. Research Aim, Objectives, and Questions

Building upon the research gaps identified in Section 1.6, this study seeks to examine how brand- and community-related conditions within OBCs shape psychological experiences, and how these experiences relate to CE and CWB.

Research Aim

To develop an integrative, process-based model that explores how brand- and community-related conditions shape psychological experiences, and how these

experiences relate to Customer engagement and Consumer well-being within Online brand communities.

Research Objectives

To address the research aim and the identified 5 gaps, the following interrelated objectives are proposed:

1. **Research Objective 1:** To explore Customer engagement as a dynamic process by examining how and why customers' interactions with brands and communities in Online brand communities context influence cognitive, affective and behavioural engagement.
2. **Research Objective 2:** To explore Consumer well-being from a psychological perspective within socially intensive Online brand communities.

Overarching Research Question

'How do brand- and community-related conditions shape psychological experiences that, in turn, relate to Customer Engagement and Consumer Well-Being within Online Brand Communities?'

This overarching question reflects the process orientation of the study and captures its focus on both enabling (identity-based) and constraining (strain-based) pathways through which engagement unfolds in OBC contexts.

Subsequent Research Questions: Building on the overarching research question (RQ), the study is guided by 3 interrelated sub-questions that correspond to its qualitative, quantitative and integrative phases:

Table 1: Research Questions

Research Question	Addressed Gap(s)	Methodological Phase	Purpose
RQ1. How is Customer Engagement experienced as a psychological process across cognitive, affective and behavioural dimensions within Online Brand Communities?	G1	Qualitative	To explore how engagement is experienced psychologically within OBC participation.
RQ2. How is Consumer Well-Being experienced from a psychological perspective within Online Brand Communities?	G2	Qualitative	To examine how participation in OBCs relates to consumers' psychological well-being experiences.
RQ3. How and why do brand-related and community-related cues influence Customer Engagement and Consumer Well-Being within Online Brand Communities?	G3, G4, G5	Quantitative (informed by qualitative insights)	To examine how participation conditions relate to CE and CWB through underlying psychological experiences.

1.8. Research Context

To understand the objectives of this study, it is important to consider the setting in which CE and CWB unfold. OBCs have become prominent spaces for brand-customer interaction and ongoing participation. They offer a suitable context for examining how participation conditions relate to engagement and psychological experience. To ground the study in today's digital context, Table 2 presents recent global statistics on social media use and brand community adoption. These

figures provide contextual background regarding the scale and relevance of OBC participation.

Table 2: Key Contextual Statistics and Implications for the Present Study

Driver	Statistic	Relevance to the Study
Global social-media usage	~5 billion user identities in 2024 (Kepios & We Are Social, 2024)	Indicates the widespread presence of digitally mediated participation.
Daily social-media time	~2 h 20 m average user time per day (Kemp, 2024)	Reflects sustained exposure to online interaction environments.
Brand community adoption	>33% of organisations host communities with 10,000+ members (CMX/BETTERMODE, 2024)	Suggests strategic recognition of community-based engagement.
Self-service resolution rate	14% of service issues resolved via self-service alone (Gartner, 2024)	Points toward the increasing role of peer and community support in service contexts.

These figures help illustrate the scale and relevance of OBC participation in today's digital environment.

1.8.1. The Rise and Scope of Online Brand Communities

Digital connectivity has expanded significantly in recent years. Reports indicate that more than 5 billion social media identities exist globally (Kepios & We Are Social, 2024), with users spending on average over 2 hours, 20 minutes per day on such platforms (Kemp, 2024). Within this environment, brand-hosted communities are no longer niche spaces. Industry reports indicate that many organisations now operate structured brand communities as part of their digital strategy (CMX/BETTERMODE, 2024).

From an academic perspective, OBCs have long been recognised as socially embedded environments in which members develop shared meanings and relational bonds through interaction (Muniz & O'Guinn, 2001; McAlexander, Schouten & Koenig, 2002). Later work further demonstrated that engagement within these communities unfolds through ongoing interaction between customers and brands; and among customers themselves (Brodie et al., 2013; Dessart, 2017; Schau, Muñiz & Arnould, 2009).

This evolution positions OBCs as more than communication channels. They function as participatory environments in which customers exchange knowledge, contribute content, shape brand meaning collectively and support others through interaction (Muniz & O'Guinn, 2001; Schau, Muñiz & Arnould, 2009; Brodie et al., 2013; Dessart, 2017). For research purposes, such settings allow engagement to be examined within socially interactive environments instead of solely within one-off brand-consumer exchanges (Brodie et al., 2013).

1.8.2. Online Brand Communities as Interactive Service Ecosystems

From a service perspective, OBCs can be understood as interactive ecosystems in which value is co-created through participation (Brodie et al., 2013; Hollebeek, Srivastava & Chen, 2019; Vargo & Lusch, 2016). In these settings, brand communication occurs alongside discussion and contributions from other

members (Brodie et al., 2013; Dessart, 2017). Industry reports indicate that self-service channels often fail to fully resolve customer issues, highlighting the need for additional support mechanisms (Gartner, 2024).

Within these ecosystems, members take on more than one role. They interact with brand communication, exchange advice, share experiences and contribute to discussions that influence community meaning (Muniz & O'Guinn, 2001; Schau, Muñiz & Arnould, 2009; Brodie et al., 2013). Participation, therefore, extends beyond direct brand-consumer interaction and occurs within a socially interactive environment (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017).

This interactive structure makes OBCs particularly relevant for examining how participation conditions relate to psychological experiences. Instead of assuming engagement develops in a simple or linear way, the OBC setting allows exploration of how customers interpret and respond to brand-related and community-related influences within a shared environment (Muniz & O'Guinn, 2001; Brodie et al., 2013; Dessart, 2017; Islam, Rahman & Hollebeek, 2018).

1.8.3. Psychological and Relational Dynamics in OBC Participation

Existing research recognises that engagement is closely associated with participation and interactive experiences between consumers and brands (Brodie

et al., 2013; Vivek, Beatty & Morgan, 2012). At the same time, more recent work suggests that engagement is not always experienced in uniformly positive ways (Santini et al., 2020; Sim et al., 2022). Scholars have called for closer attention to the emotional aspects of engagement and the effects of intensive participation (Santini et al., 2020; Sim et al., 2022). Empirical evidence further indicates that high levels of interactivity may, under certain conditions, be associated with fatigue or disengagement among community members (Marbach, Lages & Nunan, 2019).

In OBCs, expectations to respond and stay involved may shape how members experience being part of the community (Muniz & O'Guinn, 2001; Algesheimer, Dholakia & Herrmann, 2005; Brodie et al., 2013). Transformative Service Research highlights that participation in service systems can create benefits for consumers while also introducing demands that may affect their well-being (Anderson & Ostrom, 2015; Ostrom et al., 2015; Mende, & van Doorn, 2015; Weaver et al., 2023).

Together, these insights suggest that OBC participation may relate not only to patterns of engagement but also to broader psychological experiences. The OBC context, therefore, provides a meaningful empirical setting for examining how brand-related and community-related conditions shape both CE and CWB.

1.8.4. Empirical Scope of the Present Study

The qualitative phase of this research comprised 26 first-wave interviews followed by 12 second-wave interviews with participants drawn from OBCs across 7 countries: Canada, India, Ireland, the United Arab Emirates, the United States, the United Kingdom and Turkey. Participating brands spanned several sectors, including technology, retail, gaming, lifestyle and fashion. This spread increases variation in experiences and reduces reliance on a single brand context.

The subsequent quantitative phase employs Structural Equation Modelling (SEM) to examine relationships identified during the qualitative stage within a larger sample. This sequential design allows exploration of how participation conditions relate to psychological experiences and associated outcome variables.

1.8.5. Summary of Research Context

OBCs represent globally prevalent and socially interactive environments in which participation extends beyond direct brand contact. Their scale and participatory structure make them appropriate settings for examining how brand-related and community-related conditions relate to psychological experiences. These features provide a suitable empirical basis for investigating how engagement and well-being are shaped within contemporary digital participation contexts.

1.9. Theoretical Foundation

This study is guided by Jacoby's (2002) extension of the Stimulus-Organism-Response (S-O-R) framework, originally developed by Mehrabian and Russell (1974). The S-O-R perspective proposes that environmental conditions (stimuli) influence individuals' internal psychological states (organism), which then shape subsequent responses.

Within marketing and consumer research, the S-O-R framework has been used to examine how environmental cues influence internal evaluations and subsequent responses across service and digital settings (Eroglu, Machleit & Davis, 2001; Vieira, 2013). Jacoby (2002) further clarified the model's relevance for marketing by emphasising that consumer responses are shaped through internal processing and not occurring as direct reactions to external conditions. This process logic makes S-O-R particularly suitable for studying OBCs, where customers are exposed to both brand-related and community-related conditions. In the present study:

- Stimuli refer to brand and community conditions within OBCs.
- Organism refers to customers' psychological experiences as they interpret and respond to those conditions.
- Response refers to CE and CWB.

By adopting this structure, engagement is conceptualised not as a fixed outcome, but as something shaped through internal psychological processes, arising in response to participation conditions.

Supporting Perspective: Conservation of Resources Theory

To better understand the psychological experiences captured at the organism level, this study draws on Conservation of Resources (COR) theory (Hobfoll, 1989).

COR theory proposes that individuals seek to obtain and protect valued resources (Hobfoll, 1989). These resources can include personal characteristics, emotional energy, or conditions that individuals consider important. When participation supports resource gain, experiences may feel positive, whereas when it requires sustained effort or threatens valued resources, individuals may experience strain.

In socially intensive digital environments such as OBCs, members are often expected to contribute or remain visible. From a COR perspective, these expectations may be experienced as either supportive or demanding, depending on how individuals interpret and manage their participation.

COR complements the S-O-R framework by offering insight into how participation conditions may relate to psychological experiences and resource dynamics.

Positioning

Taken together, Jacoby's S-O-R framework provides the overarching process structure for the study, while COR offers additional insight into how participation conditions may relate to psychological experiences.

This theoretical foundation helps explain how brand- and community-related conditions are experienced and interpreted, and how these experiences relate to both CE and CWB within OBCs.

1.10. Philosophical Positioning and Methodological Approach

This study adopts a critical realist philosophical position (Bhaskar, 1978; Danermark et al., 2002). Critical realism assumes that social phenomena exist independently of individual perception, while recognising that our understanding of them is shaped by context and interpretation (Bhaskar, 1978; Fletcher, 2017). In other words, reality is considered real, but knowledge about it is always partial and open to refinement.

This position suits research that looks at both underlying processes and lived experiences. It allows attention to structural conditions within OBCs, such as participation norms and brand-related cues, while recognising that individuals interpret these conditions in different ways.

In the context of this study, critical realism supports the examination of psychological mechanisms that relate brand- and community-level conditions to CE and CWB. At the same time, it recognises that these mechanisms are not observed directly but are understood through participants' responses and empirical findings. This philosophical position fits with the study's mixed-method design (MMD), which combines qualitative exploration with quantitative testing to examine both personal experiences and broader patterns.

Critical realism does not require the use of one particular research method, because it supports the use of different methods where they help examine the phenomenon more fully (Danermark et al., 2002; Sayer, 2000; Blaikie, 2007). This was important for this study because the psychological mechanisms shaping CE and CWB cannot be observed directly. They can only be understood through how consumers describe their experiences and through the patterns found in the data. Beginning with a fixed quantitative model may have limited the study to constructs already identified in the literature. The qualitative phase was therefore

needed to explore how participants experienced OBC participation and to identify possible mechanisms that could explain these experiences.

This approach is consistent with retroductive logic. Retroduction involves moving between observations and theory to develop an explanation of the mechanisms that may have produced what was observed (Danermark et al., 2002; Blaikie, 2007). Consistent with this retroductive approach, the interview findings were used not only to describe participants' experiences, but also to identify possible mechanisms underlying them. Straussian Grounded Theory and constant comparison helped identify possible relationships between OBC conditions, psychological experiences, CE and CWB (Corbin & Strauss, 2015). The qualitative findings suggested that these experiences developed through identity-based and strain-based processes. These insights then guided the development of the quantitative model, including which constructs to examine and how they might be related.

The exploratory sequential MMD followed this critical realist logic. The qualitative phase came first because the study aimed to explore processes that were not yet clearly established in the existing literature (Creswell & Plano Clark, 2018). The quantitative phase was then developed from the qualitative findings instead of being designed separately. In line with the building approach to integration, insights from the interviews informed the survey and the

development of the structural model (Fetters, Curry & Creswell, 2013). The quantitative analysis examined whether the proposed relationships were also present across a broader sample. It did not claim to prove the mechanisms with certainty. Instead, it provided further evidence through which the explanation developed from the qualitative phase could be examined and refined. This is consistent with the critical realist view that knowledge remains partial and open to revision (Sayer, 2000).

Ontological and Epistemological Assumptions

From an ontological perspective, this study adopts a critical realist position. Critical realism assumes that social phenomena are shaped by underlying structures and mechanisms that exist independently of our awareness of them (Bhaskar, 1978). These mechanisms cannot be observed directly. Instead, they are identified by looking carefully at patterns in the data and developing explanations that make sense of those patterns.

From an epistemological perspective, the study recognises that knowledge is shaped by context and interpretation (Sayer, 2000). Different interpretations of reality may exist, but some explanations are more convincing when they are logically consistent and supported by empirical evidence. Knowledge is therefore seen as open to revision and refinement and not final or absolute (Sayer, 2000).

This position supports the use of more than one method. In line with ideas of methodological pluralism (Blaikie, 2007), the study combines qualitative and quantitative approaches to explore and examine the mechanisms that shape engagement and well-being within OBCs. The research moves back and forth between data and theory in an iterative way, consistent with retroduction (Danermark et al., 2002), to develop plausible explanations for observed patterns.

Methodological Approach

In line with critical realism and its support for methodological pluralism, this study adopts a MMD (Creswell & Plano Clark, 2018). A sequential exploratory structure was chosen so that theory could first emerge from qualitative data and then be examined quantitatively.

The qualitative phase used Straussian Grounded Theory (SGT; Corbin & Strauss, 2015) to explore how participants experience and interpret engagement and well-being within OBCs. Data were collected through semi-structured interviews with individuals having prior experience with OBCs. Analysis followed open, axial and selective coding procedures. The constant comparison method was used to refine categories and clarify relationships between concepts as analysis progressed.

The quantitative phase followed the qualitative findings. SEM in AMOS was used to examine the relationships among the constructs identified earlier. Following the building integration logic described by Fetters, Curry and Creswell (2013), insights from the qualitative phase informed the development of the quantitative model. Integration occurred during model development and interpretation, where findings from both phases were considered together to understand how participation conditions relate to psychological experiences, CE and CWB within OBCs.

Ethical Considerations: Ethical approval was obtained prior to data collection. All participants were informed of the study's purpose and how their data would be used, along with their right to withdraw. Informed consent was obtained, and anonymity was assured. Data were securely stored and used solely for academic purposes, adhering to institutional ethical standards and the principles of responsible research conduct.

1.11. Prospective Contributions of the Study

This section outlines the prospective theoretical, methodological and practical contributions of the study. By addressing the 5 identified research gaps, the research seeks to advance understanding of CE & CWB within OBCs and contribute to both scholarly knowledge and managerial practice.

1.11.1. Prospective Theoretical Contributions

First, in response to *Gap 1 (process-based understanding of CE),* this study offers a clearer account of CE as a psychological process within OBC. Building on established multidimensional conceptualisations of CE as comprising cognitive, affective and behavioural elements (Brodie et al., 2011; Vivek, Beatty, & Morgan, 2012; Dessart, 2017), the study examines how these dimensions are experienced and shaped through participation in OBCs.

By focusing on customers' psychological experiences, the research gives more attention to how engagement develops through ongoing interaction with brand-related and community-related conditions. This helps address previous calls to better understand engagement as a process and not primarily as an outcome or behavioural expression (Brodie et al., 2013; Connell et al., 2019; Hollebeek, Srivastava, & Chen, 2019). In doing so, the study provides a more context-sensitive understanding of how engagement is experienced within socially interactive digital environments, while remaining grounded in existing CE theory.

Second, in response to *Gap 2 (CWB from a psychological perspective)*, this study brings greater attention to CWB within OBCs. While prior research in Transformative Service Research has emphasised that service participation can affect individuals' broader well-being (Anderson & Ostrom, 2015; Ostrom et al.,

2015), much of this work has focused on service systems more broadly and not on socially intensive digital community contexts. At the same time, research on OBCs has primarily concentrated on engagement behaviours and relational outcomes (Brodie et al., 2013; Dessart, 2017), with less direct focus on members' psychological well-being.

By examining how participants experience involvement within OBCs, this study connects engagement research with the well-being perspective advanced in Transformative Service Research (Anderson et al., 2013; Mende, & Scott, 2021). Instead of treating well-being as a general performance-related outcome, it considers how ongoing participation in interactive, visible environments may relate to members' psychological experiences. In doing so, the study responds to calls to better understand how contemporary participation contexts influence consumers' lives beyond traditional metrics such as satisfaction or loyalty (Anderson & Ostrom, 2015; Weaver et al., 2023).

Third, in response to *Gap 3 (joint influence of brand and community cues)*, this study provides further insight into how engagement and well-being are shaped within the layered structure of OBCs. Prior research has examined brand-related drivers of engagement, such as value propositions and relational exchanges (Hollebeek, Glynn & Brodie, 2014; Pansari & Kumar, 2017), while other streams

have explored community dynamics, including shared meaning and identification (Muniz & O'Guinn, 2001; Algesheimer, Dholakia & Herrmann, 2005).

Although these streams provide important insights, they are often examined separately. Within OBCs, however, brand communication and peer interaction are experienced together (Brodie et al., 2013; Dessart, 2017). This study therefore considers how brand-related and community-related conditions coexist within the same participatory space and how they are interpreted by members in shaping both CE and CWB.

By looking at brand and community influences together, the study goes beyond research that treats them separately. It suggests that engagement and well-being in OBCs may be better understood when both sources of influence are considered together and not in isolation, thereby offering a more context-sensitive understanding of OBCs.

Fourth, in response to *Gap 4 (enabling and constraining psychological experiences),* this study gives closer attention to the different kinds of internal experiences that accompany participation in OBCs. Much of the engagement literature has focused on conditions that support involvement, such as trust and satisfaction (Vivek, Beatty & Morgan, 2012; Hollebeek, Srivastava & Chen,

2019). However, more recent research suggests that engagement is not always experienced in this way. Santini et al. (2020) call for more attention to emotional dynamics within engagement and Sim et al. (2022) note that different psychological factors combine in shaping participation. Marbach, Lages & Nunan (2019) further show that high levels of interaction may relate to fatigue among community members.

Building on these insights, the present study does not assume that participation leads only to positive outcomes. It considers how supportive experiences and demanding experiences may both relate to CE and to CWB. In doing so, it offers a better understanding of participation in OBCs, where involvement may feel rewarding for some members and effortful for others.

Finally, in response to *Gap 5 (OBCs as socially embedded environments)*, this study places stronger emphasis on the nature of the OBC itself. Early research describes OBCs as socially embedded spaces where members develop shared meaning and identity ties through ongoing interaction (Muniz & O'Guinn, 2001; & McAlexander, Schouten & Koenig, 2002). Later work shows that engagement within these communities develops through continued interaction between customers and brands and among customers themselves (Brodie et al., 2013; Dessart, 2017).

However, less attention has been given to how the structure of OBCs, where participation is visible and interaction is repeated, may shape both engagement and well-being. Members are not interacting privately with a brand; they are participating within a shared space where others are present. This setting may influence how involvement is experienced.

By examining CE and CWB within this socially embedded context, the study provides a clearer view of OBCs as environments that shape both behaviour and psychological experience. It therefore supports a more grounded understanding of digital participation that recognises both its potential and demands.

Taken together, these contributions aim to offer a clearer understanding of CE and CWB within OBCs. By examining engagement alongside CWB and by grounding the analysis in participants' experiences, the study provides a more balanced view of digital participation.

1.11.2. Prospective Methodological Contributions

While the main contribution of this study is theoretical, it also offers methodological value.

First, the study shows how SGT (Corbin & Strauss, 2015) can be used to explore CE & CWB within OBCs in a systematic way. Through open, axial and selective

coding, supported by constant comparison and memo writing, the qualitative phase allowed themes to emerge from participants' accounts. This helps ensure that the concepts reflect how engagement and well-being are actually experienced within OBCs.

Second, the study adopts a sequential exploratory MMD. The first round of 26 interviews was followed by 12 additional interviews to refine and deepen emerging ideas. This stepwise approach strengthened the development of the conceptual model before moving to the quantitative phase. SEM was then used to examine relationships identified in the qualitative stage. In this way, insights from participants' experiences were carried forward into empirical testing. This approach brings together qualitative insights and quantitative analysis.

Third, the qualitative sample includes participants from multiple countries and from communities linked to different sectors. This range of contexts allows the study to capture varied forms of participation instead of focusing on a single brand or industry. Such variation supports the credibility of the qualitative insights and reduces reliance on one specific setting.

Finally, the study offers a clear example of how qualitative findings can inform structured model testing. By tracing the movement from interview data to

conceptual development and then to empirical assessment, the research illustrates one way in which mixed methods can be used to examine engagement and well-being within OBCs.

1.11.3. Prospective Practical Contributions

In addition to its academic value, this study may offer useful insight for managers responsible for OBC.

First, by examining psychological experiences within OBCs, the study helps managers better understand how participation is felt and interpreted by members. Instead of viewing engagement only through visible behaviours such as posting or commenting, the findings draw attention to the internal experiences that support or weaken participation. This highlights considerations that may be relevant for practitioners to think more carefully about the kinds of conditions they create within their communities.

Second, the study recognises that participation does not always feel effortless or rewarding. Community features that encourage visibility or frequent contribution may strengthen involvement for some members yet feel demanding for others**.** Being aware of these different experiences can help managers design

communication practices and participation structures that are attentive to members' capacity and expectations.

Third, by examining engagement alongside CWB, the study tries to shift attention beyond narrow performance outcomes. It suggests that community strategy can be approached not only as a means of increasing activity or loyalty, but also as part of a broader responsibility toward members' psychological experiences. This perspective aligns with calls within Transformative Service Research to consider how marketplace activities relate to well-being (Anderson & Ostrom, 2015; Ostrom et al., 2015).

Taken together, the framework developed in this research may serve as a useful guide. It may help managers consider how brand- and community-related conditions shape engagement and well-being within OBCs.

1.12. Structure of the Thesis

This thesis is organised into 8 chapters, each addressing a distinct stage of the research process and contributing to the investigation of CE and CWB within OBCs.

Chapter 1 introduces the study by outlining the research background, motivation, research gaps, aims and objectives, contributions and the structure of the thesis.

Chapter 2 presents a comprehensive review of the relevant literature. It critically examines existing theories and empirical findings related to OBCs, CE and CWB. The review identifies the conceptual foundations of the study and highlights areas requiring further empirical exploration.

Chapter 3 discusses the research methodology, outlining the philosophical positioning and justification for adopting a sequential MMD. It explains the rationale for using SGT to explore the qualitative phase, followed by SEM for quantitative validation.

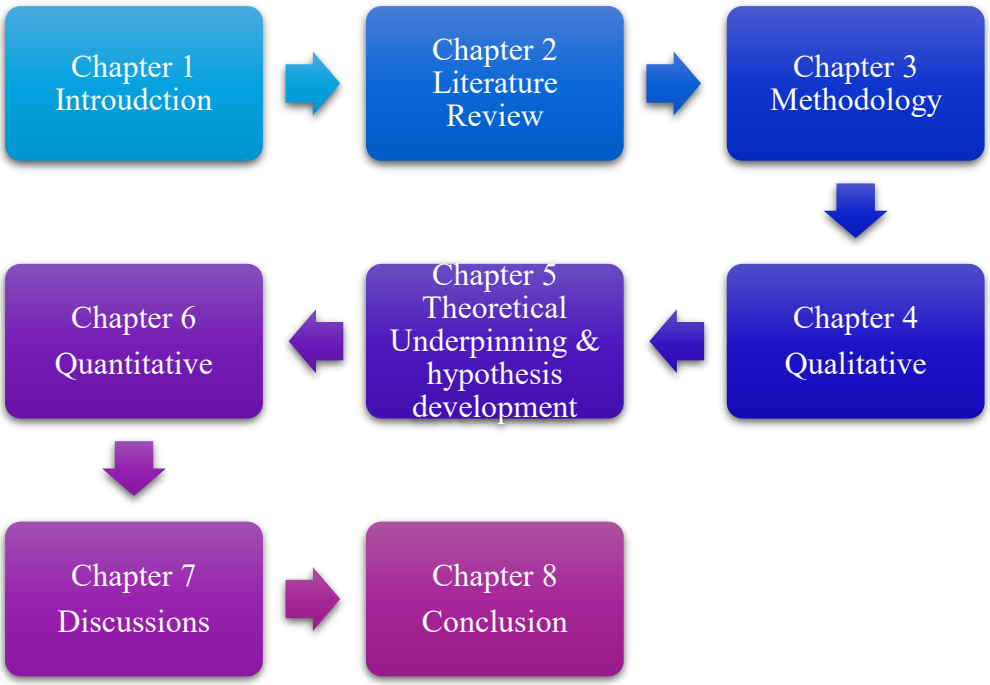


Figure 1: Thesis Layout

Chapter 4 presents the qualitative phase, detailing data collection and analysis procedures and reporting the emergent themes and conceptual categories that shaped the theoretical framework.

Chapter 5 outlines the theoretical underpinning of the study. Drawing on the qualitative findings, it develops the conceptual model and hypotheses for the quantitative phase, primarily guided by S-O-R and COR theory.

Chapter 6 describes the quantitative phase, including measurement development, sampling, data analysis and the results of confirmatory factor analysis and structural model testing.

Chapter 7 provides the discussion of findings, linking qualitative and quantitative results and interpreting them in light of existing literature. It also outlines the theoretical, methodological and managerial contributions.

Chapter 8 concludes the thesis by summarising the key findings. Further, it acknowledges the study's limitations and suggests directions for future research.

This chapter has outlined the rationale and objectives of the study and introduced its structure. The next chapter reviews existing literature on CE, CWB and OBCs to provide initial conceptual grounding for the qualitative phase, while recognising that further constructs will be developed inductively in later chapters.

Chapter 2: Literature Review

2.1. Introduction

This chapter reviews the theoretical and empirical foundations of the study by examining the key constructs that shape customer-brand relationships in digital environments. Building on Chapter 1, which outlined the background, rationale, gaps and objectives of the research, this chapter critically examines 3 core domains that form the basis of the study: OBCs, CE and CWB.

Marketing scholarship has moved away from a transactional and firm-centred view towards approaches that focus on ongoing relationships and value co-creation (Grönroos, 1994; Vargo & Lusch, 2004; Payne, Storbacka, & Frow, 2008). Within this shift, two related but distinct areas have gained importance. The first is CE, which explains how customers invest psychological and behavioural effort in brand interactions (Brodie et al., 2011; Hollebeek, 2011; Vivek, Beatty, & Morgan, 2012). The second concerns CWB, which focuses on how marketplace participation shapes individuals' broader psychological functioning and quality of life (Anderson et al., 2013; Anderson & Ostrom, 2015; Ostrom et al., 2015).

At the same time, the rise of OBCs has reshaped the context in which these processes occur. OBCs provide digitally mediated spaces where customers

interact with brands and also with one another, co-creating meanings and sharing experiences over time (Muñiz & O'Guinn, 2001; Brodie et al., 2013; Dessart, Veloutsou, & Morgan-Thomas, 2015). In these communities, members interact repeatedly and their contributions are visible to others. This makes OBCs a suitable setting for examining how engagement develops and how it affects customers psychologically.

Prior research has shown that participation in brand communities can strengthen connection with the brand and support value creation processes (Brodie et al., 2013; Dessart, Veloutsou, & Morgan-Thomas, 2015). However, sustained participation may also create pressure or fatigue, especially when involvement becomes demanding or emotionally intense (Marbach, Lages & Nunan, 2019; Mende & van Doorn, 2015; Santini et al., 2020).

Although CE has developed into a well-established research area (Brodie et al., 2011; Hollebeek, 2011), research on CWB has largely evolved within Transformative Service Research and related work (Anderson et al., 2013; Anderson & Ostrom, 2015). These two areas have not always been studied together. CE research has mostly examined how engagement relates to outcomes such as advocacy and firm performance (Kumar & Pansari, 2016; Hollebeek, Srivastava, & Chen, 2019). In contrast, CWB research has focused more on how

service participation affects people's broader psychological functioning and quality of life (Ostrom et al., 2015; Mende & van Doorn, 2015).

Research on OBCs has shown that these communities enable interaction and value co-creation among customers and brands (Brodie et al., 2013; Dessart, Veloutsou, & Morgan-Thomas, 2015). However, less attention has been given to whether sustained participation in such environments may also shape customers' psychological well-being, positively or negatively. As a result, the connection between participation processes in OBCs and CWB outcomes remains less clearly articulated in the existing literature.

This chapter reviews the literature on OBCs, CE, and CWB to explain how each has developed in existing research. It also identifies where these areas have been studied separately and where greater clarity is still needed, particularly in digital brand community settings. By systematically examining these domains, the chapter establishes the need for a process-based framework capable of explaining how brand-related and community-related conditions within digital communities are associated with both engagement and CWB.

2.2. Literature Search Strategy

This literature review was conducted using a structured search process. The aim was to identify relevant work on OBCs, CE, and CWB in a way that was systematic and transparent, instead of relying on selective citation. Two academic databases were used: Scopus and Web of Science. These were chosen because they index leading journals in marketing, service research, and consumer behaviour. The search covered peer-reviewed journal articles published in English between 2009 and 2025.

The search was carried out in two stages. The first stage focused on research that examined CE within OBC contexts. The second stage focused on research that examined CWB within OBC contexts. Conducting the searches separately made it possible to understand how each stream of literature has developed and where they intersect.

For the OBC domain, the following terms were used: "*online brand community*", "*virtual brand community*", "*digital brand community*", "*social media brand community*", and "*brand community*". These variations were used because different studies adopt slightly different terminology.

For the CE domain, the search included terms such as "*customer engagement*", "*consumer engagement*", "*brand engagement*", "*customer brand engagement*", "*engagement behaviour",* "*engagement behavior*", and "*actor engagement*". These terms capture both broader and more specific conceptualisations of engagement within marketing research.

For CWB, the search included "*well-being*", "*wellbeing*", and "*ill-being*". Because the study also considers adverse psychological outcomes, additional terms such as "*burnout*", "*emotional exhaustion*", "*stress*", and "*fatigue*" were included to capture research that may not explicitly use the term well-being but still addresses relevant psychological strain.

In the first stage, OBC terms were combined with CE terms using Boolean operators. In the second stage, OBC terms were combined with CWB terms. Searches were conducted within Scopus and Web of Science using titles, abstracts, and keywords (Appendix 1).

The search was limited to peer-reviewed journal articles published in English. Both conceptual and empirical studies were considered if they directly examined one or more of the focal constructs within marketing, consumer behaviour, or service-related contexts. Articles that did not address these constructs in a

meaningful way or were outside the scope of digital or community-based environments were excluded. The identified articles were screened for relevance by reviewing titles, abstracts, and full texts where necessary. Studies were retained if they contributed to the conceptual or empirical development of CE, CWB, or OBC research. This approach intended to ensure that the review reflects the main developments in these fields avoiding a selective focus on a limited set of studies.

The CE-OBC search identified 108 records in Scopus and 75 in Web of Science. After removing duplicates, 139 unique articles remained. These were screened through title and abstract review, resulting in 106 studies being retained for inclusion. The OBC-CWB search yielded 8 records in Scopus. Web of Science did not provide any additional unique studies. After screening, 5 articles were retained.

Studies were included if they made a clear conceptual or empirical contribution to CE, CWB, or OBC research within consumer or service contexts. Articles were excluded if they did not focus on brand communities, used the terms in a purely technical or unrelated way, or fell outside the scope of digitally mediated environments.

In summary, this approach intended to ensure that the review reflects the main developments in CE and CWB research within OBC settings, while minimising the risk of selective inclusion.

2.3. Overview of the Field: Findings from the Review

2.3.1. Descriptive Overview

The structured search process resulted in 106 studies examining CE within OBC contexts and 5 studies examining CWB within OBC contexts. This difference in volume suggests that engagement within OBCs has received substantially more attention than well-being in these settings.

The CE-OBC literature has grown noticeably over the past decade, with most publications appearing after the mid-2010s. From the titles and keywords, many studies focus on relational and behavioural outcomes such as loyalty, advocacy, trust, identification and value co-creation. Far fewer studies refer to strain-related concepts such as burnout, emotional exhaustion, stress or fatigue. In contrast, research explicitly linking OBCs and well-being remains limited. Even when broader psychological strain terms were included in the search, only a small number of relevant studies were identified. This suggests that, although engagement in OBCs is well established as a research area, the potential implications for CWB have been explored to a much lesser extent.

Of the 106 studies examining CE in OBC contexts, 67% use quantitative survey-based methods, analysed using SEM or PLS-SEM. 19% adopt qualitative approaches such as netnography or interviews, and 12% use mixed methods. Only 2% are purely conceptual. This shows that CE in OBC contexts has mainly been studied through structured, survey-based models, with relatively less emphasis on interpretive or theory-building approaches.

In contrast, all 5 studies examining CWB in OBC contexts use quantitative designs. 4 rely on survey-based modelling approaches, and 1 adopts an experimental design. None of the identified studies uses qualitative or mixed methods. This suggests that well-being in OBCs has been examined almost entirely through structured, quantitative frameworks, with no interpretive exploration of how well-being is experienced or constructed within these settings.

2.3.2. Thematic Synthesis: Customer Engagement in Online Brand Communities Contexts

When the 106 studies on CE in OBC contexts are examined together, some clear patterns begin to appear. Although the papers use different methods and theories, they often centre around the similar main topics.

First, many studies (38/106 = 35.8%) treat ***engagement as something that leads to stronger relationships with the brand.*** In this stream, engagement is often positioned as the link between participation in the community and outcomes such as loyalty, advocacy, trust, or purchase intention (e.g., Chan et al., 2014; Islam et al., 2017; Kumar & Kumar, 2020; Bilro & Loureiro, 2023). The community matters because it creates conditions that make these outcomes more likely. Engagement, in this sense, is a mechanism that explains why community involvement translates into positive brand consequences (Yuan et al., 2020).

Another group of studies (26/106 = 24.5%) looks at ***what actually leads people to engage in the first place.*** These papers focus on the conditions that make engagement more likely. They explore factors such as motivations for participation, empowerment, emotional attachment, perceived value and a sense of belonging (e.g., Marbach, Lages & Nunan, 2019; Islam et al., 2017; Kumar & Nayak, 2019). In this stream, engagement is not treated as automatic.

A third theme focuses (20/106 = 18.9%) on ***how engagement is expressed and understood within OBCs.*** Instead of concentrating only on testing relationships between variables, these studies look at engagement practices, interaction patterns, community norms and measurement approaches. Some use qualitative or mixed methods to examine how members interact and respond to one another

within the community (e.g., Brodie et al., 2013; Hollebeek et al., 2017; Dessart et al., 2016; Lim et al., 2019). This work helps clarify what engagement looks like in practice and how it can be conceptualised and measured in OBC settings.

A fourth theme (20/106 = 18.9%) ***links engagement to value co-creation within the community.*** In this stream, engagement is seen in actions such as sharing knowledge, helping other members, contributing content or working with the brand in different ways. The emphasis is less on outcomes like loyalty and more on the idea that participation itself creates value for both the brand and the community members (e.g., Brodie et al., 2013; Hammedi et al., 2015; Wu et al., 2018; Marchowska-Raza & Rowley, 2024). Here, engagement is treated as something active and productive.

Finally, only a small number of studies (5/106 = 4.7%) consider the possibility that ***engagement in OBCs may also have negative aspects.*** A few papers discuss issues such as conflict between members, tensions within the community, crisis situations or negatively valenced engagement (e.g., Bowden et al., 2017; Dineva & Daunt, 2023; Yuan et al., 2020). However, most of the CE research in OBC contexts continues to focus on positive relationship outcomes and brand-related benefits. Attention to potential strain or other adverse consequences of sustained participation remains limited.

2.3.3. Well-Being within OBC Contexts

Compared to the large body of research on CE, only 5 studies directly examine well-being within OBC contexts. Although limited in number, they reveal 3 clear lines of inquiry.

First, some studies ***examine well-being through the lens of social capital and relational resources within the community*** (Zhou et al., 2020). In these papers, well-being is linked to shared language, trust, reciprocity and membership duration. Psychological well-being or subjective well-being is treated as an outcome of social connection within the community. The emphasis is on how community-level structures foster happiness or enhanced psychological functioning.

Second, some research ***connects well-being to motivations and engagement-related processes*** (Bilro & Loureiro, 2023; Pahi et al., 2024). Here, well-being is often conceptualised in hedonic terms and positioned as a consequence of brand attachment or community support. These studies suggest that interaction within OBCs can enhance subjective well-being, especially when members experience intrinsic motivation, rewards or supportive brand relationships.

Finally, one study explicitly addresses the ***darker side of participation*** (Osei-Frimpong et al., 2025). It examines psychological ill-being linked to continuous community participation, highlighting mechanisms such as social media fatigue and negative emotions. Unlike many previous studies that focus on positive outcomes, this study also highlights possible negative effects.

Collectively, while these studies show that OBC participation can influence both positive and negative aspects of well-being, the number of investigations remains small and largely quantitative in nature. The literature therefore provides initial insights but remains limited in scope compared to research on CE in these settings. In addition to the database search, some foundational OBC, CE & Well-being papers were identified through manual cross-referencing. This involved checking the reference lists of highly cited conceptual studies to make sure important theoretical work was not missed. These papers were used to support the conceptual discussion in this chapter, but they are not included in the systematic review results reported above.

2.4. Context of the Study: Online Brand Communities

2.4.1. Definition, Structure, and Role of Online Brand Communities

OBCs can be understood as digital extensions of traditional brand communities that have developed alongside the growing presence of social and digital

technologies in consumers' everyday lives. Muniz and O'Guinn (2001, p. 412) define brand communities as "*a specialised, non-geographically bound community based on a structured set of social relationships among admirers of a brand.*" OBCs extend these community dynamics into online environments. They may be hosted on social networking platforms, company websites, mobile apps or dedicated online forums where members interact around shared brand interests and experiences (Wirtz et al., 2013; Brodie et al., 2013). The relational structure of OBCs is also supported by social capital mechanisms. Meek et al. (2019) show that shared language, trust, reciprocity and shared vision within a community strengthen relational ties among members and support sustained engagement.

Dessart et al. (2015) suggested that OBCs can be understood through 3 closely connected elements: the brand, the community, and the consumers. This structure allows interaction to occur in several directions, as customers engage with the brand and also with other members, shaping meanings and experiences together (Habibi, Laroche & Richard, 2016). Participation in these communities is often guided by informal norms and shared practices that encourage interaction, trust, learning and the exchange of knowledge (Schau, Muñiz & Arnould, 2009; Algesheimer, Dholakia & Herrmann, 2005; Brodie et al., 2013). Members may also take on different roles within the community, ranging from *posters*, who

actively contribute content, to *lurkers,* who primarily observe discussions but remain psychologically involved (Mousavi & Roper, 2023).

Another way to distinguish OBCs is through their underlying value orientation and structural purpose. Wirtz et al. (2013) note that different communities may emphasise different forms of participation, such as the exchange of information, social interaction among members, knowledge assimilation or support for the brand. Value creation within these communities does not flow in a single direction, instead, it develops through co-creation processes in which customers collectively shape brand-related meanings and ideas (Schau, Muñiz & Arnould, 2009; Ramaswamy & Ozcan, 2016). Through this kind of participation, consumers move beyond being passive recipients and become active contributors to brand meaning and identity development (Hollebeek, Srivastava & Chen, 2019). In this way, OBCs function as interactive environments where engagement and value creation evolve through ongoing interactions.

The dynamics of OBCs can also be understood through several psychological perspectives. **Identity theory** (Burke, 1991; Burke & Stets, 2009; Stryker & Burke, 2000) explains how alignment of values, recognition within the group and meaningful interaction can strengthen members' sense of connection with the brand and the community. **Self-congruity theory** (Sirgy, 1982) further suggests

that people are drawn to communities that reflect who they are or who they aspire to be, making participation feel personally relevant and rewarding. **Appraisal theory** (Lazarus & Folkman, 1984) helps explain how members interpret situations that appear demanding or inconsistent, shaping whether these experiences are perceived positively or negatively. **COR** (Hobfoll, 1989, 2001) maintains that individuals seek to protect their emotional and cognitive resources, which helps explain why supportive interactions can strengthen engagement while tension may weaken it. Together, these perspectives indicate that participation in OBCs is influenced not only by functional motivations but also by personal meaning and the way individuals manage their psychological resources.

From a managerial standpoint, OBCs have become an important part of firms' digital brand management and relationship strategies. They act as ongoing brand touchpoints where firms can observe and encourage CE, which in turn can strengthen brand equity and trust (Hollebeek, Glynn & Brodie, 2014). Through interactive communication in OBCs, firms can gain real-time consumer insights and respond to their experiences with the brand (Habibi, Laroche & Richard, 2016). Consequently, OBCs help sustain long-term customer relationships and function as platforms where engagement can contribute to value creation and brand advocacy (Wirtz et al., 2013; Brodie et al., 2013).

In summary, OBCs function as socially interactive environments where customers develop brand-related meanings through ongoing interactions with other members. These communities provide a valuable setting for examining how the cognitive, affective and behavioural dimensions of CE emerge and evolve over time, while also offering insights into CWB as a parallel outcome of consumers' experiences within these environments.

2.4.2. Customer Behaviour within Online Brand Communities

Recent work shows that customer-to-customer interaction can strengthen identification with the community, which in turn encourages engagement behaviours (Jeseo, Lastner, and Black, 2024). Similarly, Hsieh et al. (2022) show that participation in OBCs can foster psychological empowerment among members, which in turn increases satisfaction and encourages continued involvement in community activities.

Empirical research further shows that engagement behaviours within OBCs can be influenced by community design features. For instance, Hanson, Jiang, and Dahl (2019) demonstrate that reputation signals, such as badges or labels that indicate member roles, can enhance engagement by providing role clarity and encouraging participation in community interactions.

Consumer behaviour in OBCs can also reflect two sides of engagement. In many cases, engagement encourages positive behaviours such as learning, trust, collaboration and a stronger sense of belonging within the community. These experiences can deepen customers' connection with the brand and strengthen loyalty (Brodie et al., 2013; Hollebeek, 2011). At the same time, very high levels of involvement may also bring less positive experiences. For example, members may feel emotionally tired from constant interaction or develop concerns about privacy when sharing information in the community (Kaur et al., 2020).

Taken together, customer behaviour within OBCs is shaped by relationships between members and how individuals interpret and respond to their experiences. These influences affect how individuals participate and whether their involvement deepens or fades over time. Understanding these patterns helps introduce the later discussion of engagement processes, which are explored further in the following chapters.

2.4.3. Empirical Studies on Online Brand Communities

Empirical research on OBCs has developed considerably since the early studies of brand communities and their influence on relationships between consumers and brands. Early work focused mainly on understanding how these communities function and how members behave within them, particularly in terms of

participation and word-of-mouth activities. Muniz and O'Guinn (2001), through an ethnographic study, showed that brand communities are characterised by a shared consciousness among members as well as a sense of moral responsibility toward the community. Their work highlighted how participation in such communities can strengthen a collective identity around the brand. Building on this foundation, McAlexander, Schouten, and Koenig (2002) conducted an ethnographic study at brandfests and proposed a model that emphasised the relationships linking customers, the brand and the firm, drawing attention to the social and relational structure that underpins brand communities.

Later research drew attention to the interactive and co-creative nature of OBCs. Brodie et al. (2013) showed that participation in these communities involves a range of activities through which members exchange ideas and contribute to brand-related discussions. Engagement and value co-creation emerge from ongoing participation within the community. Their findings highlighted how OBCs can support customer-driven knowledge sharing and innovation, which aligns closely with the principles of S-D logic. Ramaswamy and Ozcan (2016) further developed this view by explaining how digital technologies enable continuous co-creation between firms and consumers, with community interaction playing an important role in shaping brand meaning and value. Empirical evidence also highlights the role of digital community environments in shaping engagement processes. For example, Carlson et al. (2021), drawing on

the S-O-R framework, found that website quality and brand involvement act as key stimuli that enhance CE in OBCs, which subsequently translates into behavioural loyalty outcomes.

The emotional and relational aspects of engagement in OBCs have also been examined in empirical studies. Habibi, Laroche, and Richard (2016) tested an extended model of consumer-brand relationships in online communities and showed that factors such as trust and identification play an important role in linking community participation with brand loyalty. Their work highlights that engagement in OBCs goes beyond simple interaction and often involves emotional attachment and a sense of connection with the brand. More recent qualitative research also shows that engagement experiences within OBCs can gradually reshape consumers' perceptions of brands. For example, Ul-Haq and Kwok (2025) demonstrate how participation in brand communities can transform previously negative brand perceptions over time. In a related study, Hollebeek, Juric, and Tang (2017) used netnography to show that when members perceive the community as relevant and interactive, their emotional engagement with the brand tends to increase.

Later studies began to examine the psychological foundations of participation in OBCs. Kumar (2019) showed that psychological ownership can motivate

members to take part in community activities and support the brand, suggesting that the extent to which individuals feel connected to the community influences how they engage with it. More recent work reinforces this insight. For example, Kumar (2022) showed that visitors' feelings of psychological ownership toward OBCs, reflected in perceptions of belongingness and self-identity significantly enhance brand engagement and subsequent purchase intentions. Similar insights emerge in more recent work. Roopak, Chakrabarti, and Sreen (2025) show that psychological needs such as social connection and validation can significantly drive engagement within OBCs. Kaur et al. (2020) surveyed *602 Facebook users* and extended the S-O-R framework by introducing factors such as brand community identification and reward mechanisms as important stimuli shaping engagement and loyalty in OBCs. Their results suggest that although engagement can strengthen loyalty, participation that becomes excessive or strongly reward-driven may also lead to negative emotional experiences, including fatigue. These findings point to the dual nature of OBC participation, where involvement can either strengthen or gradually drain members' psychological resources depending on the situation.

Recent research further highlights the potential tensions within community interactions. Dineva and Daunt (2022) show that conflicts between community members can reduce engagement and generate negative emotional responses

among observing consumers, indicating that undesirable interactions may undermine both community cohesion and brand perceptions. Community design mechanisms also influence engagement behaviour. Xi and Hamari (2020) show that gamification features embedded in OBCs can increase cognitive and emotional engagement while strengthening consumers' connections with the brand.

Further, empirical research has begun to explore OBCs from more contextual and comparative perspectives. Bowden and Mirzaei (2021) examined CE across hedonic and utilitarian brand communities using survey data from *820 respondents.* Their findings show that emotional attachment and social interaction tend to generate stronger engagement in hedonic community settings. Mousavi and Roper (2023) compared posters and lurkers in OBCs using an online consumer panel of *742 participants*, demonstrating that different participation levels shape members' perceptions of value and the nature of their relationships with the community. Taking a broader perspective, Connell, Marciniak, and Carey (2023) used netnography to introduce a cross-cultural perspective, showing that cultural values influence how customers engage within OBCs. Similarly, Raichur, Sharma, and Kalro (2025) distinguished between firm-initiated and consumer-initiated OBCs, showing that the drivers of engagement vary across

community types, with informational value and self-enhancement emerging as key engagement drivers.

Taken together, empirical research on OBCs consistently highlights the interactive, social and emotional foundations of engagement within these communities. However, several limitations remain. Many studies focus mainly on outcomes such as loyalty or advocacy, giving less attention to the psychological mechanisms that explain how and why engagement develops. In addition, only a small number of studies consider that engagement may have both positive and demanding aspects, where participation can strengthen relationships but may also place pressure on members' psychological resources. Another limitation is that brand-related and community-related influences are often examined separately and not within a single process-based framework. Finally, despite calls for greater theoretical integration and the use of mixed methods (Brodie et al., 2013; Connell et al., 2023), much of the existing OBC research continues to rely on single-theory perspectives and cross-sectional designs.

While the literature shows strong evidence that participation in OBCs can strengthen identification, encourage value co-creation and support brand loyalty, there is still limited understanding of the internal mechanisms that shape engagement responses. In particular, few studies examine how enabling and

constraining conditions interact to produce different outcomes, such as deeper connection with the community or emotional strain. To address this limitation, the present study draws on the S-O-R framework to explore the psychological processes through which engagement and well-being develop within OBC environments.

2.4.4. Key Research Gaps in Online Brand Community Literature

Although OBCs have emerged as important spaces for interaction between customers and brands, as well as among community members themselves, existing research still shows several conceptual, theoretical, methodological and contextual limitations. As a result, understanding of how engagement develops within these communities remains incomplete.

Recent studies have begun to acknowledge problematic dynamics within communities, such as consumer-to-consumer conflicts that may negatively affect engagement and brand perceptions (Dineva & Daunt, 2022). However, such work remains limited and fragmented, leaving the broader psychological mechanisms through which these interactions shape engagement insufficiently understood.

Insights from the systematic review conducted in this chapter suggest a similar pattern. While many studies examine drivers or outcomes of engagement in

OBCs, fewer studies explore the psychological processes through which engagement develops within these socially interactive environments.

Early conceptual work by Brodie et al. (2013) highlighted the need for future research to integrate different theoretical perspectives and adopt more diverse empirical approaches in order to better capture the dynamic and evolving nature of CE. They noted that the way engagement develops over time, through a series of interconnected processes linking drivers, internal mechanisms and outcomes, has received limited empirical attention. The present study responds to these calls by adopting a mixed-method sequential design and drawing on Jacoby's S-O-R framework, supported by COR theory, to examine both the psychological and behavioural mechanisms through which CE unfolds within OBC environments.

Further, Kelley and Alden (2016) argued that the role of extended self in digital environments must be explored more and individual differences such as the psychological sense of community, age and gender must be considered. Their work underscored that engagement in OBCs is not only social but also self-expressive, reflecting identity-related processes. In response, this study examines psychological mechanisms that reflect how individuals develop connections with brands and brand communities.

Islam, Rahman, and Hollebeek (2018) also encouraged researchers to move beyond congruity theory and consider a wider range of constructs and theoretical perspectives when examining CE in OBC contexts. Their work highlights the need for frameworks that can better capture the complexity of engagement in these environments. Responding to this call, the present study adopts the S-O-R framework to examine how different types of stimuli influence internal psychological states and, in turn, shape engagement responses within OBCs.

From a value-based perspective, Marbach, Lages & Nunan, (2019) highlighted the need for theoretical frameworks that examine the psychological processes underlying engagement and explain how personal values influence engagement behaviours. Their work suggests that engagement cannot be fully understood without considering how individuals interpret and respond to participation conditions based on their own value systems. This insight is reflected in the present study, where value-related constructs are included to examine how brand and community stimuli within OBCs interact with individuals' internal value orientations to shape engagement outcomes.

Methodologically, several scholars have also pointed to limitations in existing OBC research designs. For example, Kumar (2021) noted that many studies rely heavily on student samples and suggested that future research should include

more diverse respondent groups to improve the generalisability of findings. The present study responds to this concern by drawing on a heterogeneous sample drawn from real community members. In addition, Connell, Marciniak, and Carey (2023) encouraged the use of mixed-method approaches that combine qualitative depth with quantitative analysis. This recommendation is reflected in the sequential exploratory design adopted in this research.

From a contextual point of view, Mousavi and Roper (2023) noted that many studies on OBCs focus on a single sector or a specific brand context. This makes it difficult to know whether the findings apply more broadly. They therefore suggested that future research should examine OBCs across different market sectors to better understand how engagement develops. Bowden and Mirzaei (2021) also observed that engagement can vary across hedonic and utilitarian brand communities. They encouraged further work to explore how relational factors, such as self-brand connection, interact with other influences to shape engagement. The present study does not focus on a single brand category. Instead, it views OBCs as psychologically embedded participation spaces. The qualitative phase, therefore, included participants from a range of brand communities, allowing the study to explore engagement processes across different contexts.

In summary, although research on OBCs has progressed considerably, several gaps remain. Existing studies offer valuable insights, but there is still a scope to better integrate different theoretical perspectives and to further explain the psychological processes behind engagement and well-being across varied contexts and research designs. This study responds to these gaps by developing and testing a process model based on the S-O-R framework, supported by COR, which explains how brand and community stimuli influence internal psychological states and how these experiences relate to CE and CWB within OBCs.

2.5 Customer Engagement

2.5.1. Introduction

CE has become a core idea in relationship marketing, as the field has moved beyond one-off transactions towards ongoing interaction and value creation. In simple terms, CE helps explain how customers put cognitive, emotional and behavioural effort into brand-related interactions that go beyond buying. This is especially relevant in digital settings such as OBCs, where engagement develops through ongoing interaction and the way members make sense of their experiences with the brand over time. Because of this, CE is often treated as something dynamic that develops through interaction, and not as a fixed outcome or a single behaviour (Brodie et al., 2011; Kumar & Pansari, 2016; Hollebeek, Srivastava, & Chen, 2019).

2.5.2 Evolution of Customer Engagement

Marketing thinking has shifted gradually over time. Earlier work focused largely on transactions and exchange. Over the years, attention moved toward understanding relationships and ongoing interaction between firms and customers. The development of Service-Dominant (S-D) logic further strengthened the idea that value is not embedded in products alone but is created through interaction (Vargo & Lusch, 2004). This broader shift in perspective provided the foundation for later discussions around CE.

As relationship marketing perspective gained prominence, researchers began looking beyond short-term financial indicators. Instead of focusing only on isolated transactions, marketing scholarship increasingly considered the longer-term value of customer relationships (Berry, 1995; Pansari & Kumar, 2016). This gradual change in emphasis created space for a construct such as CE, which captures how customers contribute to firms in ways that extend beyond purchase.

Although references to CE began appearing around 2006, the concept gained clearer visibility after 2010 (Lim et al., 2022). Lim et al. show that between 2006 and 2010 only 35 CE-related articles were published. This number increased to 177 publications between 2011 and 2015 and then rose further to 649 articles during the period from 2016 to 2020. These figures reflect sustained growth in

academic interest. Harmeling et al. (2017) similarly observe that the term, which had limited presence in scholarly discussions prior to 2007, became widely used in the decade that followed.

On the whole, the evolution of CE reflects a broader transition in marketing thought. The focus has gradually expanded from exchange to relationships, and then to the active role customers play in shaping brand-related value. CE did not emerge in isolation; it developed within this wider movement toward interaction, and value co-creation.

2.5.3. Importance of Customer Engagement

"*Customer engagement is everything in business*" (Forbes, 2015). While this statement is rhetorical in nature, it reflects the growing recognition of engagement within both practice and academia.

CE is increasingly viewed as central to sustained business performance. Lim et al. (2022) argue that CE contributes to the development and maintenance of profitability by strengthening the depth and quality of customer-firm interactions. A substantial body of academic and practitioner research highlights its strategic relevance. Several scholars describe CE as critical to firm success, particularly in environments characterised by ongoing interaction between customers and

brands (Verhoef et al., 2010; Kumar et al., 2010; Kumar & Pansari, 2016; Kumar et al., 2019).

Brodie et al. (2011; 2013) suggest that CE represents a significant development within contemporary marketing thought, reflecting the broader move toward interactive and relational perspectives. Similarly, Harmeling et al. (2017) emphasise the strategic implications of engaging customers beyond transactional exchanges. Subsequent contributions continue to expand this discussion, indicating sustained academic interest in the concept (Hollebeek, 2011a; Hollebeek, Conduit & Brodie, 2016; Rietveld et al., 2020; Rahman et al., 2022). On the whole, CE has moved from being a relatively new idea to becoming an established construct within marketing research, with clear relevance for firms operating in increasingly interactive marketplaces.

Hollebeek, Srivastava, and Chen (2019) point to another indication of how central CE has become in marketing research. They note that CE was included in the Marketing Science Institute's (MSI) research priorities for both 2014-2016 and 2016-2018. Being listed in these priorities suggests that CE was recognised as an area requiring continued scholarly attention. The authors also mention that engagement has been the focus of dedicated special issues in well-regarded journals such as the *Journal of the Academy of Marketing Science* (2017), the

Journal of Service Research (2010; 2011), and the *Journal of Consumer Psychology* (2009). Michel (2022) similarly observes that the MSI (2020) continued to include CE among its key research priorities, indicating that interest in the concept has remained steady.

Gallup (2019) encourages firms to treat CE as a strategic priority instead of a peripheral activity. Several scholars draw on findings from Gallup's industry reports to illustrate the potential business implications of engagement (Pansari & Kumar, 2016; Pansari & Kumar, 2017; Kumar et al., 2019; Venkatesan, 2017).

For example, data from the consumer electronics sector show that fully engaged customers spent an average of 373 USD per shopping trip, compared with 289 USD spent by actively disengaged customers (Kumar et al., 2019). Other Gallup findings suggest that fully engaged and engaged customers were associated with revenue increases of around 30%, while not-engaged and actively disengaged customers were linked to revenue declines of approximately 14% (Pansari & Kumar, 2016; Pansari & Kumar, 2017; Venkatesan, 2017).

Pansari and Kumar (2017), drawing on Gallup (2013), further discuss the relationship between engagement and firm performance. They report that fully engaged customers are associated with a 23% premium in terms of share-of-

wallet, profitability, revenue and relationship growth, whereas actively disengaged customers are associated with a 13% discount on similar performance indicators.

They also suggest that this pattern appears across different industries. For example, in consumer electronics, fully engaged customers are reported to make 44% more visits to their preferred retailer than actively disengaged shoppers. In casual dining, the difference is cited as 56% more visits, while in fast food the gap is 28%. In hospitality, fully engaged guests are said to spend 46% more than actively disengaged guests. In insurance, fully engaged policyholders purchase 22% more than their disengaged counterparts. In retail banking, fully engaged customers are reported to generate 37% more annual revenue for their primary bank than actively disengaged customers (Pansari & Kumar, 2017).

Taken together, these figures are often used in the literature to underline the potential performance implications of CE. Reflecting this growing managerial interest, firms increasingly attempt to guide engagement deliberately and do not leave it to develop organically (Harmeling et al., 2017).

Several scholars emphasise the strategic importance of CE. Gligor, Bozkurt, and Russo (2019), for instance, describe CE as a necessary condition for sustained sales growth and profitability, linking it to overall firm performance.

Moving beyond financial outcomes, Islam and Rahman (2016, p. 2020) describe CE as "*the most extensive and integrated approach to understand customers*," highlighting its ability to capture the depth and breadth of customer-firm interactions. Likewise, Rabbanee (2019) suggests that CE helps build meaningful and enduring firm-customer relationships, which may reduce customers' tendency to switch compared to those who remain disengaged.

Highlighting the relevance of CE in an increasingly connected digital environment, Li, Larimo, and Leonidou (2021), and Hewett et al. (2016) argue that customers can no longer be viewed as passive recipients of value in unidirectional firm-customer relationships. In digital settings, customers participate more actively and often collaborate with firms in shaping value. Their interactions are not restricted by time or location, and they engage with brands across multiple networks and platforms. Li, Larimo, and Leonidou (2021) attribute this shift to greater access to information and the speed at which it now circulates, along with the availability of low-cost search technologies that make comparison and evaluation easier for customers.

Taken together, these developments help explain why CE has moved to the centre of contemporary marketing thought. As firms operate in increasingly interactive and digitally mediated environments, understanding how and why customers engage has become important. CE is no longer treated as a peripheral concept, but as a way of making sense of how customers relate to firms in ongoing and evolving relationships.

2.5.4. Conceptualization of Customer Engagement

The Cambridge dictionary defines 'customer' as "*a person who buys goods or a service*" (The Cambridge Dictionary, 2022). Hooley, et al. (2020) maintain that defining 'customers' is not a straightforward task, as numerous actors are involved in the process of purchase and use of products and services. They maintain that a customer can play one or more of the following roles: **the Initiator:** one who initiates the search for a solution to the customer's problem; **the Influencer:** all the people who have influence on the purchase decision; **the Decider:** individuals who actually make the buying decision; **the Purchaser:** individuals who spend money in exchange for the benefits provided by the goods or services; **the User:** individuals who use the offer. Sometimes these roles are performed by one individual; in other cases, they are distributed across several people. Hooley et al. (2020) further argue that understanding customers requires attention to who is involved in buying and using the product, what criteria guide

their choices, when and where decisions take place, and how the product or service is used in practice.

Simons (2014) describes the term “customer” as one of the most elastic concepts in management theory. Instead of referring only to individual consumers, the term can include various actors within a firm’s broader value chain, such as wholesalers, retailers or purchasing departments, all of whom generate revenue through their interaction with the firm.

Kumar and Reinartz (2016) extend this view by arguing that customers contribute value not only through purchase transactions but also through a range of non-purchase behaviours. These contributions may take different forms and occur at different points in the relationship, suggesting that customers influence firm outcomes in ways that go beyond buying alone.

Engagement has been defined as “*the act of being involved with something*”, in Cambridge dictionary. Engagement has been investigated in numerous realms, such as education, psychology, management and information technology (Vivek et al., 2014). It is a complicated concept and has distinct connotations based on varied context. For example, in management literature it means organizational activities of internal stakeholders. Kahn’s definition of engagement is “*the simultaneous employment and expression of a person’s ‘preferred self’ in task*

behaviors that promote connections to work and to others, personal presence (physical, cognitive, emotional) and active, full role performances" (Kahn, 1990, p. 700).

Within organisational behaviour research, Schaufeli et al. (2002, p. 74) define engagement as "*a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption."* Kahn (1992) similarly suggests that being engaged involves psychological presence while performing an organisational role. In the burnout literature, engagement is often positioned as the conceptual opposite of burnout, representing a more positive and energetic state (Maslach et al., 2001).

In marketing, engagement shifts from an employee-focused concept to one centred on customers and their interactions with firms. CE broadly refers to the ways in which customers invest effort, attention and involvement in their relationship with a brand or organisation (Kumar et al., 2010; Brodie et al., 2011; Vivek Beatty, and Morgan, 2012).

Some scholars suggest that engagement builds on relational foundations. For example, Pansari and Kumar (2017) argue that satisfaction and emotional bonding within a relationship may create conditions that make engagement more

likely. In an earlier conceptualisation, Pansari and Kumar (2016, p. 498) define engagement as "*the attitude, behavior, the level of connectedness, among customers; between customer and employees; of customers and employees within a firm.*" Their definition highlights that engagement is not confined to purchase but reflects a broader sense of connection within the firm-customer ecosystem.

Despite being discussed extensively in the literature, there is still no full agreement on a single definition of CE (Lim et al., 2022; Hollebeek, Kumar, & Srivastava, 2022). Scholars approach CE from different theoretical angles, which has resulted in multiple conceptualisations co-existing in the field. Table 3 summarises some of the prominent definitions and theoretical perspectives that have shaped the development of the construct.

Table 3: Key Conceptualizations and Definitions of Customer Engagement

Author(s) and Year	Conceptual Focus / Perspective	Definition	Key Features / Contributions
Van Doorn et al. (2010, p. 253)	Behavioral manifestation perspective	"*Customers' behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers*"	Introduced the term *Customer Engagement Behaviors.* Identified both positive (e.g., positive WOM) and negative (e.g., public protest) behaviors beyond purchase.
Brodie et al. (2011, p. 260)	Relational and experiential perspective	"*A psychological state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (e.g., a brand) in service relationships"*	Framed CE as a *psychological state* derived from co-creative experiences; proposed five foundational propositions highlighting interactive, value co-creation processes.

Vivek et al. (2012, p. 133)	Relationship marketing perspective	"*The intensity of an individual's participation and connection with the organization's offerings and activities initiated by either the customer or organization*"	Expanded CE to include *cognitive, emotional, behavioral and social* dimensions; positioned CE as a component of relationship marketing linking involvement and participation to outcomes such as loyalty and WOM.
Verleye et al. (2014, p. 69)	Social exchange perspective	"*Customers' behavioral manifestations toward a firm, after and beyond purchase" and "the psychological state reflecting customers' interactive, co-creative experiences with a firm*."	Distinguished CEBs from CE; identified five positive CEB forms (cooperation, feedback, compliance, helping others, positive WOM); emphasized voluntary and firm-focused nature of engagement behaviors.
Pansari & Kumar (2016, p. 498)	Attitudinal: behavioral and value-based perspective	"*The mechanics of a customer's value addition to the firm, either through direct and/or indirect contribution*."	Linked CE to measurable value contributions: Customer Lifetime Value, Referral Value, Influence Value & Knowledge Value; established relationship between Employee Engagement and CE.
Harmeling et al. (2017, p. 312)	Behavioral and managerial (CEM) perspective	"*A firm's deliberate effort to motivate, empower and measure customer contributions to marketing functions" (p. 312); CE is "customer's voluntary resource contribution to a firm's marketing function, going beyond financial patronage"*	Introduced CE Marketing as firm-initiated engagement; connected CE to firm performance via customer-owned resources such as persuasion capital and creativity.
Hollebeek, Srivastava, & Chen (2019, p. 171)	Service-Dominant Logic and resource-integration perspective	"*A customer's motivationally driven, volitional investment of focal operant resources (including cognitive, emotional, behavioural and social knowledge and skills), and operand resources… into brand interactions in service systems*."	Integrated CE into the S-D logic framework; conceptualized CE as *motivational resource investment*; outlined antecedent processes (resource integration, knowledge sharing) and outcomes (co-creation, operant resource development).

For the purpose of this study, emphasis is placed on the resource-integration perspective of CE advanced by Hollebeek, Srivastava, and Chen (2019). They define CE as a "*customer's motivationally driven, volitional investment of specific operant/operand resources in interactions*" (p. 171).

Within this perspective, operant resources refer to intangible investments such as time, effort, knowledge, skills, and experience that customers bring to brand interactions. These investments may manifest cognitively, emotionally or behaviourally (Hollebeek, Srivastava & Chen, 2019; Jaakkola & Alexander, 2014; Connell, Marciniak & Lindsey Carey, 2023). Operand resources, in contrast, are tangible resources that support those interactions, such as digital devices or technological infrastructure that enable engagement to occur.

Scholars have cautioned against equating observable behaviours with engagement itself. So et al. (2014) argue that focusing only on behavioural manifestations may overlook the underlying processes that give rise to engagement. Similarly, Prentice et al. (2020) suggest that engagement involves an ongoing psychological connection with a brand or organisation. Taken together, these perspectives indicate that behavioural expressions alone may not fully capture the depth of CE, particularly when its internal and relational dimensions are taken into account.

Harrigan (2017) describes CE as developing through repeated interactions between a customer and an organisation, which gradually deepen the customer's emotional, psychological or behavioural investment in the brand. In this sense, engagement reflects more than a single interaction; it evolves through ongoing contact.

2.5.5. What Customer Engagement is not?

CE is often confused with related ideas such as involvement, participation or passion. However, these concepts are not the same. Zaichkowsky (1985, p. 347) defines involvement as "*an individual's level of interest and personal relevance in relation to an object in terms of his own values, self-concept or goals."* So et al. (2014) note that involvement is typically understood as primarily cognitive in nature, whereas engagement encompasses a broader range of responses that extend beyond cognition (Harrigan, 2017). This distinction suggests that CE captures a richer and more active form of customer-brand connection. Participation, on the other hand, refers to "*the degree to which customers produce as well as deliver services*" (Bolton & Saxena-Iyer, 2009, p. 99). While both involvement and participation describe important forms of customer activity, they do not necessarily imply an interactive or co-creative relationship with the firm.

Engagement has also been described more broadly as a psychological state in which individuals feel absorbed in an activity (Forgeard et al., 2011, p. 84). In marketing, however, CE reflects something more relational. It develops through interaction between customers and firms. Marbach, Lages, and Nunan (2019) argue that involvement may be driven largely by instrumental value, whereas engagement requires a stronger experiential connection with the brand.

Engagement is often described as relating to one's experience while performing a task (Birkeland & Buch, 2015). Kahn (1990, p. 693) refers to it as occurring in "*moments of task performances*." Research also shows that engagement can fluctuate across the day. For example, Sonnentag et al. (2012) found that it is typically higher after recovery in the morning and may decline under situational constraints. Passion, by contrast, refers to the quality of a person's relationship with a task, in totality. Although it may develop through deliberate processes, it tends to be relatively stable and does not shift from day to day (Forest et al., 2012).

Another difference lies in identity. Engagement reflects psychological involvement in an activity, while passion is more closely tied to identity, with individuals more likely to see the activity as part of who they are (Christian et al., 2011; Ho & Astakhova, 2018).

2.5.6. Theoretical Perspectives Underpinning Customer Engagement

CE has been examined through a range of theoretical lenses that seek to explain how and why customers interact with brands and firms. Among the perspectives most frequently used in the literature are S-D Logic (Vargo & Lusch, 2004, 2008), Relationship Marketing (Morgan and Hunt, 1994; and Grönroos,1994), Experiential Theory (Schmitt, 1999) and the S-O-R framework. Each of these traditions has contributed to shaping contemporary understandings of CE.

While these perspectives provide important conceptual foundations, the present study draws primarily on the S-O-R framework as its guiding theoretical lens. S-O-R offers a structured way of examining how environmental stimuli influence internal psychological states, which in turn shape behavioural responses. Given the study's focus on understanding how specific conditions within OBCs influence customer responses, this framework provides a clear structure. To further account for the role of psychological resource dynamics, the S-O-R perspective is complemented by insights from COR (Hobfoll, 1989, 2001) theory.

S-D Logic (Vargo & Lusch, 2004, 2008) views customers as active participants in value creation and not as passive recipients of firm offerings. Value is understood to emerge through interaction, where firms and customers integrate resources within broader service ecosystems. From this perspective, CE reflects

customers' contribution to these interactive processes (Brodie et al., 2011; Hollebeek, Srivastava, & Chen, 2019). Engagement is therefore seen as a continuing process in which customers invest their own resources into brand interactions. These resources may include knowledge, skills, time or effort. In this sense, CE represents an ongoing exchange within the service system, shaped by mutual participation and not just one-sided firm action.

Relationship Marketing Perspective: Drawing on the foundations laid by Morgan and Hunt (1994) and Grönroos (1994), relationship marketing centres on the development and maintenance of long-term relationships between firms and customers. Instead of focusing solely on transactions, this tradition highlights trust and ongoing interaction as key elements of value creation. CE builds on this logic by placing greater emphasis on customers' active role in these relationships (Vivek, Beatty, & Morgan, 2012). Bowden (2009) suggests that engagement reflects a deeper relational state that can evolve from satisfaction and commitment over time. Similarly, Hollebeek (2011) conceptualises CE as closely tied to relationship quality, where customers who feel more connected to a brand are more likely to participate voluntarily in ways that extend beyond purchase.

Experiential and Psychological Perspectives: Drawing on experiential marketing (Schmitt, 1999) and flow theory (Csikszentmihalyi, 1990), this

perspective views engagement as rooted in lived experience. Customers are more likely to engage when brand interactions feel absorbing and personally meaningful. In this sense, engagement reflects not only observable behaviour but also internal experience. Research grounded in this tradition emphasises the role of intrinsic motivation and affect in shaping engagement (Calder, Malthouse & Schaedel, 2009; Vivek et al., 2012). It helps explain why customers sometimes invest effort and attention in brand interactions even when there is no immediate transactional outcome. By focusing on how customers experience interactions, this perspective adds depth to S-D and relationship views, particularly in socially mediated environments such as OBCs.

Stimulus-Organism-Response Framework: While S-D Logic, relationship marketing and experiential perspectives each offer valuable insights into CE, the present study adopts the S-O-R framework**.** Originating in environmental psychology (Mehrabian & Russell, 1974), the S-O-R framework provides a foundational lens to explain how environmental and informational stimuli elicit internal psychological states that drive behavioural outcomes. In this paradigm, the stimulus (S) refers to external factors that provoke a reaction, the organism (O) represents internal cognitive and affective processes (such as emotions, perceptions, or evaluations), and the response (R) denotes the resultant behaviour (Donovan & Rossiter, 1982). Jacoby (2002) extended the applicability of the S-O-R framework beyond physical environments, arguing that stimuli can also be

symbolic, social, or informational, such as marketing communications, online interactions or community cues. This reconceptualization made the framework highly relevant to consumer and brand research, allowing scholars to examine how psychological processing mediates the relationship between external brand stimuli and customer behaviours. Within the CE context, the S-O-R model explains *how various brand- and community-level stimuli* shape customers' internal *organismic states* which in turn influence *behavioural responses*.

Additionally, COR (Hobfoll, 1989, 2001) theory is used in support to explain how customers manage and invest psychological resources within these interactions, complementing this perspective by explaining how individuals seek to acquire and protect valued resources over time. In digital brand environments, engagement can be understood as a form of resource investment, where customers devote time, emotional energy and cognitive effort, while also facing the possibility of resource depletion under sustained demands.

2.5.7. Online Customer Engagement

Digital environments introduce additional nuances to CE. In online settings, engagement often involves deeper processing of brand-related information and emotional involvement, while also encouraging customers to take action. It may occur at both individual and social levels, as customers interact with brands, share

experiences, create content and support other members within digital communities.

Sashi (2012, p. 267) describes online CE as "*interactive consumer experiences where ICTs such as social media act as tools that can enable and facilitate these experiences,*" and suggests that engagement reflects both calculative and affective commitment to an active relationship with a firm or its online community. Research also shows that online CE is expressed through behaviours that extend beyond transactions, including word-of-mouth communication, referrals, content creation and suggestions (Verhoef et al., 2010).

Mollen and Wilson (2010) describe online CE as the customer's cognitive and affective commitment to an active relationship with a brand as represented through a website or other computer-mediated interfaces designed to communicate brand value. In this view, online engagement is characterised by sustained cognitive processing and the pursuit of both instrumental and experiential value within digital interactions.

Hollebeek (2011) argues that the relevance of CE dimensions can vary depending on the context, such as online, social, brand or firm settings. She further suggests that the engagement process and behaviours can be understood through 3 broad

themes: *immersion*, which reflects the extent to which customers become engrossed in brand interactions; *passion,* referring to feelings of attachment or admiration toward the brand; and *activation,* which captures the willingness of customers to invest time and effort in interacting with the brand.

Similarly, Dessart, Veloutsou and Morgan-Thomas (2016) further refined the conceptualisation of engagement in OBCs by proposing a dual-focus perspective, suggesting that engagement may simultaneously be directed toward both the brand and the community, and can be captured through multiple cognitive, emotional and behavioural dimensions. Extending this perspective, Kumar (2021) shows that engagement in OBCs often operates through two focal objects, the brand and the community itself, with psychological ownership and value congruity shaping engagement toward each.

Calder, Malthouse and Schaedel (2009) propose two basic forms of engagement in online media: personal engagement and social-interactive engagement. The extent to which each form appears can vary across different types of media. Personal engagement is often associated with traditional media such as newspapers, where readers engage through activities like learning or intellectual stimulation. Social-interactive engagement, on the other hand, is more

characteristic of online environments, where users interact with others, participate in discussions and contribute to community activities (Vivek et al., 2014).

Customers who engage with brand communities online often report stronger connections with their preferred brands. They also tend to express greater trust, commitment, satisfaction and loyalty toward those brands (Harrigan, 2016).

2.5.8. Empirical Studies on Customer Engagement

Empirical research on CE has progressed from early conceptual work to studies examining its antecedents, underlying processes and outcomes across different contexts. Early empirical efforts focused largely on validating the structure and measurement of CE.

For example, Brodie et al. (2013), using a multi-method approach that combined semi-structured interviews with netnography, advanced understanding of CE by identifying several engagement sub-processes, including sharing, learning, co-developing, advocating and socialising. Their findings show that engagement develops through interactive and relational experiences among consumers within brand communities. In this way, CE is portrayed as a dynamic and socially embedded phenomenon, reflecting the broader shift in marketing from

transactional exchanges toward more interactive and value co-creating relationships.

Hollebeek, Glynn, and Brodie (2014) provided empirical support for the multidimensional nature of the construct. Using survey data (*n=96*), their study confirmed a three-dimensional structure of CE consisting of cognitive processing, affection and activation. The findings also demonstrated that CE is a higher-order construct that is distinct from, yet related to, concepts such as relationship quality, satisfaction and involvement, reflecting customers' psychological and behavioural investment in brand interactions.

Subsequent research also highlighted the experiential and affective mechanisms underlying engagement. Dessart (2017), drawing on data from more than *48 Facebook brand pages* across nine product categories and *448 consumers*, found that experiential elements such as enjoyment, enthusiasm and immersion play an important role in shaping engagement intensity. The study suggests that CE reflects a psychological state of absorption and not a fixed attitude. This focus on experiential and emotional elements helped advance the experiential marketing perspective and offered insight into why customers continue to engage with brands over time.

From a strategic perspective, Kumar and Pansari (2016) developed and validated a framework using data from *120 companies* across two time periods. Their findings link CE to firm-level performance outcomes, showing that CE contributes to both revenue growth and cost efficiency beyond what can be explained by transactional behaviour alone. Engagement within OBCs can also influence consumer responses during adverse events. Yuan et al. (2020) show that higher levels of OBC engagement can mitigate the negative consequences of product-harm crises by strengthening consumer forgiveness and repurchase intentions.

More recent work also suggests that the effects of engagement may not always increase indefinitely. Taylor et al. (2023) demonstrate that extremely high levels of engagement within OBCs may eventually reduce sharing behaviours, suggesting that engagement can exhibit diminishing or curvilinear effects under certain conditions. Further, Shin and Perdue (2023) show that online engagement behaviours within OBCs generate important non-transactional value for both firms and customers.

Recent empirical work has increasingly focused on the mechanisms and contextual conditions that shape engagement. Marbach, Lages & Nunan, (2019), using a multi-method design (*n=559* users from two firm-hosted OBCs), found

that factors such as identification with the community and the level of interaction among members encourage engagement. Their study also shows that opportunities for value co-creation can further strengthen this involvement, although excessive demands may lead to negative affective outcomes such as fatigue.

Kumar (2019), in a survey of students (*n=763*), identified psychological ownership as an important mechanism that strengthens customers' motivation to contribute knowledge and advocacy, extending CE research toward internal psychological drivers of engagement.

Lim et al. (2022), through a bibliometric and thematic review of *861 Scopus-indexed CE articles* published between 2006 and 2020, called for more process-oriented and longitudinal research designs. They argued that such approaches are needed to capture both enabling and strain-based dynamics of engagement over time, suggesting that CE can generate dual outcomes that are both constructive and potentially depleting.

Complementary studies further support the multidimensional and relational nature of CE. Leckie, Nyadzayo, and Johnson (2016), examining customers of Australian mobile phone service providers (*n=502*), found that satisfaction and

commitment play an important role in fostering engagement, with trust strengthening these relational links. Their findings reinforce the view of CE as a higher-order relational construct. Similarly, Rather et al. (2019), in a survey of *395 luxury hotel guests*, reported that brand identification and self-congruity encourage stronger emotional and behavioural engagement. Islam and Rahman (2017) also show that the quality of customer interactions and peer influence within communities can shape the intensity of engagement.

Across this body of empirical research, CE consistently appears as a multidimensional construct that combines cognitive and affective elements with observable behavioural expressions. It is also widely understood as a socially embedded process that develops through ongoing relational exchanges. In addition, several studies highlight its strategic value for firms, linking engagement to broader performance outcomes.

Despite this progress, a number of limitations remain. Much of the existing research concentrates on positive drivers of engagement. Far fewer studies examine the psychological mechanisms that explain how engagement develops or declines over time. Research has also paid limited attention to the potential strain or negative experiences that may accompany sustained engagement in highly interactive environments.

2.5.9. Key Research Gaps in Customer Engagement Literature

Although CE has become a central construct in contemporary marketing research, several conceptual, theoretical and methodological gaps remain. Early work by van Doorn et al. (2010) highlighted the importance of identifying a broader range of antecedents of CE behaviours and understanding how these factors influence engagement. Since then, a growing body of research has examined different drivers of engagement. However, many studies tend to focus on individual predictors and did not consider how multiple brand- and community-related factors may operate together within engagement processes (Jaakkola & Alexander, 2014; Pansari & Kumar, 2017; Hollebeek & Macky, 2019; Lim, 2022). As a result, calls for a more comprehensive and process-oriented understanding of CE remain only partially addressed.

Similarly, Jaakkola and Alexander (2014) emphasised that research should examine the interplay between drivers and outcomes of engagement, particularly at a systemic level where customer, firm and contextual factors interact. Along similar lines, Connell et al. (2019) encouraged scholars to devote closer attention to the processes through which CE develops. Despite these calls, much empirical research still treats engagement primarily as an outcome and not as a process that unfolds over time through cognitive, emotional and behavioural experiences (Brodie et al., 2011; Dessart, 2017; Hollebeek & Macky, 2019; Lim, 2022). A

similar pattern is also reflected in the studies identified through the systematic review conducted in this chapter, where many empirical investigations continue to focus primarily on antecedent-outcome relationships instead of examining the underlying psychological processes through which engagement develops. This highlights the importance of models that show how experiences shape internal responses and guide engagement.

The literature also suggests that the emotional and psychological mechanisms underlying CE are not yet fully understood. Santini et al. (2020) called for closer examination of the role of emotions within the engagement framework, while Sim et al. (2022) highlighted the importance of understanding how customers' dispositional characteristics and psychological conditions influence engagement processes. These observations indicate that engagement may arise not only from external marketing stimuli alone, but also from internal cognitive and affective states that shape behavioural responses. In response to these discussions, the present study incorporates organismic variables that capture both enabling and constraining aspects of customer experience.

From a relational perspective, Grégoire, Tripp, and Legoux (2009) highlighted the importance of considering deeper emotional and relational constructs, such as attachment and affection, that that reflect long-term customer-brand relationships,

which can sometimes be positive and negative at the same time. Kumar and Kaushik (2022) similarly suggested that engagement frameworks may benefit from incorporating relational variables such as brand love and trust. Despite these insights, CE research has often examined positive and negative relational processes separately, which limits understanding of how engagement may simultaneously create feelings of connection while also generating strain. The present study seeks to address this limitation by examining both relational enrichment and relational depletion within a single integrative framework.

Recent reviews note that many CE studies rely on static models that link drivers of engagement to its outcomes but offer less insight into the psychological pathways through which engagement unfolds (Hollebeek & Macky, 2019; Lim, 2022). Instead of focusing only on temporal change, several scholars therefore encourage conceptually process-based approaches that explain the internal mechanisms shaping engagement responses (Brodie et al., 2013; Hollebeek et al., 2019; Hollebeek & Macky, 2019; Lim, 2022). Marbach, Lages & Nunan, (2019) similarly observed that interactive community features can foster engagement, but very high levels of participation may also lead to negative emotional outcomes such as fatigue. These findings highlight the importance of recognising the dual nature of engagement, as it may both strengthen and deplete psychological resources. The present study therefore adopts a balanced

perspective by examining both enabling and strain-based mechanisms in order to develop a more complete understanding of engagement dynamics.

A further limitation relates to the contextual understanding of engagement within socially embedded settings. Izogo et al. (2022) suggested that future research should explore how customer-to-customer interactions shape engagement across both online and offline contexts. Despite growing attention to digital environments, many CE models remain bounded to specific contexts and pay limited attention to the broader interaction conditions in which engagement develops. In response to this limitation, the present study examines CE within OBC settings characterised by sustained interaction and shared meaning among members. This context allows exploration of how brand- and community-related cues, together with underlying psychological processes, influence engagement responses.

In summary, although CE has become a well-established concept in marketing research, important questions remain about the mechanisms through which engagement develops, the emotional and relational conditions that shape it, and the contexts in which it unfolds. To address these issues, the present study adopts the S-O-R framework, originally proposed by Mehrabian and Russell (1974) and later extended to consumer research by Jacoby (2002). This framework provides

a useful lens for explaining how brand- and community-level stimuli influence internal psychological states and how these states shape the cognitive, affective and behavioural expressions of engagement. By taking this process-based perspective, the study aims to offer a more grounded understanding of how engagement develops, evolves and sometimes weaken within contemporary digital environments.

While the preceding discussion has examined the conceptual and theoretical development of CE, engagement processes do not occur in isolation from consumers' broader experiences. Increasingly, scholars recognise that participation in interactive environments can also influence how individuals experience their involvement psychologically. The following section therefore focuses on the concept of CWB, examining how marketplace participation and interaction may shape consumers' psychological experiences.

2.6. Consumer Well-Being

2.6.1. Conceptual Foundations of Consumer Well-Being

CWB has gradually become an important theme in marketing and consumer research as scholars have begun to look beyond economic exchange and consider how marketplace experiences influence people's lives (Sirgy and Lee, 2008; Lee and Ahn, 2016; Zhou et al., 2020). Instead of viewing consumption only as a

means of satisfying functional needs, this perspective recognises that consumption experiences can shape how individuals evaluate their life circumstances, experience emotions and pursue satisfaction and fulfilment (Diener, 1984; Sirgy and Lee, 2008; Zhou et al., 2020). Within marketing scholarship, CWB is therefore generally understood as the degree to which consumption activities and marketplace experiences contribute positively to individuals' quality of life (Sirgy and Lee, 2008).

A large part of the literature approaches CWB through the concept of subjective well-being, which originates in psychology. Subjective well-being refers to individuals' own evaluation of their lives and typically includes both cognitive and emotional components, such as life satisfaction and the experience of positive and negative emotions (Diener, 1984). This perspective has been widely used in consumer research because it focuses on how individuals themselves evaluate their lives and emotional experiences, instead of relying only on external or objective indicators of welfare (Diener, 1984; Sirgy and Lee, 2008). As a result, CWB research increasingly examines how consumption experiences and brand interactions influence individuals' life satisfaction and emotional states (Bettingen and Luedicke, 2009; Zhou, Wang & Zhan, 2020).

Over time, scholars have increasingly recognised that CWB is not a single, simple outcome but a multidimensional construct that reflects both cognitive evaluations and emotional experiences associated with consumption (Diener, 1984; Sirgy and Lee, 2008; Zhou et al., 2020). In well-being research, a distinction is often made between hedonic and eudaimonic perspectives. The hedonic view focuses on pleasure and enjoyment derived from experiences, while the eudaimonic perspective considers deeper aspects of well-being, including meaning, personal growth and the fulfilment of psychological needs (Diener, 1984; Sirgy and Lee, 2008; Ryan and Deci, 2001). In marketing settings, this distinction becomes particularly meaningful because consumption experiences can provide immediate enjoyment while also shaping deeper feelings of identity and personal fulfilment connected to brands and consumption practices (Bettingen and Luedicke, 2009).

Another important development in the literature is the recognition that consumption can influence well-being in both positive and negative ways (Lee and Ahn, 2016; Zhou et al., 2020). Some marketplace experiences may enhance individuals' sense of satisfaction and emotional fulfilment, whereas others can give rise to stress, dissatisfaction or psychological pressure (Lee and Ahn, 2016; Zhou et al., 2020). For instance, research has shown that materialistic orientations may reduce CWB by encouraging constant comparison and dissatisfaction, whereas alternative consumption orientations that emphasise restraint or intrinsic

values may contribute to greater life satisfaction (Lee and Ahn, 2016). These findings highlight that the relationship between consumption and well-being is complex and depends not only on what consumers acquire but also on how they experience and interpret consumption in their everyday lives.

The literature has also considered how brands and brand-related experiences may contribute to CWB. Because brands increasingly shape consumption experiences and social identities, they can influence individuals' emotional lives and their perceptions of happiness. Bettingen and Luedicke (2009) suggest that brand experiences may generate forms of happiness by providing emotional meaning and symbolic value to consumers. Building on this line of work, scholars have examined the idea of brand-related subjective well-being, referring to the emotional fulfilment that consumers derive from their interactions with brands across different contact points (Zhou et al., 2020).

The growing importance of digital consumption environments has also expanded this discussion. OBCs, for instance, enable consumers to interact with one another and with brands in ways that go beyond traditional purchase experiences (Dessart et al., 2015; Zhou et al., 2020). These environments create spaces where consumers can interact with one another and develop supportive relationships through ongoing exchanges within the community (Zhou Wang and Zhan, 2022;

Dessart et al., 2015). Zhou, Wang and Zhan (2022) suggest that interactions within OBCs may enhance consumers' positive emotional experiences and life satisfaction within the community, which can contribute to their overall subjective well-being. Their study also indicates that well-being within OBCs may operate at different levels, including both community-level well-being and brand-related well-being, with community well-being playing an important role in strengthening consumers' relationships with the brand (Zhou et al., 2020).

Taken together, these developments suggest that CWB is now widely viewed as a multidimensional concept within marketing scholarship (Diener, 1984; Schnebelen and Bruhn, 2018; Zhou et al., 2020). It reflects consumers' evaluations of their consumption experiences and the emotions associated with those experiences, as well as the extent to which interactions with brands and brand communities contribute to feelings of satisfaction and well-being (Diener, 1984; Schnebelen and Bruhn, 2018; Zhou et al., 2020). Understanding these foundations is particularly important in contemporary digital environments, where brand interactions increasingly occur within interactive social contexts and may influence both CE and well-being (Dessart et al., 2015; Zhou et al., 2020).

2.6.2. Consumer Well-Being in Brand and Consumption Contexts

Within marketing research, scholars have examined how brands and consumption experiences may influence CWB (Bettingen and Luedicke, 2009; Zhou et al., 2020). Because consumption often carries symbolic meaning and emotional significance for consumers, brands are commonly understood not only as functional offerings but also as sources of emotional and psychological value (Bettingen and Luedicke, 2009).

Several studies suggest that consumption experiences associated with brands can contribute to consumers' feelings of satisfaction and emotional fulfilment. Bettingen and Luedicke (2009), for example, discuss how brands can become meaningful elements of consumers' lives by providing symbolic and emotional value, which may contribute to experiences of happiness and well-being.

Research has also examined how specific consumption orientations and experiences relate to CWB. Some studies suggest that certain forms of consumption can influence individuals' emotional states and life satisfaction in general, particularly when consumption is guided by values that support personal balance and well-being (Lee and Ahn, 2016). In this sense, well-being outcomes are shaped not only by the acquisition of products or services but also by the

meanings and emotional experiences that consumers associate with brands and consumption (Bettingen and Luedicke, 2009).

Scholars have also examined how these processes unfold within interactive brand environments. Digital platforms and brand-related communities, in particular, create spaces in which consumers can engage with brands beyond traditional purchase situations (Dessart et al., 2015; Zhou et al., 2020). These environments allow consumers to interact with brands and other consumers and participate in brand-related activities, thereby expanding the ways in which consumption experiences may influence CWB (Baldus et al., 2015; Dessart et al., 2015).

2.6.3. Consumer Well-Being in Online Brand Communities

OBCs have increasingly been recognised as environments in which consumers' experiences with brands extend beyond individual consumption to include interaction and participation within a social setting (Muniz and O'Guinn, 2001; Dessart et al., 2015). These communities enable consumers to interact with other brand users and engage with brands in ways that extend beyond traditional marketplace encounters (Muniz and O'Guinn, 2001; Baldus et al., 2015).

Because of this interactive nature, participation in OBCs has been associated with a range of experiential outcomes for consumers. Research suggests that

interactions within these communities may influence how consumers experience brands, as community members communicate with one another and develop shared understandings around brand-related topics (Muniz and O'Guinn, 2001; Dessart et al., 2015). Such interactions can influence consumers' emotional experiences and their sense of connection with the brand and with other community members. Some studies have begun to examine how participation in OBCs may relate to CWB. Zhou, Wang and Zhan (2022) show that social relationships and interactions within these communities are associated with consumers' subjective well-being, particularly when participation generates positive emotional experiences and satisfaction within the community.

These findings suggest that OBCs may play an important role in shaping well-being outcomes by providing social environments in which consumers experience brands not only through consumption but also through interaction with other members and participation in community activities.

2.6.4. Empirical Studies on Consumer Well-Being

Empirical research on CWB has developed across a variety of consumption contexts and methodological approaches. Quantitative studies have frequently examined how consumption activities and marketplace experiences influence consumers' evaluations of their well-being (Zhong and Mitchell, 2010;

Balderjahn et al., 2020). For example, Zhong and Mitchell (2010) found that hedonic consumption may enhance subjective well-being indirectly through increased satisfaction with relevant life domains. Later work by Zhong and Mitchell (2012) showed that subjective well-being may also influence subsequent hedonic consumption behaviour. Together, these studies suggest that the relationship between consumption and well-being may be reciprocal instead of being strictly one-directional. Similar concerns appear in Lee and Ahn's (2016) study, which found that materialistic consumption orientations may undermine CWB, whereas anti-consumption values may support it by encouraging greater control over consumption and a stronger focus on intrinsic concerns. Balderjahn et al. (2020) further showed that forms of sustainable anti-consumption, such as voluntary simplicity and debt-free living, do not necessarily reduce well-being and may in some cases strengthen it, particularly in relation to psychosocial and financial aspects of well-being. These studies collectively suggest that well-being outcomes depend not simply on the amount of consumption, but also on how consumption is experienced and interpreted by consumers.

A second stream of empirical work has examined well-being in relation to brands and digital consumption environments. In this area, Zhou, Wang and Zhan (2022) found that interactions within OBCs contribute positively to community subjective well-being, which in turn is associated with brand-related well-being.

Their findings suggest that well-being in brand settings may arise not only from direct consumption but also from experiences within brand communities. Other studies have highlighted less positive outcomes. Ho and Ito (2019), for instance, found that consumption-oriented engagement in social network sites may reduce personal well-being when social comparison increases feelings of anxiety or lowers individuals' self-esteem.

Kuanr et al. (2022) examined the issue from a different perspective and found that consumers with higher levels of subjective well-being may be more likely to avoid brands they perceive as violating moral standards, partly because well-being is linked to stronger self-control. More recently, Liyanaarachchi et al. (2026) examined immersive retail environments such as virtual reality shopping and found that these experiences can generate both experiential value and ethical tension. Their study suggests that CWB in such settings depends largely on how consumers perceive issues such as privacy and the convenience of the experience. Taken together, these studies suggest that digital and brand-related environments can support CWB, but they may also create psychological strain depending on how consumers experience and interpret those environments.

Qualitative and mixed-method studies have added further depth by exploring how consumers understand and experience well-being within specific marketplace

contexts. Sharma, Conduit and Hill (2017), for example, found that participation in co-creation roles can generate both hedonic and eudaimonic forms of well-being, particularly when consumers feel a sense of empowerment and personal meaning through their involvement. Pera, Quinton and Baima (2020) found that social media practices such as photo-sharing may enhance subjective well-being by allowing consumers to express themselves and connect with others in meaningful ways. Similarly, Plaud and Guillemot (2015) showed that service interactions can influence subjective well-being by shaping how consumers experience relationships and personal development within service contexts. Engström and Elg (2015) also highlighted the importance of participation, showing that well-being can be strengthened when consumers experience a sense of autonomy and competence through their involvement. These studies are particularly useful because they show that CWB is not only an outcome that can be measured, but also an experience shaped by how consumers interpret their interactions within specific marketplace contexts.

Taken together, the empirical literature suggests that CWB is shaped by how consumers experience consumption and by the relationships they develop with brands and marketplace environments. At the same time, the evidence also suggests that these effects are rarely straightforward. CWB may improve when consumption experiences feel meaningful and when relationships with brands or

other consumers are supportive, but it can also be undermined by pressures such as social comparison or problematic marketplace experiences. This makes CWB an important and complex outcome within contemporary consumer research.

2.6.5. Scope of Consumer Well-Being and Participation Differences

The present study examines CWB mainly from a psychological and subjective perspective. This is consistent with well-being research that focuses on how individuals evaluate their experiences and the emotions associated with them (Diener, 1984; Sirgy and Lee, 2008). It also reflects the purpose of this study, which is to understand how consumers experience their participation in OBCs. The quantitative measure captures how engagement with the brand relates to social well-being, leisure well-being and perceived quality of life within the community (El Hedhli, Chebat and Sirgy, 2013). The study therefore focuses on consumers' psychological and psychosocial experiences and not on objective or clinical indicators of health.

This focus does not mean that strain is only psychological. Research on social networking services suggests that technostress may also affect sleep (Salo, Pirkkalainen and Koskelainen, 2019). Physical effects were not measured in the present study because its focus was on how consumers experienced participation psychologically and socially. Sleep disturbance and other aspects of physical

well-being were therefore outside the focus of the study but remain relevant for future research.

Members may also experience OBC participation differently depending on whether they participate actively or passively. Active members contribute through posting, commenting, sharing knowledge or supporting other members. Their participation may be encouraged by opportunities to interact, contribute and receive recognition within the community. Passive members, often described as lurkers, mainly observe discussions and gather information, although they may remain psychologically involved with the brand and community (Mousavi, Roper and Keeling, 2017; Mousavi and Roper, 2023). These differences can also be understood through identity and resource-based perspectives. Identity Theory suggests that people are motivated to act in ways that support and express identities that are important to them (Burke, 1991; Burke and Stets, 2009; Stryker and Burke, 2000). Within OBCs, active participation may therefore provide greater opportunities for members to express their connection with the brand or community and gain recognition through visible contribution. COR theory, in contrast, emphasises that individuals seek to protect and manage valued resources such as time, attention and emotional energy (Hobfoll, 1989, 2001). From this perspective, passive participation may allow members to remain connected to the

community while requiring fewer cognitive and emotional resources than active contribution.

These differences may also affect how demands are experienced. Active participation can require greater investments of time and emotional effort, particularly where members feel expected to respond or contribute regularly. Passive participation may involve less visible effort, but passive members may still experience information overload, social comparison or other forms of psychological strain. Low visible participation must therefore not automatically be understood as an absence of engagement or an absence of well-being effects.

2.6.6. Research Gaps in Consumer Well-Being Literature

CWB has also been examined within the perspective of Transformative Service Research, which explores how marketplace systems and service experiences may influence the well-being of consumers (Anderson et al., 2013; Ostrom et al., 2015). This perspective encourages scholars to consider how marketing activities and service environments affect people's lives beyond immediate consumption outcomes. As a result, Transformative Service Research has drawn attention to the broader societal implications of marketplace interactions and their potential role in shaping CWB. Within this perspective, well-being is viewed as a broader societal outcome that can be influenced by the way marketplace systems shape

consumers' experiences and interactions. As a result, marketing scholars have examined how marketplace experiences and consumption practices may influence consumers' quality of life (Sirgy and Lee, 2008; Lee and Ahn, 2016).

Despite this growing interest, several limitations remain evident in the literature. Much of the empirical research still examines well-being mainly as an outcome of specific consumption activities and not as part of a broader process that develops through ongoing marketplace interaction (Zhong and Mitchell, 2010; Balderjahn et al., 2020). While these studies show that consumption can influence well-being, less attention has been given to how well-being develops through ongoing interactions within marketplace environments. Another limitation concerns the theoretical perspectives used to examine the relationship between consumption and well-being, as many studies focus on specific aspects of consumption and not broader marketplace processes. Prior research often focuses on specific consumption orientations, such as materialism or sustainable consumption (Lee and Ahn, 2016; Balderjahn et al., 2020). Other studies examine well-being within particular behavioural settings, including social media participation (Pera, Quinton and Baima, 2020). These approaches provide useful insights, but they offer less clarity on how brand- and community-related conditions interact with psychological processes to shape engagement and well-being outcomes.

A further limitation concerns the mechanisms through which marketplace experiences influence CWB, which remain relatively underexplored in the literature. Existing research frequently identifies associations between consumption practices and well-being outcomes, yet comparatively less attention has been given to the psychological processes through which these outcomes emerge (Sharma, Conduit and Hill, 2017; Engström and Elg, 2015). Understanding these processes is particularly important in digital environments, where consumers' experiences are shaped through consumption as well as through interaction with other participants. Another gap concerns OBCs. Although these communities have become an important space for consumer-brand interaction, relatively little research has examined how participation in them may influence CWB. Existing research shows that OBCs facilitate social interaction and engagement among consumers (Dessart et al., 2015). Some studies also suggest that such interactions may contribute to CWB within community settings (Zhou, Wang and Zhan, 2022). Taken together, these limitations highlight the need for research that examines CWB within interactive brand environments while also considering the psychological processes through which brand- and community-related cues shape engagement and well-being outcomes. Addressing these issues is particularly relevant in the context of OBCs, where consumers' experiences with brands develop through ongoing interaction and not isolated consumption events.

Although research on CE, CWB, and OBCs has grown considerably, these areas have often developed along separate lines in marketing scholarship. Studies on CE mainly examine how interactions with brands encourage customers to participate and build relationships with brands and other community members (Brodie et al., 2011; Dessart et al., 2015). Research on CWB, in contrast, has been more concerned with how consumption experiences influence individuals' evaluations of their lives and their sense of satisfaction or happiness (Sirgy and Lee, 2008; Lee and Ahn, 2016). At the same time, work on OBCs has highlighted the importance of social interaction in shaping brand- and community-related experiences within digital environments (Brodie et al., 2013). While these streams of research offer valuable insights, they rarely examine how experiences within OBCs are interpreted psychologically by consumers and how those interpretations may influence both engagement and CWB. As a result, the processes through which brand and community experiences translate into engagement and well-being outcomes remain less clearly understood in the existing literature.

To synthesise the literature discussed in this chapter, Table 4 provides a summary of key empirical studies on OBCs, CE, and CWB.

Table 4:Summary of Key Empirical Studies on Online Brand Communities, Customer Engagement, and Consumer Well-Being

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Hollebeek, Srivastava & Chen (2019)	S-D logic–informed customer engagement: integrative framework, revised fundamental propositions, and application to CRM	Journal of the Academy of Marketing Science	Customer engagement conceptualisation in service systems and CRM	Literature review	Framework development	**Antecedents:** Negative CE **Mediators:** Interaction **Moderators:** Context-specific characteristics of service systems **Outcomes:** Co-creation; Co-destruction	Negative CE can lead to value co-destruction, while post-interaction engagement may result in co-creation. The study positions CE as an interactional process within service systems grounded in S-D logic.	Focuses mainly on S-D logic as the theoretical foundation and does not empirically test the proposed framework. Other theoretical perspectives may also explain CE processes. Empirical validation of the framework is needed. Future studies could test the model in B2B contexts and examine the performance outcomes of S-D logic–informed CE.
Pansari & Kumar (2017)	Customer engagement: the construct, antecedents, and consequences	Journal of the Academy of Marketing Science	Customer engagement theory in firm–customer relationships	Literature review	Framework development	**Antecedents:** Satisfaction, emotions **Mediators:** CE **Moderators:** Firm type (B2B vs B2C), industry type, brand value, involvement, convenience **Outcomes:** Customer satisfaction, customer direct contribution, customer indirect contribution	Customer engagement emerges when customers experience satisfaction and emotional connection with the firm. Higher engagement leads to greater direct and indirect contributions such as participation in marketing programs and sharing personal information.	The framework is conceptual and lacks empirical testing. Longitudinal studies across industries could examine how satisfaction and emotions influence engagement and firm performance over time. Future work could also test the framework across cultures and in contexts such as education or non-profit sectors.
Connell, Marciniak, Carey & McColl (2019)	Customer engagement with websites: a transactional retail perspective	European Journal of Marketing	Customer engagement in transactional retail websites	Qualitative study	Exploratory interpretative design using 22 semi-structured interviews with older online shoppers	**Antecedents:** Positive product CE. **Outcomes:** CE; Brand engagement	Product-level engagement can strengthen brand engagement within transactional websites. Engagement may arise from both product interaction and website cues, forming a triadic relationship between customer, brand and website environment.	The study uses a relatively small sample of participants from a narrow demographic group. Future research should validate the findings through empirical studies, examine other product categories, include broader demographic group, and further explore how engagement develops in retail
Kumar & Pansari (2016)	Competitive Advantage Through Engagement	Journal of Marketing Research	Customer engagement and employee engagement in firm performance context	Quantitative	Framework development and survey validation using multiple studies (customers, students, employees) with factor analysis and hypothesis testing	**Antecedents:** Employee satisfaction, identification, commitment, loyalty, performance (components of employee engagement) **Mediators:** Customer engagement **Moderators:** Employee empowerment; firm type (B2B vs B2C); industry type (service vs manufacturing) **Outcomes:** Firm performance	Employee engagement positively influences customer engagement, especially when employee empowerment is high. Customer engagement improves firm performance. The effects are stronger in service industries and B2B settings.	Future research should examine the time-varying impact of engagement on firm performance, test the measures across countries, and explore the relative influence of different CE and EE components.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Kumar, Rajan, Gupta & Dalla Pozza (2019)	Customer Engagement in Service	Journal of the Academy of Marketing Science	Customer engagement in service environments	Qualitative	Grounded theory approach using in-depth interviews with managers from B2C service firms	**Antecedents:** Firm-related factors such as interaction orientation and omnichannel model **Mediators:** Service experience, emotional attachment, satisfaction **Moderators:** Offering characteristics, value, enabling factors, market conditions, convenience, firm type, involvement level, brand value **Outcomes:** Customer engagement in service	Interaction orientation and omnichannel models enhance service experience and customer engagement. Their impact depends on factors such as trust, customer participation, technological adoption, and market development conditions.	Empirical validation of factors such as satisfaction and emotions is difficult. Marketing mix variables may also influence service experience but were not directly examined. Future studies should empirically test the proposed propositions, analyse behavioural and attitudinal data, examine geographical variations in engagement creation, and test the framework in other sectors such as education or non-profit contexts.
Santini et al. (2020)	Customer Engagement in Social Media: A Framework and Meta-analysis	Journal of the Academy of Marketing Science	Customer engagement in social media environments	Quantitative	Meta-analysis of 814 effect sizes from 97 studies involving 161,059 respondents	**Antecedents:** Trust, commitment (relationship formation) **Mediators:** Satisfaction, positive emotions **Moderators:** Convenience, product involvement, firm type, industry type, product value, type of social media **Outcomes:** CE contributions (behavioural intentions, WOM), firm performance	Satisfaction, positive emotions and trust strongly increase customer engagement. Engagement contributes directly to firm performance and indirectly through behavioural intentions and word-of-mouth. Engagement effects are stronger for hedonic consumption.	The analysis focuses on commonly studied relationships in marketing literature. The study synthesises existing findings rather than directly examining measurement of CE. Future research should examine the role of trust more deeply, study emotional drivers of engagement, investigate negative engagement driven by negative emotions, analyse the influence of social media environments on performance, and further test CE as a distinct construct.
Venkatesan (2017)	Executing on a Customer Engagement Strategy	Journal of the Academy of Marketing Science	Customer engagement strategy and customer engagement value in customer journey stages	Literature review	Editorial / conceptual analysis	**Antecedents:** Customer lifetime value (CLV), customer referral value (CRV), customer influence value (CIV), customer knowledge value (CKV) **Mediators:** Customer engagement **Moderators:** Customer journey stages (acquisition, growth, retention, win-back across pre-purchase, purchase and post-purchase phases) **Outcomes:** Customer engagement value (CEV)	Different engagement value components contribute to CEV at different stages of the customer journey. CLV, CRV, CIV and CKV influence CEV depending on whether the customer is in acquisition, growth, retention or win-back stages.	Future research should identify customers with high CIV and CKV, examine which engagement strategies increase different value metrics, explore how customer experiences influence CEV, and study how engagement behaviours affect other customers' purchase decisions.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Perez-Vega et al. (2021)	Reshaping the Contexts of Online Customer Engagement Behaviour via Artificial Intelligence: A Conceptual Framework	Journal of Business Research	Online customer engagement behaviour in AI-enabled digital environments	Literature review	Conceptual framework development	**Antecedents:** Online customer engagement behaviours (solicited and unsolicited) **Mediators:** AI-enabled information processing systems generating real-time customer insights **Moderators:** Data sources (live vs stored data), sentiment and category analysis, human and automated responses **Outcomes:** Enhanced online customer engagement behaviours	Combining solicited and unsolicited engagement data improves AI-generated customer insights. AI systems using both live and stored data provide better decision support. Coordinated human and automated responses improve future engagement outcomes.	The study highlights challenges in examining AI environments using theories originally developed for human behaviour. Future research should apply richer behavioural theories to AI contexts, explore how AI-enabled customised responses influence engagement outcomes, and examine data from multiple industries to improve AI learning systems.
Singh et al. (2020)	One-Voice Strategy for Customer Engagement	Journal of Service Research	Customer engagement across service interfaces in customer journeys	Literature review	Conceptual framework development	**Antecedents:** Customer-firm interaction at time t; prior customer engagement (t-1); service interfaces and configurations **Mediators:** Customer engagement **Moderators:** Interface heterogeneity (human vs automated agents), configuration consistency, digitisation, distribution and processing of interaction data **Outcomes:** Future customer engagement	Customer engagement evolves over time and depends on prior engagement and current interactions. Coordinated interactions across interfaces help firms deliver seamless engagement experiences. Automated and human capabilities can complement each other when interaction data are effectively captured and processed.	Future research should examine the characteristics of service interaction spaces, investigate firm capabilities required for one-voice strategies, and explore coordination mechanisms and contextual conditions influencing engagement.
Harmeling, Moffett, Arnold & Carlson (2017)	Toward a Theory of Customer Engagement Marketing	Journal of the Academy of Marketing Science	Customer engagement marketing and its role in firm performance	Quantitative	Case illustrations and quasi-experimental field study using Likert-scale measures	**Antecedents:** Customer engagement marketing (CEM) initiatives; customer-owned resources (network assets, persuasion capital, knowledge stores, creativity) **Mediators:** Psychological ownership; self-transformation **Moderators:** Customer-owned resources **Outcomes:** Customer engagement; firm performance	Customer engagement marketing improves firm performance through revenue benefits and cost savings. Task-based and experiential engagement initiatives strengthen cognitive bonds with customers. Psychological ownership and self-transformation help translate engagement initiatives into long-term customer engagement.	The proposed model has not yet been empirically validated across broader contexts. Future work should examine how firms design effective engagement initiatives, explore how firms can better leverage customer-owned resources, and investigate the potential negative consequences of customer engagement.
Hollebeek, Sprott & Brady (2021)	Rise of the Machines? Customer Engagement in Automated Service Interactions	Journal of Service Research	Customer engagement in AI-enabled service interactions	Literature review	Editorial conceptual analysis	**Antecedents:** AI-based service technologies (RPA, ML, DL) and service interactions **Mediators:** Customer engagement **Moderators:** Type of interaction (AI-based vs human interaction); customer engagement styles (active vs inactive) **Outcomes:** Customer engagement over time	AI-enabled service technologies influence customer engagement differently. RPA interactions may reduce engagement over time, while machine learning and deep learning systems can stimulate engagement depending on interaction context and customer engagement style.	Future research should examine strategies to manage engagement in automated interactions, improve ML-based service interactions, and investigate how different AI technologies affect engagement among active and inactive customers.

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Heller, Chylinski, de Ruyter, Keeling, Hilken & Mahr (2021)	Tangible Service Automation: Decomposing the Technology-Enabled Engagement Process for Augmented Reality	Journal of Service Research	Customer engagement in augmented reality service automation	Literature review	Conceptual framework development	**Antecedents:** Interactive qualities of AR service automation (visual appeal, information fit-to-task) **Mediators:** Spatial presence; psychological engagement (cognitive and emotional). **Outcomes:** Value-in-use and continued service engagement	Augmented reality service automation initiates engagement through interactive qualities such as visual appeal and task-relevant information. Spatial presence connects interaction with deeper engagement, leading to value-in-use and continued service usage.	Future studies should distinguish between interactive and engaging qualities of service automation, examine differences between AR and VR contexts, explore the role of customer heterogeneity, and investigate cultural influences on engagement in automated service environments.
van Doorn, Lemon, Mittal, Nass, Pick, Pirner & Verhoef (2010)	Customer Engagement Behavior: Theoretical Foundations and Research Directions	Journal of Service Research	Customer engagement behavior (CEB) beyond purchase activities	Literature review	Conceptual framework development	**Antecedents:** Customer-based factors (satisfaction, trust, identity, goals, resources, perceived costs/benefits); firm-based factors (brand characteristics, reputation, information usage, industry context); environmental factors **Mediators:** Customer engagement behavior (CEB) **Moderators:** Alignment between customer goals and firm goals; fit between customer and brand; valence of engagement actions **Outcomes:** Customer, firm and societal consequences of CEB	Customer engagement behaviors include activities such as WOM, reviews, recommendations and complaints that influence firms and other stakeholders. The impact of these behaviors depends on their valence and alignment with firm goals.	Future research should identify additional antecedents of CEB, examine how different drivers influence various engagement behaviors, incorporate the monetary value of engagement behaviors in CLV models, and explore how engagement benefits multiple stakeholders.
Jaakkola & Alexander (2014)	The Role of Customer Engagement Behavior in Value Co-Creation: A Service System Perspective	Journal of Service Research	Customer engagement behavior in value co-creation within service systems	Qualitative	Embedded case study using interviews and thematic analysis	**Antecedents:** Customer engagement behavior through resource contributions (knowledge, skills, time, relationships) **Mediators:** Types of engagement behaviors (augmenting, codeveloping, influencing, mobilizing) **Moderators:** Stakeholder participation and interaction in service systems **Outcomes:** New value co-creation processes between firms and stakeholders	Customers contribute resources that enhance firm offerings, influence other stakeholders and stimulate broader value co-creation processes. Different engagement behaviors shape how value is created within service ecosystems.	Findings are based on case studies with limited generalizability. The study focuses on broad system-level interactions and does not fully capture actor-level details or disengagement. Future research should examine CEB across different contexts and stakeholders, explore mechanisms for integrating customer contributions into innovation, test proposed relationships empirically, and investigate how engagement evolves over time within service systems.

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Hollebeek, Sprott, Andreassen, Costley, Klaus, Kuppelwieser, Karahasanovic, Taguchi, Ul Islam & Rather (2019)	Customer Engagement in Evolving Technological Environments: Synopsis and Guiding Propositions	European Journal of Marketing	Customer engagement in technology-driven environments	Literature review	Commentary	**Antecedents:** Technology adoption and firm innovation capabilities **Mediators:** Customer engagement **Moderators:** Customer segmentation, technology usage patterns, marketing strategy **Outcomes:** Customer engagement and potential well-being outcomes	Emerging technologies reshape how customers interact with brands. Firms must balance high-tech and high-touch interactions and adapt marketing strategies to maintain engagement in evolving digital environments.	Future research should investigate how firms segment technology users, evaluate the profitability of engagement through emerging technologies, examine innovation–engagement cycles, and study how technology-driven engagement affects customer well-being.
Gupta, Pansari & Kumar (2018)	Global Customer Engagement	Journal of International Marketing	Customer engagement across countries and cultural contexts	Qualitative	Interviews with 60 managers across 12 countries from multinational firms	**Antecedents:** Emotions, contribution behaviors, brand value, involvement, convenience, satisfaction, economic factors **Mediators:** Customer engagement **Moderators:** Cultural dimensions (individualism/collectivism, masculinity/femininity, uncertainty avoidance, long- vs short-term orientation, power distance) **Outcomes:** Customer engagement value and engagement outcomes	Customer engagement varies across national contexts. Cultural dimensions influence how customers engage with firms, affecting behaviors such as referrals, feedback sharing, loyalty and cross-buying. Economic indicators such as GDP also shape engagement intensity and satisfaction levels.	Future studies should examine how cultural dimensions influence stakeholder engagement, explore the role of subcultures, empirically test the global CE framework across industries, and conduct longitudinal research on cultural influences on engagement.
Mele & Russo-Spena (2022)	The Architecture of the Phygital Customer Journey: A Dynamic Interplay Between Systems of Insights and Systems of Engagement	European Journal of Marketing	Customer engagement within phygital customer journeys enabled by smart technologies	Qualitative	Grounded theory study using interviews with technology firms and service providers	**Antecedents:** Systems of insight (data collection and analytics) and systems of engagement (technology-enabled interaction mechanisms) **Mediators:** Customer engagement processes **Moderators:** Technology-enabled capabilities such as immersive experiences, gaming mechanisms, and clienteling strategies **Outcomes:** Fostered customer engagement in phygital journeys	Smart technologies shape customer journeys through the interaction between systems of insight and systems of engagement. Integrated digital and physical touchpoints enable firms to exploit customer knowledge and enhance engagement experiences.	The study focuses mainly on the provider perspective and does not include customer data. It also concentrates on specific organizational actors and does not consider differences across customer segments. Future research should incorporate customer perspectives in phygital journeys, examine how consumers move beyond traditional marketing funnels, investigate the role of frontline employees, explore differences across customer cohorts, and operationalize the proposed model to test antecedents and moderators of engagement.

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Alvarez-Milán, Felix, Rauschnabel & Hinsch (2018)	Strategic Customer Engagement Marketing: A Decision-Making Framework	Journal of Business Research	Strategic decision-making in customer engagement marketing	Qualitative	In-depth interviews with managers using thematic analysis	**Antecedents:** Customer activation (emotional, cognitive, behavioral) **Mediators:** Customer engagement marketing processes **Moderators:** Reciprocity and exchange relationships in social exchange theory **Outcomes:** Customer engagement and competitive advantage	Customer engagement arises when customers are activated emotionally, cognitively and behaviorally. Commitment and trust are particularly important in B2B relationships. Engagement with intermediaries can strengthen exchange relationships and support competitive advantage.	The study explains how managers conceptualize engagement but does not clarify how organizations arrive at these conceptualizations. Context-specific managerial perspectives may influence the findings. Future research should examine how management styles influence engagement strategies and explore engagement with intermediaries and other stakeholders to broaden the operationalization of customer engagement marketing.
Sharma, Jain, Kingshott & Ueno (2020)	Customer Engagement and Relationships in Multi-Actor Service Ecosystems	Journal of Business Research	Customer engagement in multi-actor service ecosystems	Literature review	Editorial review of research on service ecosystems	**Antecedents:** Customer experiences, emotions, service failures, interactions with other customers **Mediators:** Customer engagement **Moderators:** Interactions among actors within service ecosystems **Outcomes:** Customer engagement outcomes such as satisfaction, loyalty and word-of-mouth	Customer engagement is influenced by interactions among multiple actors in service ecosystems. Experiences and emotions shape perceptions of service encounters, while other customers and technological innovations alter engagement dynamics. Negative interactions or service failures can lead to dissatisfaction and negative word-of-mouth.	Future studies should examine how service managers manage relationships among multiple actors, investigate interactions between different ecosystem participants, and explore how emerging technologies influence engagement in service ecosystems.
Grégoire, Tripp & Legoux (2009)	When Customer Love Turns into Lasting Hate: The Effects of Relationship Strength and Time on Customer Revenge and Avoidance	Journal of Marketing	Customer reactions following service failures and complaints	Quantitative	Longitudinal survey with follow-up experiment using hypothesis testing	**Antecedents:** Relationship quality and perceived betrayal **Mediators:** Emotional reactions following service failure **Moderators:** Time **Outcomes:** Desire for revenge; desire for avoidance	Over time, customers' desire for revenge decreases while their desire to avoid the firm increases. Customers with stronger prior relationships experience stronger reactions when betrayal occurs. Relationship quality increases perceived betrayal, which in turn leads to revenge and avoidance behaviors.	Longitudinal field studies with real complainants limited control over response rates and caused attrition in the data. Longitudinal and scenario-based designs also face challenges in controlling for internal validity. Future research should replicate the findings using experimental designs, examine forgiveness processes and cultural influences on customer reactions, and develop broader theories explaining revenge and avoidance in customer relationships.

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An & Han (2020)	Effects of Experiential Motivation and Customer Engagement on Customer Value Creation: Analysis of Psychological Process in the Experience-Based Retail Environment	Journal of Business Research	Customer engagement and value creation in experiential retail environments	Quantitative	Structural equation modelling using survey data from visitors to experiential shopping malls	**Antecedents:** Experiential motivation, shopping experience, hedonic value **Mediators:** Customer engagement and co-created value processes. **Outcomes:** Customer value creation	Customer engagement increases customer value creation in experiential retail environments. Hedonic value mediates the relationship between engagement and shopping memories as well as customer satisfaction. Shopping memories also mediate the relationship between hedonic value and satisfaction.	Findings are based on experiential retail settings that are relatively new, which may limit the generalizability of the results. The study focuses mainly on psychological mechanisms and does not account for physical environmental factors in retail spaces. Future studies should examine both psychological and physical environmental factors in experiential retail contexts to better understand engagement and value creation processes.
Beckers, van Doorn & Verhoef (2018)	Good, Better, Engaged? The Effect of Company-Initiated Customer Engagement Behavior on Shareholder Value	Journal of the Academy of Marketing Science	Firm-initiated customer engagement behavior and its financial implications	Quantitative	Event study examining public announcements of CE initiatives and their market value consequences	**Antecedents:** Firm-initiated customer engagement initiatives **Mediators:** Customer engagement behaviors **Moderators:** Type of CE initiative, social media usage, competitive intensity, advertising intensity, firm characteristics **Outcomes:** Shareholder value	Announcements of firm-initiated engagement initiatives can negatively affect shareholder value overall. However, initiatives encouraging customer word-of-mouth generate higher returns than voice-based initiatives. Social media support and competitive market conditions also influence outcomes.	Event study methodology relies on strict assumptions and secondary data. It focuses mainly on shareholder responses and provides limited insight into the underlying engagement processes. Future research should examine other performance outcomes of firm-initiated engagement initiatives, use alternative research methods to study customer reactions, and explore how different stakeholders respond to engagement initiatives.
Bruneau, Swaen & Zidda (2018)	Are Loyalty Program Members Really Engaged? Measuring Customer Engagement with Loyalty Programs	Journal of Business Research	Customer engagement in loyalty programs	Mixed methods	Multiple studies including interviews, surveys, and structural equation modelling	**Antecedents:** Loyalty program engagement behaviors (card usage, information seeking, redeeming points, adapting purchases, sharing information) **Mediators:** Loyalty program engagement. **Outcomes:** Company engagement	Several behaviors such as proactive card use, information sharing and adapting purchase behavior indicate engagement with loyalty programs. These engagement behaviors contribute to stronger engagement with the company.	Engagement was measured at a single point in time, while engagement is a dynamic process that evolves across interactions. Future research should examine different types of loyalty programs, adopt longitudinal approaches to understand engagement changes over time, explore moderating variables such as program design and customer characteristics, and investigate additional organizational outcomes of loyalty program engagement.

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Kim, So & Wirtz (2022)	Service Robots: Applying Social Exchange Theory to Better Understand Human–Robot Interactions	Tourism Management	Human–robot interactions in hospitality and service settings	Quantitative	Survey using PLS-SEM with respondents interacting with service robots	**Antecedents:** Perceived intelligence, perceived social presence, perceived social interactivity **Mediators:** Relational states (trust, rapport) and psychological state (uniqueness neglect) **Moderators:** Sociodemographic factors and individual characteristics **Outcomes:** Usage intentions toward service robots	Human–robot interaction attributes significantly influence relational states and usage intentions. Perceived intelligence increases trust, while social presence and interactivity strengthen rapport and trust. These relational states subsequently increase customers' intentions to use service robots.	The study focuses only on customers' perceptions of robot attributes and does not examine interactions between robots and employees. Future studies should explore interactions among customers, employees, and service robots in service encounters, examine other service settings, and use experimental or longitudinal designs to strengthen causal inference.
Prentice, Weaven & Wong (2020)	Linking AI Quality Performance and Customer Engagement: The Moderating Effect of AI Preference	International Journal of Hospitality Management	AI-enabled service environments in hospitality	Quantitative	Survey of hotel customers who interacted with AI-powered service tools	**Antecedents:** AI information quality and AI system quality **Mediators:** AI customer satisfaction **Moderators:** AI preference **Outcomes:** Customer engagement	AI service quality positively influences customer satisfaction, which in turn increases customer engagement. AI preference moderates the relationship between AI service quality, satisfaction and engagement.	Measurement scales for AI services are still developing and may not fully capture the breadth of AI-enabled service quality. Data were collected from a single country and a single survey method. Future research should develop comprehensive scales for AI service quality, test the model in other industries and geographic contexts, and use qualitative methods such as interviews or focus groups to deepen understanding of AI-driven engagement.
Lim, Rasu, Kumar & Ala (2022)	Past, Present, and Future of Customer Engagement	Journal of Business Research	Comprehensive review of the customer engagement literature	Literature Review	Domain-based systematic literature review combining bibliometric and thematic analysis	**Outcomes:** Research propositions for CE development	Customer engagement is a broad concept encompassing cognitive, affective and behavioural interactions across multiple touchpoints and industries. The study maps the intellectual structure of CE research and proposes future research directions.	The review relied mainly on Scopus-indexed journals and may have missed studies indexed in other databases. The analysis also does not deeply examine the theories, contexts and constructs underpinning CE research. Future reviews should include additional databases to enhance coverage and further examine theoretical foundations, research contexts and methodological approaches within the CE literature.
Liu, Shin & Burns (2021)	Examining the Impact of Luxury Brand's Social Media Marketing on Customer Engagement: Using Big Data Analytics and Natural Language Processing	Journal of Business Research	Luxury brand social media marketing and customer engagement	Quantitative	Big data analysis using Twitter observations from luxury brand social media activity	**Antecedents:** Luxury brand social media marketing activities (entertainment, interaction, trendiness, customization) **Mediators:** Customer engagement behaviours (consumption, contribution, creation of brand-related content). **Outcomes:** Customer engagement in social media	Entertainment, interaction and trendiness significantly increase customer engagement behaviours on social media. Customization does not significantly influence engagement. Engagement manifests through consumption, contribution and creation of brand-related social media content.	The study focuses only on Twitter as a social media platform, while consumers use different platforms for different purposes. Brand and customer characteristics influencing engagement were not included in the analysis. Future research should compare engagement across multiple social media platforms, combine big data with traditional consumer data sources, and examine how luxury brand characteristics influence different engagement behaviours.

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Mostafa & Kasamani (2022)	Antecedents and Consequences of Chatbot Initial Trust	European Journal of Marketing	Customer trust and engagement in chatbot-based interactions	Quantitative	Survey data analysed using structural equation modelling	**Antecedents:** Compatibility, perceived ease of use, performance expectancy, social influence, customer involvement **Mediators:** Initial chatbot trust. **Outcomes:** Chatbot usage intention and customer engagement	Compatibility, ease of use and social influence positively influence initial chatbot trust. Initial trust significantly increases chatbot usage intentions and customer engagement. Customer involvement also positively affects chatbot usage intentions and engagement.	Results are based on data from a single country, limiting generalizability. The cross-sectional design also restricts understanding of how trust develops over time. Future research should test the model across different countries, use longitudinal designs to examine trust development over time, and incorporate additional variables such as system quality, customer experience, and social presence.
Eisingerich, Marchand, Fritze & Dong (2019)	Hook vs. Hope: How to Enhance Customer Engagement Through Gamification	International Journal of Research in Marketing	Customer engagement through gamification in digital platforms	Mixed methods	Qualitative interviews combined with large-scale field studies and survey data	**Antecedents:** Gamification principles (social interaction, sense of control, goals, progress tracking, rewards, prompts) **Mediators:** Hope and compulsion **Moderators:** Age, gender **Outcomes:** Customer engagement and purchases	Gamification mechanisms influence customer engagement through emotional states such as hope and compulsion. Hope plays a stronger mediating role than compulsion in driving engagement and purchase behaviour in gamified applications.	The study focuses only on in-app purchases, which limits understanding of gamification effects in other consumption contexts. Future studies should examine gamification effects in offline contexts, investigate psychological factors influencing reactions to gamification, and explore potential negative or addictive effects of gamified engagement.
Rather, Hollebeek & Rasoolimanesh (2022)	First-Time versus Repeat Tourism Customer Engagement, Experience, and Value Co-creation: An Empirical Investigation	Journal of Travel Research	Customer engagement, experience and value co-creation in tourism contexts	Quantitative	Survey data analysed using partial least squares structural equation modelling (PLS-SEM)	**Antecedents:** Cognitive, affective and behavioural engagement **Mediators:** Customer experience and value co-creation **Moderators:** Customer involvement **Outcomes:** Revisit intention	Customer engagement significantly enhances customer experience and value co-creation. Both customer experience and value co-creation increase revisit intentions. Engagement indirectly strengthens revisit intentions through its influence on experience. Repeat customers respond more positively to experiential marketing strategies.	Survey-based data limits causal inference, and the data were collected from a specific tourism destination. Future research should examine causal relationships using experimental designs, replicate the model in other contexts or countries, and explore alternative conceptual networks involving engagement, experience and co-creation.
Hollebeek, Kumar & Srivastava (2022)	From Customer- to Actor-, to Stakeholder Engagement: Taking Stock, Conceptualization, and Future Directions	Journal of Service Research	Conceptual development of stakeholder engagement extending customer engagement research	Literature Review	Conceptual framework development integrating S-D logic and stakeholder theory	**Antecedents:** Stakeholder role-based resource investments **Mediators:** Stakeholder engagement processes **Moderators:** Role-based interactions across stakeholder contexts **Outcomes:** Stakeholder engagement	The study expands engagement research beyond customers to broader stakeholders, emphasizing engagement as a dynamic process involving resource investments across roles, interactions and relationships.	Future research should examine how customer engagement interacts with engagement in other roles, investigate how customers decide resource investments in brand interactions, explore engagement dynamics over time, examine disengagement and re-engagement processes, and study how engagement manifests during and beyond brand interactions.

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Sim, Conduit, Plewa & Hentzen (2022)	Customer Engagement with Service Providers: An Empirical Investigation of Customer Engagement Dispositions	European Journal of Marketing	Customer engagement dispositions in financial service relationships	Qualitative	Semi-structured interviews analysed using Gioia methodology	**Antecedents:** Engagement dispositions (internal tendencies and capabilities) **Mediators:** Interaction with service providers **Moderators:** Context-specific factors such as expertise and time availability **Outcomes:** Customer engagement	Customer engagement disposition consists of three dimensions: internal personal tendencies (confidence, desire for control, extroversion), relational tendencies emerging from interactions (similarity, social connection, trust), and contextual capacity (expertise, knowledge, time availability). These factors shape customers' willingness and ability to engage with service providers.	Future studies should examine engagement dispositions across different service contexts, explore interaction effects between disposition dimensions, conduct longitudinal research to understand how dispositions evolve over time, and investigate additional personality or contextual factors influencing engagement.
Gill, Sridhar & Grewal (2017)	Return on Engagement Initiatives: A Study of a Business-to-Business Mobile App	Journal of Marketing	Firm engagement initiatives and economic returns in B2B settings	Quantitative	Event studies, seller-level observational inference designs, randomized experiments, and longitudinal data analysis	**Antecedents:** Organizational engagement initiatives through a mobile app **Mediators:** Customer participation intensity **Outcomes:** Return on engagement initiatives (RoEI)	Engagement initiatives increase economic returns through higher customer participation intensity. The return on engagement initiatives grows nonlinearly as participation increases, highlighting the economic potential of engagement-based marketing strategies.	The study examined only one context and did not explore substitution effects across marketing channels following the introduction of the app. Future studies should assess RoEI across different contexts, conduct meta-analyses of engagement initiative outcomes, examine optimal spending on engagement initiatives, and explore how engagement initiatives influence broader performance metrics such as customer satisfaction, market share and financial performance.
Brodie, Fehrer, Jaakkola & Conduit (2019)	Actor Engagement in Networks: Defining the Conceptual Domain	Journal of Service Research	Conceptual development of actor engagement within service ecosystems	Literature Review	Conceptual framework development based on S-D logic	**Antecedents:** Actor engagement dispositions and network interactions **Mediators:** Dynamic engagement processes within service networks **Moderators:** Institutional and contextual factors **Outcomes:** Actor engagement within service ecosystems	Actor engagement is conceptualized as a dynamic, iterative process in which actors invest resources in interactions with other actors within service systems. Engagement occurs within institutional contexts and evolves through network connections and shared practices.	Future research should investigate engagement roles of multiple actors in networked contexts, examine engagement emergence across network structures, apply diverse theoretical perspectives, and employ longitudinal and multi-method research designs to deepen understanding of engagement processes.
Verleye, Gemmel & Rangarajan (2014)	Managing Engagement Behaviors in a Network of Customers and Stakeholders: Evidence From the Nursing Home Sector	Journal of Service Research	Customer engagement behaviors within stakeholder networks	Mixed methods	Case studies, interviews, surveys and structural modeling	**Antecedents:** Managerial processes such as organizational support, service quality toward stakeholders, and customer socialization **Mediators:** Customer affect and customer role readiness **Outcomes:** Customer engagement behaviors (compliance, cooperation, feedback, helping other customers, positive WOM)	Organizational support and service quality toward stakeholders increase customer affect, which encourages engagement behaviors. Socialization processes and support from other customers enhance role readiness, which further stimulates engagement behaviors within stakeholder networks.	The study focused on managerial and psychological processes but did not examine individual customer differences influencing engagement behaviors. Future research should examine how managerial practices can discourage negative engagement behaviors, investigate the role of frontline employees in managing engagement, explore optimal timing of engagement interventions, and examine how individual traits influence engagement behaviors in stakeholder networks.

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Grewal, Roggeveen, Sisodia & Nordfält (2017)	Enhancing Customer Engagement Through Consciousness	Journal of Retailing	Customer engagement in retailing through a consciousness-based philosophy	Literature Review	Framework development	**Antecedents:** Consciousness-based foundations such as purpose, values, leadership, corporate culture, and stakeholder integration **Outcomes:** Customer engagement and meaningful customer experience	The study proposes a hierarchy of customer engagement built on consciousness. Purpose, values, leadership, corporate culture, and stakeholder integration form the foundation for creating more engaging and meaningful customer experiences.	Future research should examine how firms communicate purpose and values to different stakeholders, explore how conscious retailing influences firm performance, and investigate how organizational consistency, employee alignment, vendor relationships, and community engagement shape customer engagement.
Lim & Rasul (2022)	Customer Engagement and Social Media: Revisiting the Past to Inform the Future	Journal of Business Research	Customer engagement research in social media contexts	Literature Review	Systematic review using PRISMA, ADO, and TCM frameworks	**Antecedents:** Brand-, customer-, industry-, market-, message-, platform-, social-, and value-related antecedents **Mediators:** Cognitive, affective, and behavioural engagement. **Outcomes:** Business, brand, customer, and social media outcomes	Customer engagement on social media is shaped by a wide set of antecedents and leads to multiple business, brand, customer, and platform-related outcomes. The review highlights the breadth of CE research and emphasizes the need for stronger theoretical integration across studies.	Future research should deepen understanding of cognitive, affective, and behavioural engagement on social media, examine underexplored antecedents and outcomes, compare social media platforms and market contexts, and use mixed-method, experimental, and alternative review approaches to strengthen CE research.
Li, Liu & Xie (2022)	How do consumers engage with proactive service robots? The roles of interaction orientation and corporate reputation	International Journal of Contemporary Hospitality Management	Customer engagement with service robots in hospitality service settings	Quantitative	Survey and experimental design with structural equation modeling and PROCESS mediation analysis	**Antecedents:** Proactive service robot behaviour **Mediators:** Trust in service robots **Moderators:** Interaction orientation, corporate reputation **Outcomes:** Engagement with service robots	Proactive service robots increase customer engagement by strengthening trust. This relationship becomes stronger when customers have high interaction orientation and when the company has a strong corporate reputation.	The study focused on relational bonds between customers and service robots, but it remains unclear whether these bonds transfer to relationships with the brand or firm. Trust and engagement were also measured using a unidimensional approach. Future research should examine how robot–customer relationships influence brand-level engagement, apply multidimensional engagement measures, control for factors such as technology anxiety or algorithm aversion, and examine additional moderators such as consumption goals, personality traits, company size, and the presence of human employees.

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Kumar & Kaushik (2022)	Engaging customers through brand authenticity perceptions: The moderating role of self-congruence	Journal of Business Research	Customer engagement in relation to brand authenticity perceptions	Quantitative	Online survey using Likert-scale questionnaire and structural equation modeling	**Antecedents:** Perceived brand authenticity (credibility, continuity, integrity, symbolism) **Mediators:** Consumer brand engagement **Moderators:** Self-congruence **Outcomes:** Brand usage intention and willingness to pay a premium	Perceived brand authenticity positively influences consumer brand engagement, which in turn increases brand usage intention and willingness to pay a price premium. Self-congruence strengthens the relationship between brand authenticity and engagement.	The study did not focus on a specific brand category and relied largely on Indian student respondents, limiting generalizability across contexts and countries. Future research should test the model using broader and more diverse samples, examine gender differences, compare student and working populations, apply the model to service brands, and incorporate additional brand-related constructs such as brand experience, brand trust, and brand loyalty. Negative consequences of engagement should also be explored.
Harrigan, Evers, Miles & Daly (2017)	Customer engagement with tourism social media brands	Tourism Management	Customer engagement with tourism brands in social media environments	Quantitative	Online survey with scale validation using factor analysis and structural equation modeling	**Antecedents:** Customer involvement with a tourism social media brand **Mediators:** Customer engagement with tourism social media brands **Outcomes:** Behavioural intention of loyalty toward a tourism social media brand	The study proposes a refined three-factor engagement scale and demonstrates that customer engagement significantly predicts behavioural loyalty intentions toward tourism brands. Customer involvement also positively predicts engagement.	The study relied on a non-random U.S. sample and had a relatively small sample size, which limits generalizability. Future research should validate the scale using larger and more diverse international samples, examine cross-regional differences, and test the model across different tourism organizations and hospitality brands.
Rahman, Faroque, Sakka & Ahmed (2022)	The impact of negative customer engagement (NCE) on market-based assets and financial performance	Journal of Business Research	Negative customer engagement and its impact on firm performance in the airline industry	Quantitative	Simultaneous equation modelling using time-series cross-sectional data from the U.S. airline industry	**Antecedents:** Relative marketing capability **Mediators:** Negative customer engagement (customer complaints) **Outcomes:** Brand equity and financial performance	Firms with stronger marketing capability experience fewer customer complaints. Negative customer engagement negatively affects brand equity and firm financial performance.	The study was conducted in one country and one industry, limiting generalizability. Negative customer engagement was measured as an aggregated complaint index, which may not capture differences among complaint types. Future research should explore other strategic drivers of negative engagement, examine outcomes such as customer equity and corporate reputation, compare NCE across cultures and industries, and differentiate between types of customer complaints based on severity or inconvenience.
Kumar et al. (2010)	Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value	Journal of Service Research	Conceptualization of total customer engagement value	Literature Review	Conceptual development of the Customer Engagement Value (CEV) framework	**Antecedents:** Customer transactions and interactions with the firm. **Outcomes:** Customer engagement value components	The study conceptualizes customer engagement value as the total value customers generate for firms through multiple channels, including transactions, referrals, influence on other customers, and knowledge contributions. Customer engagement value consists of four components: CLV (customer lifetime value), CRV (customer referral value), CIV (customer influencer value), and CKV (customer knowledge value).	Future studies should empirically test the CEV framework across different industries and contexts.Research should examine interactions between the four engagement value components (CLV, CRV, CIV, CKV) and their combined effects on firm performance. Additional work is needed to develop better metrics and measurement approaches for engagement value beyond transactional data. Future research could investigate how firms can effectively manage and stimulate different forms of customer engagement behaviours across digital and offline environments.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Rajan, Salunkhe & Kumar (2023)	Understanding customer engagement in family firms: A conceptual framework	Journal of Business Research	Customer engagement in family firm contexts	Mixed methods (triangulation)	Literature review, analysis of industry sources, and interviews with 64 members from 47 family firms using grounded theory	**Antecedents:** Adaptive marketing capability and regenerative capability in family firms **Mediators:** Family firm experience **Moderators:** Vision disharmony, role overlap, ethnicity **Outcomes:** Customer engagement in family firms	Adaptive marketing capability and regenerative capability improve family firm experience up to a threshold, after which the relationship stabilizes. Family firm experience strengthens customer satisfaction and emotional attachment, which support customer engagement. Moderating factors such as family vision alignment, role overlap, and cultural context influence these relationships.	Future research should examine how firm capabilities shape family firm experience, explore nonlinear effects of capabilities, investigate engagement differences among family and non-family stakeholders, and examine how contextual factors such as culture, conflict, and governance influence customer engagement in family firms.
Taylor, Carlson, Liao & Rahman (2023)	Customer engagement and sharing behaviors: Toward a contingent curvilinear perspective	Journal of Business Research	Customer engagement and sharing behaviour in online brand communities (Facebook brand pages)	Quantitative	Cross-sectional survey using hierarchical regression analysis with data from U.S. Facebook brand page users (n=595)	**Antecedents:** Perceived OBC interactivity; Perceived OBC innovativeness **Mediators:** Customer engagement **Moderators:** OBC interactivity and innovativeness **Outcomes:** Sharing behaviour intention	Customer engagement shows a negative quadratic relationship with sharing behaviour intention. Although engagement initially increases sharing behaviour, very high levels of engagement reduce sharing intention. OBC interactivity and innovativeness mitigate this negative curvilinear effect.	The study focused on a single country (U.S.) and a single social media platform (Facebook). It relied on retrospective self-reported evaluations of customer interactions in OBCs. Future research should examine other social media platforms and geographic contexts, apply experimental designs, incorporate actual behavioural engagement data from community members, explore additional moderators such as personality traits or information-processing styles, and further investigate nonlinear engagement effects.
Schweitzer & Mai (2022)	Does one rotten apple always spoil the barrel? The role of perceptions of empowerment when consumers observe destructive others in online co-creation	Journal of Business Research	Negative customer behaviour and empowerment in online co-creation contexts	Quantitative	Two experimental studies using a 2×2 design manipulating leeway in firm-customer activities and the presence of destructive contributions	**Antecedents:** Leeway in firm-customer activity design **Mediators:** Perceived empowerment **Moderators:** Observed destructive deviant behaviour **Outcomes:** Contagious negative behaviour	Designs that provide greater contribution freedom increase consumers' perceived empowerment. Higher empowerment reduces the likelihood that consumers imitate destructive behaviour observed from others in co-creation environments.	Experimental tasks were relatively simple and short, which may limit the complexity of behaviour observed in real-world engagement contexts. Future research should examine empowerment effects across different contexts and engagement activities, explore direct behavioural responses to destructive behaviour, investigate alternative mechanisms for promoting empowerment, and analyse longer or more complex engagement tasks.
Steinhoff, Liu, Li & Palmatier (2022)	Customer Engagement in International Markets	Journal of International Marketing	Customer engagement across international markets and cross-country contexts	Literature Review	Conceptual framework development identifying cultural, institutional, social, and economic country-level indicators	**Antecedents:** Customer engagement initiatives **Mediators:** Customer engagement **Moderators:** Cultural, institutional, social, and economic country-level indicators (CISE) **Outcomes:** Customer engagement financial outcomes	The study proposes that the effectiveness of engagement initiatives varies across countries depending on cultural, institutional, social, and economic factors. Country-level differences influence both engagement processes and financial outcomes of engagement initiatives.	The proposed set of CISE indicators is extensive but not exhaustive. Future research should further examine the role of these country-level indicators in shaping engagement strategies, explore additional contextual factors, and investigate how firms adapt or standardize engagement initiatives across international markets.

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Meire, Hewett, Ballings, Kumar & Van den Poel (2019)	The Role of Marketer-Generated Content (MGC) in Customer Engagement Marketing	Journal of Marketing	Customer engagement and customer sentiment on social media in response to marketer-generated content	Quantitative	Two studies combining longitudinal observational data from a European soccer team's Facebook page and a randomized scenario-based experiment	**Antecedents:** Marketer-generated content (informational vs emotional); event outcomes **Mediators:** Customer sentiment in digital engagement **Moderators:** Type of marketer-generated content **Outcomes:** Customer sentiment toward the brand	Positive event outcomes lead to positive customer sentiment, while negative outcomes reduce sentiment. Marketer-generated content improves sentiment overall. Informational content is more effective following negative event outcomes, whereas emotional content is more effective following positive outcomes.	Results may vary across industries and customer involvement contexts. Endogeneity concerns remain difficult to fully eliminate. The study relied only on Facebook data and a limited four-year observation window. Future research should examine other social media platforms, explore different types of marketing content such as promotional messages, investigate segmentation effects across industries and markets, and extend the research design to contexts where customers have less purchase discretion.
Zhao, Zhang, Ming, Niu & Wang (2023)	The effect of image richness on customer engagement: Evidence from Sina Weibo	Journal of Business Research	Customer engagement with visual social media content	Quantitative	Large-scale social media data analysis using posts and comments collected from Sina Weibo with deep-learning based content analysis	**Antecedents:** Image richness. **Moderators:** Product type (experience vs search goods), poster influence, text length **Outcomes:** Customer engagement (emotional, behavioural, cognitive)	Image richness positively affects emotional and behavioural engagement but negatively affects cognitive engagement. Its effect is stronger for experience goods and for users with greater social influence, while longer text content weakens the effect on engagement.	The analysis was limited to one social media platform and could not identify nonlinear effects or the causal mechanism behind image richness and engagement. Future research should examine other social media platforms and cultural contexts, collect richer datasets, investigate the psychological mechanisms linking visual content and engagement, and apply multiple research methods to better understand the role of image characteristics.
Izogo, Mpinganjira, Karjaluoto & Liu	Examining the Impact of eWOM-Triggered Customer-to-Customer Interactions on Travelers' Repurchase and Social Media Engagement	Journal of Travel Research	Customer-to-customer interactions triggered by electronic word-of-mouth (eWOM) in social media travel contexts	Quantitative	Scenario-based experiment with African tourists using a 2 × 2 design examining eWOM valence and peer response type	**Antecedents:** eWOM valence (positive vs negative), peer response type (supportive vs critical) **Moderators:** Cultural orientation (collectivism vs individualism) **Outcomes:** Passive engagement, active engagement, repurchase intention	Positive eWOM combined with supportive peer responses increases both passive and active engagement. Negative eWOM combined with supportive responses increases engagement and repurchase intention compared with negative eWOM with critical responses. Cultural orientation significantly moderates the relationship between eWOM responses and engagement outcomes.	Repurchase decisions are influenced by many additional contextual factors such as travel constraints, hotel characteristics, and competitive alternatives. The study focused only on Facebook, which limits generalizability to other social media platforms. Cultural dimensions were limited to collectivism versus individualism, and sampling procedures restrict broader generalization. Future research should investigate additional determinants of repurchase decisions using alternative research methods such as field experiments and surveys. Longitudinal studies could capture the full repurchase decision journey. Studies should replicate the research across different social media platforms and examine device and media penetration differences. Researchers should also examine the effects of neutral eWOM responses, explore interactions across hotel categories, and investigate how online C2C interactions influence offline brand engagement.

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Denitsa Dineva and Kate L. Daunt (2022)	Reframing online brand community management: consumer conflicts, their consequences and moderation	European Journal of Marketing	Online Brand Communities (OBCs); consumer-to-consumer conflict	Mixed-method	Sequential exploratory design: netnography followed by online experiments	**Antecedents:** C2C conflict in OBCs. **Moderators:** Moderation by brands vs consumers. **Outcomes:** Impact on observing consumers' engagement behaviours, emotional responses, brand credibility, and negative eWOM.	Three forms of C2C conflict were identified depending on whether conflict occurs between supporters, non-supporters or outsiders of the OBC. These conflicts affect customer engagement behaviours and emotional responses and can reduce brand credibility and trigger negative eWOM. Brands are generally perceived as more suitable moderators than consumers.	Study focused on participant self-selected brands and only examined brand-managed communities on Facebook. Examine formats and content of conflicts and brand responses; test moderator effectiveness across different brand types; investigate consumer-managed communities including anti-brand communities.
Cara Connell, Ruth Marciniak, and Lindsey Drylie Carey (2023)	The Effect of Cross-Cultural Dimensions on the Manifestation of Customer Engagement Behaviors	Journal of International Marketing	Online brand communities and cross-cultural customer engagement	Qualitative	Exploratory netnography	**Antecedents:** Cultural dimensions (Hofstede). **Outcomes:** Manifestation of customer engagement behaviours in OBCs.	National culture does not directly affect engagement behaviours, but the culture associated with a brand influences how engagement behaviours are manifested.	The engagement behaviours examined may involve cognitive and emotional components that were not captured in the study. Quantitatively validate engagement behaviour conceptualisations across cultures; combine qualitative and quantitative approaches such as text mining or content analysis; examine additional product categories and more OBC contexts.
Kaisa Aro, Kati Suomi, and Richard Gyrd-Jones (2023)	Layers of love – exploring the interactive layers of brand love in the social media setting	European Journal of Marketing	Brand love and engagement in social media environments	Qualitative	Abductive reasoning	**Antecedents:** Multilayer social dynamics (micro, meso, macro, mega). **Outcomes:** Brand love identification dynamics across layers.	Brand love is dynamic and changes as individuals move across layers of identification with the brand within social media contexts.	Data collected from one destination brand in Finland. Future studies should explore different brands and cultural contexts and examine co-loving and co-hating perspectives in brand co-creation.
Alex Taylor, Jamie Carlson, Yi-Chuan Liao, and Mohammad M. Rahman (2023)	Customer engagement and sharing behaviors: Toward a contingent curvilinear perspective	Journal of Business Research	Online brand communities on Facebook	Quantitative	Cross-sectional survey with hierarchical regression (n = 595 Facebook brand page users)	**Antecedents:** Customer engagement. **Moderators:** OBC interactivity; OBC innovativeness. **Outcomes:** Sharing behaviour intention.	Customer engagement shows a negative quadratic relationship with sharing behaviour intention: engagement initially increases sharing behaviour but very high engagement reduces it. OBC interactivity and innovativeness mitigate this negative effect.	Study conducted in the United States and limited to a single platform (Facebook); relied on retrospective evaluations of customer interactions. Extend research to other platforms and countries; use experimental designs; incorporate behavioural engagement data; examine additional moderators such as personality traits or information-processing styles.
Alexandros Skandalis (2023)	Transitional space and new forms of value co-creation in online brand communities	Journal of Business Research	Online brand communities and value co-creation	Qualitative	Netnography and in-depth interviews	**Antecedents:** Transitional space between reality and fantasy. **Outcomes:** Value co-creation processes in OBCs.	Value co-creation emerges through the interplay of shared reality and individual fantasy within transitional spaces. Community members engage in voluntary activities facilitated by transitional objects, supporting new forms of value co-creation.	The study focuses on a specific digital gaming community, limiting contextual breadth. Future research could explore similar dynamics in other digital contexts such as social media communities or binge-watching environments and further examine transitional spaces.

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Sahar Mousavi and Stuart Roper (2023)	Enhancing Relationships Through Online Brand Communities: Comparing Posters and Lurkers	International Journal of Electronic Commerce	Firm-hosted online brand communities	Quantitative	Online survey of OBC members (Qualtrics), n=742, SEM analysis	**Antecedents:** Perceived brand support (recognizing contributions, encouraging interaction, providing quality information); participation type (posters vs lurkers). **Mediators:** Community identity; brand knowledge; brand trust. **Outcomes:** Purchase intention; resistance to negative information; positive WOM.	Perceived brand support strengthens community identity and brand trust. Differences exist between posters and lurkers: brand knowledge and information quality influence trust for lurkers, while community identity and interaction encouragement drive trust among posters.	The sample consists only of OBC members from the United States, limiting generalisability to other markets. Future research could examine personality influences, different participation levels including lurking, and compare OBC dynamics across sectors such as B2B and B2C.
Alexis Chapman and Athina Dilmperi (2022)	Luxury brand value co-creation with online brand communities in the service encounter	Journal of Business Research	Luxury service brand communities	Qualitative	15 manager interviews, 50 customer interviews, followed by netnography and thematic	**Antecedents:** Experiential content and community interaction. **Outcomes:** Value co-creation and engagement in luxury online communities.	Experiential and pleasurable content generates the highest engagement in luxury communities, supporting experience-based content strategies.	Focus on a specific luxury service context limits broader generalisation. Future studies could replicate the research in other contexts, examine how passive members become co-creators, and explore how lurking behaviours translate into real-world co-creation.
Nuttakon Ounvorawong, Jan Breitsohl, Ben Lowe & Des Laffey (2022)	Outcomes of Cyber-Victimization and Bystander Reactions in Online Brand Communities	International Journal of Electronic Commerce	Online brand communities	Quantitative	Scenario-based experiment with 387 members; 2×3 factorial design with control group; ANCOVA	**Antecedents:** Victimization severity. **Moderators:** Bystander reactions (reinforcing, defending, pretending). **Outcomes:** PWOM intentions; community satisfaction; community following intentions.	Severe victimization significantly reduces positive WOM, community satisfaction, and following intentions. Defending reactions produce better outcomes than pretending or reinforcing in severe cases.	Experimental scenarios simplified real interaction dynamics; only one bystander response was modelled. Future studies could explore varying comment types, different volumes and valence of bystander responses, and more complex interaction scenarios.
So Won Jeong, Sejin Ha, Kyu-Hye Lee (2021)	How to measure social capital in an online brand community? A comparison of three social capital scales	Journal of Business Research	Online brand communities	Quantitative	Online survey of community members in South Korea	**Antecedents:** Social capital dimensions (interaction ties, trust, shared values). **Outcomes:** Community commitment; brand commitment.	Social capital in OBCs is best captured through three dimensions, social interaction ties, trust, and shared value, supporting Lin and Lu's scale.	Data from fashion communities in South Korea limits generalisability; cross-sectional design limits causal inference. Future research could compare alternative scales, assess performance across outcomes, and examine social capital longitudinally.
Jitender Kumar (2021)	Understanding customer brand engagement in brand communities: an application of psychological ownership theory and congruity	European Journal of Marketing	Facebook-based brand communities	Quantitative	Internet survey (n=833); SEM using AMOS	**Antecedents:** Brand psychological ownership; value congruity (brand); brand community psychological ownership; value congruity (brand community). **Mediators:** Customer brand engagement; brand community engagement. **Moderators:** Sense of community. **Outcomes:** Brand equity.	Psychological ownership and value congruity positively influence engagement with both the brand and the brand community. Engagement enhances brand equity. Sense of community strengthens several relationships.	Model tested using student sample and general Facebook brand communities rather than specific industries. Future research could test the model in specific industries, include broader demographic samples, and explore bidirectional engagement relationships.

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Wilson Ozuem, Michelle Willis, Kerry Howell, Guida Helal, Silvia Ranfagni, Geoff Lancaster (2021)	Effects of online brand communities on millennials' brand loyalty in the fashion industry	Psychology & Marketing	Online fashion brand communities; millennials; brand loyalty	Qualitative	Constructivist perspective combined with hermeneutic methodology and embedded case study research strategy. 45 in-depth interviews of millennials. Interviewers recruited participants with prior experience with OBCs who were able to deliver lived experiences providing relevant and valuable knowledge. Participants were millennials aged 18–39 who were active social media users influenced by fashion brands. Thematic analysis.	**Antecedents:** Participation in online brand communities. **Mediators:** Consumer participation levels in OBCs. **Outcomes:** Multidimensional customer loyalty intentions (ambassador loyalists, public-voting loyalists, loveless loyalists, mercenary loyalists).	1. The analysis proposes a framework that categorizes customer loyalty into ambassador loyalists, public-voting loyalists, loveless loyalists, and mercenary loyalists. 2. Each stream contains an additional subcategory mediated by consumer participation levels in online brand communities.	The study is limited in generalizability due to the number of participants involved, although findings support transferability. Future research could explore loyalty intentions in other online contexts using the IBIL model, examine shifts between loyalty types over time, and test the framework in multicultural online communities to develop guidance for managing diverse community members.
Wilson Ozuem, Michelle Willis, Kerry Howell, Geoff Lancaster, Raye Ng (2021)	Determinants of online brand communities' and millennials' characteristics: A social influence perspective	Psychology & Marketing	Online brand communities; millennials; social influence	Qualitative	Constructivist perspective. Abductive research strategy. 40 in-depth interviews using theoretical purposive sampling among millennials. Thematic analysis.	**Antecedents:** OBC characteristics (brand sentiment, source identification, affirmative experience, conspicuous effect). **Mediators:** Social influence groups within OBCs. **Outcomes:** Customer engagement types (bias situators, sugar-coaters, rationalisers, judgmentalists).	Four categories of customer engagement behaviour in online brand communities were identified: bias situators, sugar-coaters, rationalisers, and judgmentalists.	Few participants actively contributed to online conversations, meaning some customer types were inferred rather than directly observed. The study relies on a limited number of interviews, focuses on conspicuous effects and affirmative experience, examines only one industry, and focuses solely on millennials. Future research should examine how online community interactions influence brand loyalty, explore different participation types in online communities, investigate transitions between engagement groups, test the BIAC model across industries, and adopt longitudinal and mixed-method approaches to better understand customer engagement dynamics.
Robert James Thomas, Gareth Reginald Terence White, Anthony Samuel (2021)	Exploring the motivations to participate in an online brand community: a study of 7–11-year-old children	European Journal of Marketing	Online brand communities; children consumers	Qualitative	Social constructionist approach using event diaries to capture children's participation experiences in OBCs; data collected through schools; n = 261.	**Antecedents:** Motivations for children's participation (support and reduction of pre-purchase anxiety; conflict resolution; social dominance through product ownership; digitalised pester power). **Moderators:** Gender-specific motivational aspects. **Outcomes:** Participation in online brand communities.	Children participate in brand communities to reduce purchase anxiety, resolve conflicts, display product knowledge or ownership, and engage in digitalised pester power. Some motivations, particularly conflict resolution and dominance, appear gender-specific.	Study is culturally situated in the UK and includes more female participants. The diary method limited follow-up opportunities and may involve incomplete reporting or overgeneralisation of events. Future research could examine children's behaviour in OBCs across different cultures, analyse the influence of parents, peers and siblings, and explore how participation evolves as children grow into adolescence.

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Nannan Xia, Juho Hamari (2020)	Does gamification affect brand engagement and equity? A study in online brand communities	Journal of Business Research	Gamification in online brand communities	Quantitative	Online survey of Xiaomi and Huawei brand community members (n = 824); 7-point Likert scale.	**Antecedents:** Gamification features (immersion, achievement, social interaction). **Mediators:** Brand engagement (emotional, cognitive, social). **Moderators:** Tenure in the community. **Outcomes:** Brand equity (brand awareness, brand loyalty).	Achievement and social interaction features positively influence emotional, cognitive, and social engagement. Immersion mainly affects social engagement. Brand engagement subsequently increases brand equity, suggesting gamification can strengthen engagement and brand equity simultaneously.	Self-reported measures may involve recall bias. The study could not separate brand awareness and association outcomes clearly. Conducted in Chinese technology communities, limiting cultural generalisation. Future research could examine individual gamification elements, use behavioural website data, explore other gamified services, conduct cross-cultural comparisons, and analyse moderating effects such as player types or demographic differences.
Zhimin Zhou, Ge Zhan, Nan Zhou (2020)	How does negative experience sharing influence happiness in online brand community? A dual-path model	Internet Research	Negative experience sharing in online brand communities	Quantitative	Survey and experiment with 1,015 mobile internet users from Chinese OBCs.	**Antecedents:** Negative brand experience sharing. **Mediators:** Online social support; online social exclusion. **Moderators:** Membership duration. **Outcomes:** Online brand community happiness.	Sharing negative experiences can increase the sharer's happiness through social support, especially for new members. Experienced members may instead experience social exclusion. Membership duration moderates these effects.	The concept and measurement scales were largely adopted from previous literature without deeper contextual validation. The study also focuses mainly on Chinese communities. Future studies could examine additional dimensions of happiness, explore other social capital factors such as trust and reciprocity, replicate the study across cultures, and examine additional moderators such as member age or community climate.
Daiane Scaraboto, Stefania Ordovás de Almeida, João Pedro dos Santos Fleck (2020)	"No piracy talk": how online brand communities work to denormalize controversial gaming practices	Internet Research	Gaming brand communities	Qualitative	Interviews, online and offline community interactions, and archival data within the Brazilian video game market.	**Antecedents:** Community interactions regarding controversial gaming practices (piracy). **Mediators:** Normalization processes (coherence, cognitive participation, collective action, reflexive monitoring). **Outcomes:** Denormalization of illegal gaming practices.	Online brand community members collectively promote legal gaming behaviour in a market where piracy is common by establishing shared norms and reinforcing legal consumption practices.	Future research could compare normalization processes for physical vs digital products, examine collaboration between brands and consumer-managers in building communities, and extend the framework to other forms of collective online behaviour such as online shaming.
Denghua Yuan, Zhibin Lin, Raffaele Filieri, Ran Liu, Mengqin Zheng (2020)	Managing the product-harm crisis in the digital era: The role of consumer online brand community engagement	Journal of Business Research	Product-harm crisis management; online brand communities	Quantitative	Survey of Samsung online brand community members during the Galaxy Note 7 crisis (n = 377); 7-point Likert scale; PL-SEM analysis.	**Antecedents:** Online brand community engagement; brand super-recovery effort. **Mediators:** Consumer forgiveness. **Outcomes:** Repurchase intention.	Online brand community engagement directly and indirectly increases repurchase intention through consumer forgiveness. Brand super-recovery efforts influence repurchase intentions mainly through forgiveness rather than directly.	Data are drawn from a single crisis case, which limits generalisability. Future research could examine other crisis contexts, include additional crisis response strategies, incorporate justice theory perspectives, and analyse how engagement interacts with brand recovery strategies to influence outcomes.

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Jana Bowden, Abas Mirzaei (2021)	Consumer engagement within retail communication channels: an examination of online brand communities and digital content marketing initiatives	European Journal of Marketing	Retail communication channels; online brand communities; digital content marketing	Quantitative	Survey of two samples: Facebook OBC members and digital content marketing subscribers; total n = 820.	**Antecedents:** Self-brand connection. **Mediators:** Cognitive, affective, behavioural and social engagement. **Moderators:** Communication channel (OBC vs DCM). **Outcomes:** Loyalty.	Self-brand connection positively influences all engagement dimensions. These engagement dimensions mediate the relationship between self-brand connection and loyalty. The OBC channel strengthens the engagement–loyalty relationship compared with DCM.	Conducted in one OBC for one retail brand using cross-sectional data. The study focuses on a single antecedent of engagement. Future research should explore OBCs across different product categories, use qualitative and netnographic approaches for triangulation, examine additional engagement drivers, and investigate broader outcomes such as purchase intention and reputation.
Linlin Liu, Renjing Liu, Matthew Lee, Jiawen Chen	When will consumers be ready? A psychological perspective on consumer engagement in social media brand communities	Internet Research	Social media brand communities	Quantitative	Online survey data from 279 brand community members of Weibo. Web-based survey. 7 point Likert scale. SEM.	**Antecedents:** Recognition, Self-Efficacy, Community Identification. **Mediators:** Consumer Engagement. **Moderators:** Community Type. **Outcomes:** Brand Loyalty.	Three factors, namely recognition, community identification and self-efficacy, had significant positive effects on consumer engagement in SMBCs, which consequently enhanced brand loyalty. Self-efficacy moderated the effects of both community identification and recognition on consumer engagement. The impacts of the three factors on consumer engagement are contingent upon the type of SMBCs.	Respondents were surveyed only on Weibo, which constrains the findings' generalization to other types of social media platforms. The study also did not categorize the type of brand, whether big or niche. Future research intending to replicate this study should note this variety. Cross-sectional data were used whereas a longitudinal study could usefully examine the development and changes in consumer engagement over time in SMBCs.
Julia Marbach, Cristiana Lages, Daniel Nunan, and Yuksel Ekinci (2019)	Consumer engagement in online brand communities: the moderating role of personal values	European Journal of Marketing	Online brand communities	Mixed-method	n=559 users of two distinct firm-hosted online brand communities (FHOBCs).	**Antecedents:** Extraversion, Openness to Experiences, Altruism. **Mediators:** OCE. **Moderators:** Personal values of conservation and self-enhancement. **Outcomes:** OCE, Social Value, Aesthetic Value.	Three personality traits: extraversion, openness to experiences and altruism are positively correlated with OCE. OCE is related to two types of perceived value, namely social value and aesthetic value. The personal values of conservation and self-enhancement moderate the relationships between the three identified personality traits and OCE.	The first limitation is the use of self-reported measures. A second limitation relates to the potential for findings to be culturally bound, owing to online communities with an individual national focus being selected, where cultural values might impact upon the behaviour of individuals. Future research is recommended to apply this study's conceptual framework across different cultures to enhance its generalisability. Future research could also consider additional types of consumer perceived value such as economic value and altruistic value and their role in other OCE contexts. Consider broader theoretical and practical implications, such as developing and testing theoretical frameworks of the psychological process of engagement or relating engagement to happiness. Look at how and why personal values influence engagement. Develop a richer understanding of engagement across a range of social and technological contexts.

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Jitender Kumar (2019)	How psychological ownership stimulates participation in online brand communities? The moderating role of member type	Journal of Business Research	Online brand communities; psychological ownership	Quantitative	Online surveys. n=763. SEM. University/college students, identifying themselves as the members of a real OBC created by firms around product brands were targeted.	**Antecedents:** Individual Psychological Ownership (Self-Efficacy, Accountability, Belongingness, Self-Identity); Collective Psychological Ownership. **Mediators:** Participation Intention. **Moderators:** Member Type. **Outcomes:** Brand Purchase Intentions, Positive Word of Mouth.	IPO and CPO sensed by the members positively influence their participation intentions, which further influence members' brand purchase intentions and positive WOM about the community.	Allowing respondents to select a brand community may bias responses upward because members tend to choose recently visited or favourite communities. The exclusive sample of Indian students raises concerns about generalization to other countries. Unequal male and female representation and the student sample limit broader generalisability. The author covered OBCs created around product brands only. Studying a single or predetermined set of OBCs could produce mixed responses. More replication is suggested in broader cultural contexts and in countries where gender gaps differ. A multiple-group analysis can shed more light on the moderating role of gender. Selecting general OBC members from the marketplace can improve validation. Future studies can examine OBCs around service brands and different community platforms. Researchers can also investigate whether IPO and CPO exist simultaneously or sequentially, whether inactivity/activity period moderates the effects, and how darker aspects of psychological ownership operate in OBCs.
Dennis Herhausen, Stephan Ludwig, Dhruv Grewal, Jochen Wulf, Marcus Schoegel (2019)	Detecting, Preventing, and Mitigating Online Firestorms in Brand Communities	Journal of Marketing	Online brand communities; brand crises/firestorms	Quantitative	Text mining study of negative eWOM from Facebook brand communities of all U.S. firms listed on the S&P 500 between October 1, 2011 and January 31, 2016. n = 472,995 negative customer posts across 89 online brand communities.	**Antecedents:** Negative eWOM characteristics (high- and low-arousal emotions, structural tie strength, linguistic style match). **Outcomes:** Online firestorm potential.	The study demonstrates distinct impacts of high- and low-arousal emotions, structural tie strength, and linguistic style match between sender and brand community on firestorm potential.	The study is limited to visible posts in Facebook communities, as firms may delete offensive comments. Deleted extreme posts may bias results. The study could not assess source credibility perceptions or obtain data on the number of friends due to Facebook API restrictions. Future research could examine specific service failures and severity, explore contexts where systematic information processing is stronger, assess the role of source credibility, analyse weak versus strong tie perceptions in negative eWOM sharing, and examine how different compensation strategies influence outcomes.
Stephanie Meek, Maria Ryan, Claire Lambert, Madeleine Ogilvie (2019)	A multidimensional scale for measuring online brand community social capital (OBCSC)	Journal of Business Research	Online brand communities; social capital	Quantitative	Scale development process following DeVellis (2012), Churchill (1979), Gerbing and Anderson (1988), and Netemeyer et al. (2003).	**Antecedents:** Social capital dimensions (shared language, shared vision, social trust, reciprocity). **Outcomes:** Online brand community social capital (OBCSC).	Social capital in OBCs is a multidimensional construct determined by shared language, shared vision, social trust and reciprocity within the community structure.	Differences between company-initiated and consumer-initiated OBCs were not examined. There is also a gender imbalance and concentration of respondents from one OBC, which limits variation in responses. Future research should cross-validate the OBCSC scale across consumer-initiated and company-initiated communities, examine the influence of membership type and length of membership, explore links between social capital and community usage or enjoyment, and investigate how social capital influences long-term engagement and sense of belonging.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Stacey Li, Pratik Modi, Meng-Shan (Sharon) Wu, Cheng-Hao (Steve) Chen, Bang Nguyen	Conceptualising and validating the social capital construct in consumer-initiated online brand communities	Technological Forecasting & Social Change	Consumer-initiated online brand communities	Quantitative	Web survey of 353 members from 35 Volkswagen COBCs in China analysed using Structural Equation Modelling.	**Antecedents:** Social capital dimensions (interaction ties, shared language, identification, commitment, information exchange). **Outcomes:** Social capital in COBCs.	The study conceptualises social capital in COBCs as a four-dimension construct and highlights the importance of communication processes within communities. The model distinguishes communication-based social capital from cognitive dimensions.	The study focuses on the automobile industry in China. Some attributes across dimensions may overlap conceptually. Future research should validate the construct in different industries and countries, and further investigate the relationships among social capital dimensions to better understand the complexity of the construct.
Azzouz Essamri, Sally McKechnie, Heidi Winklhofer (2019)	Co-creating corporate brand identity with online brand communities: A managerial perspective	Journal of Business Research	Corporate brand identity; online brand communities	Qualitative	Single case study. In-depth interviews with senior executives of a luxury automotive company and netnography of its online brand community.	**Antecedents:** Management-led brand identity processes (nurturing brand passion, bridging brand identity meanings, partnering with community members). **Outcomes:** Corporate brand identity co-creation within online brand communities.	The study proposes a process model showing how management participates in corporate brand identity formation through three interrelated processes: nurturing brand passion, bridging brand identity meanings, and partnering with community members and stakeholders.	The proposed model is derived from a single social media platform (a company-hosted Facebook brand community) and focuses on a single iconic brand. Future research should confirm the generalisability of the model across different platforms and examine its applicability to brands with smaller or less active online brand communities.
Melek Demiray, Sebnem Burnaz (2019)	Exploring the impact of brand community identification on Facebook: Firm-directed and self-directed drivers	Journal of Business Research	Facebook brand communities	Mixed-method	Study 1: qualitative focus groups (n=36). Study 2: quantitative survey (n=408) among members of an electronics brand's Facebook community.	**Antecedents:** Firm-directed drivers; Self-directed drivers. **Mediators:** Brand Community Identification; Brand Community Commitment. **Moderators:** Opinion Leadership; Opinion Seeking. **Outcomes:** Word of Mouth (WOM); Purchase Intention.	Firm-directed and self-directed drivers both positively influence brand community identification. Brand community identification increases brand community commitment, which in turn enhances WOM and purchase intention. Opinion leadership and opinion seeking influence the strength of relationships between drivers and identification.	Limited availability of validated scales for measuring drivers of attitudes and behaviours toward new products in online communities. Use of a single community and a specific product category limits generalisability. Future research could test the model across different product categories, cultures, industries, and social networking platforms and examine additional moderators influencing brand community identification.
Scott A. Thompson, James M. Loveland, Iana A. Castro (2018)	From rumor to release: Does product release influence WOM in brand communities dedicated to technology products?	European Journal of Marketing	Technology brand communities	Quantitative	Study 1: content analysis of 72,749 messages from 5,777 users across two rival online brand forums over 13 months. Study 2: field and online experiments (n=60; n=80).	**Antecedents:** Product release stage (pre-release vs post-release). **Mediators:** Interest in comparing brands. **Moderators:** Brand Identification. **Outcomes:** Word of Mouth (WOM) intentions regarding rival brands.	WOM behaviour changes significantly as products move from rumor to release stages. Prior to release, loyal consumers are more willing to spread positive WOM about rival brands, but this tendency declines after release. Brand identification strengthens the tendency to discuss rival product rumors before release.	Future research should examine the role of different online contexts (such as blogs) in rumor diffusion and investigate how product release schedules or delays influence rumor spread and product adoption dynamics.

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Sara Hanson, Lan Jiang, Darren Dahl (2019)	Enhancing consumer engagement in an online brand community via user reputation signals: a multi-method analysis	Journal of the Academy of Marketing Science	Online brand communities	Quantitative	Multi-method design including natural experiment with T-Mobile online brand community data, controlled experiments, and survey-based studies examining different reputation signal formats (points, labels, badges).	**Antecedents:** Reputation signal type. **Mediators:** Role clarity; Connectedness. **Moderators:** User tenure. **Outcomes:** Consumer engagement.	Signals that communicate a positive social role drive greater engagement than signals lacking role clarity. The effect is stronger for new community members, indicating tenure moderates the impact of reputation signals on engagement.	The study did not fully compare all signal formats in identical contexts. High-tenure users may focus more on content than signals, and may prefer other signal attributes such as progression indicators. Future research could explore other community contexts and combinations of reputation signals, examine boundary conditions of signal effectiveness, investigate optimal numbers of reputation categories, and conduct longitudinal studies to examine long-term effects on engagement.
Xiao-Liang Shen, Yang-Jun Li, Yongqiang Sun, Yujie Zhou (2018)	Person–environment fit, commitment, and customer contribution in online brand community: A nonlinear model	Journal of Business Research	Online brand communities	Quantitative	Survey of 480 members of the Xiaomi online brand community using SEM and regression analysis.	**Antecedents:** Needs–supplies fit; Demands–abilities fit. **Mediators:** Community commitment. **Moderators:** Value congruence; Community satisfaction. **Outcomes:** Willingness to contribute.	Needs–supplies fit shows a decreasing incremental effect on community commitment, while demands–abilities fit shows an increasing incremental effect. Community commitment subsequently increases willingness to contribute.	The model excludes potentially relevant variables such as trust or loyalty. Self-selected survey data may introduce bias, and all constructs were measured using Likert scales.Future research could explore additional nonlinear relationships, apply fuzzy-set analysis to examine combinations of P–E fit factors, incorporate behavioural data such as posting frequency, and examine measurement scale assumptions in customer contribution research.
Jamid Ul Islam, Zillur Rahman, Linda D. Hollebeek (2017)	Consumer engagement in online brand communities: a solicitation of congruity theory	Internet Research	Online brand communities	Quantitative	Survey of 443 Facebook OBC members from a higher education institution in India; SEM analysis.	**Antecedents:** Self-brand image congruity; Value congruity. **Mediators:** Consumer engagement (cognitive processing, affection, activation). **Moderators:** Gender. **Outcomes:** Brand loyalty.	Self-brand image congruity and value congruity significantly increase consumer engagement, which in turn increases brand loyalty. Gender did not moderate the tested relationships.	The study focuses on a single cultural context and uses cross-sectional data. The results are based only on Facebook brand communities. Future research could examine the model across cultures and industries, conduct longitudinal studies to understand engagement dynamics over time, and incorporate additional constructs such as brand experience, trust or commitment.
Henri Hakala, Laura Niemi, Marko Kohtamäki (2017)	Online brand community practices and the construction of brand legitimacy	Marketing Theory	Online brand communities	Qualitative	Discourse analysis examining practices within two online brand communities.	**Antecedents:** Online brand community practices and discourse. **Outcomes:** Construction of brand legitimacy.	Individual perceptions, judgements, and actions within online communities interact with broader organisational and societal contexts to shape the legitimacy of the brand.	Boundaries between perceptions, judgements and actions within legitimacy practices are blurred and extend beyond the brand community itself. Future research could examine rhetorical and discursive strategies used by organisations to influence legitimacy perceptions, explore legitimisation across different online community contexts, and investigate links between legitimacy construction and value co-creation.
Junyun Liao, Minxue Huang, Bangming Xiao (2017)	Promoting continual member participation in firm-hosted online brand communities: An organizational socialization approach	Journal of Business Research	Firm-hosted online brand communities	Quantitative	Survey across seven firm-hosted OBCs. Questionnaire. n = 589. 7-point Likert scale. SEM.	**Antecedents:** Socialization tactics – Member education, Interaction support, Participation feedback. **Mediators:** Community identification. **Moderators:** Membership duration. **Outcomes:** Membership continuance intention.	Community sponsors' efforts in member education, interaction support, and participation feedback positively influence members' membership continuance intention. Community identification mediates these relationships. Membership duration negatively moderates the mediation effect for member education but positively moderates the mediation effect for interaction support.	Only three socialization tactics were examined and may not fully represent all possible tactics. The study relies on perceptual data, limiting generalizability. Future studies should examine a broader range of socialization tactics, explore additional member characteristics such as social status, collect behavioural participation data, use experimental designs, and examine the findings across different industries and countries.

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Sascha Steinmann, Gunnar Mau, Hanna Schramm-Klein (2015)	Brand Communication Success in Online Consumption Communities: An Experimental Analysis of the Effects of Communication Style and Brand Pictorial Representation	Psychology & Marketing	Online consumption communities	Quantitative	Online experiment using a 2×2×3 design. Communication style (non-personalized vs personalized), brand pictorial representation (logo vs avatar), and membership duration as factors. Four Facebook communities created. n = 108. ANOVA.	**Antecedents:** Communication style (non-personalized vs personalized); Brand pictorial representation (brand logo vs avatar). **Moderators:** Duration of membership (time). **Outcomes:** Attitude toward the brand; Satisfaction with the community; Brand recommendation; Brand purchase.	Communication style and brand pictorial representation significantly influence members' evaluations of the brand and the community, as well as brand recommendation and purchase intentions.	Only two communication styles and two pictorial representations were examined. Conversation content effects were not investigated. The study focused on one brand in one product category and one country with a relatively small student sample. Future research should examine additional communication formats and pictorial representations, investigate the role of conversation content within communities, explore potential mediators such as attitude, examine other brand contact points, test the model across brands and industries, and conduct cross-cultural studies with larger samples.
Zhimin Zhou, Qiyuan Zhang, Chenting Su, Nan Zhou (2012)	How do brand communities generate brand relationships? Intermediate mechanisms	Journal of Business Research	Brand communities	Quantitative	Online survey of Chinese car club members. n = 437. PLS and multiple regression analysis.	**Antecedents:** Brand community identification; Brand community commitment. **Mediators:** Brand attachment. **Moderators:** Perceived community-brand similarity. **Outcomes:** Brand identification; Brand commitment.	Brand attachment fully mediates the relationship between brand community commitment and brand commitment, and partially mediates the relationship between brand identification and brand commitment. Perceived community–brand similarity moderates the effects of community identification and commitment on brand-related outcomes.	The sample was heavily male (over 97%), limiting generalizability. The study examines only the influence of brand communities on brand relationships without considering reverse effects. Future research should include more balanced samples, examine different industries and community types, and use longitudinal designs to capture dynamic brand community relationships.
Roderick J. Brodie, Ana Ilic, Biljana Juric, Linda Hollebeek (2013)	Branding co-creation with members of online brand communities	Journal of Business Research	Online brand communities; value co-creation	Qualitative	Netnography. The authors selected the company Vibra-Train Ltd with its online platform as the research setting. Theoretical sampling.	**Antecedents:** Interactive consumer experiences within online brand communities. **Mediators:** Consumer engagement processes and sub-processes reflecting value co-creation among community participants. **Moderators:** Engagement intensity levels over time. **Outcomes:** Enhanced consumer loyalty, satisfaction, empowerment, connection, emotional bonding, trust, and commitment.	The study highlights the multidimensional and dynamic nature of consumer engagement within online brand communities. Engagement emerges at varying levels of intensity and involves interactive processes that facilitate value co-creation among participants. Engaged consumers exhibit stronger loyalty, satisfaction, empowerment, connection, emotional bonding, trust, and commitment.	The exploratory study is based on a relatively small online community consisting of six highly engaged members, limiting the generalizability of the findings. Future research should integrate additional theoretical perspectives such as service-dominant logic and consumer culture theory, explore engagement across broader engagement platforms and interaction types (C2C, B2C, B2B), examine engagement networks, and employ mixed methodological approaches to investigate engagement antecedents, processes, and consequences in online brand communities.

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James B. Kelley, Dana L. Alden (2016)	Online brand community: through the eyes of Self-Determination Theory	Internet Research	Online brand communities	Quantitative	National online panel survey. Structural equation modelling. n = 215 respondents.	**Antecedents:** Consumer innovativeness; Opinion leadership; Susceptibility to normative influence. **Mediators:** Purposive motives; Brand engagement in self-concept. **Outcomes:** Brand website interactivity.	Consumer innovativeness, opinion leadership, and susceptibility to normative influence influence brand website interactivity through mediating mechanisms such as brand engagement in self-concept and purposive motives. Susceptibility to normative influence and purposive motives positively predict brand website interactivity, while stronger brand engagement in self-concept also increases interactivity levels.	The sample focuses primarily on young to middle-aged adults and lacks cultural diversity. Only purposive motives were examined and a limited number of antecedents were included in the model. Future research should examine differences between lurkers and active participants in OBCs, test the model with more representative samples, examine cultural and motivational influences on engagement, explore the digital extended self, and investigate additional individual difference variables such as opinion seeking, materialism, and psychological sense of brand community.
Mingli Zhang, Mu Hu, Lingyun Guo, Wenhua Liu (2017)	Understanding relationships among customer experience, engagement, and word-of-mouth intention on online brand communities: The perspective of service ecosystem	Internet Research	Online brand communities	Quantitative	Online survey. Context – Five smartphone brand communities in China. n = 465. ANOVA.	**Antecedents:** Evaluation of experience (Social support, Social presence, Flow). **Mediators:** Community engagement. **Outcomes:** WOM intention.	Social support, social presence, and flow positively influence community engagement. Community engagement positively affects word-of-mouth intention. Community engagement mediates the relationship between social support and WOM intention and between flow and WOM intention but does not mediate the relationship between social presence and WOM intention.	With the development of mobile networks, many users access communities through portable devices, which may influence behaviour patterns across communication channels. The study focuses on smartphone communities, limiting generalizability to other product categories. The Chinese context may also limit applicability due to cultural differences. Future research should examine communication environments and customer experiences in different types of brand communities, consider heterogeneous samples, and further explore the formation of community engagement from different perspectives to refine the proposed model.
Sahar Mousavi, Stuart Roper, Kathleen A. Keeling (2017)	Interpreting Social Identity in Online Brand Communities: Considering Posters and Lurkers	Psychology & Marketing	Online brand communities	Quantitative	Survey of 752 OBC members in the USA. SEM analysis.	**Antecedents:** Brand prestige; Brand distinctiveness. **Mediators:** Self-categorization; Community-based self-esteem; Community affective commitment; Affective brand commitment. **Outcomes:** Positive WOM; Resistance to negative information.	Social identity mechanisms mediate the relationship between brand-related perceptions and brand outcomes. Brand prestige and brand distinctiveness influence self-categorization, which affects community-based self-esteem and community affective commitment. These subsequently influence affective brand commitment, which leads to positive word-of-mouth and resistance to negative information about the brand.	The sample consists only of respondents from the United States, limiting generalizability across cultures. Future research should test the model across different cultural contexts, explore factors such as community size, member involvement, and membership length, and further investigate the role of lurkers and different types of online brand communities, including comparisons between firm-hosted and customer-led communities.
Guevarra & Howell (2014)	To Have in Order to Do: Exploring the Effects of Consuming Experiential Products on Well-Being	Journal of Consumer Psychology	Experiential consumption; well-being	Quantitative	Three quantitative studies (MTurk surveys and experiments); ANCOVA and mediation analysis using PROCESS	**Antecedents:** Type of consumption (material vs experiential purchases) **Mediators:** Satisfaction of psychological needs (autonomy/identity, competence, relatedness) **Moderators:** Purchase valence (positive vs negative outcomes) **Outcome:** Consumer well-being (happiness and satisfaction derived from consumption)	Experiential consumption leads to higher well-being than material purchases because it better satisfies psychological needs such as autonomy, competence, and relatedness.	Focuses mainly on purchase-based consumption contexts and short-term well-being effects.Future research should examine other consumption contexts, broader well-being outcomes beyond hedonic well-being, and different consumer segments.

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Albrecht et al. (2017)	Adolescents' perceived brand deprivation stress and its implications for corporate and consumer well-being	Psychology & Marketing	Adolescents; consumer well-being	Mixed methods	Qualitative interviews plus surveys across three studies; SEM analysis	**Antecedents:** Peer influence, media influence, product involvement, age **Mediators:** Brand deprivation stress **Moderators:** Self-confidence **Outcome:** Consumer well-being (psychosomatic illness) and purchase intentions	Lack of access to desired brands can create brand deprivation stress, which negatively affects adolescents' well-being and increases purchase intentions for branded products as a coping strategy.	Focused only on adolescents and clothing consumption context. Future research should examine brand-related stress across different consumer groups and consumption contexts.
McColl-Kennedy et al. (2017)	Cocreative customer practices: Effects of health care customer value cocreation practices on well-being	Journal of Business Research	Value co-creation; service contexts	Mixed methods	Diary study and surveys across three studies; SEM analysis	**Antecedents:** Customer interactions with medical staff, other customers, and social networks **Mediators:** Customer cocreation activities (coproduction, co-learning, collating, lifestyle changes) **Moderators:** Type of illness **Outcome:** Consumer well-being	Customer value co-creation practices positively influence well-being, especially when interactions extend beyond the service provider to include social networks such as family and friends.	Healthcare-specific context may limit generalisability. Future studies should examine cocreation practices and well-being across other service contexts.
Pera, Quinton & Baima (2020)	I am who I am: Sharing photos on social media by older consumers and its influence on subjective well-being	Psychology & Marketing	Social media consumption; older consumers	Qualitative	Focus groups and in-depth interviews with older consumers	**Antecedents:** Photo-sharing behaviour on social media **Mediators:** Digital self-construction **Outcome:** Subjective well-being	Photo-sharing improves older consumers' well-being by enabling self-expression, strengthening social relationships, supporting autonomy, and facilitating personal growth.	Sample limited to relatively active and educated older consumers living independently. Future studies should examine less digitally active older populations and other social media practices affecting well-being.
Lee & Ahn (2016)	Anti-consumption, Materialism, and Consumer Well-being	Journal of Consumer Affairs	Consumer well-being; anti-consumption	Conceptual + qualitative support	Content analysis of blogs, forums, and online discussions	**Antecedents:** Materialism; Anti-consumption values **Outcome:** Consumer well-being	Materialism negatively affects consumer well-being, whereas anti-consumption values may enhance well-being by encouraging intrinsic goals, reducing material desire, and promoting greater control over consumption.	Preliminary qualitative evidence and limited empirical validation.Future research should empirically test the framework and examine anti-consumption values and consumer well-being using quantitative approaches.
Azmat, Samaratunge & Ferdous (2021)	Consumer well-being and social responsibility of subsistence entrepreneurs in subsistence marketplace	Journal of Consumer Affairs	Subsistence marketplaces	Qualitative	40 in-depth interviews with subsistence entrepreneurs in Bangladesh and Sri Lanka	**Antecedents:** Religiosity; Socio-economic conditions; Local embeddedness **Mediators:** Ethical orientation **Moderators:** Socio-economic conditions; Local embeddedness **Outcome:** Consumer well-being	Ethical business practices enhance consumer well-being in subsistence markets, while business malpractices harm vulnerable consumers.	Small qualitative sample limits generalisability. Future research should examine consumer well-being using larger samples and include both entrepreneurs and consumers.
Durgee & Agopian (2018)	Refurbishing services and how services enhance consumer well-being	Journal of Services Marketing	Service consumption; well-being	Qualitative	Interviews, participant observation, and netnographic analysis	**Antecedents:** Service interactions; Co-creation with service providers; Attachment to possessions **Mediators:** Self-identity development; Knowledge acquisition **Outcome:** Consumer well-being	Service interactions can enhance consumer well-being by strengthening identity, social connection, knowledge, and continuity with past experiences.	Context limited to refurbishing services and durable goods. Future studies should explore how other service interactions influence consumer well-being across different contexts.

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Sharma, Conduit & Hill (2017)	Hedonic and eudaimonic well-being outcomes from co-creation roles: a study of vulnerable customers	Journal of Services Marketing	Value co-creation; vulnerable consumers	Qualitative	Case studies, interviews and focus groups (42 participants); thematic analysis	**Antecedents:** Co-creation participation; Customer roles **Mediators:** Psychological need fulfilment (autonomy, competence, relatedness) **Outcome:** Customer well-being (hedonic and eudaimonic)	Different co-creation roles (co-producer, strategic partner, community citizen) generate both hedonic and eudaimonic well-being outcomes.	Context limited to mental health services.Future research should test these relationships across other service contexts and through quantitative methods.
Plaud & Guillemot (2015)	Service interactions and subjective well-being in later life	Journal of Services Marketing	Service experiences; elderly consumers	Qualitative	37 in-depth interviews with older consumers	**Antecedents:** Service interactions; Life events **Mediators:** Identity adjustment. **Outcome:** Consumer well-being (subjective well-being)	Service encounters influence well-being through mechanisms including relationships, personal growth and purpose, mastery and independence, and self-acceptance.	Context limited to aging consumers experiencing major life transitions. Future research should examine other vulnerable populations and adopt multi-method research designs.
Engström & Elg (2015)	A self-determination theory perspective on customer participation in service development	Journal of Services Marketing	Service development participation	Qualitative	Diaries and interviews with lung cancer patients participating in healthcare service development	**Antecedents:** Participation in service development **Mediators:** Psychological need satisfaction (autonomy, competence, relatedness) **Outcome:** Consumer well-being	Customer participation enhances well-being by increasing feelings of autonomy, competence, and relatedness.	Small qualitative sample within healthcare context. Future research should test the participation–well-being relationship in other contexts and using quantitative methods.
Lai & Perminiene (2020)	Embracing imperfection: contemporary fashion communication and consumer well-being	Journal of Fashion Marketing and Management	Fashion consumption; well-being	Qualitative	Semiotic and content analysis of fashion advertising images	**Antecedents:** Fashion advertising messages **Mediators:** Authenticity; Self-acceptance. **Outcome:** Subjective well-being	Advertising that promotes authenticity, imperfection, and diversity can reduce anxiety and enhance consumer well-being.	Study focused only on fashion advertising images. Future research should empirically examine the relationship between marketing communication and consumer well-being.
Bodunrin & Stone (2019)	Consuming well-being and happiness through epicurean ingestion	Qualitative Market Research	Food consumption; well-being	Qualitative	Introspective qualitative analysis using film interpretation	**Antecedents:** Food consumption experiences **Mediators:** Pleasure; Experiential appreciation of consumption. **Outcome:** Subjective well-being and happiness	Experiential consumption practices such as mindful eating and appreciation of food enhance subjective well-being and happiness through both hedonic enjoyment and eudaimonic fulfilment.	Based on introspective analysis of a single film context. Future research should examine experiential consumption practices across different contexts.
Zhong & Mitchell (2010)	A mechanism model of the effect of hedonic product consumption on well-being	Journal of Consumer Psychology	Hedonic consumption	Quantitative	Longitudinal panel data analysis using fixed-effects econometric modelling	**Antecedents:** Hedonic product consumption (e.g., leisure activities) **Mediators:** Satisfaction with relevant life domains (leisure life, social life, health) **Moderators:** Frequency of consumption **Outcome:** Subjective well-being	Hedonic consumption improves consumer well-being indirectly by increasing satisfaction across key life domains.	Study focuses mainly on leisure consumption as a proxy for hedonic consumption. Future research should examine other consumption categories and mechanisms influencing consumer well-being.
Lee & Ahn (2016)	Anti-Consumption, Materialism, and Consumer Well-Being	Journal of Consumer Affairs	Consumer well-being; anti-consumption and materialism in consumption contexts	Qualitative / Conceptual	Online qualitative data collection from blogs, forums, and discussion boards	**Antecedents:** Materialism; Anti-consumption values **Mediators:** Control over consumption; Scope of concerns; Material desire; Source of happiness. **Outcome:** Consumer well-being	Materialistic values are negatively associated with consumer well-being, whereas anti-consumption values are positively associated with well-being.	Evidence is exploratory and qualitative, limiting generalisability. Future studies should empirically test the proposed relationships between anti-consumption values and consumer well-being.

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Ho & Ito (2019)	Consumption-oriented engagement in social network sites: Undesirable influence on personal well-being	European Journal of Marketing	Social networking sites	Quantitative	Survey of 900 young adults; moderated hierarchical regression and mediation analysis	**Antecedents:** Consumption-oriented engagement in social network sites (SNSs) **Mediators:** Social comparison **Moderators:** Materialistic values **Outcome:** Personal well-being and excessive spending	Consumption-oriented engagement increases anxiety and excessive spending while lowering self-esteem. Social comparison mediates these effects, and materialistic values strengthen the negative relationships.	Cross-sectional design and student-based sample limit generalisability. Future research should use longitudinal designs and examine additional psychological mechanisms affecting well-being.
Zhong & Mitchell (2012)	Does Consumer Well-Being Affect Hedonic Consumption?	Psychology & Marketing	Hedonic consumption; well-being	Quantitative	Longitudinal panel data analysis using British Household Panel Survey	**Antecedents:** Subjective well-being **Mediators:** Positive interpretation of life circumstances; Broadened activities. **Outcomes:** Hedonic consumption spending	Higher subjective well-being leads to greater spending on hedonic products and leisure activities, through more positive life interpretation and broader activity engagement.	Focused mainly on leisure consumption, so findings may not generalise to other consumption contexts. Future studies should examine other consumption categories and additional cognitive mechanisms linking well-being and consumption.
Kuanr, Pradhan, Lyngdoh & Lee (2022)	Why do consumers subvert brands? Investigating the influence of subjective well-being on brand avoidance	Psychology & Marketing	Brand avoidance	Quantitative	Survey studies analysed using SEM/PLS	**Antecedents:** Subjective well-being **Mediators:** Self-control **Moderators:** Macro and micro anti-consumption attitudes **Outcomes:** Brand avoidance	Subjective well-being increases consumers' ability to avoid brands that violate moral standards because it strengthens self-control.	Initial study used a student sample and focused on moral brand avoidance.Future research should explore broader consumption contexts and additional behavioural outcomes of subjective well-being.
Liyanaarachchi, Kurtaliqi, Viglia & Frau (2026)	The virtue-value spectrum: Managing ethical and pragmatic tensions in virtual reality retail for consumer	Journal of Business Research	Virtual reality retail	Mixed-methods	Study 1: 32 interviews using Gioia method; Study 2: analysis of Trustpilot reviews and Instagram comments	**Antecedents:** Personalization; Data collection; Privacy concerns **Mediators:** Psychological dissonance; Privacy cynicism **Moderators:** Transparency; Perceived value **Outcomes:** Consumer wellbeing; Trust; Engagement	Consumers balance ethical concerns and experiential benefits in immersive retail environments. Transparency and ethical data practices reduce psychological tension and improve wellbeing.	Focused on VR retail and Gen-Z consumers. Future research should examine ethical governance, privacy protection, and psychological mechanisms shaping wellbeing in immersive retail environments.
Anderson et al. (2013)	Transformative service research: An agenda for the future	Journal of Business Research	Transformative service research	Conceptual / agenda-setting	Conceptual framework development with illustrative sector discussions	**Antecedents:** Characteristics and actions of service entities **Outcomes:** Consumer well-being outcomes	Establishes Transformative Service Research (TSR) as a domain focused on well-being beyond satisfaction and loyalty, highlighting that service systems shape psychological and social outcomes.	Conceptual only and not empirically tested; sector examples limited.Calls for empirical testing of the TSR framework across contexts and levels.
Anderson & Ostrom (2015)	Transformative Service Research: Advancing our knowledge about service and well-being	Journal of Service Research	Transformative service research	Conceptual / domain development	Conceptual synthesis building on prior TSR work	**Antecedents:** Service system characteristics (structures, practices, actors) **Outcomes:** Consumer well-being (individual and collective)	Argues that service experiences fundamentally shape people's lives and positions well-being as a legitimate outcome of service research, highlighting long-term systemic effects of services.	Conceptual; does not empirically test relationships; primarily service-system focused rather than digital/community specific. Encourages empirical research examining how service design elements influence consumer well-being across contexts.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Ostrom et al. (2015)	Service Research Priorities in a Rapidly Changing Context	Journal of Service Research	Service research priorities	Conceptual / research priorities agenda	Conceptual synthesis + research priority development (MSI-style agenda paper)	**Antecedents:** Service design, technology integration, ecosystem actors **Outcomes:** Customer and societal well-being outcomes	Identifies well-being as a core priority in service research and highlights how digital transformation and technology-enabled interactions reshape service experiences and outcomes.	Conceptual and broad in scope; lacks empirical testing. Calls for research examining how technology-enabled service interactions affect customer and societal well-being.
Mick et al. (2009)*	The Transformative Consumer Research Movement	Journal of Public Policy & Marketing (special issue)	Transformative consumer research	Conceptual / movement-defining paper	Conceptual positioning and manifesto-style framing	**Antecedents:** Consumer vulnerabilities; marketplace structures. **Outcomes:** Consumer well-being and societal well-being	Establishes well-being as a legitimate central outcome in marketing and consumer research and frames research as a force for improving consumers' lives.	Conceptual; not tied to specific contexts such as digital communities. Encourages applied and empirical research addressing real-world consumer problems and well-being outcomes.
Mende & van Doorn (2015)	Coproduction of Transformative Services as a Pathway to Improved Consumer Well-Being	Journal of Service Research	Transformative services	Conceptual + empirical	Empirical study testing participation effects on well-being	**Antecedents:** Degree and nature of co-production/ participation **Mediators:** Psychological empowerment; perceived control **Moderators:** Contextual conditions of participation (e.g., structure, support) **Outcomes:** Consumer well-being	Co-production can enhance well-being when consumers experience empowerment and control, but poorly structured participation may create strain and reduce well-being.	Context-bound to specific service settings; limited exploration of digital or community contexts. Further research is needed to examine boundary conditions and potential negative effects of participation.
Abboud, L.; Bruce, H L; Burton, J. (2023)	I can't always get what I want: Low power, service customer disengagement and well-being	European Journal of Marketing	Service disengagement	Empirical	Quantitative survey-based study	**Antecedents:** Perceived low power in service interactions **Mediators:** Customer disengagement **Moderators:** Individual perceptions of control **Outcome:** Consumer well-being	Perceived low power increases customer disengagement, which in turn reduces consumer well-being. The study highlights that not all engagement contexts improve consumer outcomes.	Focused on specific service contexts and does not explore digital brand communities. Future research should examine power dynamics and psychological outcomes in digitally mediated or ongoing interaction contexts.
Rahman, A (2021)	Sources and categories of well-being: A systematic review and research agenda	Journal of Service Theory and Practice	Consumer well-being	Systematic literature review	Structured database search, screening and thematic coding	**Antecedents:** Participation, relationships, service design, empowerment (identified across literature) **Outcome:** Consumer well-being dimensions	Well-being research is fragmented with varying definitions and measurement approaches; prior research focuses mostly on positive outcomes and pays limited attention to strain or depletion processes.	Review depends on selected databases and inclusion criteria; primarily service-focused studies. Calls for clearer conceptual distinctions, context-specific studies, and research examining both positive and negative pathways to well-being.
Weaver et al. (2023)	Unlocking the full potential of Transformative Service Research by embedding collaboration throughout	Journal of Service Research	Transformative service research	Conceptual / domain development	Conceptual discussion supported with illustrative cases	**Antecedents:** Service system structures and stakeholder collaboration **Mediators:** Co-creation processes **Moderators:** Institutional and contextual conditions **Outcome:** Consumer and societal well-being	Well-being outcomes require collaborative engagement across multiple actors; service ecosystems and collaboration play a key role in achieving transformative impact.	Conceptual work lacking empirical testing of collaborative mechanisms. Future research should empirically examine ecosystem-level well-being processes and improve integration between theory and practice.

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Prentice, C., Snell, L., & Sok P (2023)	Managing burnout from engagement-derived acting strategy	Journal of Service Theory and Practice	Customer burnout	Empirical	Quantitative survey study in service settings	**Antecedents:** Engagement-derived acting demands **Mediators:** Emotional exhaustion (burnout) **Moderators:** Coping strategies / organisational support **Outcome:** Burnout and related well-being outcomes	Sustained effortful engagement can lead to emotional exhaustion; resource depletion explains how high engagement may produce burnout under strain.	Context-specific (service employees rather than consumers) and cross-sectional design. Future research should examine burnout in broader interaction contexts and explore boundary conditions.
Roopak, R.; Chakrabarti, S.; Sreen, N. (2025)	Engaged to Gain: How psychological needs drive integrative benefits via online customer engagement	Journal of Retailing and Consumer Services	Online customer engagement	Mixed-method	Study 1: Qualitative (phenomenological); Study 2: Quantitative (PLS-SEM)	**Antecedents:** Social needs; Status needs; Need for validation **Mediators:** Online customer engagement (OCE) **Moderators: Outcome:** Personal-integrative benefits; Social-integrative benefits	Social needs and the need for validation significantly drive online customer engagement, which in turn leads to personal and social integrative benefits. OCE fully mediates the relationship between need for validation and personal-integrative benefits and partially mediates other relationships.	The study relies on data from a single emerging market sample and focuses only on specific psychological needs driving engagement, which may limit generalisability across cultures and contexts. Future research should examine additional psychological motivations, test the model across different cultural contexts and online platforms, and explore other outcomes of online customer engagement beyond integrative benefits.
Kuchmaner, C.A.; Wiggins, J.; Lyndall, M. (2025)	Infringement on One Is Infringement on All: Observers Experience Vicarious Territorial Infringement in Virtual Brand Communities	Psychology and Marketing	Virtual brand communities	Quantitative	Experiment	**Antecedents:** Territorial signals / psychological ownership claims **Mediators:** Vicarious territorial infringement perceptions **Moderators:** Identification with the infringing consumer **Outcome:** Brand community engagement (affective and behavioral)	Observers perceive territorial infringement as a threat to their social identity in brand communities, which negatively affects their engagement. Identification with the infringing consumer reduces perceived infringement.	Experimental design and scenario-based stimuli may limit ecological validity and generalisability to real online brand community environments. Future studies should examine territorial infringement using real community data and explore other moderating factors such as community norms and member status.
Ul-Haq, S.U.; Kwok, R.Y-K. (2025)	When hate does not last: the evolution of brand schema in online communities	Qualitative Market Research	Online brand communities	Qualitative	In-depth interviews with online brand community members; qualitative analysis	**Antecedents:** Brand engagement experiences **Mediators:** Brand schema transformation processes **Moderators: Outcome:** Brand relationship change (anti-brand --- neutral/positive)	Consumers transition from anti-brand to neutral or positive relationships through multiple pathways shaped by engagement experiences and evolving brand schemas.	Qualitative interviews in a limited number of online communities restrict generalisability of the findings. Future research should quantitatively test the identified schema transformation pathways and examine brand schema evolution across different online community contexts.
Jeseo, V.; Lastner, M.M.; Black, H.G. (2024)	Enhancing customer engagement behaviors via customer-to-customer interactions and identification	Journal of Services Marketing	Customer engagement behaviors	Quantitative	Survey studies using SEM	**Antecedents:** Customer-to-customer interaction context and frequency **Mediators:** Customer identification **Moderators: Outcome:** Customer engagement behaviours; Purchase behaviours	Customer-to-customer interactions influence engagement and purchase behaviour through customer identification, with stronger effects in in-person interaction contexts.	Cross-sectional survey data limits causal inference regarding customer-to-customer interaction effects on engagement behaviours. Future studies should use longitudinal or experimental designs and investigate additional moderators such as platform characteristics and community norms.

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Zang, L.; Liu, Y.; Sun, X.; Wen, D. (2024)	Understanding the formation process of negative customer engagement behaviours: a quantitative and qualitative interpretation	Total Quality Management and Business Excellence	Negative customer engagement	Mixed-method	Qualitative text coding + machine learning analysis + regression	**Antecedents:** Various interaction and service factors identified from online community data **Outcome:** Negative customer engagement behaviours (NCEBs)	The study identifies factors influencing the emergence of negative customer engagement behaviours in online communities and shows that cognition and emotion are not always necessary drivers of such behaviours.	Data derived from online community text analysis may not fully capture offline drivers of negative engagement behaviours. Future research should explore psychological mechanisms and contextual factors that trigger negative customer engagement behaviours across industries.
Connell, C.; Marciniak, R.; Carey, L.D. (2023)	The Effect of Cross-Cultural Dimensions on the Manifestation of Customer Engagement Behaviors	Journal of International Marketing	Cross-cultural engagement	Qualitative	Netnography	**Antecedents:** Cultural context; Brand culture **Moderators:** National cultural dimensions **Outcome:** Customer engagement behaviours	National culture does not significantly affect engagement behaviours, whereas brand culture plays a stronger role in shaping engagement within online communities.	Netnographic analysis of selected communities limits generalisability across cultures and industries.Future studies should quantitatively test cultural effects on engagement behaviours and examine additional contextual moderators beyond brand culture.
Shin, H.; Perdue, R.R. (2023)	Developing a Multi-Dimensional Measure of Hotel Brand Customers' Online Engagement Behaviors to Capture Non-Transactional Value	Journal of Travel Research	Hotel brand communities	Quantitative	Scale development and validation	**Antecedents:** Internal and external motivations **Mediators:** Online engagement behaviours **Outcome:** Non-transactional value (influential-experience value; C-to-B innovation value; relational value; functional value); Brand attachment; Brand loyalty	Developed and validated a multidimensional scale capturing non-transactional value created through online engagement behaviours.	The scale was developed within the hotel context, which may limit generalisation to other service industries. Future research should validate the scale in different hospitality and tourism contexts and test its predictive power for additional behavioural outcomes.
Chou, E.-Y.; Lin, C.-Y. (2023)	Building a social media community around your brand: the moderating role of firm engagement tactics	Journal of Marketing Management	Social media brand communities	Mixed-method	Qualitative study + PLS-SEM	**Antecedents:** SMBC identification **Mediators:** Consumer engagement **Moderators:** Firm engagement tactics (education, reputation enhancement, incentives, interaction support, entertainment) **Outcome:** Brand loyalty	Consumer engagement mediates the relationship between SMBC identification and brand loyalty. Firm engagement tactics positively moderate this relationship.	Mixed-method design using community-specific data may limit generalisability to other platforms or brand communities. Future research should test the model across different social media platforms and examine additional firm engagement strategies affecting community engagement and loyalty.
Taylor, A.; Carlson, J.; Liao, Y.-C.; Rahman, M.M. (2023)	Customer engagement and sharing behaviors: Toward a contingent curvilinear perspective	Journal of Business Research	Customer engagement behaviors	Quantitative	Survey; regression (curvilinear test)	**Antecedents:** Customer engagement **Mediators:** **Moderators:** Perceived OBC interactivity; Perceived OBC innovativeness **Outcome:** Sharing behavior intention	Customer engagement shows a **negative quadratic (curvilinear) relationship** with sharing behavior intention. Perceived interactivity and innovativeness mitigate this curvilinear effect.	Cross-sectional survey data limits causal inference regarding the curvilinear relationship between engagement and sharing behaviour. Future studies should examine engagement dynamics longitudinally and explore additional moderators influencing nonlinear engagement effects.

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Kumar, J. (2022)	Psychological ownership towards online brand communities driving brand engagement: a visitors' perspective	Journal of Strategic Marketing	Online brand communities	Quantitative	Survey; model testing (moderation)	**Antecedents:** Psychological ownership dimensions (self-efficacy, accountability, belongingness, self-identity) **Mediators:** Brand engagement **Moderators:** Perceived diversity **Outcome:** Purchase intentions	Visitors' psychological ownership toward online brand communities significantly drives brand engagement, which then influences purchase intentions.	The study focuses on visitors within online brand communities, which may limit applicability to other types of community members or offline brand settings. Future research should examine psychological ownership across different community roles and platforms and explore additional engagement outcomes beyond purchase
Ozuem, W.; Willis, M.; Howell, K.; Lancaster, G.; Ng, R. (2021)	Determinants of online brand communities' and millennials' characteristics: A social influence perspective	Psychology and Marketing	Online brand communities; millennials' engagement and social influence	Qualitative	Interviews	**Antecedents:** Brand sentiment; Identification with source; Affirmative experience; Conspicuous effect **Outcome:** Customer engagement behaviors	The study identifies four categories of engagement among millennials in OBCs (bias situators, sugar-coaters, rationalisers, judgmentalists).	Qualitative interview design and focus on millennials limit generalisability across generations and contexts. Future studies should quantitatively test the proposed engagement categories and examine engagement behaviours among other consumer segments.
Kumar, J. (2021)	Understanding customer brand engagement in brand communities: an application of psychological ownership theory and congruity theory	European Journal of Marketing	Brand communities	Quantitative	Survey; SEM (AMOS)	**Antecedents:** Psychological ownership; Value congruity **Mediators:** Brand community psychological ownership **Moderators:** Sense of community **Outcome:** Customer brand engagement; Brand equity	Psychological ownership and value congruity influence brand and brand community engagement, which ultimately contributes to brand equity.	Student sample; cross-sectional design.
Rossolatos, G. (2021)	The depth of brand engagement funnel: dimensionalizing interaction in social media brand communities	Qualitative Market Research	Social media brand communities	Mixed-method	Netnography; discourse analysis; laddering; CAQDAS analysis	**Antecedents:** User-generated content interactions **Mediators:** Engagement depth across funnel stages **Moderators: Outcome:** Consumer brand engagement	Engagement across deeper levels of the engagement funnel is relatively scarce, and engagement decreases across higher funnel strata.	Netnographic and qualitative analysis of specific social media brand communities limits generalisability across industries and platforms. Future research should quantitatively test the engagement funnel framework and examine engagement depth across different platforms and brand community contexts.
Carlson, J.; Rahman, S.M.; Rahman, M.M.; Wyllie, J.; Voola, R. (2021)	Engaging Gen Y Customers in Online Brand Communities: A Cross-National Assessment	International Journal of Information Management	Online brand communities	Quantitative	Survey; model testing	**Antecedents:** OBC site quality; Brand involvement **Mediators:** Customer engagement **Moderators:** Age differences within Gen Y **Outcome:** Behavioural loyalty	OBC website quality enhances customer engagement, which then leads to behavioural loyalty. Customer engagement mediates the relationship between site quality and loyalty.	Cross-sectional survey design limits causal inference, and the focus on Gen Y consumers may restrict generalisability to other age groups. Future research should examine engagement and loyalty dynamics across other generations and investigate additional moderators affecting engagement in online brand communities.
Yuan, D.; Lin, Z.; Filieri, R.; Liu, R.; Zheng, M. (2020)	Managing the product-harm crisis in the digital era: The role of consumer online brand community engagement	Journal of Business Research	Online brand communities	Quantitative	Survey; model testing	**Antecedents:** Online brand community engagement; Brand super-recovery effort **Mediators:** Consumer forgiveness **Outcome:** Repurchase intention	Online brand community engagement directly and indirectly increases repurchase intention during product-harm crises through consumer forgiveness.	The study focuses on product-harm crises within online brand community contexts, which may limit generalisation to other crisis types or brand environments. Future studies should examine different crisis contexts and explore additional mechanisms through which online brand community engagement influences recovery outcomes.

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Kumar, J.; Kumar, V. (2020)	Drivers of brand community engagement	Journal of Retailing and Consumer Services	Brand communities	Quantitative	Survey; CFA + SEM	**Antecedents:** Experiential benefits; Self-esteem benefits; Community relationship investment **Mediators:** Brand community engagement **Moderators:** Brand ownership **Outcome:** Brand community commitment; Brand loyalty	Experiential and self-esteem benefits significantly drive brand community engagement. Engagement then positively influences brand community commitment and brand loyalty. Brand ownership moderates the effect of community benefits and relationship investment on engagement.	The study uses survey data from brand community members, which may limit generalisability to other consumer groups or offline brand contexts. Future research should examine brand community engagement across different cultural contexts and investigate additional drivers and outcomes of engagement.
Xi, N.; Hamari, J. (2020)	Does gamification affect brand engagement and equity? A study in online brand communities	Journal of Business Research	Online brand communities	Quantitative	Survey	**Antecedents:** Gamification features (achievement, social interaction, immersion) **Mediators:** Brand engagement **Outcome:** Brand equity	Gamification features related to achievement and social interaction positively influence multiple dimensions of brand engagement. Brand engagement subsequently increases brand equity.	The study relies on survey data from online brand community users, which may limit causal inference and generalisability across different platforms and gamification contexts. Future research should examine additional gamification mechanisms and test the engagement–equity relationship using longitudinal or experimental designs across different online communities.
Meek, S.; Ryan, M.; Lambert, C.; Ogilvie, M. (2019)	A multidimensional scale for measuring online brand community social capital (OBCSC)	Journal of Business Research	Online brand communities	Quantitative	Scale development and validation	**Antecedents:** Shared language; Shared vision; Social trust; Reciprocity **Moderators: Outcome:** Online brand community social capital	Social capital in online brand communities is a multidimensional construct composed of shared language, shared vision, trust, and reciprocity. The OBCSC scale demonstrates strong reliability and validity.	The scale validation is conducted within specific online brand community contexts, which may limit generalisability to other community types or digital environments. Future research should apply and validate the OBC social capital scale across different industries, cultures, and community platforms.
Hanson, S.; Jiang, L.; Dahl, D. (2019)	Enhancing consumer engagement in an online brand community via user reputation signals: a multi-method analysis	Journal of the Academy of Marketing Science	Online brand communities	Mixed-method	Panel data; natural experiment; survey; experiments	**Antecedents:** Reputation signals (points, labels, badges) **Moderators:** User tenure **Outcome:** Consumer engagement behaviors	Reputation signals that clearly communicate user roles significantly increase engagement behaviors (posting, discussions, future engagement). The effect is stronger for new users.	The study focuses primarily on reputation signals within a specific community context, which may limit generalisability to other platform designs or reputation systems. Future research should investigate other community design features that influence engagement and examine long-term behavioural effects of reputation signals.
de Almeida, S.O.; Scaraboto, D.; Dos Santos Fleck, J.P.; Dalmoro, M. (2018)	Seriously Engaged Consumers: Navigating Between Work and Play in Online Brand Communities	Journal of Interactive Marketing	Online brand communities	Qualitative	Longitudinal qualitative study	**Antecedents:** Contextual triggers (market practices, sociotechnical changes); Individual drivers (skills, expertise, entrepreneurial vision) **Mediators:** Serious engagement **Outcome:** Deep engagement and community leadership	Contextual triggers and personal motivations lead some consumers to develop deeper forms of engagement and even manage or create brand communities.	The qualitative and longitudinal design focused on specific online brand communities may limit generalisability to other community types or industries. Future studies could test the concept of "serious engagement" quantitatively and examine how such engagement evolves across different online platforms and community structures.
Liu, L.; Lee, M.K.O.; Liu, R.; Chen, J. (2018)	Trust transfer in social media brand communities: The role of consumer engagement	International Journal of Information Management	Social media brand communities	Quantitative	Survey; model testing	**Antecedents:** Consumer-to-consumer trust; Consumer-to-marketer trust **Mediators:** Consumer engagement **Moderators:** Device usage **Outcome:** Brand trust	Trust between community members and between consumers and marketers enhances engagement, which then increases brand trust through trust transfer mechanisms.	The study relies on survey data from social media brand community users, which may limit causal inference and generalisability across platforms and devices. Future research should examine trust transfer mechanisms using longitudinal or experimental designs and explore additional moderators influencing engagement and brand trust.

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Alonso Dos Santos, M.; Rejón-Guardia, F.; Pérez-Campos, C.; Calabuig, F.; Ko, Y.J. (2018)	Engagement in sports virtual brand communities	Journal of Business Research	Sports brand communities	Quantitative	Survey; SEM; QCA	**Antecedents:** Attitude toward sponsor; Sponsor-team congruence; Relationship quality **Outcome:** Engagement in virtual brand communities	Sponsorship-related factors significantly influence engagement in sports virtual brand communities.	The study focuses on sports virtual brand communities, which may limit applicability to other brand community contexts. Future studies could explore engagement drivers across different industries and examine additional relational factors influencing community participation.
Gong, T. (2018)	Customer brand engagement behavior in online brand communities	Journal of Services Marketing	Online brand communities	Quantitative	Survey; cross-cultural comparison	**Antecedents:** Brand ownership **Mediators:** Brand responsibility; Self-enhancement **Moderators:** Cultural value orientations (individualism, collectivism; power distance) **Outcome:** Customer brand engagement behaviour	Cultural values influence how brand ownership and responsibility affect customer brand engagement behavior.	Cross-cultural survey data may not fully capture contextual differences in engagement behaviour across broader cultural settings. Future research should investigate additional cultural and psychological factors influencing customer brand engagement and test the model across diverse markets.
Carvalho, A.; Fernandes, T. (2018)	Understanding customer brand engagement with virtual social communities: A comprehensive model of drivers, outcomes and moderators	Journal of Marketing Theory and Practice	Social media brand communities	Quantitative	Survey; model testing	**Antecedents:** Involvement; Interactivity; Flow experience **Mediators:** Customer brand engagement **Moderators:** Identification; Trust in brand community **Outcome:** Satisfaction; Trust; Word-of-mouth; Commitment	Involvement, interactivity, and flow experience drive customer brand engagement, which leads to positive relational outcomes such as satisfaction, trust, commitment, and word-of-mouth.	The study relies on cross-sectional survey data from online brand community members, which may limit causal interpretation and generalisability across platforms or industries. Future research could examine customer brand engagement longitudinally and explore additional drivers and contextual moderators influencing engagement in virtual communities.
Yoshida, M.; Gordon, B.S.; Nakazawa, M.; Shibuya, S.; Fujiwara,	Bridging the gap between social media and behavioral brand loyalty	Electronic Commerce Research and Applications	Social media brand communities	Quantitative	Panel survey; model testing	**Antecedents:** Opinion-seeking behavior; Entertainment value of social media **Mediators:** Brand community identification; Social media engagement. **Outcome:** Behavioral brand loyalty	Social media engagement and brand identification significantly increase behavioral brand loyalty.	The panel survey focuses on social media brand community users in specific contexts, which may limit generalisability across different social media environments. Future studies should examine additional mechanisms linking social media engagement and brand loyalty and test the model across different industries and cultural contexts.
Wu, J.; Fan, S.; Zhao, J.L. (2018)	Community engagement and online word of mouth: An empirical investigation	Information and Management	Online brand communities	Quantitative	Secondary behavioural longitudinal data; econometric-style modelling; control function approach	**Antecedents:** Community engagement in online brand communities. **Moderators:** Customer tenure **Outcome:** Post-purchase reviews; positive online reviews; online word of mouth	Community engagement increases both the likelihood of generating post-purchase reviews and the likelihood of posting positive online reviews. Customer tenure positively moderates this relationship.	The use of secondary behavioural data from a specific online community context may limit applicability to other community types or platforms. Future research could investigate psychological and motivational factors behind engagement and examine how different community designs influence word-of-mouth behaviour.

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Martinez-López, F.J.; Anaya-Sánchez, R.; Molinillo, S.; Aguilar-Illescas, R.; Esteban-Millat, I. (2017)	Consumer engagement in an online brand community	Electronic Commerce Research and Applications	Online brand communities	Quantitative	Survey; SEM	**Antecedents:** Trust; OBC identification; Satisfaction; OBC experience; Sponsor opportunism; Sponsor control **Mediators:** Consumer engagement. **Outcome:** Participation in the community	Consumer engagement plays a central role in explaining members' participation in online brand communities. Antecedents such as OBC experience and trust influence engagement directly and indirectly through identification, while commercial use of the community negatively affects trust.	The study uses survey data from online brand community members, which may restrict causal inference and generalisability across different communities. Future studies should explore additional antecedents of consumer engagement and examine engagement dynamics across different digital platforms and industries.
Rosenthal, B.; Brito, E.P.Z. (2017)	How virtual brand community traces may increase fan engagement in brand pages	Business Horizons	Luxury brand communities	Quantitative	Content analysis of Facebook brand pages (observational social media data analysis)	**Antecedents:** Topical information exchange; Identity communication; Cultural norms; Celebrity presence. **Outcome:** Fan engagement in brand pages	Brand pages can adopt characteristics of virtual brand communities that help increase fan engagement. Celebrities among fans also help foster social interaction and legitimate social practices on brand pages.	The study focuses on luxury brand community contexts, which may limit generalisability to other industries or brand page environments. Future research could examine how virtual brand community characteristics influence engagement across different social media platforms and brand categories.
Willis, E.; Wang, Y. (2016)	Blogging the brand: Meaning transfer and the case of Weight Watchers' online community	Journal of Brand Management	Online brand communities	Qualitative	Case study	**Antecedents:** Online community participation; computer-mediated content **Mediators:** Online engagement. **Outcome:** Brand meaning transfer	Online brand community engagement plays an important role in shaping and transferring brand meaning through computer-mediated content.	The qualitative case study of a single brand community (Weight Watchers) limits generalisability across other online brand communities. Future studies should investigate brand meaning transfer in different brand communities and test the proposed relationships quantitatively.
Dessart, L.; Veloutsou, C.; Morgan-Thomas, A. (2016)	Capturing consumer engagement: duality, dimensionality and measurement	Journal of Marketing Management	Online brand communities	Mixed-methods	Qualitative work plus scale development and validation surveys	**Mediators:** Dual engagement foci (brand and community) and seven sub-dimensions of engagement **Outcome:** Consumer engagement scale development	The study advances engagement theory by proposing dual engagement foci (brand and community) and develops a validated 22-item dual-focus consumer engagement scale.	The scale was developed and validated within specific online brand community settings, which may limit generalisability to other engagement contexts. Future research should test the engagement scale across different industries, cultures, and digital platforms.
Marbach, J.; Lages, C.; Nunan, D. (2016)	Who are you and what do you value? Investigating the role of personality traits and customer-perceived value in online customer engagement	Journal of Marketing Management	Social media brand communities	Qualitative	Semi-structured interviews	**Antecedents:** Personality traits **Mediators:** Online customer engagement **Outcome:** Customer-perceived value	The study proposes personality traits as antecedents of online customer engagement and customer-perceived value as a consequence of engagement.	The qualitative interview approach limits causal inference and may restrict generalisability across broader consumer groups. Future research should quantitatively test the relationships between personality traits, engagement, and perceived value.
Hammedi, W.; Kandampully, J.; Zhang, T.T.; Bouquiaux, L. (2015)	Online customer engagement: Creating social environments through brand community constellations	Journal of Service Management	Multiple online brand communities; social environment creation	Mixed-methods	Survey; SEM; network analysis	**Antecedents:** Personal identification with a core brand community; Functionality-driven motives **Mediators:** Connections to other brand communities **Outcome:** Creation of social environments / multi-community participation	Two key drivers explain connections to other online brand communities: personal identification with a core brand community and a functionality-driven approach. The study shows how customers create social environments through multiple community	The study focuses on multi-community participation within online brand communities, which may not fully capture engagement dynamics in single-community contexts. Future research should explore engagement across different digital ecosystems and examine how multiple community memberships influence long-term engagement outcomes

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Brodie, R.J.; Ilić, A.; Jurić, B.; Hollebeek, L.D. (2013)	Consumer engagement in a virtual brand community: An exploratory analysis	Journal of Business Research	Virtual brand communities	Qualitative	Netnography	**Antecedents:** Interactive community experiences **Mediators:** Consumer engagement processes **Outcome:** Loyalty; satisfaction; empowerment; commitment; trust	Consumer engagement in virtual brand communities is multidimensional and dynamic, emerging at varying intensity levels and involving value co-creation among participants.	The exploratory netnographic approach focuses on specific virtual brand communities, which may limit generalisability across different communities and industries. Future research should empirically test the proposed engagement framework using quantitative methods and examine engagement processes across different online platforms.
Bahri-Ammari, N.; Mishra, A.; Yousaf, A.; Bilgihan, A. (2025)	Enhancing loyalty and e-WOM in virtual brand communities: a multi-country study	Internet Research	Virtual brand communities	Quantitative	Survey; CB-SEM	**Antecedents:** Self-congruence with the brand **Mediators:** Affective brand engagement; VBC engagement; VBC satisfaction. **Outcome:** Brand loyalty; electronic word-of-mouth	Self-congruence strongly drives VBC satisfaction and affective engagement. Engagement significantly enhances brand loyalty and e-WOM across multiple countries.	The study relies on survey data from multiple countries, which may still limit generalisability across other cultural or community contexts. Future studies should examine additional psychological and contextual drivers of engagement and explore longitudinal effects of engagement on loyalty and e-WOM.
Raichur, V.G.; Sharma, D.; Kalro, A.D. (2025)	Customer engagement in firm-initiated and consumer-initiated online brand communities: an exploratory study	Information Systems and E-Business Management	Online brand communities	Qualitative	Netnography; content analysis; interviews	**Antecedents:** Informational benefits; Economic benefits; Social benefits; Brand identification; Self-enhancement **Mediators:** Consumer engagement **Moderators:** Community type (firm-initiated vs consumer-initiated) **Outcome:** Engagement behaviours in OBCs	Drivers of engagement differ across firm-initiated and consumer-initiated communities, with informational and identity-related content being particularly engaging.	The qualitative exploratory design may limit the generalisability of findings across different online brand community types. Future research could quantitatively test the identified engagement drivers and examine how engagement differs across various platform designs and industries.
Kumar, V.; Kaushal, V.; Shashi (2023)	Role of customer perceived brand ethicality in inducing engagement in online brand communities	Journal of Retailing and Consumer Services	Online brand communities	Quantitative	Survey	**Antecedents:** Brand marketing communications **Mediators:** Perceived brand ethicality. **Outcome:** Online brand community engagement	Brand communication strategies enhance perceived brand ethicality, which in turn increases engagement in online brand communities.	The study relies on survey data from online brand community members, which may limit causal inference and generalisability to other digital contexts. Future studies should examine additional ethical and communication factors influencing engagement and explore the role of perceived brand ethicality across different brand categories.
Chapman, A.; Dilmperi, A. (2022)	Luxury brand value co-creation with online brand communities in the service encounter	Journal of Business Research	Luxury brand communities	Qualitative	Interviews; netnography	**Antecedents:** Experiential content; Luxury service interaction **Mediators:** Online brand community engagement. **Outcome:** Value co-creation	Experiential and pleasurable content generates the highest engagement and supports value co-creation between luxury brands and consumers in online communities.	The qualitative design focusing on luxury brand communities may limit generalisability to other industries or non-luxury brand contexts. Future research should examine value co-creation processes quantitatively and explore engagement mechanisms across different brand categories and digital platforms.
Hsieh, S.H.; Lee, C.T.; Tseng, T.H. (2022)	Psychological empowerment and user satisfaction: Investigating the influences of online brand community participation	Information & Management	Online brand communities	Quantitative	Survey; model testing	**Antecedents:** Psychological empowerment factors **Mediators:** User satisfaction **Outcome:** Online brand community participation	Psychological empowerment enhances user satisfaction, which in turn increases participation in online brand communities and facilitates value co-creation.	The study relies on survey data from online brand community users, which may limit causal inference and generalisability across different community contexts. Future studies should investigate additional psychological and technological factors influencing community participation and examine longitudinal engagement behaviours.

Authors	Title	Journal	Context	Method	Methodology	Key Constructs and Relationships	Key Findings	Research gaps
Wang, K.; Tai, J.C.F.; Chang, H.L. (2021)	Influences of place attachment and social media affordances on online brand community continuance	Information Systems and E-Business Management	Online brand communities	Quantitative	Survey; PLS-SEM	**Antecedents:** Place attachment; Social media affordances **Mediators:** Service experience; Brand engagement **Outcome:** Continuance intention in online brand communities	Place attachment and social media affordances indirectly increase continuance intention through improving service experience and brand engagement.	The cross-sectional survey design limits the ability to capture changes in community continuance behaviour over time. Future research could employ longitudinal approaches to examine how place attachment and platform affordances influence long-term community engagement and participation.
Liu, L.L.; Liu, R.J.; Lee, M.; Chen, J.W. (2019)	When will consumers be ready? A psychological perspective on consumer engagement in social media brand communities	Internet Research	Social media brand communities	Quantitative	Survey; PLS-SEM; hierarchical regression	**Antecedents:** Recognition; Community identification; Self-efficacy **Mediators:** Consumer engagement **Moderators:** Self-efficacy; SMBC type **Outcome:** Brand loyalty	Recognition, community identification, and self-efficacy positively influence consumer engagement, which subsequently increases brand loyalty. Self-efficacy moderates some engagement relationships.	The study focuses on psychological antecedents of engagement within specific social media brand community settings, which may limit generalisability across other platforms or consumer groups. Future research should examine additional psychological and social factors affecting engagement and test the model across different cultural and technological contexts.
Osei-Frimpong, K.; Islam, N.; Ahorkonu, C.K.; Soga, L.R.; McLean, G. (2025)	Exploring the dark side of continuous social media brand community participation on consumer psychological ill-being: initial vs sustained participation	Information Technology & People	Social media brand communities (SMBCs)	Quantitative	Two-wave longitudinal survey; SEM (AMOS)	**Antecedents:** Escapism; SMBC participation **Mediators:** Social media fatigue; Negative emotions **Moderators:** Participation stage (initial vs sustained) **Outcome:** Psychological ill-being	Continuous participation in SMBCs increases social media fatigue and information overload. Social media fatigue mediates the relationship between SMBC participation and negative emotions, and negative emotions subsequently increase psychological ill-being.	Study limited to Facebook brand communities.Future research could examine multiple social media platforms and broader community contexts.
Pahi, S.A.; Jain, A.; Pradhan, D. (2024)	How can brands mitigate the consequences of negative digital customer experience? Investigating roles of brand attachment, brand community support, and adaptive coping	Journal of Brand Management	Digital brand interactions / online brand communities	Quantitative (experiments)	Three controlled experiments examining mechanisms and boundary conditions	**Antcedents:** Negative digital customer experience **Mediator:** Digital brand attachment **Moderators:** Adaptive coping ability; Online brand community support **Outcome:** Hedonic well-being	Negative digital customer experiences reduce hedonic well-being. Digital brand attachment mediates this relationship. Adaptive coping ability and brand community support mitigate the negative impact **indirectly via brand attachment**, but they do **not weaken the direct relationship** between negative experience and well-being.	Experimental setting may limit generalizability to real-world digital interactions.Future studies could examine additional psychological mechanisms, different types of online communities, and longitudinal effects of digital experiences on well-being.
Simões-Coelho, P.S.; Rita, P.; Santos, Z.R. (2018)	On the relationship between consumer-brand identification, brand community, and brand loyalty	Journal of Retailing and Consumer Services	Social media brand communities in mass-market products	Qualitative	In-depth interviews with experts and focus groups with consumers	**Antecedents:** Brand identity; Brand community engagement **Mediator:** Consumer-brand identification **Outcomes:** Brand trust; Brand loyalty	Engagement in social media brand communities fosters positive attitudes toward the brand, particularly trust and loyalty. Consumer–brand identification plays a key role in transforming brand community interactions into stronger consumer–brand relationships.	Qualitative design limits generalizability across industries and contexts.Future research could empirically test the proposed conceptual model using quantitative methods and examine different product categories or markets.

Note: *Only studies published in journals ranked ABS 2 and above in the ABS Academic Journal Guide are included*

2.7. Integrated Research Gaps

This chapter has examined the evolution of CE and CWB within the context of OBCs in order to establish the conceptual foundations for the present study. The review showed that CE has developed from a transactional perspective to a multidimensional psychological construct encompassing cognitive, affective and behavioural dimensions. At the same time, marketing and service research has increasingly recognised the importance of understanding how marketplace participation shapes consumers' broader psychological experiences and well-being.

Despite these advances, important questions remain regarding how participation within OBCs shapes both engagement and CWB. While existing research has generated valuable insights into the multidimensional nature of CE, it offers more limited understanding of the psychological processes through which engagement develops or changes through ongoing interaction. At the same time, although marketing and service research increasingly recognises the importance of CWB, relatively little is known about how well-being is experienced within socially interactive digital participation contexts such as OBCs. Because participation in these communities involves ongoing interaction with brands and other members, it may shape not only how customers engage with the community but also how they experience their involvement psychologically. Consequently, there remains

limited understanding of how participation conditions within OBCs influence both engagement and CWB.

Across the CE and OBC literatures, several important limitations remain. **First,** although engagement is widely recognised as a multidimensional construct, existing research often treats it as a relatively stable outcome instead of examining how it unfolds as a psychological process through ongoing interaction. **Second,** while marketing and service research increasingly emphasises the importance of CWB, limited attention has been given to how well-being is experienced within digitally mediated participation contexts such as OBCs. **Third,** prior studies have typically examined brand-related influences and community-related dynamics separately, even though participation within OBCs involves simultaneous exposure to both types of cues. **Fourth,** CE research has traditionally emphasised psychological conditions that support participation, with comparatively less attention to experiences that may constrain engagement. **Finally,** although OBCs are widely recognised as socially interactive environments, less is known about how their socially embedded structure shapes members' psychological experiences of participation.

To address these gaps, the present study adopts Jacoby's (2002) extension of the S-O-R framework as its theoretical foundation and employs a SGT-informed

sequential exploratory MMD. The S-O-R perspective enables a process-based interpretation of participation within OBCs by examining how external stimuli, namely brand- and community-related conditions, influence consumers' internal psychological experiences, which subsequently shape response outcomes. In this study, these responses are reflected in CE across its cognitive, affective and behavioural dimensions, as well as in CWB. SGT provides the inductive depth required to uncover these psychological mechanisms, while the subsequent quantitative phase empirically examines the relationships identified during the qualitative stage using SEM.

2.7.1. Addressed Research Gap

Building on the synthesis of OBC, CE and CWB literature, the following table summarises the principal gaps identified and outlines how the present study addresses each through its theoretical framing and methodological design.

As discussed in the preceding sections, several interconnected limitations remain within the CE, CWB and OBC literature. These gaps relate to the process-based understanding of engagement, the role of CWB in digitally mediated participation contexts, the joint influence of brand and community conditions, the presence of both enabling and constraining psychological experiences, and the socially embedded nature of OBC participation environments.

Table 5: Addressed Research Gaps and Study Contributions

Gaps	Identified Gap	Supporting Literature	How This Study Addresses the Gap
G1	Limited understanding of Customer Engagement as a psychological process	Brodie et al. (2011); Hollebeek & Macky (2019)	Examines CE as a dynamic psychological process within OBC participation by exploring how engagement unfolds through internal psychological experiences across cognitive, affective and behavioural dimensions.
G2	Limited understanding of Consumer Well-Being within OBC participation contexts	Anderson et al. (2013); Anderson & Ostrom (2015); Weaver et al. (2023)	Extends research on CWB by examining how participation in socially interactive digital communities relates to consumers' psychological experiences and well-being.
G3	Limited understanding of how brand-related and community-related cues jointly shape participation outcomes	Islam, Rahman & Hollebeek (2017); Hollebeek, Srivastava & Chen (2019)	Examines how brand-level and community-level conditions coexist within OBCs and how these stimuli influence psychological experiences that shape both CE and CWB.
G4	Limited understanding of enabling and constraining psychological experiences within engagement processes	Santini et al. (2020); Sim et al. (2022)	Investigates how both supportive and demanding psychological experiences may shape participation, recognising that engagement processes can involve both resource-enhancing and resource-depleting dynamics.
G5	Limited understanding of OBCs as socially embedded participation environments	Bowden & Mirzaei (2021); Mousavi & Roper (2023)	Situates CE and CWB within socially interactive OBC contexts to examine how identity, interaction, and community participation shape engagement and well-being experiences.

Taken together, the literature suggests that while research has made important progress in understanding CE and CWB limited attention has been given to how these experiences develop simultaneously within interactive brand environments such as OBCs. In particular, the psychological processes through which brand- and community-related conditions shape both engagement and well-being during

ongoing participation remain insufficiently understood. Table 5 summarises these gaps and outlines how the present study addresses each through its theoretical framing and methodological design.

2.7.2. Research Questions

Table 6: Research Questions and Alignment with Identified Research Gaps

Research Question	Addressed Gap(s)	Methodological Phase	Purpose
RQ1: How is Customer Engagement experienced as a psychological process across cognitive, affective and behavioural dimensions within Online Brand Communities?	G1	Qualitative	To explore how engagement is experienced psychologically within OBC participation and how cognitive, affective, and behavioural engagement unfolds through ongoing interaction.
RQ2: How is Consumer Well-Being experienced from a psychological perspective within Online Brand Communities?	G2	Qualitative	To examine how participation in OBCs relates to consumers' psychological experiences of well-being within socially interactive digital environments.
RQ3: How and why do brand-related and community-related cues influence Customer Engagement and Consumer Well-Being within Online Brand Communities?	G3, G4, G5	Quantitative (informed by qualitative insights)	To examine how participation conditions relate to CE and CWB through underlying psychological experiences.

Each RQ has been formulated to address one or more of the identified gaps (G1-G5) summarised in Table 6. This alignment ensures that the study's inquiry remains directly responsive to the key limitations identified in the CE, CWB and OBC literature. In particular, the RQs focus on understanding how engagement

unfolds as a psychological process within OBCs while simultaneously examining how participation in these environments relates to CWB. By addressing both constructs together, the study seeks to provide a more comprehensive understanding of how participation conditions within OBCs shape customers' engagement experiences and their broader psychological outcomes.

2.8. Chapter Summary

In summary, the conceptual and empirical gaps identified in this chapter inform the study's methodological direction. To explore and validate the underlying mechanisms of CE and CWB within OBCs, a sequential exploratory MMD was adopted (Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 2010). Guided by SGT (Corbin & Strauss, 2015) and the S-O-R framework (Jacoby, 2002; Mehrabian & Russell, 1974), the following chapter details the research design, methods, data collection, and analytical procedures used to address the stated RQs.

Chapter 3: Mixed Methods Methodology

"...only an intermediate philosophical approach allows the researcher to match philosophy, methodology and the research problem"

- Holden and Lynch (2004, p. 397)

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3.1. Chapter Outline

In Chapter 2, the key concepts and theories related to OBC, CE, CWB were outlined and the gaps in the literature were identified. This chapter explains and justifies various methodological choices employed to achieve the research aim and objective of the study. The structure broadly follows the Research Onion framework proposed by Saunders, Lewis and Thornhill (2019), which provides a systematic way of presenting research design decisions. The logic behind this MMD that used *critical realism* as its ontology, *epistemological relativism with methodological pluralism*, and *sequential exploratory* research design is explained next. This is followed by the reasons behind the tactical decisions of research method, sample design, data analysis and integration strategy. The chapter ends with research limitations and ethical considerations. A summary of key philosophical and methodological elements is presented in Table 7.

Table 7: Philosophical and Methodological Framework of the Study

Paradigm	Critical Realist Paradigm
Ontology	Critical Realism
Epistemology	Epistemological relativism with methodological pluralism
Axiology	Reflexive stance; value-laden topic
Logic of Enquiry	Retroduction
Role of Researcher	Reflexive researcher role recognised; interpretation shaped qualitative phase; objectivity maintained in quantitative analysis
Research Approach	Mixed-Methods Research
Research Design	Sequential Exploratory
Research Method	Semi-structured interviews for in-depth qualitative exploration; & a structured survey instrument for quantitative testing of hypothesised relationships using SEM techniques
Sample Design	**Qualitative phase:** Purposive sampling with snowballing **Quantitative phase:** non-probability, self-selection with screening criteria
Time Horizon	**Cross-Sectional**
Data Collection	**Qualitative**: Semi-structured interviews with individuals experienced in OBCs **Quantitative**: Online survey administered via Amazon Mechanical Turk
Data Analysis	**Qualitative:** Straussian Grounded Theory using NVivo; open, axial, & selective coding to generate emerging theoretical categories **Quantitative:** Structural Equation Modelling using AMOS to test hypothesised relationships among constructs emerging from the qualitative phase
Integration of Data	**Point of Integration:** Interpretation & model development **Type of Integration:** Building
Ethical Considerations	Ethical approval obtained, informed consent, anonymity, and right to withdraw ensured. Data stored securely and used solely for academic purposes

To maintain clarity and reflect the sequential structure of the study, this chapter focuses on the overall research design and the reasoning behind the main methodological choices. The detailed procedures for each phase are presented in the chapters that follow. While this chapter outlines the philosophical foundations, research design and general methodological approach, the practical

aspects of sampling, data collection, and analysis are discussed more fully in Chapter 4 (qualitative phase) and Chapter 6 (quantitative phase), where each stage of the study is examined in context.

3.2. Research Paradigm and Philosophical Assumptions

Research design is typically shaped by the researcher's philosophical position as well as the nature of the phenomenon being examined and not just by methodological preferences. Some scholars argue that adopting a strictly rigid philosophical position can limit what researchers are able to study and understand (Holden & Lynch, 2004). In this context, the present study adopts a critical realist paradigm, which accommodates methodological pluralism and supports a deeper understanding of the psychological processes underlying CE and CWB within OBC contexts.

This section outlines the philosophical and methodological foundations that guide the design of this study. As a sequential exploratory study, this research aims to understand the psychological processes shaping CE and CWB within OBCs.

Critical realism (Bhaskar, 1978), recognises that reality exists independently of human perception, while acknowledging that our understanding of it is shaped through theory and interpretation (Kilduff, Mehra & Dunn, 2011). This

perspective is considered well suited to MMR, particularly in exploratory studies that seek to examine both observable patterns and the underlying mechanisms shaping them (Zachariadis, Scott & Barrett, 2013).

Both positivist and interpretivist perspectives were also considered. A purely positivist approach (Creswell & Creswell, 2023) would have enabled statistical testing, but it would not have been enough for capturing the kinds of insights needed to understand participants' experiences. At the same time, an interpretivist approach (Schwandt, 1994, in Denzin and Lincoln, 1994) would have provided rich, contextual understanding, but would have limited the ability to examine relationships found. This perspective has been used in marketing and management research to support theory development and empirical inquiry (Easton, 2010; Zachariadis, Scott & Barrett, 2013; Fuchs & Robinson, 2023; Vanharanta & Wong, 2024). The following subsections outline the philosophical foundations guiding this study.

3.2.1. Ontology: Critical Realist View of Reality

Ontology means how reality is understood within a study and shapes how the social world is conceptualised (Guba & Lincoln, 1994; Scotland, 2012). In this research, a critical realist view is adopted, which recognises that social

phenomena exist independently of individual perception, while acknowledging that our understanding of them is always shaped by interpretation (Crotty, 1998).

Table 8: Comparison of Ontological Assumptions Across Research Paradigms

Paradigm	Key Assumptions	View of Reality	Relationship to Knowledge	Representative Scholars
Critical Realism	Reality exists independently of perception but is only partially knowable	Stratified (empirical, actual, real); underlying mechanisms may not be directly observable	Knowledge is theory-informed and socially shaped, but can explain real phenomena	Bhaskar (1978); Danermark et al. (2002)
Positivism	Reality is objective and measurable, existing independently of human cognition	Single, observable reality	Knowledge is objective and derived through measurement and empirical observation	Neuman (2007); Ryan (2006)
Interpretivism / Constructivism	Reality is constructed through social interaction and meaning making	Multiple, subjective realities	Knowledge is context-dependent and co-created by participants and researcher	Bryman & Bell (2015); Gill & Johnson (2010)
Post-Positivism	Reality exists but cannot be fully known; acknowledges the role of bias	A single reality that is only partially understood	Knowledge is provisional and based on probabilities and falsification	Phillips & Burbules (2000); Corbetta (2003)
Postmodernism	Rejects stable or universal reality; emphasises language, power, and discourse	Fragmented and fluid realities	Knowledge is shaped through discourse and power relations	Lyotard (1984); Foucault (1972)
Pragmatism	Reality is understood in terms of practical outcomes and usefulness	Dynamic and shaped through action	Knowledge is judged by its usefulness in addressing problems	Rorty (1982); Tilly (2002)

Different research paradigms are based on different assumptions about reality. These assumptions shape subsequent research decisions (Holden & Lynch, 2004). To situate this study, Table 8 compares the ontological positions of key paradigms and places critical realism in relation to them.

As shown in Table 8, critical realism shares with positivism the view that reality exists independently of human cognition, but it does not assume that this reality can be fully captured through observation alone (Zachariadis, Scott & Barrett, 2013). Also, it considers that knowledge is shaped through interpretation, which brings it closer to interpretivist thinking (Kilduff, Mehra & Dunn, 2011). In this research, critical realism provides a suitable foundation for exploring the psychological processes underlying CE and CWB in OBCs, while also supporting quantitative testing.

Critical realism recognises that knowledge is shaped through the interaction between the observer and what is being studied (Peters et al., 2013). It also views social phenomena as the result of multiple interacting factors, where outcomes emerge from complex and context-dependent relationships and not simple cause-and-effect patterns (Matthyssens, Vandenbempt, & van Bockhaven, 2013).

Critical realism views reality as layered. The ‘real’ refers to underlying structures and mechanisms that generate events, irrespective of whether they are directly

observable or not. The ‘actual’ refers to events that occur, regardless of whether they are observed. The ‘empirical’ refers to what is experienced or observed in practice (Sayer, 2000; Ryan et al., 2012).

This layered view of reality aligns with the study’s aim to understand both the underlying mechanisms shaping CE and CWB, and how these are experienced by individuals. The real domain includes underlying mechanisms, which are not directly observable, but they influence the outcomes. The actual domain refers to the events that arise from these mechanisms. The empirical domain captures how these processes are reported by participants through interviews and surveys, reflecting their lived experiences and perceptions.

The stratified view of reality in critical realism helps position it in relation to other research paradigms. Table 9 provides a comparison of key paradigms, showing how critical realism combines a realist view of reality with an understanding that knowledge is always partial and shaped through interpretation.

Table 9: Matrix of Scientific Philosophies and Approaches within Academic Research

		Epistemology Science gets closer & closer to the truth?	
		Yes	No
Ontology Scientific theories represent reality?	Yes	**Critical Realism** • Reality exists independently of our perceptions • Science seeks to identify underlying causal mechanisms • Well suited to mixed-method and exploratory research	**Interpretivism** • Reality is socially constructed • Emphasis on meaning and subjective experience • Typically associated with qualitative approaches
	No	**Post-Positivism** • Reality exists but can only be approximated • Emphasis on inference, testing, and falsification • Commonly associated with quantitative research	**Constructivism / Pragmatism** • Knowledge is shaped through interaction and context • Focus on practical outcomes and problem-solving • Less emphasis on objective truth

Source: Adapted from Kilduff, Mehra & Dunn (2011)

As shown in Table 9, critical realism is grounded in a realist view of reality while recognising that knowledge is always partial and open to revision. Although reality exists independently of our perceptions, our understanding of it is shaped by how we interpret it. The next section explores this epistemological position in more detail, focusing on epistemological relativism and the use of multiple methods.

3.2.2. Epistemology: Epistemological Relativism and Methodological Pluralism

Epistemology informs how the relationship between the researcher and the phenomenon is approached, and how different methods are used to generate insight (Crotty, 1998; Guba & Lincoln, 1994; Saunders, Lewis & Thornhill, 2019).

This study adopts an epistemological relativist position, recognising that knowledge is shaped through interpretation, yet can still offer meaningful insight into reality through theory and empirical investigation (Zachariadis, Scott & Barrett, 2013; Bhaskar, 1978). Therefore, the study draws on methodological pluralism (Blaikie, 2007), using both qualitative and quantitative approaches to explore different aspects of the phenomenon under investigation.

In this sequential exploratory study, qualitative methods were used to explore participants' experiences and develop initial insights, while quantitative methods were used to statistically examine these insights across a broader sample. This combination allows the study to retain depth while also extending its reach beyond individual cases.

Table 10: Comparison of Epistemological Assumptions Across Research Paradigms

Paradigm	Epistemology	Nature of Knowledge	Researcher Role	Representative Scholars (Year)
Critical Realism	Epistemological relativism with methodological pluralism; knowledge is partial and shaped through interpretation	Contextual and theory-informed, with a focus on explanation	Reflexive researcher seeking to understand underlying mechanisms	Bhaskar (1978); Danermark et al. (2002)
Positivism	Objectivism: knowledge is derived through observation and measurement	Objective, generalisable and value-free	Detached observer	Neuman (2007); Ryan (2006)
Post-Positivism	Modified objectivism: knowledge is provisional and open to revision	Probabilistic and empirically tested	Researcher aims for rigour while recognising potential bias	Phillips & Burbules (2000)
Interpretivism	Constructivism: knowledge is developed through social interaction and interpretation	Subjective and context-dependent	Researcher as co-constructor of meaning	Bryman & Bell (2015); Gill & Johnson (2010)
Postmodernism	Relativist: knowledge is shaped through language and discourse	Fragmented and unstable	Researcher challenges dominant narratives	Lyotard (1984)
Pragmatism	Knowledge is evaluated in terms of usefulness and practical outcomes	Flexible and problem-oriented	Researcher as problem-solver	Rorty (1982); Tilly (2002)

Alternative epistemological positions were also considered. A positivist approach (Creswell & Creswell, 2023; Phillips & Burbules, 2000) would have supported measurement and hypothesis testing, but it would not have captured the more subjective and evolving nature of participants' experiences. An interpretivist stance (Schwandt, 1994, in Denzin & Lincoln, 1994; Bryman, 2016), while better suited to exploring these experiences, would make it difficult to examine patterns

beyond individual cases. An epistemological relativist position within a critical realist framework was therefore adopted (Bhaskar, 1978; Sayer, 2000; Danermark et al., 2002). Table 10 compares key epistemological assumptions across major research paradigms and shows why a critical realist perspective was chosen.

By drawing on epistemological relativism (Bhaskar, 1978; Sayer, 2000), the study recognises that knowledge is shaped through interpretation, particularly during theory development in the qualitative phase.

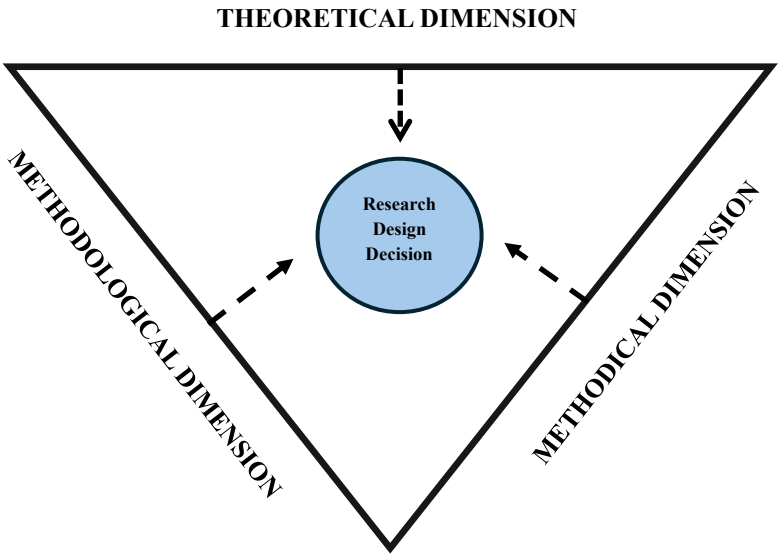


Figure 2: A vision of three-dimensional pluralism

Source: Adapted from Nicholson, Brennan, and Midgley (2014)

At the same time, methodological pluralism (Figure 2) supports the sequential MMD, allowing the study to move from exploration to empirical testing and strengthening the research approach (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2010; Danermark et al., 2002).

This position is consistent with Midgley's (2000) idea of critical pluralism, which supports the use of multiple perspectives and methods, applied with reflexivity and awareness. Instead of favouring a single methodological approach, it encourages researchers to make context-sensitive and theoretically informed choices, while being transparent about the assumptions and limitations involved (Nicholson, Brennan & Midgley, 2014). This perspective strengthens the alignment between the study's critical realist foundation and its sequential MMD (Midgley, Nicholson & Brennan, 2017).

3.2.3. Axiology: Reflexivity and Value-Laden Inquiry

Axiology considers the role of values in the research process and how the researcher's position may shape the study (Scotland, 2012; Saunders, Lewis & Thornhill, 2019; Creswell & Creswell, 2023). In this research, a reflexive stance is adopted, consistent with a critical realist perspective. The research did not assume complete objectivity, instead it recognises that interpretation is shaped by the researcher and acknowledges this influence openly (Johnson & Duberley, 2003; Saunders, Lewis & Thornhill, 2019). Table 11 compares how different paradigms approach researcher values and bias, and helps explain the choice of a critical realist, reflexive position.

Table 11: Comparison of Axiological Assumptions Across Research Paradigms

Paradigm	Axiology (Values in Research)	Stance on Researcher Bias	Purpose of Research	Representative Scholars (Year)
Critical Realism	Values are recognised and reflected on during interpretation	Researcher is involved and remains reflexive	Explaining underlying social mechanisms while maintaining rigour	Bhaskar (1978); Danermark et al. (2002)
Positivism	Emphasis on value-free research and objectivity	Researcher is independent and neutral	Identifying generalisable patterns or laws	Neuman (2007); Ryan (2006)
Post-Positivism	Values are acknowledged but efforts are made to minimise bias	Researcher aims for objectivity while recognising limitations	Testing and refining hypotheses	Phillips & Burbules (2000)
Interpretivism	Values are embedded and shape understanding	Researcher co-constructs meaning with participants	Understanding lived experiences in context	Bryman & Bell (2015); Gill & Johnson (2010)
Postmodernism	Knowledge is shaped by values, language and power	Researcher takes a critical, questioning stance	Challenging dominant narratives and assumptions	Lyotard (1984)
Pragmatism	Values influence how problems are framed and addressed	Researcher adopts a flexible, practical stance	Addressing problems and generating useful outcomes	Rorty (1982); Tilly (2002)

As the comparison shows, critical realism recognises that research is shaped by the researcher's values and context. Instead of treating this as a limitation, it sees it as something to be addressed through reflexivity (Bhaskar, 1978; Sayer, 2000; Danermark et al., 2002; Fletcher, 2017). In this study, the researcher's interpretive role is acknowledged in the qualitative phase, while the quantitative phase is guided by procedural rigour and ethical responsibility.

Reflexivity, which Johnson and Duberley (2003) highlight as central to recognising the researcher's role in knowledge production, was particularly important when analysing constructs involving interpretation and judgement, making it important to remain aware of how the researcher may shape the analysis. To address this, steps were taken to maintain transparency throughout the study, including memo-writing during the qualitative phase and clear documentation of key methodological decisions.

A positivist view of research (Neuman, 2007), which assumes objectivity and value neutrality, was not considered suitable, as research is always shaped to some extent by the researcher's perspective and theoretical lens. At the same time, a strongly subjectivist position (Bryman & Bell, 2015), where all interpretations are treated as equally valid, would make it difficult to maintain analytical rigour.

3.2.4. Metatheoretical Positioning of Critical Realism

Having outlined the philosophical foundations guiding this study, it is also useful to consider the role of critical realism as a metatheoretical framework. In this sense, it informs how theories and methods are developed and brought together across the research process (Matthyssens, Vandenbempt & van Bockhaven, 2013). As a metatheoretical position, critical realism helps bring together the study's philosophical stance and its methodological approach (Danermark et al.,

2002). This section outlines how this perspective informs the design and aims of the research.

Critical realism is used here not only as a philosophical position, but as a framework that shapes how the study is designed and carried out. It offers a layered view of reality. (Bhaskar, 1978), recognises that knowledge is always open to revision (Sayer, 2000), and supports the use of both qualitative and quantitative approaches (Danermark et al., 2002).

Its metatheoretical position allows the study to connect philosophical assumptions with theory development and empirical strategy in a coherent and reflective way (Matthyssens, Vandenbempt & van Bockhaven, 2013). It also supports the use of abductive and retroductive reasoning within a realist framework, while allowing methods to be chosen in line with the RQs (Danermark et al., 2002).

3.3. Logic of Enquiry

This study adopts a retroductive approach to reasoning, allowing movement between data and theory. Retroduction is particularly suited to MMR that moves from initial exploration towards theory development and testing (Blaikie, 2007). It involves working back and forth between observations and theoretical ideas to

identify the mechanisms that may explain observed patterns (Danermark et al., 2002).

Abduction was also considered but not adopted, as it focuses on developing plausible explanations from unexpected findings (Blaikie, 2007; Reichertz, 2014). In contrast, retroduction places greater emphasis on identifying the underlying mechanisms that explain observed patterns (Danermark et al., 2002). Given the aim of this study to move from qualitative insights towards model development and hypothesis testing, a retroductive approach was considered more appropriate.

3.4. Role of Researcher

The role of the researcher varied across the different phases of this mixed-method study. In the qualitative phase, a reflexive and interpretive stance was adopted (Johnson & Duberley, 2003), with the researcher engaging in memo writing and theoretical sampling. Here, subjectivity was not treated as bias to be eliminated, but as a resource for developing meaning, consistent with the constructivist orientation of SGT (Corbin & Strauss, 2015). A reflexive journal was maintained throughout to document insights, assumptions, and emerging patterns during data collection and analysis.

In the quantitative phase, the researcher adopted a more structured and analytical role, focusing on testing relationships using SEM (Kline, 2016). Steps were taken to limit researcher influence, including the use of established scales and adherence to statistical assumptions. This shift allowed the study to remain reflective in the qualitative phase while maintaining rigour in the quantitative analysis.

3.5. Research Approach: Mixed Method Research

As Nicholson, Brennan and Midgley (2014) note, critical pluralism in the methods dimension involves drawing on mixed methods of inquiry. This view is also reflected in the work of Creswell (2014) and Tashakkori and Teddlie (2003), who link critical pluralism to the use of mixed methods for data collection.

MMR involves combining qualitative and quantitative data within a single study (Creswell & Creswell, 2023). It is often used to bridge the gap between qualitative and quantitative approaches (Farquhar, Michels & Robson, 2020). In this context, Nicholson, Brennan and Midgley (2014) emphasise the need to be clear about how different elements of the research are brought together. This allows the study to develop a more complete understanding of the phenomenon under investigation (Silverman, 2014).

Social science research is often approached through qualitative, quantitative or mixed methods, each shaped by different assumptions and research practices (Creswell & Creswell, 2023; Bryman, 2016; Tashakkori & Teddlie, 2010). Quantitative research focuses on measurement and statistical analysis, with an emphasis on general patterns (Shadish, Cook & Campbell, 2002; Bryman, 2016). Qualitative research, in contrast, is concerned with understanding meaning and context from the perspective of participants (Denzin & Lincoln, 2018; Flick, 2018). MMR brings these approaches together and is often described as a third methodological movement (Cameron, 2011). It is particularly useful when studying complex phenomena that benefit from more than one form of insight (Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 2010). Table 12 summarises the key differences between these approaches.

MMR draws on both qualitative and quantitative approaches, allowing the study to combine numerical patterns with contextual insight (Creswell & Plano Clark, 2018; Johnson, Onwuegbuzie & Turner, 2004). This makes it particularly useful for examining complex social phenomena. It also aligns with a critical realist perspective, which supports the use of different methods to explore both observable patterns and the mechanisms that shape them (Danermark et al., 2002). It is widely used in the social and behavioural sciences (Creswell, 2014)

and is increasingly applied in marketing research (Saunders, Lewis & Thornhill, 2019).

Table 12: Comparison of Research Approach

Feature	Quantitative Research	Qualitative Research	Mixed-Methods Research
Philosophical Orientation	Positivism or post-positivism	Interpretivism or constructivism	Pragmatism or critical realism
Purpose	Testing relationships and identifying patterns	Understanding meaning and experience	Bringing together explanation and understanding
Data Type	Numeric data	Textual or visual data	Combination of numeric and textual data
Data Collection Methods	Surveys or structured designs	Interviews or other flexible approaches	Combination of qualitative and quantitative methods
Data Analysis	Statistical analysis and modelling	Interpretive analysis such as thematic approaches	Integration of statistical and interpretive analysis
Strengths	Allows comparison across larger samples	Provides depth and contextual insight	Offers a more complete understanding
Limitations	May overlook context	Limited in scope beyond the sample	More demanding in design and analysis
Typical Output	Statistical results or models	Thematic interpretations	Integrated findings across methods
Representative References	Bryman (2016); Creswell (2014)	Silverman (2021)	Creswell & Plano Clark (2018); Tashakkori & Teddlie (2010)

This study adopts a mixed-methods approach, combining qualitative and quantitative techniques within a single investigation. It allows the study to explore experiences in depth while also examining patterns across a wider sample (Tashakkori & Teddlie, 2010; Creswell, 2014).

Alternative approaches, summarised in Table 12, were considered but not adopted. A mixed-methods approach was more appropriate, as it allows the study to combine depth with broader analysis (Corbetta, 2003).

The use of mixed-methods in this study supports more robust conclusions when addressing complex RQs (Johnson & Onwuegbuzie, 2004). It allows the research to develop a fuller understanding of the issue by combining exploratory and confirmatory elements within a single design (Tashakkori & Creswell, 2007). It also enables findings from one phase to inform the other, creating a more connected and coherent research process (Hesse-Biber, 2010).

3.6. Research Design: Sequential Exploratory Design

Research design provides a clear structure for moving from data collection to analysis, helping to keep the process consistent and focused (Creswell & Creswell, 2023; Yin, 2014). In practice, MMR can take different forms. The choice of design depends on how the qualitative and quantitative phases are arranged and how they are brought together (Creswell, 2014). Bryman (2016) and Creswell and Plano Clark (2011) outline common MMDs, summarised in Table 13.

Table 13: Typology of Mixed-Method Research

Design Type	Timing	Priority	Integration	When Integration Happens	Key Characteristics
Convergent Parallel	Simultaneous	Equal or one may dominate	Triangulation	During analysis or interpretation	Qualitative and quantitative data are collected together and compared.
Explanatory Sequential	Sequential (Quant → Qual)	Quantitative leads	Explanation	After quantitative phase	Qualitative data helps explain earlier quantitative results.
Exploratory Sequential	Sequential (Qual → Quant)	Qualitative leads	Exploration	After qualitative phase	Quantitative stage builds on insights from the qualitative phase.
Embedded	Simultaneous or sequential	One approach dominates	Supportive role	During collection or analysis	One type of data is used to support the other.
Transformative	Varies	Shaped by theoretical lens	Change-oriented	Across stages	Guided by a specific theoretical perspective.
Multiphase	Multiple stages	Varies	Development over time	Across phases	Involves several linked studies conducted over time.

Source: Adapted from: Bryman (2016); and Creswell & Plano Clark (2011)

The convergent parallel design was not suitable, as it requires qualitative and quantitative data to be collected at the same time, with both given equal emphasis (Creswell & Plano Clark, 2011). This did not fit the needs of the study, which required initial theoretical development before moving to model testing.

The explanatory sequential design was also not appropriate, since it begins with quantitative data collection. Given the limited theoretical grounding in this area, starting with a survey would have risked missing important constructs or relationships (Bryman, 2016).

An embedded design was considered, but it is typically used when one method plays a supporting role within another (Creswell & Plano Clark, 2011). In this case, both phases were central to the study, making this approach less suitable.

Finally, transformative and multiphase designs were not adopted, as they tend to involve more complex or extended research processes, often linked to programme evaluation or longitudinal work, which did not align with the focus of this study (Mertens, 2007).

A sequential exploratory design was chosen because of the exploratory nature of the research problem and relatively limited theory in this area. It is particularly suited to studies where concepts need to be developed before they can be examined more broadly (Tashakkori & Teddlie, 2010). This aligns with the aim of first building understanding from qualitative data and then examining those insights in the quantitative phase (Creswell & Plano Clark, 2011; Terrell, 2012). It has also been noted that beginning with qualitative work, followed by

quantitative analysis, is a widely used approach in MMR (Morgan, 1998; Yauch & Steudel, 2003).

In this study, the SGT phase played a key role in developing initial insights and identifying underlying mechanisms such as psychological safety (May et al., 2004), value incongruity (Kumar, 2021) and emotional exhaustion (Maslach & Jackson, 1981). These insights then informed the development of hypotheses for the quantitative phase, where the relationships were examined using SEM. This type of integration reflects the logic of a sequential exploratory design (Ivankova, Creswell & Stick, 2006), where findings from the qualitative phase guide the direction of the quantitative analysis.

The sequential exploratory design provided a clear way to move from qualitative insight to quantitative testing. It allowed the study to retain depth from the qualitative phase while also examining relationships more broadly in the quantitative phase (Sale, Lohfeld & Brazil, 2002).

A similar approach has been used in prior research. Hollebeek et al. (2014), for example, began with qualitative work to develop measures of CE, followed by quantitative analysis to test and validate the scale. In the same way, the qualitative

phase in this study, based on semi-structured interviews, provides the foundation for identifying key constructs and shaping initial hypotheses.

3.7. Research Method

Research methods refer to the techniques used to collect and analyse data in order to answer the RQs (Creswell & Creswell, 2023; Flick, 2014). Selecting an appropriate method requires consistency with the research approach and the nature of the problem being studied (Guba & Lincoln, 1994). In MMR, this involves combining qualitative and quantitative approaches so that each informs the other and contributes to a fuller understanding of the issue (Tashakkori & Teddlie, 2010).

Semi-structured interviews were used in the qualitative phase to develop initial insights, which then informed the hypotheses examined in the quantitative phase. This ensured that participants' perspectives shaped the relationships that were later tested.

Qualitative Phase: Semi-Structured Interviews

Several qualitative methods were considered for the exploratory phase, including semi-structured interviews (Kvale & Brinkmann, 2009), focus groups (Krueger & Casey, 2015), and netnography (Kozinets, 2020). Given the personal and

complex nature of the topic, it was important to choose a method that could capture participants' perspectives in depth. Table 14 compares these approaches and outlines their relevance to this study.

Table 14:Comparison of Qualitative Research Methods

Method	Key Features	Advantages	Limitations	Suitability for This Study
Semi-Structured Interviews	One-to-one conversation with guided but flexible questions (Kvale & Brinkmann, 2009)	Allows detailed exploration of individual experiences and the ability to probe further	Requires time and careful handling to reduce researcher influence	Well suited to exploring sensitive and complex experiences that require personal reflection
Focus Groups	Group discussion led by a facilitator (Krueger & Casey, 2015)	Encourages interaction and brings out different viewpoints	Some participants may hold back; discussion may stay at a surface level	Less suitable, as sensitive experiences may not be openly shared in a group setting
Netnography	Study of interactions within online communities (Kozinets, 2020)	Captures naturally occurring behaviour within its context	Limited ability to explore meanings in depth; relies on observable data	Useful for understanding context, but not sufficient for capturing individual experiences

Focus groups can encourage discussion, but the topics in this study are personal and may not be easily shared in a group setting, which can limit openness (Krueger & Casey, 2015). Netnography, while useful for understanding community interactions, relies on observation and does not allow the researcher to explore participants' underlying views in depth (Kozinets, 2020). Semi-structured interviews were therefore more appropriate, as they allow participants to share their experiences in detail while giving the researcher flexibility to

explore emerging ideas (Bryman, 2016; Turner, 2020). This makes them well suited to a critical realist approach.

Semi-structured interviews offer a flexible way to explore participants' experiences within OBCs. They provide some guidance through key themes, while still allowing the conversation to develop in response to what participants share (Kvale & Brinkmann, 2009; Bryman, 2016). This flexibility is especially useful when discussing complex topics where deeper explanation and clarification are often needed (Turner, 2020). This method is consistent with a SGT approach, where data collection and analysis develop alongside each other, allowing emerging insights to shape the direction of the study (Strauss & Corbin, 2008).

Quantitative Phase: Structured Survey Instrument

Building on the qualitative findings, the quantitative phase required a method that could examine relationships across a larger sample (Hair et al., 2019). An online structured survey was selected for this purpose. Other options were considered but were less suited to the aims of the study. Table 15 compares these approaches and explains the choice of survey.

Table 15: Comparison of Quantitative Research Methods

Method	Description	Strengths	Limitations
Survey	Structured questionnaire with closed-ended items administered online	Suitable for large samples and supports statistical analysis such as SEM; efficient to administer	Relies on self-reported data and may be affected by response bias
Experiments	Controlled setting where variables are manipulated to observe effects	Allows stronger conclusions about cause and effect	May not reflect real-world behaviour; can be resource intensive
Structured Observations	Systematic recording of behaviour in natural or controlled settings	Captures actual behaviour and not reported responses	Does not provide insight into thoughts or feelings; can be time consuming
Experience Sampling / Diary Studies	Participants record experiences or behaviours over time	Captures data close to real-time	Requires sustained participant effort and is difficult to apply to larger samples

Among these options, the online survey was selected because it allowed data to be collected efficiently while supporting the type of analysis required in this study. Unlike experiments, it made it possible to examine naturally occurring perceptions and behaviours without introducing artificial conditions, while still allowing relationships to be tested statistically (Bryman, 2016; Shadish, Cook & Campbell, 2002).

Other approaches, such as structured observation or experience sampling, offer useful insights but were less practical for a larger sample and for examining psychological constructs (Bolger, Davis & Rafaeli, 2003; Angrosino, 2007). The survey method therefore provided a practical and appropriate way to collect standardised data for the analysis undertaken (Fink, 2017; Hair et al., 2019).

Structured surveys allow data to be collected from a large and diverse sample, making it possible to examine patterns using statistical analysis (Fink, 2017; Bryman, 2016). The survey items were based on established measurement scales to support reliability and construct validity (DeVellis, 2016). The survey was administered online using Amazon MTurk, which provided efficient access to participants with relevant experience of OBCs. This approach is consistent with prior research that has used crowdsourcing platforms to obtain diverse and reliable samples (Buhrmester, Talaifar & Gosling, 2018).

The data were analysed using SEM, which is well suited to examining relationships between multiple latent constructs (Kline, 2016; Hair et al., 2019). This approach allowed the study to test the proposed model in a structured way. It also aligns with a critical realist perspective (Danermark et al., 2002; Sayer, 2000). The next section explains how the two phases were brought together and how the findings were integrated.

3.8. Integration

"Mixed methods research is not simply collecting two kinds of data but requires integrating them" (Creswell & Plano Clark, 2018, p. 65). Venkatesh, Brown and Bala (2013) similarly emphasise the need to integrate findings from both phases so that they lead to coherent conclusions. Integration refers to bringing qualitative

and quantitative approaches together in a deliberate and coherent way so that they contribute to a shared understanding of the research problem. This allows the study to produce insights that would not be possible using either approach on its own (Åkerblad, 2021).

The insights generated through SGT informed the development of hypotheses that were later examined using SEM. Integration took place during interpretation and model development, where qualitative findings were considered alongside quantitative results to develop a more complete understanding of the relationships. This reflects an expansion approach, where the second phase builds on and extends the initial findings (Creswell & Plano Clark, 2018). By bringing these strands together, the study was able to link participants' experiences with patterns observed across the wider sample (Fetters, Curry & Creswell, 2013; Tashakkori & Teddlie, 2010).

In a sequential exploratory design, the qualitative phase is completed first and then used to shape the quantitative stage, so integration does not take place early in the design process (Creamer, 2018). Similarly, there is no integration during data collection, as the qualitative data are collected and analysed before the survey is developed (Tashakkori & Teddlie, 2010).

Other forms of integration were also considered but not adopted. Concordance assumes that both phases produce similar findings, which was not the aim of this study. Complementarity focuses on examining different aspects of the same issue, but not building one phase from another. Discordance is used when findings conflict, which was not the case here. In contrast, this study followed an expansion approach, where the quantitative phase was developed from the qualitative findings (see Figure 3).

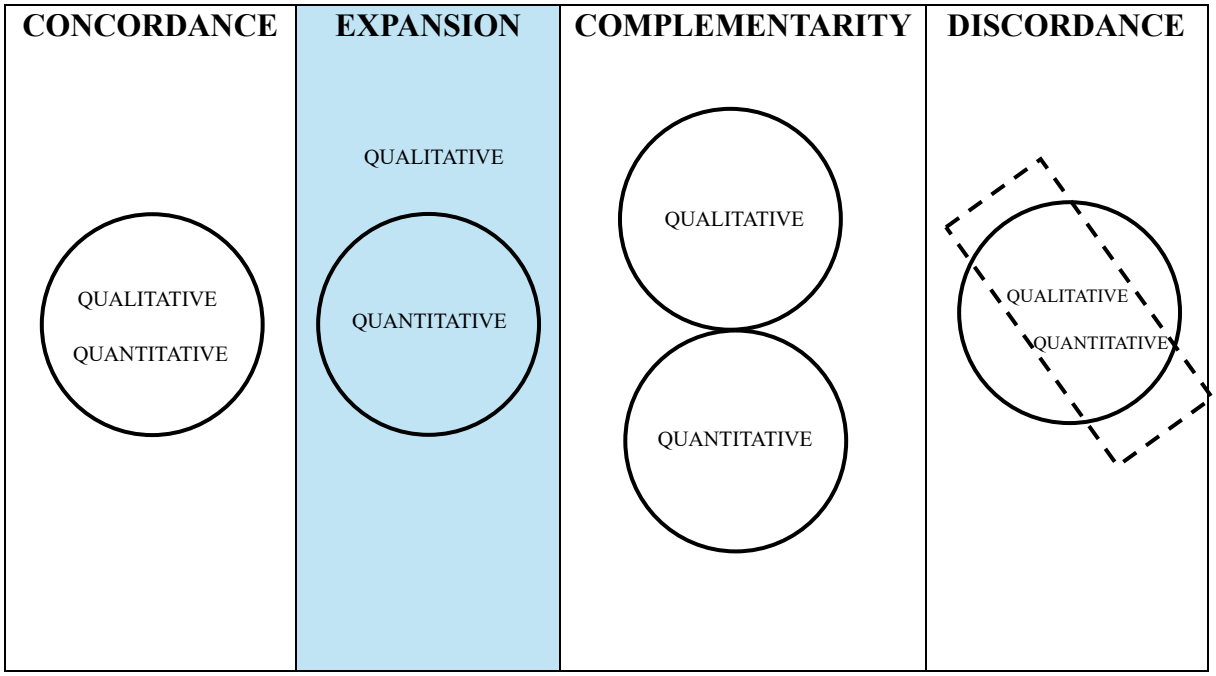


Figure 3: Four combinations of Fit with Qualitative & Quantitative findings

Adapted from: Fetters, Curry, & Creswell (2013)

Integration in this study was planned from the outset so that the qualitative phase could shape the direction of the quantitative stage (Creswell & Plano Clark, 2018). The research process remained consistent throughout, with both phases

aligned to the same aim. Integration was most evident during the development of hypotheses and the construction of the model, where insights from the qualitative phase informed what was later examined quantitatively (Fetters, Curry & Creswell, 2013; Creamer, 2018). Bringing the two phases together in this way allowed the study to combine contextual insight with broader analysis, leading to a more complete understanding of the phenomenon (Bustamante, 2019). Through this integration, the study was able to develop a more complete understanding of the phenomenon.

3.9. Sampling Design

A sample represents a subset of the population selected for investigation (Saunders, Lewis & Thornhill, 2019). It is recognised that no sample can perfectly represent a population, and some degree of sampling error is inevitable (Bryman, 2016). Steps taken to address these issues are discussed in the relevant qualitative and quantitative sections. Sampling approaches can be broadly grouped into probability and non-probability methods (Bryman, 2016). Table 16 outlines the key differences between these approaches.

Table 16: Comparison of Sampling Strategy

Feature	Probability Sampling	Non-Probability Sampling
Definition	Each member of the population has a known chance of being selected	Selection is based on access or relevance, and not all members have an equal chance
Common Techniques	Random or stratified approaches	Purposive, convenience or snowball approaches
Philosophical Alignment	Often linked to approaches focused on general patterns	Often used in studies focusing on depth and context
Strengths	Supports broader generalisation	Allows selection of participants with relevant experience
Limitations	Requires a clear sampling frame and can be resource intensive	Limited generalisability and risk of selection bias
Example Use Case	Large-scale surveys of consumer behaviour	Interviews with specific or hard-to-reach groups

Sources: Bryman (2016); Creswell & Creswell (2023); Etikan, Musa, & Alkassim, (2016)

In probability sampling, each member of the population has a known chance of being selected, which supports statistical generalisation (Fowler, 2014).

Given the study's focus on understanding participants' experiences within OBCs, non-probability sampling was considered appropriate. While probability sampling supports statistical representativeness, it is less effective for identifying participants with relevant and meaningful experience in specialised contexts (Palinkas et al., 2015). The qualitative and quantitative phases also draw on different sampling approaches, reflecting their distinct purposes (Bryman, 2016).

In non-probability sampling, participants are selected based on relevance or access, and not every member of the population has an equal chance of being included (Hair et al., 2019). Although this limits generalisation, it is often more practical for exploratory research and for reaching specific groups (Etikan, Musa & Alkassim, 2016). Common forms of non-probability sampling are outlined in Table 17 (Bryman, 2016).

Although non-probability sampling is more commonly used in qualitative research and does not offer the same statistical basis as probability approaches (Bryman, 2016; Galloway et al., 2005), it is well suited to this study. It allows participants to be selected based on their experience with OBCs, which is important for an exploratory design.

Table 17: Types of Non- Probability Sampling

Type	Description	Key Strengths
Purposive	Participants are selected based on their relevance to the research topic	Allows focus on participants with meaningful experience
Convenience	Participants are selected based on ease of access	Quick to implement but offers limited control over sample quality
Quota	Participants are selected to reflect certain characteristics of the population	Helps ensure representation of specific groups
Self-Selection	Participants choose to take part voluntarily	Useful when participants have relevant experience or interest
Snowball	Participants refer others who meet the study criteria	Helpful for reaching specific or hard-to-access groups

Source: Adapted from Bryman (2016)

Because the qualitative phase aimed to generate detailed insight, it relied on a smaller sample drawn from participants with relevant experience (Creswell & Creswell, 2023). Purposive sampling was used to identify individuals who had engaged with OBCs and could speak meaningfully about those experiences (Patton, 2015). This was followed by snowball sampling, where initial participants referred others who met the study criteria, helping to extend access to relevant cases (Noy, 2008).

The quantitative phase, by contrast, required a larger sample so that relationships could be examined more broadly (Hair et al., 2019). For this phase, a non-probability, self-selected sampling approach was used. Participants were recruited through Amazon MTurk and included only if they met the screening criteria relating to prior engagement with OBCs. This made it possible to retain relevance to the research while reaching a wider pool of respondents.

Although MTurk provides access to a broad pool of respondents, several safeguards were used to support data quality. Participation was restricted to respondents residing in the United States, and MTurk eligibility filters were applied so that only workers meeting the required approval-rating criteria could access the survey. Screening questions were also used to confirm that participants were adults and had at least six months of prior experience engaging with an

OBC. After data collection, responses were checked for duplicate IP addresses, straightlining and implausibly short completion times. These initial quality checks resulted in the removal of 52 responses, leaving 301 usable cases. A further 23 cases were removed during subsequent statistical screening, resulting in a final sample of 278 respondents. These procedures helped reduce the inclusion of duplicate or poor-quality responses and increased confidence that participants had relevant experience of the research context. Such safeguards are particularly important when using online crowdsourcing platforms (Peer et al., 2017). However, because the sample was self-selected through MTurk, the findings remain subject to limitations in their generalisability to the wider population.

For the quantitative phase, the final usable sample comprised 278 respondents. Based on the 65 substantive measurement items included in the questionnaire, this represents approximately 4.3 respondents per item. Although this is below some commonly cited rules of thumb for factor analysis, fixed participant-to-variable ratios are not treated as absolute criteria for determining sample adequacy. Research has shown that required sample size depends on characteristics such as communalities, the number of factors and the number of variables defining each factor (MacCallum et al., 1999; Mundfrom, Shaw and Ke, 2005). Similarly, sample-size requirements in SEM vary according to model

characteristics, including the number of indicators and factors and the magnitude of factor loadings and structural paths (Wolf et al., 2013). The sample of 278 was therefore considered reasonable for the planned quantitative analyses, while the adequacy of the factor solutions and structural model was further assessed through the diagnostic and model-fit procedures reported in Chapter 6.

This section outlines the reasoning behind these sampling choices. The detailed procedures, including recruitment, and screening criteria, are presented in Chapters 4 and 6.

3.10. Time Horizon

The study adopts a cross-sectional time horizon (Saunders, Lewis & Thornhill, 2019), with data collected at specific points in each phase of the research. The qualitative phase was conducted between July and October 2023, during which in-depth interviews were carried out to explore participants' experiences of engaging with OBCs and to develop initial insights. This was followed by the quantitative phase in November 2024, where data were collected using a structured survey. Although the two phases took place at different times, each captured participant perceptions at a single point and not over an extended period. The study therefore remains cross-sectional in nature (Bryman, 2016; Robson & McCartan, 2016; Tashakkori & Teddlie, 2010).

3.11. Data Collection

Data collection involves gathering information relevant to the RQs, using methods aligned with the study design (Saunders, Lewis & Thornhill, 2019). In this study, data were collected across two phases, using qualitative interviews followed by a quantitative survey.

In the qualitative phase, data were collected through semi-structured interviews with individuals who had experience engaging with OBCs. This approach allowed key topics to be explored while giving participants the space to share their experiences in their own words, leading to more in-depth insights (Kvale & Brinkmann, 2009; Turner, 2020).

For the quantitative phase, data were collected through an online survey administered via Amazon MTurk, a platform widely used in academic research (Buhrmester, Talaifar & Gosling, 2018). This approach made it possible to reach participants with prior experience of OBCs in an efficient way. The survey included items drawn from established scales, helping to ensure content validity (DeVellis, 2016).

The survey was designed and hosted on Qualtrics and included established measurement scales, supporting content validity and reliable data collection

(DeVellis, 2016; Dillman, Smyth & Christian, 2014; Kelley et al., 2003). While the rationale for selecting these data collection methods is discussed earlier in this chapter, detailed procedures for each phase, including recruitment, inclusion criteria, instrument design, and administration, are presented in Chapters 4 and 6.

3.12. Data Analysis

Data analysis involves examining and interpreting data to address the RQs (Creswell & Creswell, 2023). In this study, analysis was carried out across two phases, combining qualitative coding with quantitative statistical testing. The insights generated from the qualitative phase informed the development of hypotheses, which were then tested in the quantitative phase, ensuring continuity between the two stages (Tashakkori & Teddlie, 2010).

Qualitative Data Analysis Tools and Alternative Methods Considered

In the qualitative phase, a combination of analytical tools and software was used to support the organisation and interpretation of the data. These tools helped manage large volumes of interview data and supported the iterative nature of the analysis. Table 18 summarises the tools used, the alternatives considered, and the reasons for their selection.

Table 18: Summary of Qualitative Tools, Alternative Options and Justifications

Tool	Purpose in this Study	Alternative Options	Justification for Choice
NVivo	Used to organise and analyse interview data through coding and memo development	ATLAS.ti, MAXQDA, QDA Miner	Provided a structured way to manage data and supported the coding process effectively, particularly for linking categories and developing themes
Straussian Grounded Theory (SGT)	Guided the analysis through iterative coding and constant comparison	Glaserian Grounded Theory, Constructivist Grounded Theory, Thematic Analysis, Interpretative Phenomenological Analysis (IPA)	Offered a clearer structure for linking categories, which supported the development of a theoretical model for the next phase
Zoom (for interviews)	Used to conduct semi-structured interviews remotely	Microsoft Teams, Skype, In-person interviews	Allowed flexible scheduling and reliable recording while maintaining interaction with participants

In the qualitative phase, data analysis was conducted using NVivo, a widely used software for managing and analysing qualitative data. NVivo supports the organisation of large volumes of textual data and allows efficient coding and comparison of data segments (Bazeley & Jackson, 2013). Its ability to link codes and visualise relationships supported the analytical process. Alternative tools such as ATLAS.ti and MAXQDA were considered, but NVivo was selected due to its compatibility with the chosen analytical approach and its widespread use in social science research (Maher, 2018). This approach enabled the systematic application of coding procedures, allowing categories to be developed directly from participant accounts while maintaining transparency in the analytical process (Corbin & Strauss, 2015).

Alternative analytical approaches, such as Interpretative Phenomenological Analysis (IPA), were also considered. IPA is typically used to explore in detail how individuals make sense of their lived experiences, often focusing on small, relatively homogeneous samples and prioritising depth over breadth (Smith, Flowers & Larkin, 2009). While this would have been useful for gaining rich, individual-level insights, it was less aligned with the aims of this study. The purpose here was not only to understand individual experiences, but also to identify patterns across participants and develop a structured theoretical model that could be examined in the subsequent quantitative phase. This required an approach that moved beyond individual accounts towards the development of interconnected categories and underlying mechanisms. For this reason, a SGT approach was more appropriate, as it supports a structured process of analysis and allows patterns to be developed across participants, which could then be carried forward into the next phase of the study. Other options, such as thematic analysis, were also considered but were less suited to the study's aim of developing a structured theoretical model. The selected approach thus ensured a clear and traceable path from raw data to emerging theory.

Quantitative Data Analysis Tools and Alternative Methods Considered

For the quantitative phase, SPSS was used for initial analyses, including exploratory factor analysis (EFA), descriptive statistics, and reliability testing.

AMOS was then used for confirmatory factor analysis (CFA) and covariance-based SEM, and mediation analysis. These tools were chosen because they were suitable for testing the relationships in the proposed model (Kline, 2016; Hair et al., 2019).

Partial Least Squares SEM (PLS-SEM) was considered as an alternative approach. While PLS-SEM is useful in situations involving smaller samples, formative constructs, or a focus on prediction (Hair et al., 2019), it is variance-based and places less emphasis on model fit and theory testing compared to CB-SEM (Kline, 2016). Given that this study aims to test hypothesised relationships, CB-SEM using AMOS was considered more appropriate. CB-SEM is also widely used in marketing and management research for confirmatory analysis and theory validation (Ringle, Sarstedt & Straub, 2012). A summary of alternative analytical approaches and the rationale for their exclusion is presented in Table 19.

Table 19: Summary of Quantitative Tools, Alternative Options and Justifications

Tool	Purpose in this Study	Alternative Options	Justification for Choice
SPSS	Data screening, descriptive statistics, and exploratory factor analysis	R, Stata, SAS	Easy to use and widely accepted in social science research, with clear outputs for analysis
AMOS	Confirmatory factor analysis and SEM, including mediation analysis	Mplus, LISREL, R (lavaan)	Allows model testing in a clear and visual way, suited to theory-driven analysis
Qualtrics	Design and administration of the online survey	SurveyMonkey, Google Forms	Supports flexible survey design and integrates well with participant recruitment

Below is a brief description of the tools used for data analysis in this study.

Qualtrics is a web-based survey platform used to design and administer the questionnaire. It allows flexibility in structuring survey items and supports efficient data collection and export for analysis (Qualtrics, 2023). In this study, the survey consisted of items drawn from validated measurement scales, ensuring consistency and reliability in data collection (Dillman, Smyth & Christian, 2014; Tourangeau, Conrad & Couper, 2013).

SPSS is commonly used in social science research for statistical analysis (Pallant, 2020). In this study, it was used to prepare the data and examine its structure before moving to further analysis. AMOS was used to carry out SEM, allowing relationships between latent constructs to be examined (Kline, 2016; Hair et al., 2019). It was also used for CFA to assess the measurement model, and for testing the proposed relationships within the model. The visual interface made it easier to specify and interpret the model.

This combination of methods allowed the data to be explored in the first phase and then tested in the second. The approach follows the sequential design of the study, where insights from the qualitative phase informed the quantitative analysis (Creswell & Plano Clark, 2011).

Further details on how the analysis was carried out, including coding procedures and model evaluation, are presented in Chapters 4 and 6. The connection between qualitative and quantitative phases, including how the findings were integrated, has been discussed earlier in Section 3.8 on Integration.

3.13. Ethical Considerations

Ethical considerations were an important part of this study and were addressed throughout the research process. This involved reflecting on the researcher's role, as well as ensuring that appropriate procedures were followed during data collection and analysis. Ethical issues can arise at different stages of a study and need to be considered throughout the research process (Creswell & Creswell, 2023; Saunders, Lewis & Thornhill, 2019). This is particularly important in research involving participants, where careful attention is required during data collection and handling (Creswell, 2014).

Table 20: Ethical considerations and measures taken

Research Stage	Ethical Consideration	Application to This Study
Before Data Collection	Seek ethical approval from institutional review board or ethics committee	Approval was obtained from the Research Ethics Committee at the University of Essex prior to data collection
	Assess risks and benefits to participants	Minimal risk was anticipated. Participants were informed about the nature of the study and their voluntary participation through the participant information sheet
	Protect vulnerable populations	No vulnerable groups were targeted; participants were screened for age (18+) and relevant experience

During Data Collection	Obtain informed consent	Participant information sheets and consent forms were provided to all interview and survey participants
	Ensure voluntary participation	Participants were informed that participation was voluntary and that they could withdraw at any time without penalty
	Maintain confidentiality and anonymity	Pseudonyms were used for qualitative data; survey data was anonymised and stored securely
	Avoid coercion or undue influence	Recruitment materials emphasised that participation was voluntary
During Data Analysis	Accurately represent participants' views	Findings reflect participants' accounts, including differing perspectives where relevant
	De-identify personal data	Identifying information was removed from transcripts and datasets prior to analysis
Reporting and Dissemination	Report findings honestly and transparently	All results, including non-significant or unexpected findings, were reported
	Protect identity in publications	No identifying information was included in any outputs
	Share findings responsibly	A summary of findings will be made available to participants upon request

Source: Adapted from Creswell & Poth (2023)

Ethical considerations were guided by Creswell and Poth's (2023) framework, which outlines key checkpoints across the research process (Table 20).

In the UK University research context, clear ethical guidelines exist for research involving human participants (Pandya-Wood, Barron & Elliott, 2024). This study complied with the requirements of the Research Ethics Committee at the University of Essex. Ethical approval was obtained for the qualitative phase in March 2023 and for the quantitative phase in October 2024. Copies of the ethical approval application forms for both the qualitative and quantitative phases, along

with the participant information sheet and consent form, are included in Appendix 2 (A), 2 (B), 3, and 4, respectively (Ethics Application Number: ETH2223-1052 and ETH2324-2061).

3.14. Methodological Limitations

While this study adopts a mixed-methods approach to examine CE & CWB in OBCs, it is important to acknowledge certain methodological limitations.

- **Mixed-methods design:** While the mixed-methods approach allowed the study to explore and test relationships, it also introduced complexity in both design and execution (Creswell & Plano Clark, 2018). Integrating qualitative and quantitative findings can be challenging, particularly when they are based on different underlying assumptions, and this may affect how well the two phases connect (Bryman, 2016; Tashakkori & Teddlie, 2010). In a sequential MMD, the second phase depends on the outcomes of the first, which places constraints on timing and increases the risk if the initial findings are limited (Ivankova, Creswell & Stick, 2006). There is also a possibility that one phase may receive more attention than the other, which can affect the balance of the study (Bryman, 2016).

To address the complexity of the MMD, careful planning was undertaken at the research design stage, following established guidance for sequential exploratory

studies (Creswell & Plano Clark, 2018). The study followed a clear sequence, where findings from the qualitative phase informed the development of the quantitative survey, supporting continuity between the two stages (Ivankova, Creswell & Stick, 2006). Throughout the study, attention was given to maintaining consistency between phases. The researcher remained reflexive during the qualitative analysis and appropriate validation procedures were applied in both phases, including trustworthiness criteria in the qualitative phase and reliability and validity checks in the quantitative phase (Bryman, 2016; Kline, 2016).

- **Sampling limitations:** To ensure that participants had relevant experience with OBCs non-probability sampling was used in both phases. While this allowed the study to focus on suitable participants, it limits the extent to which the findings can be generalised to a wider population (Bryman, 2016). In the quantitative phase, participants were self-selected and recruited based on screening criteria, which may also introduce bias. In addition, the sample size (n=278), although adequate for SEM, may reduce the ability to detect smaller effects in the model (Hair et al., 2019).

To address concerns around generalisability, the qualitative phase used purposive sampling to recruit participants with relevant experience of engaging with OBCs. In the quantitative phase, participants were self-selected and included based on

screening criteria, helping to ensure relevance while reaching a wider sample. Efforts were also made to include participants with varied backgrounds in the qualitative phase. The sample size for SEM (n=278) meets recommended thresholds for model estimation (Hair et al., 2019).

- **Survey design and instrumentation:** The length of the survey, which included 65 Likert-scale items across several constructs, may have led to respondent fatigue and affected the consistency of responses (DeVellis, 2016). In addition, the use of self-reported measures may introduce biases such as social desirability and common method variance (Podsakoff, 2003).

To reduce respondent fatigue, a pilot survey was conducted with a small group (n=7). Based on this, some items were revised or removed to improve clarity. The final survey was organised into clear sections, to improve readability and ease of completion. To address common method bias, marker variables were included in the survey (Miller & Simmering, 2015; Hays et al., 1989; Steenkamp & Maydeu-Olivares, 2021).

- **Cross-sectional data collection:** The cross-sectional design limits the ability to draw causal conclusions between variables (Creswell & Creswell, 2023). This is particularly relevant in a fully mediated model, where the

relationships between variables are inferred through indirect effects. As the data were collected at a single point in time, these relationships must be interpreted with caution and not as evidence of causality (Rindfleisch, 2008).

While the cross-sectional design limits causal inference, steps were taken to strengthen internal validity. Established measurement scales were used and bootstrapping in SEM helped provide more robust estimates of indirect effects (Hair et al., 2019). In addition, the model was informed by insights generated from the qualitative phase and further supported by existing theoretical and empirical literature. This ensured that the specified relationships were grounded in participants' experiences while also being conceptually justified within the broader research context.

- **Qualitative phase limitations:** In the SGT phase (Corbin & Strauss, 2015), the findings are based on interpretive analysis, meaning that the researcher's perspectives and assumptions may have influenced the coding process and the development of theoretical categories. While reflexive practices were used to remain aware of this influence, complete neutrality cannot be assumed.

To enhance rigour in the qualitative phase, strategies such as constant comparison, memo-writing, and theoretical sampling were employed (Corbin &

Strauss, 2015). A reflexive diary was maintained throughout the analysis to document emerging insights and to remain aware of the researcher's influence on the interpretation of data (Johnson & Duberley, 2003).

- **Analytical and model complexity:** The use of SEM to examine multiple latent constructs and indirect relationships results in a relatively complex model structure, which increases the risk of overfitting (Kline, 2023). Although key assumptions, including multivariate normality and linearity, were assessed prior to analysis, any remaining violations may still affect parameter estimates and model fit (Weston & Gore, 2006).

SEM was conducted following established best-practice guidelines (Kline, 2023; Hair et al., 2019). Model fit and key assumptions were carefully assessed and additional checks such as bootstrapping and multicollinearity diagnostics were used to support the robustness of the results.

3.15. Summary

This chapter has outlined the methodological framework guiding the study, including its critical realist position, mixed-methods approach, sequential exploratory design and the use of SGT in the qualitative phase. It explained how the qualitative and quantitative phases were structured and why these methods were chosen, alongside consideration of alternative approaches. The chapter also

discussed how participants were selected, how data were collected and how the analysis was carried out across both phases, ensuring alignment with the study's aims. Ethical considerations and issues of rigour were addressed throughout. Finally, the process of integrating the qualitative and quantitative phases was outlined. The next chapter presents the findings from the qualitative phase.

Chapter 4: Qualitative Study

4.1. Introduction

Continuing from Chapter 3, where the sequential exploratory MMD was outlined, this chapter presents the qualitative findings, identifies the emergent psychological mechanisms, and explains how these inform the conceptual framework developed in Chapter 5. In this phase, specific attention was given to conditions, feelings, processes and consequences, while exploring how participants described and made sense of their engagement within OBCs.

Data were collected through semi-structured interviews, which were conducted online via Zoom. A total of 26 first-round interviews, each lasting approximately 50 to 60 minutes, were followed by 12 second-wave interviews of around 30 minutes each. The second-wave interviews were conducted to revisit and further explore emerging concepts, allowing for grouping the data in a more meaningful way and assess if saturation has been attained (Strauss & Corbin, 2008; Corbin & Strauss, 2015). All participants had at least 6 months of active involvement in one or more OBCs. The OBCs they represented were from a range of industries, including beauty, fashion, technology, retail and gaming. Participants were aged between 18 and 76 years and were geographically distributed across the UK, India, the USA, Canada, the UAE, Turkey and Ireland. In order to protect anonymity, pseudonyms are used throughout.

A semi-structured interview guide (Appendix 5) was used to ensure consistency while allowing participants to unfold the experiences most meaningful to them. Questions explored why the participants engaged with OBCs, how they engaged within OBCs, how they interacted with the community and the brand, and how they perceived the effects of this engagement over time.

In summary, the qualitative phase explored how the interviewees experienced and made sense of their involvement within OBCs. The chapter first describes the research design, participants, data collection and analytical approach adopted in this phase, before presenting the qualitative findings in later sections.

4.2. Research Design and Participants

4.2.1. Sampling Strategy

A combination of purposive, snowball and theoretical sampling was used to guide the participant selection, in this phase. In the initial stage, purposive sampling was used to identify participants with diverse experiences of OBC participation, and to ensure demographic, geographic and community type variations. Purposive sampling is widely used in qualitative research when the researcher aims is to capture rich information relevant to the phenomenon under study (Patton, 2015; Palinkas et al., 2015).

Snowball sampling was subsequently used to recruit additional participants who met the selection criteria and were referred by earlier interviewees. This approach is considered to be useful for accessing dispersed or digitally networked populations, such as OBC participants (Noy, 2008).

4.2.2. Sample Characteristics

The final sample comprised 26 first-round participants and 12 second-wave participants (drawn from the original cohort). Participants ranged in age from 18 to 76 years and represented countries including the UK, India, the USA, Canada, the UAE, Turkey and Ireland. All participants had a minimum 6-month experience of engaging in at least one OBC and represented a range of industries, including beauty, fashion, technology, retail, and gaming. This diversity in age, occupation, and geographical background provided varied perspectives on engagement experiences across different OBC contexts. Table 21 summarises participant demographics and OBC contexts.

Table 21: Participant demographics, pseudonyms

Pseudonym	Demographic Profile	OBC Context (Industry Type)
Charlotte	University Lecturer, Female, 47, UK	Beauty & Skincare
Renee	Digital Marketer, Female, 28, Canada	Beauty & Skincare; Premium café & Lifestyle
Rex	IT Consultant, Male, 34, UK	Gaming & Entertainment
Sia	Software Architect, Female, 35, India	Consumer Technology & Electronics; Fashion & E-Commerce Retail
Scott	Student, Male, 30, UK	Consumer Technology & Electronics
Jessica	Quality Testing, Female, 40, USA	E-Commerce and Online Retail

Arthur	Software Engineer, Male, 24, India	Consumer Technology & Electronics
Raj	General Manager, Mechanical, Male, 76, India	Online Grocery & Food Retail
Ruby	Software Delivery, Female, 42, UAE	Parenting, Health, & Family Support
Yaz	Service Marketer, Female, 23, Turkey	Fast Fashion & Online Apparel Retail
Archie	Investment Banker, Male, 43, USA	E-Commerce and Online Retail
Adi	Student, Male, 19, UAE	Consumer Technology & Electronics
Liam	Process Consultant, Male, 38, India	Automotive & Mobility
Phoebe	Software Engineer, Female, 37, India	Consumer Electronics &Technology Review
Ben	Digital Marketer, Male, 25, UK	Sportswear, Fitness, & Lifestyle
Laura	Strategic Consultant, Female, 53, UK	E-Commerce and Online Retail
Stacey	Student, Female, 22, Canada	Beauty & Skincare
Sam	Process Consultant, Male, 32, UK	IT & Software Development
Donna	Banker, Female, 42, UK	Fast Fashion & Online Apparel Retail
Parth	IT Consultant, Male, 34, India	Food & Hospitality Review Community
Sagar	Software Architect, Male, 35, India	Cloud Computing & IT Services
Spencer	Customer Service, Male, 28, Ireland	IT & Software Development
Stevenson	Entrepreneur, Male, 26, UK	Sustainable Fashion & Cultural Apparel Exchange
Tiana	Innovation Consultant, Female, 25, UK	Sustainable Hygiene & Personal Care
Rachel	Anthropologist, Female, 26, UK	Sustainable Personal Care & Lifestyle
Sheldon	Student, Male, 22, UK	Sports club

4.3. Data Collection and Data Analysis

4.3.1. Interview Approach

Semi-structured interviews were used as the primary method of qualitative data collection, which provided a balance between structure and flexibility, allowing participants to describe their experiences in their own words while enabling the

researcher to probe relevant issues as they emerged (Kvale & Brinkmann, 2015). This was particularly suitable for a SGT approach, as it supported exploration of participants' meanings and evolving experiences within OBCs (Corbin & Strauss, 2015). The flexibility of semi-structured interviews helped the researcher to understand how engagement unfolded over time, as it allowed participants to reflect in ways that were most meaningful to them.

4.3.2. Interview Guide and Data Collection Approach

A semi-structured interview guide was developed to ensure consistency across interviews while allowing participants the freedom to elaborate on experiences they considered most important. The guide included 10 open-ended questions with optional follow-up prompts, drawing on previous research on CE, CWB and OBCs. The questions explored the following areas:

1. **Participation context and motivations:** when and why participants joined OBCs, and what initially attracted them to specific brands or groups (Q1, Q2).
2. **Perceived benefits and positive experiences:** ways in which engagement was experienced as beneficial or rewarding (Q3, Q5).
3. **Perceived challenges and negative experiences:** experiences that participants found challenging or detrimental to their engagement or well-being (Q4, Q6).

4. **Changes in engagement over time:** how participation changed and the factors shaping these changes (Q7, Q9).
5. **Disengagement and withdrawal:** experiences that led participants to reduce or withdraw from engagement with OBCs (Q10).

These topic areas provided broad guidance for discussion, while allowing participants to define the direction of their responses. The interview guide remained flexible throughout the research process.

Following two pilot interviews, one interview question was revised to improve clarity. The revision ensured that the question was better understood and helped participants reflect more clearly on how their engagement had changed over time and its perceived consequences.

Generic probes like *"Can you explain further?"*, *"Can you give an example?"*, *"What happened?"* and "*How did that make you feel?"* were used to encourage deeper reflection and capture participants' experiences in their own words (Kvale & Brinkmann, 2015).

4.3.3. Interview Procedure

All interviews were conducted online via Zoom between July and October 2023. As described in Chapter 3, all participants were given a participant information sheet, and they provided informed consent prior to participation in the study. Interviews were audio-recorded using Zoom and transcribed verbatim by the researcher. To support ongoing qualitative analysis, the researcher wrote reflective notes and analytic memos (Appendix 6) following each interview.

4.3.4. Data Analysis

Data were analysed using SGT (Strauss & Corbin, 2008; Corbin & Strauss, 2015), which allows the researcher to follow a structured yet flexible way to understand participants' experiences by staying close to their accounts. This approach was appropriate for exploring how engagement within OBCs developed and altered over time. Analysis followed three interconnected stages: open coding, axial coding and selective coding. These stages supported the gradual development and refinement of categories, moving from elaborate descriptions toward more integrated explanations of participants' OBC engagement experiences.

Before coding began, all interviews were transcribed verbatim and read several times by the researcher to become familiar with the data. This helped develop an understanding of participants' accounts and guided the early stages of analysis.

Open coding (Appendix 7) was first carried out manually on a small set of interviews to allow close engagement with participants' accounts. The resulting codes were then imported into NVivo 14, where axial and selective coding were used to examine how categories related to one another and how patterns developed across interviews. The analysis was iterative, moving between data, coding and interpretation.

4.3.4.1. Open Coding

The first stage of analysis involved open coding, during which interview data were examined line by line and compared to identify similarities and differences (Strauss & Corbin, 2008; Corbin & Strauss, 2015). 5 initial interviews (Charlotte, Sia, Scott, Rex, and Renee) were coded manually in MS Word to stay closely connected to what participants were saying and make sure the initial codes truly reflected their own words and meanings. (Basit, 2003; Paulus & Lester, 2016).

The full dataset comprised 38 interviews (26 first-round and 12 follow-up), allowing comparison across a wide range of participant backgrounds and OBC contexts. During open coding, short descriptive labels were assigned to segments of text reflecting participants' thoughts, experiences, feelings and actions within OBCs. Many of these codes were drawn directly from participants' own words to preserve the meaning of their accounts.

This stage generated a broad set of initial concepts capturing both positive and challenging engagement experiences. Participants described feelings of enjoyment, learning, connection and validation, alongside experiences of overload, time pressure, frustration and emotional fatigue. For example, several participants referred to feeling mentally drained by excessive content, while others highlighted moments of encouragement when their contributions were recognised by the brand or community.

Throughout this stage, comparisons across interviews and ongoing memo writing helped refine early codes and clarify emerging patterns. Open coding remained exploratory, keeping the analysis close to participants' accounts and avoiding early categorisation. The resulting set of initial codes provided the foundation for the subsequent stages of axial and selective coding.

4.3.4.2. Axial Coding

Following open coding, the analysis moved to axial coding, where related codes were examined together to understand how participants' experiences were shaped and interpreted within OBCs (Strauss & Corbin, 2008; Corbin & Strauss, 2015). The aim of this stage was to move beyond descriptive codes and begin explaining how different aspects of engagement were connected over time.

All open codes were compared across interviews and reorganised by examining their causal conditions, contexts, intervening conditions, actions and consequences. This process was supported by constant comparison and memo writing, which helped clarify relationships between experiential elements and assess their relevance across participants and OBC contexts. This process resulted in 4 axial themes, which captured both supportive and challenging aspects of participation, as seen in Figure 4:

1. **Psychological Safety in Online Brand Communities**
2. **Identity Reinforcement and Engagement Development**
3. **Engagement Intensification Processes**
4. **Strain-Inducing Conditions and Emotional Responses**

These themes represent groups of experiences that participants repeatedly referred to when describing their involvement in OBCs. Importantly, they reflect how engagement was interpreted by participants.

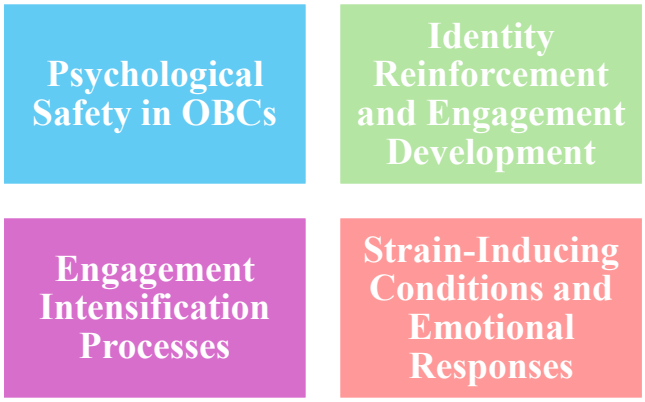


Figure 4: Four interconnected categories that emerged through axial-coding

4.3.4.2.1. Psychological Safety in OBCs

This theme reflects how participants described feeling comfortable and secure when taking part in OBCs.

Table 22: Axial Coding Structure for Psychological Safety in OBCs

Node Level	Node Type	Node Name	Description
Parent Node	**Category**	**Psychological Safety in Online Brand Communities**	**Feeling comfortable and secure when participating in the community**
Child Node	**Axial Component**	**Causal Conditions**	**Factors that encouraged participants to seek a safe space**
		Life transitions or isolation	Joining during periods of change or loneliness
		Shared interests	Connecting with others who had similar interests
		Familiarity with the brand	Previous positive experiences with the brand
Child Node	**Axial Component**	**Context**	**Situations where safety was experienced**
		Brand-hosted communities	Official community spaces
		Smaller sub-groups	Niche or regional spaces
		Supportive norms	Respectful and welcoming interaction climate
Child Node	**Axial Component**	**Intervening Conditions**	**Factors that shaped feelings of safety**
		Respectful interactions	Absence of criticism or hostility
		Platform features	Moderation, privacy settings, and visibility controls
		Time availability	Feeling able to participate without pressure
Child Node	**Axial Component**	**Actions / Interactions**	**Ways participants engaged when they felt safe**
		Reading or observing	Quiet participation
		Commenting	Low-risk interaction
		Sharing experiences	More open participation
Child Node	**Axial Component**	**Consequences**	**What participants experienced as a result**
		Feeling accepted	Social comfort
		Sense of belonging	Emotional attachment to the space
		Enjoyment	Positive feelings while engaging
		Continued participation	Staying active in the community

Many said they could speak openly or ask questions without worrying about being judged. When interactions felt respectful and supportive, participation became easier and more natural. Over time, this sense of safety encouraged them to remain active within the community.

4.3.4.2.2. Identity Reinforcement and Engagement Development

This theme reflects how participants described gradually feeling more confident and established within the community. As they interacted with others, many spoke about gaining clarity, becoming more comfortable and starting to contribute based on their own experiences. Through this process, they felt recognised and valued, which strengthened their sense of identity within the space. Over time, this growing confidence supported deeper and more active engagement.

Table 23: Axial Coding Structure for Identity Reinforcement and Engagement Development

Node Level	Node Type	Node Name	Description
Parent Node	**Category**	**Identity Reinforcement and Engagement Development**	**Strengthening personal identity within the community while becoming more actively involved**
Child Node	**Axial Component**	**Causal Conditions**	**Factors that encouraged identity development and contribution**
		Desire to learn	Looking for guidance or insights
		Prior experience or expertise	Having knowledge to share
		Interest in the domain	Ongoing curiosity about the topic
Child Node	**Axial Component**	**Context**	**Situations where identity and contribution evolved**
		Reviews and discussions	Peer-led conversations
		Q&A or support threads	Problem-focused interactions

		Brand-led activities	Organised opportunities to participate
Child Node	**Axial Component**	**Intervening Conditions**	**Factors that supported confidence in contributing**
		Trust in community content	Belief that information was credible
		Visibility of contributions	Being noticed or acknowledged
		Confidence in knowledge	Feeling comfortable sharing views
Child Node	**Axial Component**	**Actions / Interactions**	**Ways participants became more involved**
		Asking or answering questions	Participating in discussion
		Sharing personal experiences	Offering perspective
		Providing suggestions	Contributing ideas
Child Node	**Axial Component**	**Consequences**	**Outcomes of identity reinforcement**
		Feeling useful	Personal satisfaction
		Recognition from others	Sense of being valued
		Stronger sense of self in the community	Identity reinforcement
		Increased participation	Deeper engagement over time

4.3.4.2.3. Engagement Intensification Processes

This theme captures how participants described becoming more involved in the community over time. Many spoke about enjoyment and growing interest, which made them return regularly. For some, engagement gradually became more central to their daily routines. A few described becoming highly absorbed or emotionally invested in community activity, sometimes spending more time than they had initially intended.

Table 24: Axial Coding Structure for Engagement Intensification Processes

Node Level	Node Type	Node Name	Description
Parent Node	**Category**	**Engagement Intensification Processes**	**Increasing depth of involvement and emotional connection over time**
Child Node	**Axial Component**	**Causal Conditions**	**Factors that led to stronger involvement**
		Enjoyable content	Content that sparked interest
		Frequent updates	Regular new activity
		Personal relevance	Content linked to personal interests or identity
Child Node	**Axial Component**	**Context**	**Situations that supported ongoing engagement**
		Continuous content flow	Endless scrolling or feed updates
		Promotions or events	Temporary spikes in activity
		Routine use	Habitual checking
Child Node	**Axial Component**	**Intervening Conditions**	**Factors influencing the level of intensity**
		Time pressure	Competing responsibilities
		Notification settings	Ability to manage alerts
		Emotional attachment	Feeling invested in the community or brand
Child Node	**Axial Component**	**Actions / Interactions**	**How intensified engagement was expressed**
		Frequent checking	Returning repeatedly
		Extended browsing	Spending long periods online
		Emotional reactions	Excitement or anticipation
Child Node	**Axial Component**	**Consequences**	**Outcomes of intensified engagement**
		Enjoyment	Positive involvement
		Losing track of time	Immersion
		Stronger emotional responses	Heightened sensitivity

4.3.4.2.4. Strain-Inducing Conditions and Emotional Responses

This theme reflects situations where participation in OBCs began to feel demanding or tiring. Some participants described feeling overwhelmed by the volume of content or pressured by promotional activity. Others mentioned moments of frustration or value misalignment that affected how they interacted

with the community. Over time, these experiences sometimes led to emotional fatigue and changes in the way they engaged.

Table 25: Axial Coding Structure for Strain-Inducing Conditions and Emotional Responses

Node Level	Node Type	Node Name	Description
Parent Node	**Category**	**Strain-Inducing Conditions and Emotional Responses**	**Situations where engagement became demanding or emotionally taxing**
Child Node	**Axial Component**	**Causal Conditions**	**Factors that contributed to strain**
		Excessive content	Feeling overwhelmed by volume of posts
		Commercial pressure	Perception of being pushed to buy or engage
		Value misalignment or conflict	Tension arising from differing values, expectations, or opinions within discussions
		Adverse brand encounters	Dissatisfactory brand or service experiences
Child Node	**Axial Component**	**Context**	**Situations where strain became noticeable**
		Promotional spaces	Sales-oriented areas of the platform
		Algorithm-driven feeds	Repetitive or overwhelming content flow
		Public complaint threads	Visible dissatisfaction among members
Child Node	**Axial Component**	**Intervening Conditions**	**Factors shaping responses to strain**
		Personal stress	Limited emotional bandwidth
		Ability to set boundaries	Taking breaks or limiting exposure
		Trust in the brand	Interpreting negative events differently
Child Node	**Axial Component**	**Actions / Interactions**	**How participants responded**
		Reducing activity	Becoming less active
		Avoiding certain features	Selective engagement
		Expressing frustration	Sharing dissatisfaction
Child Node	**Axial Component**	**Consequences**	**Outcomes of sustained strain**
		Emotional fatigue	Feeling mentally drained
		Frustration or guilt	Negative emotional reactions
		Withdrawal	Decreased participation over time

Participants often described feeling comfortable and connected within the community. Being able to speak openly without fear of judgement seemed to sit alongside learning from others and gradually contributing their own perspectives. These experiences were not described as separate stages, but as part of everyday participation in the community.

At the same time, participants spoke about different levels of involvement. Many described enjoying their time in OBCs and finding it interesting or meaningful. However, some also mentioned moments when engagement felt tiring or difficult to manage, particularly when it clashed with limited time, value misalignment, frequent promotional content or negative brand encounters.

Participants often described both positive and challenging experiences, suggesting that engagement did not stay the same. For example, Charlotte, 47, described appreciating the sense of connection:

"There's a sort of feeling of I'm part of a group. This is quite nice."

Yet she also reflected on moments when engagement became more passive or less absorbing:

"Just flicking through, not really paying that much attention."

These examples illustrate how supportive and demanding aspects of engagement were closely linked in participants' experiences of OBC participation.

Axial coding organised these experiences into 4 themes. As the analysis progressed, it became clear that these themes were not isolated but interconnected in participants' accounts. They were retained as distinct categories to preserve analytical clarity and not merged prematurely.

Although these themes helped structure participants' experiences, they were not treated as final findings. They served as intermediate categories that supported the ongoing development of the analysis. Through selective and theoretical coding, they were further refined and integrated into the conceptual structure presented in the findings section. The next stage of selective coding therefore focused on examining how supportive and demanding experiences related to one another, allowing for a clearer understanding of how engagement unfolded within OBCs.

4.3.4.3. Selective Coding

Following axial coding, the next stage of analysis involved selective coding. In line with SGT, this stage focused on examining how the previously developed categories related to one another as part of a broader process (Strauss & Corbin, 2008; Corbin & Strauss, 2015). Instead of treating the themes as separate, the aim was to understand how participants' experiences connected.

This involved returning to the interview transcripts, open coding outputs, axial coding outputs and analytic memos to explore how the 4 themes interacted and how participants moved between different experiences. The focus was not on summarising themes again, but on identifying patterns that explained how engagement in OBCs developed and shifted.

Memo writing played an important role in tracing links between themes and reflecting on how experiences accumulated over time. This helped clarify how participants interpreted their engagement and how their feelings and behaviours changed as their involvement continued.

Selective coding suggested that engagement was not a single, fixed outcome, but an ongoing process. Participants described balancing connection and involvement with moments of pressure or strain, adjusting their participation in response to how the experience felt at different points in their engagement journey.

4.3.4.4. Overview of the Integrative Process

Across interviews, participants described engagement in OBCs as something that developed and kept changing, as their journey evolved. Participants shared that

they weighed what they gained against what it cost them and adjusted how they engaged based on how it felt.

The 4 axial themes captured different parts of this process. Some reflected experiences that supported engagement, such as feeling safe, sharing, contributing and feeling recognised. Others captured experiences that made engagement harder to sustain, such as emotional overload, pressure to consume, frustration, adverse brand-service encounters or feeling drained.

Instead of occurring separately, these experiences often appeared together. Participants frequently described enjoyment and discomfort within the same narratives, suggesting that engagement was something they actively managed instead of experiencing passively.

4.3.4.5. Supportive Experiences and the Growth of Meaningful Engagement

Many participants described feeling comfortable and accepted within the community. Being able to speak openly without fear of judgement created a sense of ease in participation. This sense of safety often went hand in hand with gradually becoming more involved in discussions and activities.

As participants continued engaging, several described growing confidence in contributing. Sharing experiences, offering suggestions or responding to others helped them feel recognised within the community. Over time, these interactions strengthened their sense of being someone who belonged in that space.

For some, continued participation also led to a stronger emotional connection to the community. Engagement felt enjoyable and personally meaningful, and in certain cases became part of everyday routines. Instead of being a single moment, this development occurred gradually through ongoing interaction.

These accounts illustrate how feelings of safety, enhanced comfort, increasing confidence and involvement built upon one another. As participants felt more secure and recognised, their engagement deepened and became more sustained.

4.3.4.6. Intensifying Engagement and Shifts Toward Strain

As participation continued, some participants described becoming more involved in the community. Many spoke about enjoying their time in OBCs and finding the experience engaging or rewarding. For some, this meant returning regularly and spending increasing amounts of time browsing or interacting.

However, increased involvement did not always remain effortless. A few participants noted moments where engagement became harder to manage. They described feeling overwhelmed by the volume of content or the steady flow of updates. Others reflected on spending more time than they had intended or finding it difficult to balance participation with other responsibilities.

As involvement deepened, some participants became more sensitive to pressure or unmet expectations. What initially felt enjoyable could, over time, begin to feel tiring or demanding, particularly when participation felt less voluntary and more habitual. These accounts suggest that engagement intensity was not fixed. It shifted depending on personal limits and how interactions within the platform unfolded.

4.3.4.7. Strain, Emotional Responses, and Adjusted Participation

Participants also described experiences that introduced strain into their engagement. These included negative interactions, misleading content, unmet expectations or situations where brand actions did not align with their values. Such moments often disrupted earlier positive feelings and led participants to reconsider how they participated. In response, some became more cautious or reduced their activity. Others turned off notifications or took temporary breaks.

These changes were usually described as protective adjustments and not full withdrawal.

Well-being featured strongly in these accounts. Participants spoke about feeling mentally tired or frustrated when engagement became too intense. Stepping back or setting boundaries was often described as necessary to maintain balance. These accounts show how strain and emotional cost were part of engagement, shaping how participants adjusted their involvement over time.

4.3.4.8. Theoretical Coding

Building on selective coding, theoretical coding involved further integrating the categories developed during axial coding to form a clearer explanation of how engagement unfolded (Strauss & Corbin, 2008; Corbin & Strauss, 2015). While selective coding focused on identifying relationships between categories, theoretical coding aimed to understand broader patterns across participants' accounts.

This stage required revisiting coded transcripts and analytic memos to examine how the axial themes interacted and influenced one another over time. Instead of assuming a single, fixed pattern of engagement, the analysis focused on how

participants described shifting between different experiences as their involvement continued.

Across interviews, engagement was consistently presented as ongoing and dynamic and not linear. Participants spoke about feeling connected at times, and at other times experiencing pressure or withdrawing from participation. Theoretical coding suggested that these patterns could be understood as two interrelated experiential processes that shaped how engagement developed and changed over time.

Identity-Oriented Engagement Experiences

One process reflected experiences centred on connection and identity. This included feeling safe and accepted within the community, contributing knowledge, receiving recognition and developing a sense of personal relevance through participation. These experiences often appeared together in participants' narratives and were described as reinforcing one another.

When participants felt comfortable expressing themselves, supported by others, and able to learn or contribute in meaningful ways, engagement began to feel rewarding and personally significant. These experiences supported ongoing involvement and, in some cases, deeper emotional investment in both the

community and the brand. This reflects how engagement felt meaningful through shared interests and supportive interactions.

Strain-Oriented Engagement Experiences

Alongside the more positive experiences, participants also described a second process shaped by strain. This included feeling overwhelmed by content, pressured by promotional activity, feeling their privacy was compromised or disappointed when expectations were not met. Some also mentioned moments where community interactions felt tense or where engagement became difficult to balance with other responsibilities.

These experiences were often gradual and did not occur suddenly. Strain tended to surface after periods of higher involvement, particularly when the experience no longer felt aligned with participants' expectations, values or personal limits. In such situations, engagement became harder to sustain.

As a result, some participants took temporary breaks or reassessed how much time and attention they wanted to give to the community or brand. These adjustments were frequently described as responses to feeling mentally tired or emotionally stretched.

Movement Between the Two Processes

These two processes were not fixed. Participants described moving between more supportive and more demanding experiences over time. Engagement could feel encouraging in one period and more difficult in another, depending on changing circumstances and how community or brand behaviour was interpreted.

Responses differed across participants. How they reacted often depended on how they identified with the brand and/or the community, how invested they felt, how comfortable they were within the community, and how they managed their time and boundaries. For some, a particular situation felt manageable; for others, it felt more draining.

Across interviews, participants spoke about weighing what they gained from engagement against what it required from them. Over time, they adjusted their involvement accordingly. Well-being was sometimes mentioned in this context, particularly when explaining why they chose to scale back or remain involved.

Summary of the Theoretical Integration

In summary, integrating these relational patterns led to a consolidated explanation of engagement in OBCs. OBC Engagement emerged *as a dynamic and negotiated process shaped by push-pull dynamics between reinforcing experiences of identity*

and periods of strain. Supportive interactions strengthened connection and meaning, whereas moments of pressure or emotional cost introduced friction.

Instead of following a single direction, participants' engagement shifted over time as these processes interacted. At different points, identity reinforcement, strain or withdrawal became more prominent. This theoretical integration remains grounded in participants' accounts and provides the foundation for linking the qualitative findings to the conceptual framework developed in the subsequent chapter.

4.3.5. Memo Writing and Reflexivity

Memo writing was used throughout the analysis to record emerging ideas and support the development of categories. Memos were written during coding and constant comparison to note patterns in the data and document key analytical decisions. They also supported reflection on interpretations and ensured that emerging explanations remained grounded in participants' accounts. At several points, earlier interpretations were revisited to test their fit with the data and to consider alternative explanations. This ongoing reflexive practice helped trace how the analysis evolved over time.

4.3.6. Ensuring Trustworthiness

The trustworthiness of the qualitative analysis was guided by the criteria of credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985).

Credibility was supported through close engagement with the data and an iterative coding process. Interviews were coded and compared repeatedly, and memo writing was used to record emerging interpretations and check that these remained grounded in participants' accounts.

Dependability was addressed by keeping a clear record of analytic decisions throughout the study. Coding structures and analytic notes were documented allowing the analytic process to be traced over time.

Confirmability was supported by linking interpretations closely to participants' words. Verbatim quotes are used throughout the findings to illustrate categories, and memos were used to reflect on and justify analytical decisions.

While the qualitative study does not aim for statistical generalisation, **transferability** was supported by providing contextual detail about participants and the OBC settings they described. This allows readers to assess the relevance of the findings to similar contexts.

4.3.7. Ethical Considerations

Ethical approval for this study was obtained from the University of Essex Research Ethics Committee, as outlined in Chapter 3. Participants were informed about the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time without consequence. To protect anonymity, pseudonyms were used and identifying details were removed from the transcripts. Audio recordings and transcripts were stored securely in accordance with institutional policies and GDPR requirements. Ethical considerations were revisited throughout data collection and analysis.

4.4. Findings

This section presents the key themes that emerged from the SGT analysis and explains how participants described and interpreted their experiences within OBCs. Building on the earlier stages of analysis, the findings are organised into 4 interconnected themes. While these draw on the axial categories, they are presented in a way that reflects how engagement and well-being were experienced in the data and helps inform the development of the conceptual framework used in the subsequent quantitative phase. These include: (1) customer engagement, (2) consumer well-being, (3) antecedent conditions shaping engagement and well-being, and (4) mediating mechanisms that influenced how participation developed and changed over time.

Each theme is presented as a narrative and illustrated with examples from participants' own words. While the themes are organised separately for clarity, participants' accounts frequently moved across these domains. Experiences of engagement, well-being, supportive conditions and strain were often intertwined, showing that participation unfolded in a layered and evolving way and not as discrete events.

The findings highlight recurring patterns in how participants explained their involvement in OBCs, how they interpreted both community and brand-related dynamics, and how they adjusted their participation in response to changing experiences. Some aspects of engagement strengthened connection and participation, while others introduced strain or led participants to reconsider their level of involvement. These themes collectively provide the empirical foundation for the conceptual framework developed in the subsequent chapter, ensuring that the model remains grounded in participants' lived experiences.

4.4.1. Customer Engagement

Participants described CE within OBCs as a multi-dimensional experience involving thinking, feeling and acting. Instead of emerging in a single form, engagement unfolded through distinct but interconnected processes. At times, engagement centred on understanding products and evaluating information. At

other times, it was characterised by emotional involvement, enjoyment or anticipation. In many accounts, engagement also involved visible participation through posting, responding, reviewing and contributing to discussions. The following sections describe these cognitive, affective and behavioural dimensions as they emerged from participants' experiences.

Subtheme 1: Cognitive Customer Engagement

Participants frequently described using OBCs as spaces for information seeking and understanding. Instead of relying solely on advertisements or external sources they did not fully trust, many turned to community discussions to gather insights from other users. Reading others' experiences, comparing viewpoints and asking questions were common ways of making sense of products or services.

Through this process, they reported becoming more informed and more confident in their decisions. Engaging with community content helped reduce uncertainty and provided reassurance when evaluating options. Learning was therefore not passive consumption, but an active process of seeking, interpreting, comparing and assessing information.

"Reading reviews has been always super helpful for me, because it kind of helps me decide whether the product is really good or not."

- (Donna, 40)

Similarly, Yaz, 23, described carefully evaluating options before making a decision.

"I would focus on only bags and I would like read all the reviews, check all the photos, compare like similar models, and like see, which is better than the other"

These accounts show that cognitive engagement involved actively thinking through information within the community.

Subtheme 2: Affective Customer Engagement

Participants described varying levels of emotional involvement in OBC participation. Engagement was not experienced as fixed; instead, it shifted over time, ranging from light browsing to more immersive and emotionally absorbing involvement. At certain points, participation felt enjoyable and energising, while at other times it felt less engaging.

For many, engagement was linked to feelings of excitement and anticipation. Some described looking forward to participating in community activities as a rewarding part of their daily routine. As Rex, 34 explained:

"The excitement is there. So, I end up spending these couple of hours every day."

Engagement was not only stimulating but also emotionally restorative. After busy routines, returning to the community provided a break and an opportunity to

reconnect with something enjoyable. In this way, involvement carried a positive emotional charge that extended beyond the activity itself. Others highlighted the simple pleasure of staying connected and informed. As Ben, 25 reflected:

"I know at the end of the day I'm gonna get some sort of entertainment out of it… it makes me feel good… pretty good… just to know what's going on."

This sense of enjoyment reinforced participation, making engagement feel rewarding and not obligatory.

Emotional involvement was also strengthened through interaction and feedback. Several participants described how reactions from others intensified their engagement. As Liam, 38 noted:

"Likes and comments are something like energy boosters."

Such responses amplified positive feelings and contributed to a sense of momentum within participation.

At the same time, emotional involvement meant that community experiences carried personal significance. When engagement levels were high, interactions mattered more. Positive exchanges felt especially rewarding, while unmet expectations sometimes led to mild disappointment. As Stevenson, 26 puts it:

"I'd be a little disappointed."

This suggests that emotional investment heightened responsiveness to community outcomes.

Several participants also described engagement becoming habitual over time. Checking updates, scrolling feeds or responding to notifications were incorporated into daily routines. As Donna,40 explained:

"It just keeps calling me back, you know. So, I keep opening it."

Although not necessarily negative, such repetition intensified emotional involvement and sustained continued interaction with the platform.

Taken together, affective CE was characterised by fluctuating emotional intensity. Excitement, enjoyment, anticipation, reinforcement through feedback and even mild disappointment reflected the extent to which participation carried personal meaning. When emotional rewards were present, engagement felt energising and self-sustaining.

Subtheme 3: Behavioural Customer Engagement

Beyond seeking information and experiencing emotional involvement, many participants described actively contributing within the community. As familiarity with the platform increased, engagement often shifted from observation to visible participation. This included answering questions, sharing advice, leaving

reviews, posting content, attending live events and participating in brand-hosted activities. Helping others was frequently described as a natural progression from earlier learning. Instead of remaining passive consumers of content, participants became contributors within discussions. As Sia reflected:

"It makes me feel good that I could contribute something back to the community."

- (Sia, 35)

Several participants outlined multiple forms of participation across different sections of the platform. Renee, 28, described browsing new products, attending live events, leaving reviews and contributing to ongoing discussions:

"I'll either be browsing for new products… I attend live events… I leave reviews for products that I've used and actively engage in discussions on the platform… Suppose someone wants to try a new brand and a certain person would have already commented on their query. I just go and add to it… So, I am engaging with a lot of people through the platform."

Other participants emphasised regular content creation as part of their engagement. As Stacey explained:

"I post a lot of stuff. I post lot of photos and stuff like that."

Participation also extended to structured activities organised by the brand. As Sia noted, *"I participate in the competitions,"* indicating involvement beyond routine browsing or commenting.

Together, these accounts show that behavioural engagement involved observable, sustained actions within the community. Posting, reviewing, responding, attending events and participating in competitions reflected active investment in the platform.

Summary: Across accounts, cognitive, affective and behavioural elements of engagement were closely intertwined. Participants often began by seeking information, which increased confidence and encouraged participation. Emotional involvement then reinforced ongoing interaction, while visible contributions reflected deeper commitment to the community. Instead of occurring independently, these dimensions developed dynamically, shaping how individuals experienced and sustained their engagement within OBCs. Together, they illustrate CE as an evolving process involving active thought, emotional investment, and behavioural participation.

4.4.2. Consumer Well-Being

Beyond engagement itself, participants frequently reflected on how their involvement in OBCs influenced their well-being. These accounts revealed both supportive and depleting effects. At times, participation provided reassurance and emotional relief. At other times, sustained involvement disrupted routines and contributed to mental or physical strain. The impact on well-being was shaped

not simply by participation itself, but by the nature of interactions, the surrounding conditions and how individuals experienced and interpreted their involvement over time.

Subtheme 1: Well-Being Enhancement Through Supportive Engagement

Participants also reflected on how involvement in OBCs influenced their well-being. During periods when engagement felt supportive, several described positive psychological effects. Feeling safe within the community, receiving helpful responses and interacting with others around shared interests contributed to reassurance and emotional comfort. For some, participation reduced uncertainty and provided clarity in situations that might otherwise have felt stressful. Seeing that others faced similar challenges often eased feelings of isolation and helped regulate emotions.

"I could connect with that, seeing others are also facing similar problems… It made me quite calm."

- (Ruby, 42)

Engagement was therefore described as more than informational. In supportive contexts, the community functioned as a space where participants could experience reassurance and emotional relief. When interactions were respectful and aligned with personal expectations, participation contributed positively to their sense of balance and well-being.

Subtheme 2: Well-Being Strain and Emotional Depletion

While supportive engagement enhanced well-being for some, participants also described periods when involvement negatively affected their daily functioning and physical comfort. Extended time spent on the platform messed-up timings, disrupted routines, affected sleep patterns and contributed to physical strain. Renee described becoming so absorbed in engagement that daily structure became compromised:

"But I have been so engrossed in, you know. It's just being on the app and engaging: that I'll spend late nights. Sometimes my timings get messed up.... Just scrolling and engaging... Got a catch in my back or my neck. So, it has definitely affected my body in that way... once I log in, it can just sit there for hours."

In such cases, engagement extended beyond cognitive or emotional involvement and affected participants' sense of balance. Instead of feeling restorative, participation became physically and mentally taxing. These experiences illustrate how sustained involvement could, over time, reduce well-being when boundaries were not maintained.

Summary: Collectively, participants described well-being as influenced by the broader conditions and experiences within OBCs. Supportive interactions and aligned expectations could enhance emotional balance, while sustained exposure to strain or unmet expectations sometimes reduced well-being. These accounts

demonstrate that well-being was not a fixed outcome but fluctuated in response to the quality and context of OBC experiences.

4.4.3. Antecedents of Engagement and Well-Being

Across interviews, participants described a range of underlying conditions that shaped how they experienced OBC participation. These conditions operated prior to and alongside engagement itself, influencing whether involvement felt open and supportive or pressured and demanding. Some factors created a sense of psychological safety and comfort, while others introduced cognitive strain, scepticism or tension. They were not isolated incidents, instead, these antecedent conditions formed the broader context within which engagement and well-being unfolded. The following sections describe these key conditions as they emerged from participants' accounts.

Subtheme 1: Psychological Safety in Online Brand Communities

This theme captures how participants described feeling comfortable, accepted, safe and emotionally secure within OBCs. These experiences centred on being able to ask questions, share views, share personal information and interact with others without fear of judgement. Feeling safe shaped how participants approached the community and influenced the extent to which they felt comfortable participating over time.

Participants did not describe these feelings as fixed or guaranteed. Instead, comfort and connection developed gradually through interaction and could strengthen or weaken depending on how others responded and how the community was managed. When participants felt accepted, they were more willing to engage and contribute.

"It was like a safe space… where we could all talk and help each other."

- (Renee, 28)

When this sense of safety was disrupted, participation became more cautious and restrained.

"You post a picture and somebody says, no, this is ugly… you would be very upset about it… it would put me off, yes. I would withdraw."

- (Charlotte, 47)

"If it becomes a toxic community… it will make me rethink how I engage with the community."

- (Sam, 32)

These accounts show that psychological safety functioned as a foundational condition shaping how participants experienced engagement. When the community felt welcoming and non-judgemental, participants were more willing to participate openly. When this sense of safety weakened, they became more cautious or reduced their involvement.

Subtheme 2: Information Overload

Many participants described feeling overwhelmed by the volume and speed of content within OBCs. Continuous posts, lengthy discussions, numerous reviews, and frequent notifications made it difficult to process information meaningfully. The accumulation of content sometimes created confusion.

Participants noted that constant messaging and updates from the brand, conflicting advice or an excess of options increased cognitive strain. Instead of feeling informed, they described feeling mentally fatigued or unsure about decisions.

"As sometimes there's too much information to consume, and then you blank out and then you don't know what to do with so much information… I think people take a break. If they not completely disengage… I will digital detox."

- (Sia, 35)

In response, some participants reduced how carefully they read discussions, avoided certain threads, or took breaks from the community altogether. These adjustments reflected attempts to manage cognitive fatigue and protect mental energy.

Subtheme 3: Brand Wastefulness

Beyond information overload, participants described feeling strain from persistent activity from the brand to consume more. Frequent notifications, product launches, and sales-oriented posts sometimes created a sense of pressure

to engage or consume. For some, this pressure conflicted with their expectations of the brand. When promotional strategies appeared excessive or inconsistent with the brand's stated values, participants described feelings of scepticism or frustration and not enthusiasm.

"They are trying to direct the consumption… they are like forcing their customers to buy more. As well as their sham of going carbon neutral also kind of and be seen here. So, it's like they are sort of cheating their customer two ways."

- (Arthur, 24)

Participants interpreted such practices as wasteful or manipulative. Instead of increasing excitement, they reported feeling fatigued by repeated consumption cues. In response, some ignored promotional posts or limited their interaction with brand-led content.

Subtheme 4: Privacy Concerns

Some participants expressed unease about how their data or personal information might be used within the community. Concerns about visibility, data security or lack of control over shared content reduced feelings of comfort and trust. When privacy felt uncertain, participants reported becoming more cautious about what they posted. In some cases, they avoided sharing personal details or limited their participation altogether due to perceived risks.

"If confidential information is leaked… all those details that you needed to… personal details and stuff like that. I think if anything like that happens, then it kind of affects me in a very bad way, because you don't know what another person

could use that information for. So, I think that could have a big impact. Cause I post a lot of stuff. I post lot of photos and stuff like that. So that might be harmful."

- (Stacey, 22)

These concerns altered how secure engagement felt within the community environment and shaped participants' willingness to participate openly.

Subtheme 5: Value Incongruity

Strain was particularly evident when participants perceived a mismatch between their personal values and brand actions. Several described becoming uncomfortable when organisational practices conflicted with what they expected from the brand.

"They use local suppliers. If they start importing more, then I don't like imports when things are available in our country. Why should we import? … I will find out some other local supplier."

- (Raj, 76)

Such value misalignment created tension and scepticism. When participants felt that brand behaviour contradicted ethical standards or fairness, their sense of comfort within the community weakened.

Summary: Taken together, these antecedent conditions illustrate how participation in OBCs was embedded within broader contextual influences. Psychological safety created the foundation for open interaction and comfort,

whereas information overload, brand wastefulness, privacy concerns and value incongruity introduced varying degrees of cognitive and emotional strain. While these conditions did not automatically determine outcomes, they shaped how participants interpreted their experiences and how manageable engagement felt over time. As such, they formed the groundwork from which later identity-based and strain-based processes emerged.

4.4.4. Mediating Mechanisms

While antecedent conditions shaped the broader context of participation, the analysis also revealed key processes through which these conditions translated into different forms of engagement and well-being outcomes. Two distinct but related pathways emerged from participants' accounts. In some cases, supportive experiences fostered a stronger sense of identification and personal connection with the community and brand. In other cases, sustained demands and pressures contributed to emotional exhaustion, which in turn altered how participants interpreted subsequent brand interactions. The following sections describe these mediating processes as they unfolded in participants' experiences.

Subtheme 1: Self-Brand Connection

Beyond participation and emotional involvement, some participants described a deeper process in which engagement became integrated with their sense of self.

Over time, interaction within the community and repeated positive experiences led to a stronger identification with both the OBC and the brand itself.

Recognition and validation played an important role in this process. When contributions were acknowledged or relied upon, participants described feeling affirmed in their role within the community. As Scott, 30 reflected:

"It was a feeling… kind of achievement… the joy of validation."

Such experiences reinforced how individuals perceived themselves within the community environment.

However, self-brand connection extended beyond momentary validation. Several participants described a gradual development of belonging and alignment. Engagement began to feel personally meaningful and not purely functional. Charlotte explained:

"I feel strong affinity towards it… I wouldn't have any motivation to engage otherwise."

Similarly, Rex described how this connection strengthened over time:

"It has developed over many years. So that is a strong connect."

In these accounts, connection was not limited to enjoyment or activity. Instead, involvement became embedded within participants' understanding of self.

Engagement reflected alignment and ongoing identification with the platform and brand. As Rex further noted:

"It is not just for the sake of the gaming… it is about the wider engagement with the community and the sense of belonging."

Together, these narratives illustrate how ongoing interaction and positive experiences strengthened the perceived connection between participants and the brand-related community. Self-brand connection emerged as a deeper form of attachment in which involvement became personally meaningful and integrated into how participants understood themselves in relation to the brand.

Subtheme 2: Emotional Exhaustion

Alongside periods of strong involvement, participants described moments where engagement became difficult to manage. Spending longer than intended on the platform or responding to frequent notifications sometimes created tension with everyday responsibilities.

During these periods, engagement shifted from feeling absorbing to feeling tiring. Participants described losing track of time or feeling mentally overloaded. Instead of feeling energised, they became aware that the community was consuming more time or emotional energy than they intended. Several participants described feeling psychologically pressured by the volume of notifications and sales-driven messaging.

“I think that a lot of information and notifications just makes you nervous. It makes you feel like you're missing out. It makes you feel like you need to constantly keep buying things… it gives you this false idea that oh, there's a sale and the urgency of like a sale and then missing out.”

- Rachel, 26

Similarly, others described difficulty disengaging once logged in:

“I lose a sense of time… I keep scrolling to no end.”

- (Renee, 28)

As these patterns repeated over time, strain accumulated. Participants spoke about feeling mentally tired or emotionally drained after extended involvement in the community environment.

“The online community has me sort of slip into that space… it can lead to just feeling quite tired mentally, and emotionally… I think it can get quite draining. It can feel quite negative as well.”

- (Tiana, 25)

For some, emotional exhaustion appeared as a cycle instead of a single episode. Yaz, 23 described feeling burnt out and wanting to withdraw completely:

“I just want to throw my phone away and not look at it for a while… If I feel burnt out with shopping, I can’t shop for a while… but as soon as I go back on the app, I’m still obsessively scrolling… I just want to put my phone away and be isolated from the experience.”

This account illustrates how exhaustion did not always lead to permanent disengagement. Instead, participants described oscillating between stepping away

and returning, reflecting difficulty in regulating their involvement once fatigue had set in.

In response to emotional strain, many adjusted their behaviour by reducing participation, disabling notifications or distancing themselves from particular sections of the OBC or brand content. These actions were rarely described as definitive exits, but as attempts to restore balance and protect personal well-being.

Subtheme 3: Negative Brand Experience

Participants described instances where their overall perception of a brand shifted following unsatisfactory interactions. In some cases, dissatisfaction emerged gradually through repeated frustrations. Charlotte described how a customer service encounter altered her long-standing positive perception of a brand she had previously considered herself loyal to:

"I have been a very loyal customer… but recently their service has been very disappointing… I was annoyed… and over time my opinion… is going down rapidly. So, from having been very loyal… and now quite negative about them."

Here, dissatisfaction did not stem from a single mistake alone, but from how the interaction was experienced and interpreted. The incident contributed to a broader reassessment of the brand.

In other cases, negative experiences marked more decisive turning points. Renee reflected on a service failure that followed years of loyalty:

"After years and years of being a loyal customer… the product bought was also fairly expensive and getting no help from customer service just totally put me off. I haven't been there in years. I probably may never go there again."

In this account, dissatisfaction reshaped the relationship entirely, leading to long-term withdrawal.

Participants, like Archie or Sagar also described feeling "*disappointed*" or "*dejected*" when expectations were not met. When such experiences occurred alongside earlier strain or frustration, they appeared to carry greater weight. Instead of treating issues as isolated, participants evaluated them within the context of their broader history with the brand.

Negative brand experience therefore reflected a shift in perception, where frustration accumulated and loyalty became more fragile. For some, this resulted in distancing or disengagement; for others, it altered how they evaluated future interactions.

Summary: Thus, the analysis suggests that engagement outcomes were shaped not only by external conditions, but by the internal processes through which

participants interpreted their experiences. For some, repeated positive interactions and affirmation strengthened identification with the brand-related community, embedding participation within their sense of self. For others, sustained cognitive and emotional demands accumulated over time, leading to exhaustion and more critical evaluations of the brand. Negative brand experiences were often intensified when fatigue was already present, reflecting how earlier strain shaped later interpretation.

Together, these mediating processes illustrate how engagement evolved through distinct but interconnected pathways. Participation could move in the direction of deeper personal connection or toward emotional depletion and dissatisfaction, depending on how experiences were accumulated and managed over time.

4.5. Integrative Theoretical Model

The qualitative analysis culminated in the development of an integrative process model that explains how engagement and well-being outcomes emerge within OBCs. Participation did not unfold in a uniform or linear manner, instead, it was shaped by underlying conditions and internal processes that redirected experiences over time.

The findings indicate that engagement and well-being were influenced by a set of antecedent conditions, including psychological safety, information overload, perceived brand wastefulness, privacy concerns and value incongruity. These conditions did not directly determine outcomes. Instead, they operated through two central mediating mechanisms.

The first pathway reflected an identity-oriented process. When community interactions were supportive and affirming, participants developed a stronger sense of self-brand connection. Through recognition, belonging and alignment, engagement became personally meaningful and integrated into participants' understanding of themselves in relation to the brand. This process reinforced sustained and active engagement.

The second pathway reflected a strain-oriented process. When participation involved sustained cognitive demands, commercial pressure, privacy concerns or repeated frustrations, participants described emotional exhaustion. Once fatigue had accumulated, dissatisfaction with the brand was more likely to intensify, leading to negative brand experiences and in some cases, withdrawal or reduced participation.

Importantly, these processes did not operate in isolation. Participants frequently described movement between reinforcing and straining experiences. Positive and demanding elements could coexist, and engagement evolved depending on how these experiences accumulated and were interpreted over time. The resulting theoretical model therefore reflects a dynamic system in which identity reinforcement and strain-related depletion shape engagement and well-being through distinct but interconnected cycles. This integrative model provides the conceptual bridge to the framework developed in the following chapter.

4.5.1. Overview of the Model

The central insight of the model is that *engagement in OBCs is best understood as a negotiated process shaped by two recurring pathways* through which underlying conditions are experienced and interpreted.

The first pathway reflects **an identity-oriented process.** When participants experienced psychological safety and positive affirmation within the community, engagement fostered a stronger sense of connection with the brand-related environment. Over time, recognition and meaningful interaction contributed to self-brand connection, reinforcing continued engagement and positive well-being outcomes.

The second pathway reflects **a strain-oriented process.** When participation involved persistent overload, brand wastefulness, privacy concerns or value misalignment, emotional demands accumulated. Prolonged exposure to these conditions contributed to emotional exhaustion, which in turn amplified dissatisfaction and negative brand experiences.

These pathways were not fixed or mutually exclusive. Participants moved between reinforcing and straining experiences depending on context, expectations, and emotional capacity. Engagement therefore evolved over time as individuals adjusted their involvement in response to both supportive and demanding conditions within the community environment.

4.5.1.1. The Identity-Oriented Pathway

The identity-oriented pathway describes how supportive conditions within OBCs contributed to a strengthening of self-brand connection over time. When participants experienced psychological safety, positive interaction, and affirmation within the community, engagement began to take on deeper personal meaning.

Feeling able to interact without fear of judgement provided the foundation for open participation. As participants received recognition for their contributions

and developed familiarity within the community, engagement moved beyond functional information exchange. Instead, involvement gradually became embedded in how individuals understood themselves in relation to the brand-related community.

This process reflected more than enjoyment or activity. Through repeated positive interaction, participants described developing a stronger sense of connection and identification with the brand environment. Engagement became internally reinforced: the more individuals felt aligned and affirmed, the more participation felt natural and worthwhile.

Over time, this pathway supported sustained engagement and contributed positively to well-being. Identity reinforcement acted as a stabilising force, encouraging continued involvement and deeper personal commitment.

4.5.1.2. The Strain-Oriented Pathway

In contrast, the strain-oriented pathway illustrates how demanding conditions within OBCs contributed to emotional exhaustion and heightened dissatisfaction. When participants encountered persistent information overload, brand wastefulness, privacy concerns or value misalignment, cognitive and emotional demands accumulated.

As these demands intensified, participants described feeling mentally drained, fatigued or less in control of their participation. Emotional exhaustion altered how subsequent brand-related events were interpreted. Incidents that might otherwise have been tolerated were experienced more negatively when individuals were already depleted.

In this context, dissatisfaction with the brand became more pronounced. Negative service encounters or perceived inconsistencies were not viewed in isolation but assessed against prior strain. For some, this led to distancing or withdrawal; for others, it resulted in more cautious or critical engagement.

This pathway illustrates how sustained demands can shift participation from reinforcement toward depletion. Instead of strengthening identification, experiences accumulated in ways that reduced enthusiasm and prompted efforts to protect personal well-being.

4.5.1.3. Interactions Between the Two Pathways

The analysis also indicated that the identity-oriented and strain-oriented pathways did not operate in isolation. The participants described movement and interaction between these processes over time.

In some cases, a strong sense of self-brand connection appeared to moderate the impact of demanding experiences. When individuals felt aligned and invested in the brand-related community, they were often more tolerant of occasional overload or minor dissatisfaction. Strain did not immediately disrupt engagement when identification remained strong.

However, sustained emotional exhaustion sometimes weakened this connection. Repeated frustration, unmet expectations or prolonged fatigue gradually altered how participants perceived their relationship with the brand. Over time, strain-based experiences could diminish earlier feelings of alignment and belonging.

The pattern of engagement therefore depended on how these processes accumulated and interacted. Some participants remained primarily identity-oriented, others oscillated between reinforcement and strain, and some gradually shifted toward more cautious or reduced involvement. Engagement and well-being were shaped by this ongoing balance and not by a single pathway alone.

4.5.1.4. The Core Negotiation Process

Across the analysis, engagement emerged as an ongoing process of negotiation. Participants did not describe their involvement in OBCs as automatic or stable.

Instead, they continually assessed how their experiences felt and adjusted their participation accordingly.

This negotiation unfolded between reinforcing and straining forces. When interactions fostered connection and affirmation, engagement deepened and felt personally meaningful. When demands accumulated through overload or dissatisfaction, participants reassessed their involvement and adjusted their boundaries. These forces were rarely experienced in isolation; instead, they interacted over time within the same engagement journey.

Participants described actively regulating their engagement in response to these conditions. At times, they chose to become more involved and contribute more frequently. At other times, they reduced exposure, limited participation or created emotional distance to protect their well-being. These adjustments reflected an ongoing evaluation of whether participation remained worthwhile, manageable and aligned with personal expectations.

The patterns that emerged varied across individuals. For some, identity-oriented experiences reinforced continued engagement. For others, sustained strain gradually shifted participation toward caution or withdrawal. Engagement and well-being were therefore shaped by how individuals navigated these interacting

processes over time. This negotiated dynamic provides the conceptual foundation for the framework examined in the following chapter.

4.6. Summary

The integrative analysis demonstrated that engagement within OBCs unfolded through two interconnected processes operating through identity reinforcement and strain accumulation. One process supports engagement by building feelings of connection and identity within the community. The other introduces strain through pressure, disappointment or overload, leading participants to pull back or protect their boundaries. Participants moved between these processes over time. How they balanced supportive experiences against demanding ones helps explain why engagement differed across individuals, and why levels of involvement, emotional investment and participation changed instead of remaining stable.

4.6.1. Conceptual Constructs Emerging from the Straussian Grounded Analysis

This section summarises the key constructs that emerged from the SGT analysis. Instead of abstract variables, they represent patterned experiences repeatedly described across interviews.

Table 26: Conceptual Constructs Emerging from the Straussian Grounded Analysis

Model Position	Construct	Grounded Description	Illustrative Quote
Antecedent Conditions	**Psychological Safety**	Feeling able to participate, ask questions, and express views without fear of judgement within the OBC.	*"It was like a safe space… where we could all talk and help each other."* (Renee, 28)
	Information Overload	Exposure to excessive, fast-moving, or repetitive content that made information difficult to process and created cognitive strain.	*"It is too much information… with that overload it makes me tired."* (Rachel, 26)
	Perceived Brand Wastefulness	Perception that brand communication or practices encouraged unnecessary or excessive consumption.	*"When new product comes, the older ones magically get slow."* (Adi, 19)
	Privacy Concerns	Unease about data security, visibility of personal content and loss of control over shared information.	*"We have to be very careful… every transaction."* (Raj, 76)
	Value Incongruity	Perceived mismatch between personal values and brand philosophy or actions.	*"If I don't like their philosophy, I wouldn't engage. Simple."* (Raj, 76)
Mediating Experience	**Self-Brand Connection**	Perceived overlap between the self and the brand/community, reflected in belonging, identification and sustained alignment.	*"It has developed over many years. So that is a strong connect."* (Rex, 34)
	Emotional Exhaustion	Mental and emotional depletion resulting from sustained overload, pressure or demanding engagement conditions.	*"It can get quite draining… mentally and emotionally."* (Tiana, 25)
	Negative Brand Experience	Dissatisfaction or disappointment that altered perceptions of the brand or reshaped loyalty.	*"I just felt put off… I stopped associating with them."* (Yaz, 23)
Engagement Outcome	**Cognitive Engagement**	Active attention, information seeking and evaluation within the community environment.	*"Looking at tips and tricks… documentation… updates."* (Sam, 32)
	Affective Engagement	Emotional involvement, enthusiasm, passion or emotional responsiveness to participation.	*"I feel very passionately about it."* (Charlotte, 47)
	Behavioural Engagement	Observable participation such as posting, reviewing, responding, tagging, attending events or contributing content.	*"I tag some friends… review the products… answering questions."* (Rachel, 26)
Well-Being Outcome	**Consumer Well-Being**	Perceived positive or negative effects of OBC participation on psychological balance, routines and health.	*"It affects my health… being awake at night isn't healthy."* (Renee, 28)

Participants identified recurring antecedent conditions, mediating experiences, and engagement and well-being outcomes. These constructs were refined during selective and theoretical coding and form the foundation of the conceptual model tested in the quantitative phase. Table 26 provides a concise overview of each construct, its grounded meaning, and a representative participant quote.

Linking Constructs to the Conceptual Model

The SGT analysis revealed a structured pattern in how participants described their experiences within OBCs. Antecedent conditions, including information overload, value incongruity, privacy concerns, perceived brand wastefulness and psychological safety, shaped participants' experiences of emotional exhaustion, negative brand experiences and self-brand connection. These mediating processes illustrate how external conditions were internally interpreted before influencing engagement behaviours and well-being outcomes. These recurring relational patterns directly informed the structure of the conceptual model subsequently formalised and tested in the quantitative phase. The proposed pathways reflect how participants described the buildup, intensification and consequences of engagement within OBCs over time.

Although the qualitative analysis initially generated a wide range of themes, the model was later refined to ensure empirical alignment and analytical focus. The

final model concentrates on a core set of antecedents, mediators, and outcomes that best captured the recurring processes identified across accounts. This refinement did not remove key insights, but organised related experiences under constructs that could be meaningfully used. Chapter 5 builds directly on this grounded structure by formally developing the constructs and proposing relationships quantitatively, which are subsequently tested in Chapter 6.

Chapter 5: Theoretical Underpinning and Conceptual Framework

5.1. Introduction

Building on the findings from the qualitative phase, this chapter develops the theoretical foundation and conceptual framework for the study. The analysis is guided by the S-O-R paradigm (Mehrabian & Russell, 1974), which provides a useful way of understanding how external cues influence behaviour through internal psychological processes. In simple terms, S-O-R suggests that stimuli do not shape behaviour directly, but work through the individual's internal state, which then leads to behavioural responses such as approach or avoidance (Mummalaneni, 2005; Vieira, 2013).

Although earlier applications of S-O-R focused more on deliberate and reflective processing, this view has been questioned in later work. Jacoby (2002), for example, argues that not all consumer responses are effortful or fully conscious, and that more immediate reactions also play an important role. This perspective aligns with dual-processing views (Strack & Deutsch, 2004) and is particularly relevant in digital contexts, where responses to online cues are often quick and intuitive (Bigné, Chatzipanagiotou & Ruiz, 2020). As a result, S-O-R could be considered a suitable framework for examining behaviour in OBCs.

This has been consistently shown across both offline and online settings (Donovan & Rossiter, 1982; Eroglu, Machleit & Davis, 2001; Richard & Chebat, 2016). Following this logic, the present study adopts a mediation perspective, where brand- and community-related stimuli are expected to influence engagement and well-being through underlying psychological mechanisms.

5.2. The Overarching Framework: S-O-R Paradigm

The S-O-R framework explains how environmental cues influence behaviour through internal psychological states, which then shape approach or avoidance responses. In its original form, the model focused mainly on affective reactions as the link between external stimuli and behavioural outcomes.

Jacoby (2002) points out that consumer responses are not always fully deliberate or effortful, and that many reactions occur with relatively little conscious processing. This broader view is consistent with dual-processing perspectives, which distinguish between more reflective and more automatic responses to stimuli (Strack & Deutsch, 2004).

In digital environments, individuals are often exposed to large amounts of information and tend to respond quickly, sometimes without extended evaluation. Research in online consumer behaviour suggests that such responses can be both

intuitive and immediate, and often not purely reflective (Bigné, Chatzipanagiotou & Ruiz, 2020).

Foundational studies help illustrate how this logic operates in consumption settings. In one of the earlier applications, Donovan and Rossiter (1982) examined how store atmospherics, such as music, scent, design and layout, influenced shoppers' emotional states, which were then linked to approach or avoidance behaviours. Building on this, Bitner (1992) introduced the idea of the servicescape, showing that features of the service environment can shape both cognitive and emotional responses, which in turn relate to satisfaction and behavioural intentions.

A similar pattern has been observed in online contexts. Eroglu et al. (2001), for example, suggest that elements of the online environment, such as website design or the level of clutter, can influence how consumers evaluate a site both cognitively and affectively, with implications for whether they continue interacting with it or choose to withdraw.

More recent research has extended the S-O-R framework to online community settings, where community cues and information environments shape internal reactions and engagement. Some studies have looked more closely at how these

processes unfold in online contexts. For instance, Bigné, Chatzipanagiotou & Ruiz (2020) use eye-tracking and configurational analysis to examine how online reviews function as stimuli. Their findings suggest that such cues can trigger both more deliberate and more immediate evaluative responses, which in turn relate to behavioural outcomes. Jeong, Kim, and Kim (2022) examine how personalised product recommendations and reward structures in online environments relate to users' emotional responses, and how these responses are associated with purchase behaviour.

Taken together, these studies show how the S-O-R framework has been used across different contexts, from physical retail to digital environments. Instead of being limited to a single setting, the model has been applied in a range of situations where external cues shape internal responses and, in turn, behaviour. This also supports the broader interpretation of S-O-R suggested by Jacoby (2002), where both more reflective and more immediate reactions are taken into account.

In this study, the same logic is applied to the context of OBCs. Here, brand- and community-related conditions, such as information overload, brand wastefulness, value incongruity, psychological safety and privacy concerns, are treated as stimuli. These are expected to influence internal psychological states, including

emotional exhaustion, negative brand experience and self-brand connection, which then shape outcomes in CE and CWB. Following this reasoning, the model is specified as a mediation process, where the effects of external conditions are carried through these internal states instead of operating directly. In this way, the S-O-R framework provides a clear and consistent lens for structuring the study.

5.3. Theoretical Underpinning of Each Relationship Cycle

Building on the S-O-R framework outlined above, this section develops the theoretical logic for each hypothesised pathway. In line with this approach, each independent variable is treated as a stimulus that influences internal psychological states, which then shape engagement and well-being outcomes.

To explain these internal processes more clearly, the discussion draws on COR theory as a supporting perspective. COR suggests that individuals seek to retain and protect valued resources, and that perceived or actual resource loss can shape how situations are experienced and responded to (Hobfoll, 1989). This perspective helps to explain the psychological mechanisms examined in this study. The remainder of this chapter proceeds construct by construct, showing how different brand- and community-related conditions are expected to influence CE and CWB through these underlying processes.

Consistent with the S-O-R framework and the full-mediation approach adopted in this study, the effects of the stimuli on outcomes are expected to operate through internal psychological processes and not directly. Two mechanisms are distinguished, these are referred to as the "strain mechanism" and the "identity mechanism," which capture different ways in which stimuli are processed and translated into responses.

1. **The strain mechanism** reflects how certain stimuli can place demands on individuals, particularly when they are experienced as taxing or difficult to manage. In the context of CE and CWB in OBCs, conditions such as information overload, value incongruity, perceived brand wastefulness or privacy concerns may require effort to process or cope with. Over time, this can draw on individuals' psychological resources, leading to emotional exhaustion. In turn, when individuals feel depleted, they may be more likely to interpret subsequent interactions negatively, increasing the likelihood of a negative brand experience and shaping engagement and well-being outcomes.

Here, internal states translate external conditions into responses. It also aligns with COR theory, which suggests that when resources are depleted, individuals become more sensitive to further demands and adjust their responses accordingly (Hobfoll, 1989). This general idea is also reflected in research on stress and coping in consumer contexts (Duhachek & Kelting, 2009).

2. **The identity mechanism** captures how some stimuli are interpreted in relation to the self. In the context of CE and CWB in OBCs, brand and community conditions can shape the extent to which individuals feel a sense of alignment or connection with the brand. When this sense of fit is stronger, customers are more likely to develop a stronger self-brand connection, which can support more positive engagement and well-being outcomes. When this connection is weaker, involvement with the brand may become more limited.

Within the S-O-R framework, this process reflects how external conditions are translated into internal relational states, which then guide responses. Self-brand connection is treated here as an organismic state that reflects the perceived alignment between the individual and the brand, influencing how attention, emotions and behaviour are directed towards it. This interpretation is broadly consistent with prior work on self-brand relationships, which highlights the role of perceived alignment in shaping consumer responses (Escalas & Bettman, 2003, 2005; Bhattacharya & Sen, 2003).

5.3.1. Emotional Exhaustion and Negative Brand Experience

Within the S-O-R framework, emotional exhaustion is treated as an internal organismic state that reflects the depletion of psychological resources under demanding conditions. When individuals are exposed to situations that require

sustained cognitive or emotional effort, their capacity to regulate responses can become strained over time. This can lead to a general state of fatigue, reduced tolerance and lower ability to process further demands.

From a COR perspective, this reflects a condition where individuals experience resource depletion, making them more sensitive to subsequent interactions (Hobfoll, 1989). When resources are reduced, individuals are less able to engage with new stimuli in a neutral or positive way.

As a result, emotional exhaustion can shape how subsequent brand or community interactions are interpreted. When individuals feel depleted, they may be more likely to evaluate these interactions negatively. In this study, this evaluative response is captured through negative brand experience, which reflects how a specific interaction is perceived. In this way, emotional exhaustion functions as the internal mechanism through which external conditions influence response-level appraisals, consistent with the S-O-R sequence.

Research on burnout is useful here in characterising emotional exhaustion as a state of depletion that arises under sustained demands (Maslach & Leiter, 1997; Maslach et al., 2001), but the causal logic of the relationship is grounded in the S-O-R process.

Although much of the early work on strain comes from occupational settings, the general idea of resource depletion has also been applied in consumer and digital contexts. In these settings, conditions such as information overload or technostress can place demands on individuals and contribute to feelings of strain (Eppler & Mengis, 2004; Ayyagari, Grover & Purvis, 2011). Similarly, privacy and security concerns in online environments have been linked to fatigue, often through the experience of emotional exhaustion (Sheng et al., 2023). There is also some evidence that when customers take on more active roles, for example during participation or co-creation, unclear expectations or role conflict can create additional pressure, which may reduce their willingness to stay engaged (Blut, Heirati & Schoefer, 2020).

In this study, the focus is placed on emotional exhaustion as the key organismic state. Other components often discussed in burnout research, such as cynicism or reduced accomplishment, are acknowledged but not included in the model (Maslach & Leiter, 1997; Maslach et al., 2001).

In this model, emotional exhaustion is treated as a general state reflecting the depletion of emotional and self-regulatory resources, and not a reaction to any single interaction (Maslach & Leiter, 1997). In contrast, negative brand experience refers to how a specific brand or community interaction is evaluated

at a given moment. Positioning emotional exhaustion as a broader state and negative brand experience as a more immediate appraisal helps clarify how the process unfolds. When individuals feel depleted, this can shape how they interpret subsequent interactions, making negative evaluations more likely. These evaluations then carry forward to influence engagement and well-being outcomes, consistent with the S-O-R sequence.

When demands continue over time, emotional and self-regulatory resources can become depleted, leading to emotional exhaustion. In this state, individuals tend to have less tolerance for additional demands and may find subsequent interactions more difficult or frustrating to deal with. As a result, they are more likely to interpret these encounters in a negative way (Maslach & Leiter, 1997; Maslach et al., 2001).

5.3.2. From Negative Brand Experience to Engagement and Well-Being

COR theory suggests that individuals try to retain and protect resources that they value, and that losses tend to have a stronger impact than gains (Hobfoll, 1989, 2001; Hobfoll et al., 2018). These resources can take different forms, including time, attention, emotional energy or aspects of the self that individuals want to maintain. When these resources are threatened or reduced, individuals are more likely to shift towards conserving what they have left. This often means limiting

further effort or involvement in order to avoid additional loss. Over time, repeated losses can accumulate and affect both how individuals function and how they feel within a given context (Hobfoll, 1989; Hobfoll et al., 2018).

In this study, negative brand experience reflects how interactions are perceived when they feel effortful or frustrating. From a COR perspective, such experiences are likely to reduce individuals' willingness to invest further effort, which can, over time, affect both engagement and CWB. In this model, emotional exhaustion increases the likelihood of a negative brand experience.

In this sense, COR does not explain how the appraisal itself is formed, but instead why negative evaluations are associated with reduced engagement and lower well-being.

5.3.3. Self-Brand Connection and Customer Responses

The identity mechanism focuses on how individuals interpret brand and community-related cues in relation to themselves. In OBCs, signals such as shared values or respectful interactions can shape whether individuals feel aligned with the brand. When this sense of alignment is present, individuals are more likely to feel connected to the brand. When it is absent, that connection may weaken.

Within the S-O-R framework, this reflects how external conditions are translated into internal relational states. Self-brand connection is treated here as an organismic state that captures the extent to which individuals feel a sense of fit with the brand, which then influences how they engage and respond within that context. This interpretation is consistent with prior work on self-brand relationships, which highlights the role of perceived alignment in shaping consumer responses (Escalas & Bettman, 2003, 2005).

Over time, repeated interactions can strengthen or weaken the connection individuals feel with a brand. When experiences are consistent and feel aligned, this connection tends to become more stable and continues to guide how individuals pay attention and engage. In contrast, when misalignment persists, for example through value incongruity or a lack of psychological safety, the connection may weaken. As this happens, individuals may gradually disengage from the brand or become less involved in the relationship (Burke & Stets, 2009; Stryker & Burke, 2000).

In this study, self-brand connection is treated as an internal state that reflects how closely individuals feel aligned with a brand. When brand or community conditions support this sense of alignment, for example through psychological safety, the connection tends to strengthen. When this happens, individuals are

more likely to stay involved with the brand and continue engaging with it over time. Within the S-O-R framework, self-brand connection represents the internal process through which these conditions shape responses. A stronger connection is expected to support engagement and contribute to well-being in the consumption context.

5.3.4. From Self-Brand Connection to Engagement and Well-Being

When individuals feel a strong connection with a brand, they are more likely to remain involved and continue engaging with it over time. This connection reflects a sense of alignment between the individual and the brand, which can shape how they respond within that context.

Within the S-O-R framework, self-brand connection represents an internal state that carries the effect of this alignment forward. When this connection is stronger, individuals are more likely to invest effort and remain engaged, and this can also contribute to a more positive experience within the interaction, supporting their sense of well-being. In contrast, when the connection is weaker, engagement may become more limited, and the experience may feel less positive.

5.4. Conceptual Framework

The model is grounded in the S-O-R framework, where brand- and community-related conditions are treated as stimuli that shape outcomes through internal psychological processes and not through direct effects. In this study, conditions such as information overload, brand wastefulness, value incongruity, privacy concerns and psychological safety are positioned as the stimulus layer, representing the external cues individuals encounter in the brand and community environment.

These stimuli are processed through internal states, which form the organism layer of the model. Two concurrent mechanisms are captured here. One reflects how ongoing demands can draw on emotional and self-regulatory resources, leading to emotional exhaustion and a greater likelihood of negative brand experiences. The other reflects how individuals relate to the brand and OBC in a more personal sense, where supportive conditions can strengthen self-brand connection. Together, these organismic states represent how external conditions are interpreted and experienced.

These internal mechanisms then shape responses, captured through CE and CWB. When experiences are more demanding and resource-draining, engagement may become more limited and well-being may decline. In contrast, when individuals

feel a stronger connection with the brand, they are more likely to remain engaged and report more positive experiences within the interaction.

Although these mechanisms are described separately, they operate at the same time within the S-O-R process. The model therefore captures how different internal states contribute to engagement and well-being outcomes, while recognising that individuals may experience these processes together and not in isolation. Figure 5 presents the structure of the model.

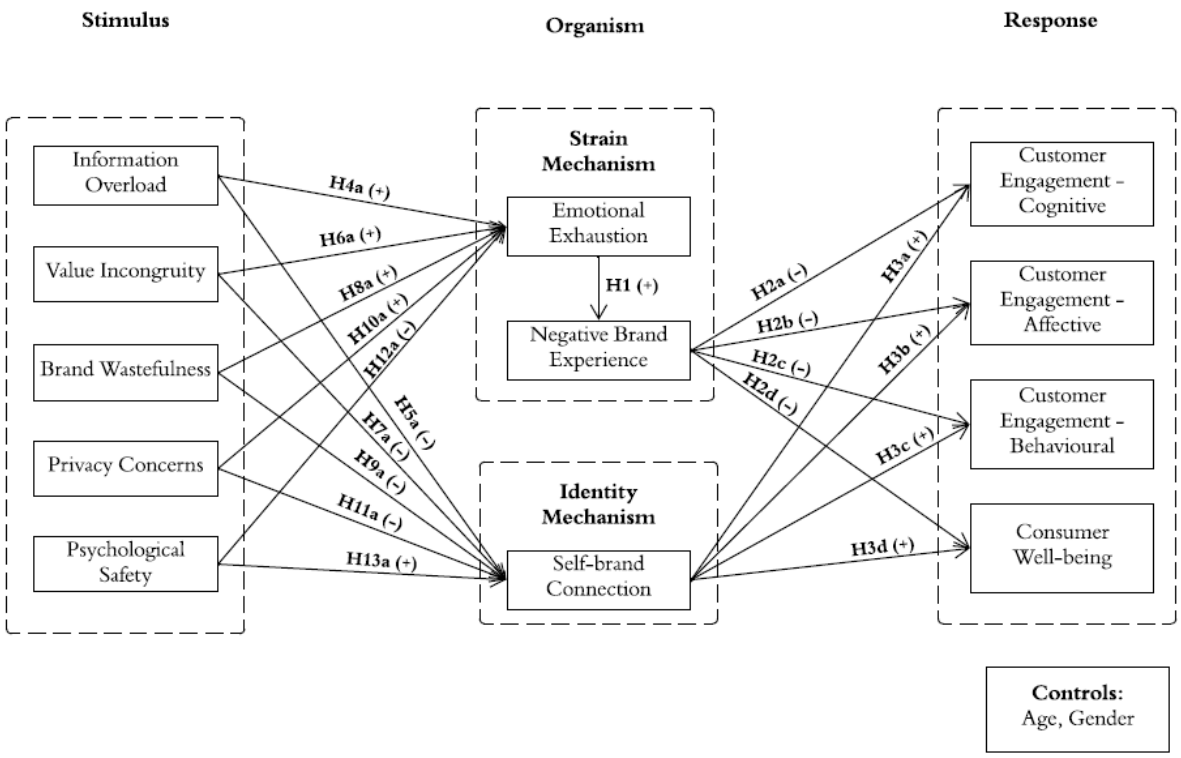


Figure 5: Conceptual framework.

Brand- and community-related stimuli influence CE (cognitive, affective, and behavioural) and CWB through internal psychological processes. The model captures two mechanisms: a strain process, where emotional exhaustion increases the likelihood of negative brand experience, and an identity process, where self-brand connection is strengthened. Direct effects from stimuli to outcomes are not specified.

5.4.1. Global Mediator-Outcome Hypotheses

Within the S-O-R framework, external brand and OBC conditions are understood to influence outcomes primarily through internal psychological processes. The strain mechanism is reflected in emotional exhaustion and its role in shaping more negative evaluations of brand experiences, while the identity-based mechanism is reflected in self-brand connection as a relational state. The following hypotheses focus on how these organismic states are associated with CE and CWB.

H1. Emotional Exhaustion to Negative Experience with the Brand

Emotional Exhaustion: Emotional exhaustion is treated in this study as a general capacity state, reflecting a sense of being emotionally overextended and drained, and not a reaction to any single encounter. This view is consistent with burnout research, which identifies emotional exhaustion as the central component of burnout and often the earliest to emerge (Maslach & Leiter, 1997; Maslach, Schaufeli & Leiter, 2001). It captures a state of depleted emotional resources that can shape how individuals respond to subsequent interactions (Maslach & Jackson, 1981).

Negative Brand Experience: Negative brand experience refers to the evaluation of a specific interaction with a brand or OBC as frustrating, or effortful.

Conceptually, it draws on appraisal theory, which focuses on how individuals interpret particular encounters and not broader attitudes (Lazarus, 1991). It is also consistent with research in service and consumption contexts that documents negative reactions during interactions, including frustration and perceived unfairness (Bitner, Booms & Tetreault, 1990; Tax, Brown & Chandrashekaran, 1998; Richins, 1997; Oliver, 1997). Negative brand experience captures the evaluation of a specific interaction.

Maslach, Schaufeli and Leiter (2001) summarise evidence showing that ongoing demands, when not matched with adequate recovery, are associated with higher levels of emotional exhaustion. This state can shape how subsequent interactions are interpreted. Related research also shows that demanding conditions are linked to strain outcomes, including anxiety and exhaustion, as well as less favourable functioning (LePine, Podsakoff and LePine, 2005).

Extending this, Podsakoff, LePine and LePine (2007) find that hindrance-type demands are associated with less favourable attitudes and greater withdrawal, which is consistent with a conservation response following strain. Although these studies focus on work settings, they support the broader logic linking demanding conditions to strain and withdrawal.

Similarly, Crawford, LePine and Rich (2010), using meta-analytic structural modelling, show that job demands are associated with higher burnout, while resources are linked to lower burnout. They also find that these effects depend on how demands are appraised. This evidence supports the view that demanding conditions can contribute to emotional exhaustion.

In a large MISQ study, Ayyagari, Grover and Purvis (2011) show that technology-related characteristics, including overload and privacy invasion, are associated with higher levels of strain. Their model indicates that ICT-driven demands can trigger strain responses such as fatigue and stress, suggesting that these demands may contribute to a depletion-like state consistent with emotional exhaustion.

Applying a stress-strain perspective to social networking sites, Maier et al. (2015) show that emotional exhaustion among content creators is associated with withdrawal behaviours, such as intentions to reduce or discontinue use. This pattern is consistent with a conservation response following strain.

Similarly, Sheng et al. (2023) find that factors such as information overload and privacy concerns are associated with higher emotional exhaustion, which in turn relates to social media fatigue. They describe fatigue as a negative state characterised by frustration or aversion toward the platform. Taken together, these

findings suggest that emotional exhaustion can shape how individuals evaluate their digital interactions.

In co-development contexts, Blut, Heirati and Schoefer (2020) show that placing customers in more active roles can generate role-related strain, which is associated with more negative feelings and lower perceived value of the participation experience. This suggests that when individuals experience strain, they may be more inclined to evaluate the interaction in a negative way.

Negative brand experience, by contrast, is located at the episode level and refers to the evaluation of a specific interaction as negative or effortful (Lazarus, 1991; Bitner, Booms & Tetreault, 1990; Tax, Brown & Chandrashekaran, 1998). Specifying emotional exhaustion as the state and negative brand experience as the evaluation preserves the S-O-R sequence, where a depleted state can shape how subsequent interactions are interpreted.

This ordering is consistent with evidence that sustained demands are associated with higher exhaustion, and that individuals experiencing exhaustion may have less capacity to deal with further demands and may evaluate interactions less favourably (Maslach & Leiter, 1997; Maslach et al., 2001; LePine, Podsakoff & LePine, 2005). In line with this reasoning, higher emotional exhaustion is

expected to be associated with more negative evaluations of subsequent brand or OBC interactions. Thus, it is hypothesised that:

H1: Emotional exhaustion is positively associated with more negative brand experience.

H2a-H2d. Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

As described earlier, negative brand experience refers to the evaluation of a specific brand or OBC interaction as negative or effortful (Lazarus, 1991; Bitner, Booms, & Tetreault, 1990; Tax, Brown, & Chandrashekaran, 1998; Richins, 1997; Oliver, 1997).

CE in this study is conceptualised across three facets: cognitive engagement, reflecting attention to brand-related content; affective engagement, reflecting positive emotional responses; and behavioural engagement, reflecting active participation (Hollebeek, 2011; Brodie et al., 2011). CWB reflects consumers' sense of comfort and satisfaction within the shopping context (Sirgy & Lee, 2008; Anderson et al., 2013).

Negative brand experience reflects the evaluation of an interaction as negative, which can shape how individuals respond to subsequent encounters. Such

evaluations can draw attention to the issue and may lead individuals to limit their involvement or reduce further engagement. In line with appraisal-based perspectives, when interactions are experienced negatively, individuals may be less inclined to engage and may also experience lower well-being within that context (Lazarus, 1991).

Empirical research shows that negative service experiences are associated with less constructive engagement and greater withdrawal. Studies on service failure and critical incidents indicate that perceptions of unfairness or negative emotional responses can reduce engagement with the brand (Bitner et al., 1990; Tax et al., 1998; Richins, 1997).

Engagement research also suggests that negative experiences are linked to lower levels of attention and reduced participation in brand-related activities (Brodie et al., 2011; Hollebeek, 2011; van Doorn et al., 2010; Dessart et al., 2016). Similarly, research in transformative service contexts indicates that negative service experiences are associated with lower CWB (Sirgy & Lee, 2008; Anderson et al., 2013).

Related work in co-creation settings shows that role-related strain can reduce the perceived value of the experience and lower willingness to continue contributing

(Blut, Heirati, and Schoefer, 2020). Taken together, these findings suggest that when customers evaluate an interaction negatively, they may reduce their engagement and experience lower well-being.

Verleye, Gemmel and Rangarajan (2014) examine how organisational support and service quality shape CE behaviours in a nursing-home context. Their findings show that these conditions influence engagement indirectly through customer affect, which functions as an internal state within the S-O-R framework. They also observe that different engagement behaviours may respond differently to the same internal state.

Santini et al. (2020) analyse a large body of studies on social media engagement and find that engagement is associated with internal evaluations such as satisfaction and affect. Engagement, in turn, is linked to favourable outcomes, including behavioural responses. They also report that these relationships can vary across contexts.

This evidence supports the view that engagement is shaped by internal evaluations. In this study, negative brand experience represents an encounter-level evaluation, and when interactions are evaluated negatively, engagement may be lower, with potential implications for CWB.

In the context of cognitive CE, negative brand experience may draw attention toward the issue and reduce the capacity for constructive processing, which is central to this facet of engagement (Hollebeek, 2011; Brodie et al., 2011). From a COR perspective, individuals may conserve their cognitive resources following a negative experience, which can result in lower involvement with brand-related content.

In terms of affective CE, negative evaluations may be associated with emotional responses such as frustration, which are not consistent with positive feelings toward the brand (Richins, 1997). From a COR perspective, such experiences may draw on emotional resources, which can reduce positive affect and weaken engagement.

In terms of behavioural CE, negative encounters may be associated with lower participation and a reduced willingness to contribute, while increasing the tendency to disengage from the interaction (van Doorn et al., 2010; Tax et al., 1998). From a COR perspective, discretionary participation requires time and effort, and following a negative experience, individuals may limit their involvement to conserve resources, resulting in lower observable engagement.

In terms of CWB, negative evaluations of an interaction may be associated with lower feelings of comfort and satisfaction within the shopping experience (Sirgy & Lee, 2008; Anderson et al., 2013). From a COR perspective, such experiences may draw on available resources, which can reduce momentary well-being.

Research in retail contexts also supports this pattern. El Hedhli, Chebat, and Sirgy (2013) conceptualise CWB as a multi-domain construct and show that favourable retail conditions are associated with higher well-being, which in turn relates to more positive evaluations and behavioural responses. Taken together, these findings suggest that when an interaction is evaluated negatively, CWB may decline, consistent with the S-O-R and COR logic of this study.

Using a large-scale consumer survey, Maggioni et al. (2019) show that consumers' decision-making styles are associated with CWB and shape how shopping experiences translate into well-being outcomes. This supports the view that internal orientations influence how interactions are evaluated and carried forward into CWB, which is consistent with the S-O-R and COR logic applied in this study.

Flacandji, Vlad, and Lunardo (2024) show that using a retailer's mobile app can enhance consumers' sense of competence, which is associated with higher CWB.

This provides further evidence that supportive features in the brand environment can contribute to well-being outcomes. By contrast, conditions that place pressure on consumers or create discomfort may be associated with lower CWB.

Consistent with COR, a negative brand experience can be interpreted as a loss or strain on resources, which may lead individuals to conserve their effort and involvement. This can reduce engagement with the brand and may also be associated with lower CWB. Therefore, consistent with the S-O-R framework and appraisal-based reasoning, it is hypothesised that:

H2a: Negative brand experience is negatively associated with cognitive customer engagement.

H2b: Negative brand experience is negatively associated with affective customer engagement.

Baldus, Voorhees, and Calantone (2015), developed and validated an engagement scale capturing members' motivation to continue interacting with a brand community. Their findings show that engagement is reflected in observable behaviours, including participation and continued involvement.

Within the S-O-R framework, negative brand experience represents the evaluation that precedes behavioural responses. From a COR perspective, when

individuals evaluate an interaction negatively, they may limit their discretionary effort, which can reduce participation and observable engagement (H2c).

The cognitive and affective facets of engagement, as conceptualised by Hollebeek (2011) and Dessart et al. (2016), are also expected to be lower under negative brand experience, for similar reasons (H2a–H2b), with implications for CWB (H2d).

H2c: Negative brand experience is negatively associated with behavioural customer engagement.
H2d: Negative brand experience is negatively associated with consumer well-being.

H3a-H3d. Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Self-brand connection reflects the extent to which a brand is integrated into an individual's self-concept (Escalas & Bettman, 2003, 2005; Thomson, MacInnis, & Park, 2005). Within the S-O-R framework, identity-relevant cues from the brand or OBC are processed at the organism level, where self-brand connection represents an internal state that shapes how individuals engage with the brand (Jacoby, 2002; Escalas & Bettman, 2003, 2005).

When individuals feel a stronger connection with a brand, they are more likely to engage with it, experience more positive responses, and remain involved over time (Escalas & Bettman, 2003, 2005; Thomson, MacInnis, & Park, 2005). From a COR perspective, such connections can be understood as supportive of continued investment, and not withdrawal.

Accordingly, higher self-brand connection is expected to be associated with higher cognitive, affective and behavioural engagement, as well as higher CWB (Hollebeek, 2011; Brodie et al., 2011; Dessart et al., 2016; Sirgy & Lee, 2008; El Hedhli, Chebat, & Sirgy, 2013).

Research shows that when brand meanings align with the self, individuals tend to engage more deeply with brand-related information and respond more positively. Self-referencing can increase the personal relevance of brand information and support stronger cognitive responses, while alignment with the self is also associated with more positive feelings toward the brand (Escalas & Bettman, 2003, 2005).

Brand attachment reflects the strength of this connection. Higher attachment has been linked to stronger advocacy and continued involvement with the brand It

has also been shown to predict behaviour beyond general attitudes, highlighting its importance for downstream outcomes (Thomson, MacInnis & Park, 2005).

Identity-based motivation in OBCs is closely linked to participation. Research shows that when consumers feel a sense of connection with a brand or its community, they are more likely to engage and develop favourable intentions, including advocacy (Algesheimer, Dholakia & Herrmann, 2005; Bagozzi & Dholakia, 2006).

Ethnographic work also illustrates how community members contribute in practice, for example by sharing knowledge or supporting others, which reflects the behavioural foundations of engagement in these settings (Schau, Muñiz & Arnould, 2009). Taken together, these findings suggest that stronger self-brand connection is associated with greater participation and behavioural engagement.

In retail environments, settings that align with the consumer's sense of self are associated with higher CWB, whereas misalignment is linked to less favourable outcomes (Sirgy & Lee, 2008; El Hedhli, Chebat & Sirgy, 2013). Accordingly, when self-brand connection reflects a sense of fit with the brand, it may support CWB during shopping experiences.

Having established the global mechanisms, where emotional exhaustion relates to more negative brand experiences and lower engagement and CWB, while self-brand connection is associated with higher engagement and well-being, the focus now turns to antecedent-specific predictions.

H3a: Self-brand connection is positively associated with cognitive customer engagement.
H3b: Self-brand connection is positively associated with affective customer engagement.
H3c: Self-brand connection is positively associated with behavioural customer engagement.
H3d: Self-brand connection is positively associated with consumer well-being.

5.4.2. Development of Antecedents-Mediator-Outcome Relationships

For each antecedent, including information overload, privacy concerns, value incongruity, perceived brand wastefulness and psychological safety, the expected direction of its association with the relevant mediators is first outlined. This is followed by the formulation of indirect-effect hypotheses through the strain mechanism, via emotional exhaustion and negative brand experience, and through the identity mechanism, via self-brand connection.

H4: Information Overload to Emotional Exhaustion-Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Information overload refers to the perception that the volume or complexity of brand or OBC content exceeds an individual's ability to process it, making interactions feel effortful. From a limited-capacity perspective, when information demands exceed available cognitive resources, individuals may begin to experience strain (Kahneman, 1973; Sweller, 1988). Within the S-O-R framework, such conditions are interpreted as taxing, as they require sustained attention and ongoing self-regulation. From a COR perspective, this can be understood as a potential drain on resources such as time, and energy, which may contribute to emotional exhaustion over time (Hobfoll, 1989; Maslach, Schaufeli & Leiter, 2001).

As emotional exhaustion increases, individuals may have less capacity to process subsequent interactions in a balanced way. This can shape how brand or OBC encounters are evaluated, making negative interpretations more likely. This pattern is consistent with appraisal-based perspectives, which suggest that depleted or strained states can influence how experiences are interpreted (Lazarus, 1991; Weiss & Cropanzano, 1996).

Ayyagari, Grover and Purvis (2011), using a large cross-sectional survey, show that technology-related characteristics such as overload and privacy invasion can act as stressors that are associated with higher levels of strain. In social

networking contexts, Maier et al. (2015) report a similar pattern, finding that different forms of overload are linked to emotional exhaustion, which in turn relates to intentions to reduce or discontinue use. These findings suggest that overload may contribute to feelings of exhaustion and reduced engagement in digital environments. More recent work by Sheng et al. (2023) also shows that various forms of overload and privacy-related concerns are associated with emotional exhaustion, which is linked to social media fatigue.

Excess information can place demands on attention and reduce the quality of processing, which may contribute to fatigue. In line with this reasoning, and with H1 and H2, information overload is expected to be positively associated with emotional exhaustion. As individuals become more emotionally exhausted, they may be more inclined to interpret subsequent brand or OBC encounters in a negative way, consistent with appraisal-based perspectives (Lazarus, 1991; Weiss & Cropanzano, 1996). Building on the relationships established earlier between the organismic states and the outcomes, the following hypothesis considers information overload as an antecedent of the strain mechanism.

H4a: Information overload is positively associated with emotional exhaustion.

H4b-H4e: Information overload is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via increased emotional exhaustion-negative brand experience.

Self-congruity theory suggests that consumers tend to respond more favourably to brands whose image aligns with their self-concept. This sense of alignment supports self-consistency and can strengthen attachment to the brand, encouraging more positive responses over time (Sirgy, 1982, 1986). The emphasis here is on the symbolic fit between brand meanings and the self, as higher congruity has been associated with stronger relational ties and outcomes such as loyalty (Kressmann et al., 2006). Related work also shows that self-referencing processes help individuals connect brand meanings to their sense of self, which can strengthen self-brand connection (Escalas & Bettman, 2003, 2005).

In the current model, self-brand connection reflects how this sense of identity fit is internalised. When brand meanings become unclear or difficult to process, this sense of alignment may weaken, which can reduce self-brand connection and, in turn, affect CE and CWB.

H5: Information Overload to Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Within the S-O-R framework, information overload, as a stimulus, can be experienced as taxing at the organism level, as it makes brand meanings harder to interpret and may disrupt how individuals relate this information to the self. In

such conditions, self-brand connection may weaken, which can shape subsequent engagement and CWB (Jacoby, 2002; Escalas & Bettman, 2003, 2005).

From an identity perspective, brand and OBC information provides symbolic cues that individuals use to interpret and express aspects of the self. When these cues are clear and aligned with the self-concept, self-brand connection is more likely to strengthen through self-referencing processes (Stryker & Burke, 2000; Sirgy, 1986; Escalas & Bettman, 2003, 2005).

When exposure becomes excessive and cognitively demanding, information overload can make it more difficult for individuals to make sense of brand-related content. As message volume or complexity increases, processing demands may exceed available cognitive resources, leading to confusion and making identity-related cues harder to interpret (Sweller, 1988; Eppler & Mengis, 2004; Walsh, Hennig-Thurau & Mitchell, 2007).

Recent research in digital environments also suggests that different forms of overload can combine into a broader sense of strain, which has been linked to weaker relationship quality and lower loyalty intentions (Lin & Wang, 2023). By contrast, when information is easier to process and more clearly presented, individuals are more likely to engage with it meaningfully. For instance, higher

information quality and system usability have been associated with stronger engagement in OBCs, partly because they support more favourable internal evaluations (Islam & Rahman, 2017).

Stronger self-brand connection has been linked to deeper engagement with brand-related content and more favourable behavioural responses, including participation and advocacy (Thomson, MacInnis, & Park, 2005; Algesheimer, Dholakia, & Herrmann, 2005; Dessart, Veloutsou, & Morgan-Thomas, 2016). There is also evidence that identity-consistent retail environments are associated with higher CWB, particularly through more positive affective experiences (El Hedhli, Chebat, & Sirgy, 2013).

For example, Algesheimer, Dholakia, and Herrmann (2005) show that identification with a brand community encourages participation and advocacy, although they also note that strong normative pressure can reduce engagement.

Similarly, Rabbanee et al. (2020), across 2 Facebook brand-page studies, find that self-congruity is associated with brand attachment, which in turn relates to behaviours such as liking, sharing, commenting and helping. They also show that self-extension strengthens the relationship between self-congruity and attachment.

Building on this, a weaker self-brand connection is expected to be associated with lower cognitive, affective and behavioural engagement, as identity-based motives play an important role in sustained participation (Brodie et al., 2011). It may also be linked to lower CWB, as self-brand congruence has been associated with more positive affect and satisfaction (Malär et al., 2011). The following hypotheses build on the relationships established earlier between the organismic states and the outcome variables.

H5a: Information overload is negatively associated with self-brand connection.

H5b-H5e: Information overload is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via reduced self-brand connection.

Taken together, these mechanisms show that information overload operates through more than one internal process. It can place demands on cognitive and self-regulatory resources, which may contribute to emotional exhaustion and shape how subsequent interactions are evaluated, often in a more negative way. In parallel, overload can make brand meanings harder to interpret, which may weaken self-brand connection and reduce the motivation to engage.

Considering these mechanisms together highlights the different ways in which information overload can influence both CE and CWB. The same logic is applied

next to value incongruity, followed by perceived brand wastefulness, privacy concerns, and psychological safety.

H6: Value Incongruity to Emotional Exhaustion-Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Value incongruity refers to the perceived mismatch between a customer's personal values and those expressed by a brand or community. In the context of person-organisation (P-O) fit, this reflects a lack of alignment, particularly in terms of shared values. Early work defines P-O fit as the compatibility that arises when individuals and organisations share key characteristics, such as values, or when one meets the needs of the other (Kristof, 1996). Building on this, research on person-environment (P-E) fit suggests that alignment between personal attributes and environmental characteristics is generally associated with more positive outcomes, whereas misfit tends to be linked to strain and less favourable reactions (Edwards, 2008).

Leiter and Maslach (1999) describe several areas of work life and show that mismatches in these areas are associated with a higher risk of burnout. Among these, value misalignment is identified as particularly important. Their later work (Leiter & Maslach, 2016) continues to highlight the role of value incongruity as

a factor linked to burnout. Empirical evidence also supports this pattern. For example, Siegall and McDonald (2004) find that lower value congruence among university faculty is associated with higher levels of burnout, which in turn relates to less favourable outcomes.

Within the S-O-R framework, value misfit can be experienced as taxing, as it requires ongoing self-regulation, for example through monitoring or adjusting one's responses. From a COR perspective, persistent misalignment may be seen as a threat to valued resources, such as a sense of meaning or coherence, which can contribute to emotional exhaustion over time. Research on fit has consistently linked value misfit to strain (Kristof, 1996; Edwards, 2008; Cable & DeRue, 2002), and related work shows that incongruent demands are associated with higher levels of strain and less favourable outcomes (LePine, Podsakoff, & LePine, 2005).

As emotional exhaustion increases, individuals may have less capacity to process subsequent interactions in a balanced way, which can shape how these encounters are evaluated. This is consistent with appraisal-based perspectives, where internal states influence how experiences are interpreted (Lazarus, 1991; Weiss & Cropanzano, 1996).

In line with this reasoning, value incongruity is expected to be associated with higher emotional exhaustion and more negative brand evaluations, which in turn relate to lower engagement and reduced well-being. Thus, it is hypothesised that:

H6a: Value incongruity is positively associated with emotional exhaustion.

H6b-H6e: Value incongruity is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via increased emotional exhaustion - negative brand experience.

H7: Value Incongruity to Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Within the S-O-R framework, value incongruity is treated as a stimulus, which may be interpreted as an identity misfit within the organism, thereby weakening self-brand connection and shaping subsequent responses in CE and CWB (Jacoby, 2002). Value incongruity reflects a perceived mismatch between a customer's personal values and those communicated by the brand or its community, making it more difficult for a stable sense of connection to develop. When brand values align with those of the customer, a stronger sense of connection is more likely to develop, whereas misalignment tends to weaken this connection (Sirgy, 1986; Escalas & Bettman, 2003, 2005; Bhattacharya & Sen, 2003).

When a brand's image aligns with how individuals see themselves, responses tend to be more favourable, whereas misalignment can make it harder to maintain a sense of consistency with the self (Sirgy, 1986). One way this connection develops is through self-referencing, where individuals relate brand meanings to their own experiences, which can strengthen self-brand connection (Escalas & Bettman, 2003, 2005). More recent research also suggests that alignment between brand values and personal values can support a sense of self-expansion and encourage more supportive responses toward the brand (Michel et al., 2022).

In a multi-brand survey, Stokburger-Sauer, Ratneshwar, and Sen (2012) find that greater alignment between the brand and the self is associated with stronger identification, which in turn relates to outcomes such as loyalty and word-of-mouth. Similarly, Elbedweihy et al. (2016) report that value congruence and perceived similarity with other customers are linked to stronger identification with the brand, both directly and through more favourable evaluations.

Taken together, these findings suggest that when value alignment is weaker, it may be more difficult for individuals to develop or maintain a sense of connection with the brand, which can reduce self-brand connection. As outlined under H3, a

weaker self-brand connection is expected to be associated with lower cognitive, affective and behavioural CE, as well as lower CWB.

H7a: Value incongruity is negatively associated with self-brand connection.

H7b-H7e: Value incongruity is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via reduced self-brand connection.

Taken together, these mechanisms show that value incongruity can influence outcomes through more than one internal process. It can create a sense of ongoing misfit that requires continued adjustment, which may contribute to emotional exhaustion and shape how subsequent interactions are evaluated, often in a more negative way. At the same time, value incongruity can make it harder for individuals to feel aligned with the brand or community, which may weaken self-brand connection and reduce the motivation to engage. Considering these mechanisms together highlights the different ways in which value incongruity can affect both CE and CWB.

H8: Perceived Brand Wastefulness to Emotional Exhaustion-Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

In this study, perceived brand wastefulness refers to the extent to which consumers perceive a brand as generating unnecessary or inefficient use of

resources. Recent scale development work conceptualises perceived brand wastefulness along these lines and shows that it is distinct from corporate social responsibility and ‘green’ perceptions, while being associated with less favourable consumer responses, including lower purchase likelihood, reduced willingness to pay a premium and more negative self-conscious emotions (Gain, Coote and Bonfrer, 2024). Within the S-O-R framework, this provides a brand-level stimulus that can shape subsequent internal responses.

Within the S-O-R framework, perceived brand wastefulness is treated as a stimulus, which may be interpreted as a violation of expected norms or efficiency, requiring additional cognitive and emotional effort. This can shape how subsequent interactions are evaluated, often in a more negative way. From a COR perspective, repeated exposure to such conditions may be seen as a drain on valued resources, such as time or money, which can contribute to emotional exhaustion over time.

Research on waste aversion supports this view, showing that cues related to waste can be psychologically uncomfortable and may require self-regulation, as individuals tend to respond negatively when waste becomes noticeable (Arkes, 1996; Bolton & Alba, 2012).

Perceived brand wastefulness has been associated with less favourable brand evaluations and negative self-conscious emotions such as guilt or shame, and it can evoke reactions similar to negative brand experiences (Gain, Coote & Bonfrer, 2024). Related research on corporate irresponsibility and perceived hypocrisy also shows that such violations can trigger negative moral responses and lead to avoidance or punitive reactions. These findings point to the role of negative affect in shaping how such situations are experienced, which aligns with the role of negative brand experience in this model (Wagner, Lutz and Weitz, 2009; Richins, 1997; Bougie, Pieters and Zeelenberg, 2003).

There is also evidence that perceived violations or value-related tensions are linked to strain, particularly emotional exhaustion. Work in the burnout and fit literature shows that misalignment can contribute to higher levels of exhaustion (Leiter & Maslach, 1999; Maslach & Leiter, 2016). In line with this, perceived brand wastefulness is expected to be positively associated with emotional exhaustion, and more exhausted individuals may be more inclined to evaluate subsequent brand encounters negatively.

In line with this reasoning, perceived brand wastefulness is expected to be associated with higher emotional exhaustion and more negative brand

evaluations, which in turn relate to lower engagement and reduced well-being. Thus, it is hypothesised that:

H8a: Perceived brand wastefulness is positively associated with emotional exhaustion.

H8b-H8e: Perceived brand wastefulness is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via increased emotional exhaustion-negative brand experience.

H9: Perceived Brand Wastefulness to Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Within the S-O-R framework, perceived brand wastefulness is treated as a stimulus that may be interpreted as a violation of consumers' values, which can weaken self-brand connection and shape subsequent responses in CE and CWB. Research on perceived brand wastefulness shows that such perceptions are associated with less favourable brand evaluations and negative self-conscious emotions, and that this construct is distinct from CSR-related perceptions, indicating a specific belief about the brand (Gain, Coote & Bonfrer, 2024).

When brand meanings align with personal values, individuals are more likely to develop a sense of connection, whereas misalignment can make this connection harder to sustain (Sirgy, 1986; Escalas & Bettman, 2003, 2005). Self-referencing

processes help individuals relate brand meanings to the self, which can strengthen self-brand connection, but cues that signal wastefulness may disrupt this process. More recent work also suggests that value alignment can support identity-related outcomes such as self-expansion, while incongruity tends to weaken them (Michel et al., 2022). Consumers who place greater importance on values related to sustainability may be more sensitive to such signals, which can intensify how these cues are interpreted (Haws, Winterich & Naylor, 2014).

Stronger self-brand connection has been associated with deeper engagement with brand-related content and more favourable responses, including participation in OBCs. There is also evidence that identity-consistent environments relate to higher CWB (Thomson, MacInnis, & Park, 2005; Algesheimer, Dholakia, & Herrmann, 2005; Dessart, Veloutsou, & Morgan-Thomas, 2016; El Hedhli, Chebat, & Sirgy, 2013). In line with this, reductions in self-brand connection are expected to be associated with lower cognitive, affective, and behavioural engagement, as well as lower CWB. Accordingly, perceived brand wastefulness is expected to be negatively associated with self-brand connection. Therefore,

H9a: Perceived brand wastefulness is negatively associated with self-brand connection.

H9b-H9e: Perceived brand wastefulness is indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via reduced self-brand connection.

H10: Privacy Concerns to Emotional Exhaustion-Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Privacy concerns refer to consumers' apprehensions about how their personal information is collected and used in interactions with brands and OBCs. These concerns are often discussed in terms of awareness and perceived control over personal data (Malhotra, Kim, & Agarwal, 2004; Smith, Dinev, & Xu, 2011).

Within the S-O-R framework, privacy concerns can be experienced as taxing, as they may require increased vigilance and ongoing self-regulation. From a COR perspective, such concerns may be seen as a potential loss of valued resources, such as a sense of control or autonomy, which can contribute to emotional exhaustion over time.

Research on privacy also suggests that when individuals perceive risks related to their personal information, they may become more cautious in how they engage, which can shape how subsequent interactions are evaluated. This is consistent with appraisal-based perspectives, where internal states influence how experiences are interpreted (Lazarus, 1991; Weiss & Cropanzano, 1996).

Research in technology and social media contexts shows that privacy-related concerns can be associated with strain and emotional exhaustion, along with less favourable evaluations and reduced engagement. For example, Ayyagari, Grover, and Purvis (2011) find that technology characteristics, including privacy invasion, are linked to a general strain factor. Similarly, Sheng et al. (2023) report that privacy concerns are associated with emotional exhaustion, which in turn relates to social media fatigue. Other work also shows that privacy concerns are linked to fatigue and avoidance in social media use (Dhir, et al., 2018).

In line with this reasoning, privacy concerns are expected to be positively associated with emotional exhaustion. As individuals become more emotionally exhausted, they may be more inclined to evaluate subsequent brand or OBC encounters in a negative way. Therefore, privacy concerns are expected to be associated with higher emotional exhaustion and more negative brand evaluations, which in turn relate to lower engagement and reduced well-being. Thus, it is hypothesised that:

H10a: Privacy concerns are positively associated with emotional exhaustion.

H10b-H10e: Privacy concerns are indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via increased emotional exhaustion-negative brand experience.

H11: Privacy Concerns to Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Within the S-O-R framework, privacy concerns are treated as a stimulus that may be interpreted as a threat to personal boundaries or safety, which can weaken self-brand connection and shape subsequent responses in CE and CWB (Jacoby, 2002). When individuals feel uncertain about how their personal information is handled, it may reduce their sense of trust and make it more difficult to maintain a sense of connection with the brand.

Research on privacy also suggests that perceived risks can affect how individuals engage in digital environments. For example, concerns about privacy have been associated with lower trust and reduced willingness to interact, which may weaken relational ties over time (Dinev & Hart, 2006; Krasnova et al., 2010).

Empirical research shows that privacy concerns are associated with lower trust, reduced self-disclosure and weaker participation in online environments, conditions that typically support the development of self-brand connection in OBCs (Malhotra, Kim, & Agarwal, 2004; Dinev & Hart, 2006; Krasnova, et al.,2010; Smith, Dinev, & Xu, 2011).

In parallel, identification with a brand or OBC has been linked to more supportive behaviours (Mills et al., 2022), and value alignment has been associated with stronger participation in these settings (Stokburger-Sauer, Ratneshwar, & Sen, 2012; Elbedweihy et al., 2016). Taken together, these findings suggest that higher privacy concerns may be associated with weaker self-brand connection, which in turn relates to lower engagement and reduced CWB.

Accordingly, privacy concerns are expected to be negatively associated with self-brand connection. In line with this reasoning, privacy concerns are expected to be associated with weaker self-brand connection, which in turn relates to lower engagement and reduced well-being. Thus, it is hypothesised that:

H11a: Privacy concerns are negatively associated with self-brand connection.

H11b-H11e: Privacy concerns are indirectly associated with (b) lower cognitive customer engagement, (c) lower affective customer engagement, (d) lower behavioural customer engagement, and (e) lower consumer well-being, via reduced self-brand connection.

H12: Psychological Safety to Emotional Exhaustion-Negative Brand Experience to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Psychological safety refers to an individual's sense that they can express themselves without fear of negative consequences (Kahn, 1990). It has also been described as a shared belief that a setting is safe for interpersonal risk-taking,

where individuals feel able to speak up or acknowledge mistakes without concern about negative reactions (Edmondson, 1999; Edmondson & Lei, 2014).

In OBCs, this relates to whether customers feel comfortable participating and engaging in interactions with others. Within the S-O-R framework, psychological safety can be experienced as a condition of low interpersonal threat, which may reduce the need for constant vigilance and self-regulation. From a COR perspective, it can be understood as a resource that helps individuals maintain their energy and recover from demands, which may lower emotional exhaustion and shape how subsequent interactions are evaluated. Research on engagement also suggests that psychological safety supports active involvement and not withdrawal in social settings (Kahn, 1990; May, Gilson & Harter, 2004).

Empirical research suggests that psychologically safe environments are associated with lower levels of strain and can help individuals cope more effectively with demands. For example, psychological safety has been linked to lower emotional exhaustion and may buffer the effects of demanding conditions (Dollard & Bakker, 2010). At the interaction level, psychological safety is associated with greater willingness to speak up, whereas silence has been linked to higher burnout (Sherf et al., 2021). It has also been associated with more constructive responses to mistakes, instead of defensive reactions (Frazier et al.,

2017; Carmeli & Gittell, 2009). Taken together, this evidence suggests that when psychological safety is higher, individuals may be less inclined to interpret encounters in a negative way.

Accordingly, higher psychological safety is expected to be associated with lower emotional exhaustion. As individuals experience less exhaustion, they may be less inclined to evaluate subsequent brand or community encounters in a negative way. In line with this reasoning, higher psychological safety is expected to be associated with lower emotional exhaustion and less negative brand evaluations, which in turn relate to higher engagement and improved well-being. Thus, it is hypothesised that:

H12a: Psychological safety is negatively associated with emotional exhaustion.

H12b-H12e: Psychological safety is indirectly associated with (b) higher cognitive customer engagement, (c) higher affective customer engagement, (d) higher behavioural customer engagement, and (e) higher consumer well-being, via reduced emotional exhaustion-negative brand experience.

H13: Psychological Safety to Self-Brand Connection to Customer Engagement (cognitive, affective, behavioural) and Consumer Well-Being

Within the S-O-R framework, psychological safety is treated as a stimulus that may be experienced as a sense of relational security, which can support self-brand connection and shape subsequent responses in CE and CWB. When individuals

feel safe in an environment, they are more likely to engage openly and maintain a sense of connection with others.

Foundational research shows that psychological safety is an important condition for engagement, and that safe environments support active participation and contribution (Kahn, 1990; Edmondson, 1999; Edmondson & Lei, 2014; May et al., 2004).

Empirical research suggests that psychologically safe community contexts are associated with continued participation and a greater willingness to share, which are conditions that support the development of connections with a brand or community. In virtual communities, psychological safety has also been linked to ongoing knowledge sharing, partly because users feel more comfortable relying on others and trusting the interaction environment (Zhang, Fang, Wei, & Chen, 2010).

In group service settings, customers who feel safe are more likely to contribute and report higher satisfaction (Kuppelwieser & Finsterwalder, 2011). Broader evidence also shows that psychological safety is associated with greater information sharing and more constructive participation (Frazier et al., 2017), and

that it tends to emerge in high-quality relationships that support open interaction (Carmeli & Gittell, 2009).

Taken together, these findings support the view that psychological safety can act as a relational resource that strengthens self-brand connection, with positive implications for engagement and well-being. Accordingly, psychological safety is expected to be positively associated with self-brand connection.

In line with this reasoning, higher psychological safety is expected to be associated with stronger self-brand connection, which in turn relates to higher engagement and improved well-being. Thus, it is hypothesised that:

H13a: Psychological safety is positively associated with self-brand connection.

H13b-H13e: Psychological safety is indirectly associated with (b) higher cognitive customer engagement, (c) higher affective customer engagement, (d) higher behavioural customer engagement, and (e) higher consumer well-being, via increased self-brand connection.

Across the 5 antecedents, namely information overload, value incongruity, perceived brand wastefulness, privacy concerns and psychological safety, the model operates through two organismic mechanisms. First, a strain-based mechanism, where demanding conditions such as overload, value misfit, wastefulness, or privacy concerns are experienced as taxing. Over time, this can

draw on available resources and contribute to emotional exhaustion, which in turn shapes how interactions are evaluated, often in a more negative way. These evaluations are associated with lower engagement and reduced CWB.

Second, an identity-based mechanism operates through changes in self-brand connection. Identity-relevant cues shape how closely individuals feel aligned with the brand. When there is misfit or perceived inconsistency, such as value incongruity, brand wastefulness, privacy concerns or information overload, this sense of connection may weaken. In contrast, psychological safety can support and strengthen this connection, which in turn influences engagement and CWB.

Considering both mechanisms together helps clarify how each antecedent operates, whether through resource-related strain, changes in perceived alignment, or a combination of both. It also highlights where interventions may be directed, either toward reducing demands or supporting a stronger sense of fit and safety.

5.5. Chapter Summary

Taken together, this chapter has developed the theoretical framework for the study by grounding the model in the S-O-R perspective, supported by COR theory. It has shown how brand- and community-related conditions can shape internal

psychological states, which in turn influence CE and CWB in OBCs. The chapter has also shown how these internal processes connect external conditions to engagement and well-being, providing a clear basis for the hypotheses developed in this study. The next chapter turns to the quantitative phase, where these relationships are examined using SEM.

Chapter 6: Quantitative Study

6.1. Introduction

Chapter 5 presented the conceptual framework and developed the research hypotheses based on the findings from the qualitative phase. This chapter now focuses on the quantitative stage of the study, including the research design, sampling, survey development, data collection and data analysis.

6.1.1. Quantitative Research Objectives

The quantitative phase was designed to test the conceptual framework developed in Chapter 5, drawing on the qualitative insights presented in Chapter 4. It focuses on examining the relationships between the key independent variables, namely, Information Overload, Value Incongruity, Brand Wastefulness, Privacy Concerns and Psychological Safety; and the main outcomes, namely CE and CWB. The objectives of this phase are as follows:

1. To validate the measurement model by assessing the reliability and validity of the constructs.
2. To test the hypothesised structural relationships among the independent, mediating and dependent variables using SEM.
3. To examine the mediating roles of Self-Brand Connection SBC, Emotional Exhaustion, and Negative Brand Experience.

These objectives directly address the RQs outlined in Chapter 1 and the hypotheses developed in Chapter 5, providing an empirical test of the proposed conceptual model. To achieve this, the research design, sampling strategy, data collection, and analysis procedures were carefully aligned, as discussed in the following sections.

6.1.2. Quantitative Research Design

Research design provides the framework for data collection and analysis (Bryman & Bell, 2015). In this study, a conclusive research design (Malhotra, 2019) was adopted for the quantitative phase, as the aim is to test the hypothesised relationships within the proposed conceptual model. This approach is appropriate given the study's focus on theory testing instead of exploration.

The qualitative phase (Chapter 4) adopted an exploratory design to identify key constructs relevant to the research problem. In contrast, the quantitative phase employs a conclusive design to test the hypotheses developed in the conceptual framework (Chapter 5).

A cross-sectional survey design was used, with data collected at a single point in time from a sample of OBCs members to test the proposed model. This approach is widely applied in consumer behaviour and service marketing research

(Rindfleisch et al., 2008). This cross-sectional design is appropriate for testing the proposed relationships within the conceptual model, including the mediating roles of Self-Brand Connection, Emotional Exhaustion, and Negative Brand Experience.

To analyse the hypothesised model, a combination of statistical techniques was employed. EFA was conducted in SPSS to assess construct dimensionality. This was followed by CFA and SEM in AMOS to validate the measurement model and test the fully mediated structural relationships proposed in the model. SEM was selected due to its ability to estimate multiple relationships simultaneously, incorporate latent variables and accommodate complex models, including second-order constructs (Kline, 2023; Hair et al., 2022). Descriptive and preliminary analyses were also conducted in SPSS. The specific context of the study is outlined in the following subsection.

6.1.3. Context of the study

The hypotheses were tested in the context of OBCs, which have become key platforms for both customer-brand and customer-customer interactions. Recent research shows a shift from examining community formation to exploring more complex relational processes within OBCs (Brodie et al., 2013). These environments are particularly suitable for studying how brand-related perceptions

shape consumer behaviour; for instance, brand-related evaluations have been found to influence engagement within OBCs (Hollebeek, Glynn and Brodie, 2014).

OBCs are also widely examined in research employing SEM to analyse relationships among antecedents, mediators and outcomes (Islam and Rahman, 2017; Dessart et al., 2015). This context is therefore well aligned with the focus of the present study, which seeks to explain CE and CWB. Given the diversity of OBCs, careful sample selection was necessary to ensure participants had sufficient experience with community interactions. The sampling procedure is outlined in the following section.

6.1.4. Sampling Procedure:

In this study, the target population comprised active participants in OBCs. As the aim was to test the hypothesised relationships among antecedents, mediators and outcomes, it was important to include individuals with sufficient experience of OBC participation to ensure informed responses based on actual interactions.

6.1.4.1. Selection of Sampling Units

The sampling unit comprised individuals who were members of OBCs and had actively engaged with them within the past 6 months. This criterion ensured that

participants had sufficient exposure to OBC dynamics. Participants were recruited via MTurk, a platform widely used in consumer and marketing research for providing diverse and reliable samples (Goodman & Paolacci, 2017; Hauser et al., 2019).

A non-probability, self-selected sampling approach was adopted. Participants were recruited on a voluntary basis via MTurk and were included only if they met predefined screening criteria, namely active membership and minimum 6 months of experience engaging in OBCs. This approach was appropriate given the need to access individuals with relevant experience of OBC participation.

A total of 278 usable responses were obtained, representing consumers across different demographic groups. The proposed model estimates 160 parameters, reflecting its complexity in terms of multiple constructs and structural relationships. This sample size was considered reasonable for SEM, as it exceeds commonly recommended minimum thresholds (e.g., around 200 cases for models of moderate complexity) and is further supported by satisfactory model fit (Kline, 2023; Hair et al., 2022).

6.1.4.2. Units of Analysis

The unit of analysis was the individual community member, as the conceptual framework focuses on consumer perceptions, such as information overload, value incongruity, brand wastefulness, privacy concerns and psychological safety, and their influence on key mediators (Self-Brand Connection, Emotional Exhaustion and Negative Brand Experience), as well as outcomes including CE and CWB.

6.1.5. Data Collection

Quantitative data were collected using a self-administered online survey (Appendix 9) designed and hosted on Qualtrics. The questionnaire comprised 65 items, each measured on a seven-point Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). This format was selected to enhance response variability and reliability and is widely supported for measuring latent psychological constructs (Preston & Colman, 2000). It also provides sufficient sensitivity to capture differences in participant perceptions, supporting subsequent analyses such as EFA, CFA, and SEM.

All measurement items were adapted from previously validated scales to ensure theoretical alignment and content validity. The questionnaire included constructs representing the study’s independent, mediating and dependent variables, each

grounded in established theoretical frameworks. A summary of the constructs, their sources and corresponding items is provided in Table 27.

Table 27: Summary of the constructs included in the quantitative survey, the number of items used for each, and their corresponding measurement sources

Construct	Adapted from	No. of Items	Items
Information Overload	Zhang et al. (2016)	4	*I am often distracted by the excessive amount of information available on this Online Brand Community.* *I find that I am overwhelmed by the amount of information available on this Online Brand Community that I have to process on a daily basis.* *There is too much information available on this Online Brand Community that I find it a burden to handle.* *I find that only a small part of information available on this Online Brand Community is relevant to my needs.*
Value Incongruity	Kumar (2021)	3	*I do not really support the intent of the core values of this Online Brand Community.* *I do not have a clear understanding of the core values of this Online Brand Community.* *I have a great deal of disagreement about what this Online Brand Community's core values represent.*
Perceived Brand Wastefulness	Gain, Coote & Bonfrer (2024)	6	*There are resources associated with this brand which won't be fully utilised.* *This brand does not utilise resources as fully as they could be.* *I expect this brand will create waste.* *I expect some resources associated with this brand will become waste.* *There are resources associated with this brand that will be wasted.* *There are resources associated with this brand that will end up as waste instead of serving another purpose.*
Privacy Concerns	Tan & Qin (2011)	3	*I am concerned about the negative consequences of unknown parties accessing my private information on this Online Brand Community.*

			I am concerned that my private information on this Online Brand Community may be misused. *I am concerned that unknown parties have access to my private information on this Online Brand Community.*
Psychological Safety	May et al. (2004)	3	*I am not afraid to be myself in this Online Brand Community.* *I am not afraid to express my opinions in this Online Brand Community.* *There is no threatening environment in this Online Brand Community.*
Customer Engagement (Cognitive)	Dessart, et al. (2016)	5	*I spend a lot of time thinking about this brand.* *I make time to think about this brand.* *When interacting with this brand I forget everything else around me.* *When I am interacting with this brand I get carried away.* *When interacting with this brand, it becomes difficult to detach myself.*
Customer Engagement (Affective)	Dessart, et al. (2016)	4	*I am interested in anything about this brand.* *I find this brand interesting.* *When interacting with this brand, I feel happy.* *Interacting with this brand is like a treat for me.*
Customer Engagement (Behavioural)	Dessart, et al. (2016)	5	*I share my ideas with this brand.* *I help this brand.* *I seek ideas or information from this brand.* *I promote this brand.* *I try to get others interested in this brand.*
Consumer Well-Being	El Hedhli, Chebat, & Sirgy (2013)	4	*This brand satisfies my overall engagement needs.* *The engagement with this brand plays a very important role in my social well-being.* *The engagement with this brand plays a very important role in my leisure well-being.* *The engagement with this brand plays an important role in enhancing the quality of life in my community.*
Emotional Exhaustion	Maslach & Jackson (1981)	8	*I feel emotionally drained by engaging with this brand.* *I feel used up after engaging with this brand.*

			I feel fatigued when I had to think about or face this brand. *I feel burned out from engaging with this brand.* *I feel frustrated when engaging with this brand.* *I feel I was exerting too many efforts in engaging with this brand.* *I feel like I was at the end of my rope whenever I had to engage with this brand.* *The engagement with this brand took more emotional energy from me than it should.*
Negative Brand Experience	Odoom et al. (2019)	5	*The brand has a poor performance.* *There is inconvenience (hassle) associated in acquiring this brand.* *The store environment where this brand is sold is unpleasant.* *This brand has failed to meet its promised value.* *My expectations of the brand were not met during my experience.*
Self-Brand Connection	Escalas & Bettman (2003)	4	*I feel a personal connection to this brand.* *I (can) use this brand to communicate who I am to other people.* *I think this brand (could) help(s) me become the type of person I want to be.* *I consider this Brand to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others).*

To address potential common method bias (CMB), three marker variables unrelated to the study's focal constructs were included, following established procedural and statistical recommendations (Lindell & Whitney, 2001; Podsakoff et al., 2003; Fuller et al., 2016; Steenkamp & Maydeu-Olivares, 2021).

The questionnaire was structured into three sections. Section A included the study information and consent process. Section B contained screening and contextual questions to ensure participants had relevant experience with OBCs. Section C captured the main constructs related to participants' experiences and perceptions of brand and OBC engagement, along with demographic information. To address potential common method bias, marker variable items were embedded within the survey (Lindell & Whitney, 2001; Podsakoff et al., 2003; Fuller et al., 2016). In addition, item order was randomised and participants were informed that there were no right or wrong answers to minimise response bias (Podsakoff et al., 2003).

Before launching the main data collection, a pilot study was carried out with 7 participants drawn from the qualitative phase, all of whom had at least six months of experience engaging with OBCs. The pilot version of the survey contained 139 items and was used to check whether the questions were clear and reasonable in length, and not to assess reliability or validity statistically.

The participants found the questionnaire easy to follow and relevant to their experiences. However, a few noted some repetition between items referring to the "brand" and those referencing the "OBC." One participant also pointed out that introducing the term "OBC" earlier in the survey would make it easier to

understand. The survey was generally described as detailed but manageable, with completion times ranging from 15 to 20 minutes. Based on this feedback, minor wording changes were made, repetitive phrasing was reduced, and a brief definition of “OBC” was added at the beginning of the survey.

Following refinement, the final survey was distributed via MTurk, a widely used crowdsourcing platform that has demonstrated reliability in behavioural and consumer research (Buhrmester et al., 2011; Paolacci & Chandler, 2014). Data were collected in November 2024, and participation was restricted to adults residing in the United States who reported at least six months of prior engagement with OBCs. Screening questions were included to confirm eligibility. Each respondent received USD 1.25, which is consistent with typical compensation for surveys of this length.

To ensure data quality and integrity, several screening procedures were applied. Duplicate IP addresses, straightlining responses and unrealistically short completion times were identified and removed in line with recommended practices for online survey data (Peer et al., 2017). Approximately 50 responses were excluded at this stage, leaving 301 usable cases. A further 23 cases were removed during subsequent statistical screening due to low engagement, resulting

in a final sample of 278 responses. Detailed data cleaning procedures are presented in Section 6.2.

Participation was voluntary and anonymous, and informed consent was obtained electronically before the survey began. Respondents were informed of their right to withdraw at any stage without penalty, and a debrief message was provided at the end of the survey. Ethical principles relating to consent, confidentiality and data protection were followed in line with University of Essex research ethics requirements (British Psychological Society, 2021). Full details of the ethical approval process are provided in the Methodology chapter.

The following section outlines the analytical procedures applied to the survey data. Initial data preparation and screening were conducted in SPSS to identify missing values, detect outliers and assess normality. Reliability and validity were then examined using EFA and CFA, followed by testing of the measurement and structural models in AMOS. The structural model was specified as fully mediated, with the effects of the independent variables on the outcomes operating through the designated mediators. Bootstrapping with 5,000 resamples and 95% confidence intervals was used to ensure robust estimation of indirect effects.

6.2. Quantitative Data Analysis

Following data collection, the quantitative data were prepared and analysed to test the study's hypotheses. This section outlines the analytical procedures in five stages: (1) data preparation and screening, (2) assessment of reliability and validity using EFA and CFA, (3) testing of the measurement model, (4) evaluation of the structural model using SEM, and (5) hypothesis testing. The following subsections describe each stage, outlining the statistical techniques and software used, including SPSS and AMOS.

6.2.1. Data Preparation and Screening

Prior to statistical analysis, the dataset was screened to ensure data quality and suitability for multivariate analysis. Initial checks were conducted on MTurk, where 52 responses were removed due to duplicate IP addresses, straightlining patterns, or implausibly short completion times, leaving 301 usable cases. The data were then imported into SPSS for further screening. At this stage, checks were carried out for outliers, and normality. Cases with or extreme Mahalanobis distance values were excluded, resulting in a final sample of 278 responses. Descriptive statistics, along with skewness and kurtosis, indicated that the data were suitable for subsequent analyses, including factor analysis and SEM.

6.2.2. Reliability and Validity Testing (EFA and CFA)

To assess the psychometric quality of the measurement instruments, a two-stage approach was adopted, consisting of EFA followed by CFA. This approach is widely used in social science research to establish the dimensionality, reliability and validity of multi-item constructs (Fabrigar et al., 1999; Hair et al., 2019; Worthington & Whittaker, 2006).

EFA was conducted in SPSS to examine the underlying factor structure of each construct and to ensure that items loaded in line with theoretical expectations. The Maximum Likelihood (ML) extraction method was used, as it allows for efficient estimation and statistical testing of factor loadings, assuming approximate normality (Fabrigar et al., 1999; Hair et al., 2019). An oblique rotation (Direct Oblimin with Kaiser Normalization) was applied to allow factors to correlate, reflecting the expectation that psychological constructs are related and not independent (Costello & Osborne, 2005).

Given the large number of measured items, EFA was conducted in smaller groups to improve interpretability and reduce cross-loading complexity. This grouping was primarily pragmatic, reflecting the need to obtain stable and interpretable factor solutions when analysing a complex set of constructs (Hair et al., 2019). Items with loadings below .40 or substantial cross-loadings were examined and

removed where theoretically justified (Tabachnick & Fidell, 2019). All retained items demonstrated clear and conceptually consistent factor loadings. Internal consistency was then assessed using Cronbach's alpha (α), with values above .70 indicating acceptable reliability (Nunnally & Bernstein, 1994).

Subsequently, CFA was conducted in AMOS to validate the measurement models identified through EFA. This approach allows for a rigorous assessment of unidimensionality and the relationships between observed indicators and their underlying constructs (Hair et al., 2019). Given the number of constructs, the analysis was carried out in two stages, with individual measurement models assessed before being integrated into the full structural model.

Model fit was evaluated using a combination of indices reflecting absolute, incremental, and parsimonious fit, including χ^2/df, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Goodness-of-Fit Index (GFI) and PCLOSE, in line with recommendations by Hu and Bentler (1999) and Hair et al. (2019).

Construct reliability and validity were assessed using Cronbach's alpha (α), Composite Reliability (CR), and Average Variance Extracted (AVE) for convergent validity, along with the Heterotrait-Monotrait Ratio (HTMT) for

discriminant validity. Thresholds of α and CR above .70, factor loadings of .60 or higher, and AVE values close to or exceeding .50 were taken to indicate acceptable convergence (Hair et al., 2019). Two constructs, namely, CE (Affective) and CE (Behavioural), had AVE values marginally below the .50 benchmark but exhibited strong factor loadings and Composite Reliability above .70, indicating sufficient convergence despite slightly lower extracted variance (Hair et al., 2019).

Discriminant validity was assessed using the HTMT criterion, which is widely regarded as a robust approach for evaluating construct distinctiveness in business and marketing research (Henseler et al., 2015; Voorhees et al., 2016; Hair et al., 2022). HTMT values below .85 were taken as evidence of adequate discriminant validity.

This two-stage validation process ensured that all constructs demonstrated adequate reliability, as well as convergent and discriminant validity, before proceeding to structural model testing.

6.2.3. Measurement Model Testing

Following the assessment of reliability and validity, CFA was conducted to evaluate the adequacy of the measurement model before proceeding to the

structural model. CFA allows for testing whether the observed data fit the proposed latent structure derived from theory (Anderson & Gerbing, 1988; Hair et al., 2019). This step ensured that each indicator appropriately reflected its underlying construct and that the model demonstrated acceptable levels of reliability, as well as convergent and discriminant validity.

All CFAs were conducted in AMOS using the ML estimation method, which is appropriate for large samples and approximately normally distributed data (Kline, 2016; Byrne, 2016). The analysis followed the two-step approach proposed by Anderson and Gerbing (1988), where the measurement model is first evaluated before testing structural relationships.

Given the number of constructs, CFAs were carried out in two stages to confirm individual factor structures before integrating them into the full model. Model fit was assessed using a range of indices capturing different aspects of fit, in line with recommendations from the SEM literature (Hu & Bentler, 1999; Hair et al., 2019).

Model fit was evaluated using commonly recommended indices, including the CFI, TLI, and RMSEA. CFI and TLI values of .90 or above indicate acceptable fit, with values above .95 reflecting good fit. RMSEA values below .08 indicate

reasonable fit, and below .06 indicate good fit, with PCLOSE values above .05 supporting close model fit (Hu & Bentler, 1999; Hair et al., 2019). These criteria provided a balanced assessment of model fit. Modification indices (MIs) were also examined to identify potential sources of misfit. Any model re-specifications, such as correlating error terms, were introduced cautiously and only when supported by theoretical or empirical justification (Byrne, 2016; Kline, 2016).

In line with Hair et al. (2019), the final measurement model was evaluated before proceeding to the structural model. The results indicated that all indicators loaded significantly on their intended constructs, with minimal cross-loadings, supporting the adequacy of the measurement model.

6.2.4. Structural Model Testing

Once the measurement model demonstrated satisfactory reliability and validity, the structural model was tested to examine the hypothesised relationships among the latent constructs. SEM provides a useful framework for estimating multiple relationships simultaneously while accounting for measurement error (Hair et al., 2019; Kline, 2016).

The analysis was conducted in AMOS using the ML estimation method, which is appropriate for large samples and performs well when the data do not substantially deviate from normality (Byrne, 2016; Kline, 2016). The structural

model incorporated the validated latent constructs from the CFA, allowing the hypothesised relationships to be tested within a single integrated framework.

Model adequacy was assessed using the same fit indices as in the measurement model, ensuring consistency in evaluation (Hu & Bentler, 1999; Hair et al., 2019). In addition to overall model fit, attention was given to whether the relationships among constructs were statistically significant and made theoretical sense. Thus, the results indicated that the structural model provided an adequate representation of the data while maintaining parsimony (Kline, 2016; Hair et al., 2019).

After confirming satisfactory model fit, individual path coefficients were examined for their direction and statistical significance ($p < .05$). Standardised regression weights (β) and critical ratios (C.R.) were used to assess support for each hypothesised relationship. Given the fully mediated structure, particular attention was paid to the significance of indirect effects, which were estimated in AMOS using the Estimands function. Mediation was further assessed using bootstrapping with 5,000 resamples and 95% bias-corrected confidence intervals, providing robust estimates that do not rely on normality assumptions (Preacher & Hayes, 2008; Hayes, 2018).

Where MIs suggested potential improvements, these were reviewed carefully. Any re-specifications were made only when supported by clear theoretical or empirical justification (Byrne, 2016; Kline, 2016). This approach helped improve model fit without undermining the theoretical basis of the model.

This stage confirmed that the structural relationships among constructs were statistically significant and aligned with the theoretical expectations, providing a basis for subsequent hypothesis testing and interpretation of indirect effects.

The preceding sections outlined the sequence of quantitative analyses, from data preparation to measurement validation and structural model estimation. Having established the reliability and validity of the model, the next section presents the empirical findings. Results are organised in line with the analytical process, beginning with data screening, followed by measurement model results (EFA and CFA), and then the structural model and mediation analysis. Each hypothesis is examined in turn, with findings interpreted in relation to the study's theoretical framework.

6.3. Descriptive Analysis and Measurement Validation

This section presents the results of the preliminary analyses used to ensure data quality and assess the measurement properties of the constructs prior to

hypothesis testing. It covers data screening, demographic characteristics, assumption testing, and validation of the constructs using EFA and CFA. These results confirm that the dataset and measurement instruments were suitable for subsequent SEM analysis.

6.3.1 Data Preparation and Examination

Prior to hypothesis testing, the dataset was screened and prepared for multivariate analysis. No missing values were observed, as the Qualtrics survey was configured to require responses to all items before submission. This resulted in a complete dataset and removed the need for data imputation, supporting the reliability of subsequent analyses (Hair et al., 2019).

Outliers were first assessed at the univariate level using boxplots to identify extreme values for individual items. A small number of isolated outliers were observed but retained, as they did not meaningfully affect the variable distributions. Multivariate outliers were then examined using Mahalanobis distance (D^2), based on the chi-square distribution at $p < .001$. With 65 observed variables, the critical value was $\chi^2(65) = 105.99$, and cases exceeding this threshold were treated as multivariate outliers. A total of 23 cases met this criterion and were removed, reducing the dataset from 301 to 278 responses. This

procedure helped improve the robustness of the analysis and the stability of the model estimates (Hair et al., 2019; Tabachnick & Fidell, 2019).

Normality Assessment: Normality was assessed at the univariate level using both statistical tests and distributional indicators. The Kolmogorov-Smirnov and Shapiro-Wilk tests were significant for all items ($p < .001$), which is common in larger samples (Field, 2018). Skewness and kurtosis were therefore examined to assess distributional shape. Skewness values ranged from -1.46 to +1.46 and kurtosis from +1.07 to +2.11, both within the acceptable ±2 threshold (Kline, 2016), indicating approximate normality. Visual inspection of histograms and Q-Q plots supported this conclusion, with no evidence of severe non-normality. Given the sample size (n=278) and the observed distributions, the data were considered suitable for ML estimation, which is generally robust to moderate deviations from normality (Byrne, 2016; Hair et al., 2019). Accordingly, the dataset was deemed appropriate for subsequent CFA and SEM analyses.

6.3.2. Sample Characteristics

As shown in Table 28, the final sample consisted of 278 valid responses from U.S. based participants recruited via MTurk. Most respondents were aged 25-34 (54.3%), followed by those aged 35-44 (31.7%). Smaller proportions fell within

the 18-24 (3.2%) and 65+ (1.1%) age groups. In terms of gender, the sample was predominantly male (72.7%), with females accounting for 27.3%.

Table 28:Demographic characteristics of the respondents (n=278)

Variable	Category	Frequency (n)	Percentage (%)
Age	18-24	9	3.2
	25-34	151	54.3
	35-44	88	31.7
	45-54	21	7.6
	55-64	6	2.2
	65 and above	3	1.1
Gender	Male	202	72.7
	Female	76	27.3
Employment	Employed-Full time	265	95.3
	Employed-Part time	5	1.8
	Unemployed-Not looking for work	2	0.7
	Unemployed-Looking for work	2	0.7
	Student	1	0.4
	Retired	3	1.1
Education	Less than high school	1	0.4
	High school graduate	17	6.1
	Undergraduate	150	54
	Postgraduate	104	37.4
	Doctorate	6	2.2

In terms of employment, most respondents were employed full-time (95.3%), with smaller proportions reporting part-time work (1.8%), unemployment (1.4%), or retirement (1.1%). Educational attainment was relatively high, with 54.0% holding an undergraduate degree and 37.4% a postgraduate qualification, indicating a generally well-educated sample.

6.3.3. Assumption Testing

Before proceeding with inferential analyses, key statistical assumptions were examined to ensure the robustness of the multivariate models (Hair et al., 2019). These included normality, linearity, homoscedasticity, and multicollinearity.

Normality: As outlined in Section 6.3.1, univariate normality was assessed using skewness, kurtosis, and the Kolmogorov-Smirnov and Shapiro-Wilk tests. Although the statistical tests were significant ($p < .001$), which is common in larger samples, skewness (−1.46 to +1.46) and kurtosis (1.07 to 2.11) remained within acceptable ranges (Kline, 2016). This indicates approximate normality and supports the use of ML estimation (Byrne, 2016).

Linearity and Homoscedasticity: Linearity is an important assumption in multivariate analyses based on correlations, as these methods capture relationships between variables in a linear form (Hair et al., 2019). Scatterplots were examined between the independent and dependent constructs, and the patterns indicated generally linear relationships with no substantial deviations. The same plots were also used to assess homoscedasticity. The spread of residuals appeared relatively consistent across levels of the predictors, suggesting no major issues with heteroscedasticity.

Homoscedasticity refers to the assumption that the variance of the dependent variable remains constant across levels of the independent variables (Hair et al., 2019; Tabachnick & Fidell, 2019). Violations of this assumption can affect the accuracy of standard errors and test statistics. To assess this, standardised residual scatterplots were examined. The plots showed a random and even spread of residuals around the regression line, with no clear clustering or funnel-shaped patterns, indicating that the assumption of homoscedasticity was met.

Multicollinearity: Given the presence of multiple related predictors in the model, multicollinearity was assessed to ensure that each construct contributed uniquely to the explained variance. Multicollinearity occurs when independent variables are highly correlated, which can inflate standard errors and affect the stability of regression estimates (Hair et al., 2019).

To assess multicollinearity, Variance Inflation Factor (VIF) and tolerance values were examined for all predictor constructs. VIF values below 5 and tolerance values above .20 indicated no concerns regarding multicollinearity (Hair et al., 2019; Tabachnick & Fidell, 2019). In this study, VIF values ranged from 1.186 to 2.801, while tolerance values ranged from .357 to .843, confirming that multicollinearity was not a concern and supporting the stability of the model estimates. Detailed results are provided in Appendix 10.

6.3.4. Analysis of Multi-Item Constructs

All constructs were measured using multi-item Likert-type scales adapted from validated sources. Before testing the measurement and structural models, their psychometric properties were assessed to ensure clear factor structure, internal consistency and validity. Given the large number of observed indicators, the analysis was carried out in stages. EFA was first conducted to identify the underlying structure and remove poorly performing items. This was followed by CFA to confirm the measurement model and establish reliability and validity before structural estimation.

Reliability and validity were assessed using Cronbach's alpha, CR, and AVE, while discriminant validity was evaluated using the HTMT criterion (Henseler et al., 2015). This approach ensured that all latent constructs were sufficiently robust before proceeding to hypothesis testing.

6.3.4.1. Exploratory Factor Analysis

The purpose of the EFA was to examine the underlying structure of the measurement scales and refine the items by retaining those that were both strongly related and theoretically meaningful.

Sample Adequacy: A total of 278 valid responses were retained after the removal of multivariate outliers. The overall sample-to-item ratio was approximately 4.3:1, which is below some commonly cited rules of thumb, such as the 10:1 guideline. However, fixed participant-to-variable ratios need not be treated as absolute criteria for factor analysis, as sample-size requirements depend on characteristics of the factor solution, including communalities, the number of factors and the number of variables per factor (MacCallum et al., 1999; Mundfrom, Shaw and Ke, 2005). Sample adequacy was therefore considered alongside the observed communalities, factor structure, KMO values and Bartlett's tests.

To improve interpretability and reduce cross-loading complexity, EFA was conducted in three grouped sets of constructs. The grouping was based on analytical manageability and not strict theoretical categorisation, allowing for more stable and interpretable factor solutions when working with a large number of indicators (Hair et al., 2019).

Data Suitability for Factor Analysis: The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity were used to assess the suitability of the data for factor analysis. All 3 EFA groups exceeded the recommended KMO threshold (≥ .60), with values ranging from .868 to .922, indicating strong sampling adequacy.

Bartlett's Test was significant ($p < .001$) across all groups, confirming that inter-item correlations were sufficient for factor extraction (Tabachnick & Fidell, 2019).

Selecting the Factor Extraction Method: The choice of factor extraction method depends on the purpose of the analysis and the nature of the constructs being examined. Two commonly used approaches are Principal Component Analysis (PCA) and common factor methods. While PCA focuses on data reduction by accounting for total variance, common factor methods consider only shared variance, making them more suitable for identifying latent constructs (Fabrigar et al., 1999; Hair et al., 2019).

In this study, the ML extraction method was used, as the constructs were theoretically defined in advance and the aim was to examine their underlying structure and remove weak or ambiguous items (Fabrigar et al., 1999; Brown, 2015). This approach also allows for statistical testing of factor loadings and model fit, making it suitable for subsequent confirmatory analysis (Brown, 2015; Hair et al., 2019).

Selecting the Factor Rotation Method: After extraction, rotation was applied to achieve a clearer and more interpretable factor structure. Rotation methods can

be either orthogonal or oblique, depending on whether the constructs are assumed to be correlated. Orthogonal approaches, such as Varimax, produce uncorrelated factors, whereas oblique methods, such as Direct Oblimin or Promax, allow factors to correlate and are generally more appropriate in behavioural research (Fabrigar et al., 1999; Costello & Osborne, 2005; Hair et al., 2019).

Given that the constructs in this study were expected to be related, an oblique rotation was selected. Specifically, Direct Oblimin with Kaiser Normalization was used to allow for correlated factors and improve interpretability. This approach is considered to be well suited to studies involving psychological and attitudinal constructs, which are often interrelated (Brown, 2015; Hair et al., 2019).

Factor Loadings and Retention Criteria: Item retention was guided by both statistical and theoretical considerations. Items with factor loadings of .30 or higher were initially considered for retention, reflecting the minimum acceptable threshold for practical significance in samples of this size (Hair et al., 2019). Where possible, preference was given to items with stronger loadings. Items showing cross-loadings (≥ .30 on more than one factor) would have been examined carefully and retained only where there was clear theoretical justification; however, no such cross-loadings were observed in the final solution.

In this study, all items exceeded the more conservative .40 threshold, indicating strong representation of their respective constructs.

Notably, a few constructs, including *CE Cognitive, Privacy Concerns*, and *Information Overload*, showed negative factor loadings during EFA despite the absence of reverse-coded items. This was attributed to factor indeterminacy, a recognised feature of exploratory factor solutions, particularly when oblique rotations are used (Hair et al., 2019; Tabachnick & Fidell, 2019). In such cases, the orientation of factors is arbitrary, meaning that loadings may appear with opposite signs without affecting the underlying structure or interpretation. All affected items loaded positively and significantly in the CFA, confirming that the sign reversal had no substantive impact (Field, 2018). These items were therefore retained, as they remained both empirically reliable and theoretically consistent.

Reliability: Reliability refers to the internal consistency of items within a construct, indicating how well they measure the same underlying concept (Hair et al., 2019). This was assessed using Cronbach's alpha (α), which captures the average correlation among items in a scale. Values of .70 or above were considered acceptable, while values between .60 and .70 were deemed tolerable for exploratory or newly adapted measures (Nunnally & Bernstein, 1994; Hair et al., 2019).

Cronbach's alpha values were computed in SPSS for all constructs following the EFA. The results indicated satisfactory internal consistency across most scales, supporting the reliability of the extracted factor structure.

a) EFA and reliability results for individual constructs

Information Overload

Table 29: EFA and reliability results for Information Overload

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.816
Bartlett's test of sphericity	Approx. χ^2 = 515.961, df = 6, sig. = .000
Factor loadings (> .30)	
OBCIO_1	0.777
OBCIO_2	0.795
OBCIO_3	0.873
OBCIO_4	0.681
Total variance	61.53%
Cronbach's alpha (> .70)	0.862

The analysis included four items and produced a KMO value of .816, along with a significant Bartlett's test, confirming the suitability of the data for factor analysis. The total variance explained was 61.53%, indicating that the items captured a substantial proportion of the construct variance. All factor loadings exceeded the minimum threshold of .30, with a maximum loading of .873, suggesting adequate intercorrelations among the items. Cronbach's alpha was .862, indicating satisfactory internal consistency. No further improvements in

reliability were observed based on item-total statistics. Table 29 presents the EFA and reliability results for Information Overload.

Value Incongruity

Table 30: EFA and reliability results for Value Incongruity

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.721
Bartlett's test of sphericity	Approx. χ^2 = 387.648, df = 3, sig. = .000
Factor loadings (> .30)	
CoCVI_1	0.838
CoCVI_2	0. 879
CoCVI_3	0.739
Total variance	73.21%
Cronbach's alpha (> .70)	0.858

The analysis included three items and produced a KMO value of .721, along with a significant Bartlett's test (χ^2 = 387.648, df = 3, p < .001), confirming the suitability of the data for factor analysis. The total variance explained was 73.21%, indicating that the items captured a substantial proportion of the construct variance. All factor loadings exceeded the minimum threshold of .30, with a maximum loading of .879, suggesting strong inter-item correlations. Cronbach's alpha was .858, indicating satisfactory internal consistency. No further improvements in reliability were identified based on item-total statistics. Table 30 presents the EFA and reliability results for Value Incongruity.

Perceived Brand Wastefulness

Table 31: EFA and reliability results for Perceived Brand Wastefulness

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.906
Bartlett's test of sphericity	Approx. χ^2 = 1690.821, df = 28, sig. = .000
Factor loadings (> .30)	
BW_IU1	0.571
BW_IU2	0.669
BW_IU3	0.642
BW_IU4	0.625
BW_TW1	0.897
BW_TW2	0.902
BW_TW3	0.896
BW_TW4	0.866
Total variance	69.35%
Cronbach's alpha (> .70)	0.919

EFA results for Perceived Brand Wastefulness indicated a two-factor solution, consistent with the conceptual structure of the construct (Inefficient Utilisation and Tangible Waste). Sampling adequacy was confirmed by a KMO value of .906 and a significant Bartlett's test (χ^2 = 1690.821, df = 28, p < .001), indicating sufficient inter-item correlations. The two factors explained 69.35% of the total variance, suggesting that the retained items captured a substantial proportion of the construct. Factor loadings ranged from .571 to .902, all above the .30 threshold, supporting item convergence within each factor. Cronbach's alpha was .919, indicating excellent internal consistency. No further improvements were identified from the item-total statistics. Table 31 presents the EFA and reliability results for Perceived Brand Wastefulness.

Privacy Concerns

Table 32: EFA and reliability results for Privacy Concerns

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.750
Bartlett's test of sphericity	Approx. $\chi^2 = 498.531$, df = 3, sig. = .000
Factor loadings (> .30)	
PCOBC_1	0.858
PCOBC_2	0. 884
PCOBC_3	0.843
Total variance	74.32%
Cronbach's alpha (> .70)	0.897

EFA for Privacy Concerns was conducted using three items. The KMO value of .750 and a significant Bartlett's test ($\chi^2 = 498.531$, df = 3, $p < .001$) confirmed the suitability of the data for factor analysis. A single factor emerged, consistent with the theoretical structure of the construct. All items loaded strongly on this factor, with loadings ranging from .843 to .884. The factor explained 74.32% of the total variance, indicating that the items captured a substantial proportion of the construct. Cronbach's alpha was .897, demonstrating excellent internal consistency. No further improvements were identified from the item-total statistics. Table 32 presents the EFA and reliability results for Privacy Concerns.

Psychological Safety

Table 33: EFA and reliability results for Psychological Safety

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.688
Bartlett's test of sphericity	Approx. χ^2 = 289.208, df = 3, sig. = .000
Factor loadings (> .30)	
PS_1	0.847
PS_2	0. 816
PS_3	0.635
Total variance	59.56%
Cronbach's alpha (> .70)	0.807

The construct Psychological Safety consisted of three items. The KMO value of .688 and a significant Bartlett's test (χ^2 = 289.208, df = 3, p < .001) confirmed the suitability of the data for factor analysis. Although SPSS produced a warning regarding zero degrees of freedom, this is expected for a just-identified model (df = 0) and does not indicate a problem, as such models reproduce the sample covariance matrix perfectly and cannot be evaluated using conventional fit indices (Kline, 2016; Byrne, 2016). A single factor was extracted using the ML method, explaining 59.56% of the total variance. All items loaded positively on this factor, with loadings ranging from .635 to .847, supporting unidimensionality. Cronbach's alpha was .807, indicating satisfactory internal consistency. No further improvements were identified from the item-total statistics. Table 33 presents the EFA and reliability results for Psychological Safety.

Customer Engagement – Cognitive

Table 34: EFA and reliability results for Customer Engagement-Cognitive

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.853
Bartlett's test of sphericity	Approx. χ^2 = 627.522, df = 15, sig. = .000
Factor loadings (> .30)	
CBE_CE1	0.724
CBE_CE2	0.708
CBE_CE3	0.806
CBE_CE4	0.637
CBE_CE5	0.645
CBE_CE6	0.636
Total variance	48.35%
Cronbach's alpha (> .70)	0.845

CE-Cognitive consisted of six items. The KMO value of .853 and a significant Bartlett's test (χ^2 = 627.522, df = 15, p < .001) confirmed the suitability of the data for factor analysis (Kaiser, 1974). Factor extraction using the ML method produced a single-factor solution, explaining 48.35% of the total variance. Factor loadings ranged from .636 to .806, indicating satisfactory item convergence (Hair et al., 2019). Cronbach's alpha was .845, supporting the reliability of the construct. No further improvements were identified from the item-total statistics. Table 34 presents the EFA and reliability results for CE-Cognitive.

Customer Engagement - Affective

Table 35: EFA and reliability results for Customer Engagement-Affective

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.860
Bartlett's test of sphericity	Approx. χ^2 = 507.364, df = 15, sig. = .000
Factor loadings (≥ .30)	
CBE_AE1	0.533
CBE_AE2	0.710
CBE_AE3	0.728
CBE_AE4	0.689
CBE_AE5	0.673
CBE_AE6	0.645
Total variance	44.34%
Cronbach's alpha (≥ .70)	0.819

CE-Affective comprised six items. The KMO value of .860 and a significant Bartlett's test (χ^2 = 507.364, df = 15, $p < .001$) confirmed the suitability of the data for factor analysis. A single-factor solution was extracted using ML, explaining 44.34% of the total variance. Factor loadings ranged from .533 to .728, indicating acceptable item convergence (Hair et al., 2019). Cronbach's alpha was .819, supporting the reliability of the construct. No further improvements were identified from the item-total statistics. Table 35 presents the EFA and reliability results for CE-Affective.

Customer Engagement-Behavioural

Table 36: EFA and reliability results for Customer Engagement-Behavioural

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.901
Bartlett's test of sphericity	Approx. χ^2 = 941.492, df = 45, sig. = .000
Factor loadings (> .30)	
CBE_BE1	0.627
CBE_BE2	0.512
CBE_BE3	0.651
CBE_BE4	0.642
CBE_BE5	0.630
CBE_BE6	0.640
CBE_BE7	0.716
CBE_BE8	0.675
CBE_BE9	0.623
CBE_BE10	0.589
Total variance	40.02%
Cronbach's alpha (> .70)	0.868

CE-Behavioural included ten items. The KMO value of .901 and a significant Bartlett's test (χ^2 = 941.492, df = 45, p < .001) confirmed the suitability of the data for factor analysis (Kaiser, 1974). A single-factor solution was extracted using ML, explaining 40.02% of the total variance. All items loaded positively on the factor, with loadings ranging from .512 to .716, indicating acceptable item convergence (Hair et al., 2019). Cronbach's alpha was .868, supporting strong internal consistency (Nunnally & Bernstein, 1994). No further improvements were identified from the item-total statistics. Table 36 presents the EFA and reliability results for CE-Behavioural.

Consumer Well-Being

Table 37: EFA and reliability results for Consumer Well-Being

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.784
Bartlett's test of sphericity	Approx. $\chi^2 = 353.410$, df = 6, sig. = .000
Factor loadings (> .30)	
SWB_1	0.538
SWB_2	0.768
SWB_3	0.721
SWB_4	0.815
Total variance	51.61%
Cronbach's alpha (> .70)	0.803

CWB consisted of four items. The KMO value of .784 and a significant Bartlett's test ($\chi^2 = 353.410$, df = 6, $p < .001$) confirmed the suitability of the data for factor analysis (Kaiser, 1974). A single-factor solution was extracted using ML, explaining 51.61% of the total variance. Factor loadings ranged from .538 to .815, indicating acceptable item convergence (Hair et al., 2019). Cronbach's alpha was .803, supporting satisfactory internal consistency (Nunnally & Bernstein, 1994). No further improvements were identified from the item-total statistics. Table 37 presents the EFA and reliability results for CWB.

Emotional Exhaustion

Table 38: EFA and reliability results for Emotional Exhaustion

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.917
Bartlett's test of sphericity	Approx. χ^2 = 2012.945, df = 28, sig. = .000
Factor loadings (> .30)	
EE1	0.814
EE2	0.753
EE3	0.838
EE4	0.885
EE5	0.867
EE6	0.825
EE7	0.872
EE8	0.804
Total variance	69.40%
Cronbach's alpha (> .70)	0.948

Emotional Exhaustion consisted of eight items. The KMO value of .917 and a significant Bartlett's test (χ^2 = 2012.945, df = 28, p < .001) confirmed excellent suitability for factor analysis (Kaiser, 1974). A single-factor solution was extracted using ML, explaining 69.40% of the total variance. All items loaded strongly on the factor, with loadings ranging from .753 to .885, indicating strong item convergence (Hair et al., 2019). Cronbach's alpha was .948, demonstrating excellent internal consistency (Nunnally & Bernstein, 1994). No further improvements were identified from the item-total statistics. Table 38 presents the EFA and reliability results for Emotional Exhaustion.

Negative Brand Experience

Table 39: EFA and reliability results for Negative Brand Experience

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.901
Bartlett's test of sphericity	Approx. χ^2 = 1306.163, df = 10, sig. = .000
Factor loadings (> .30)	
NEB_1	0.897
NEB_2	0.858
NEB_3	0.884
NEB_4	0.906
NEB_5	0.874
Total variance	78.12%
Cronbach's alpha (> .70)	0.947

Negative Brand Experience consisted of five items. The KMO value of .901 and a significant Bartlett's test (χ^2 = 1306.163, df = 10, p < .001) confirmed excellent suitability for factor analysis (Kaiser, 1974). A single-factor solution was extracted using ML, explaining 78.12% of the total variance. All items loaded strongly on the factor, with loadings ranging from .858 to .906, indicating strong item convergence (Hair et al., 2019). Cronbach's alpha was .947, demonstrating excellent internal consistency (Nunnally & Bernstein, 1994). No further improvements were identified from the item-total statistics. Table 39 presents the EFA and reliability results for Negative Brand Experience.

Self-Brand Connection

Table 40: EFA and reliability results for Self-Brand Connection

KMO and Bartlett's test (KMO > .50, BTS sig. < .05)	
KMO measure	0.866
Bartlett's test of sphericity	Approx. χ^2 = 572.530, df = 15, sig. = .000
Factor loadings (> .30)	
SBC_1	0.644
SBC_2	0.606
SBC_3	0.668
SBC_4	0.742
SBC_5	0.757
SBC_6	0.687
Total variance	47.06%
Cronbach's alpha (> .70)	0.841

Self-Brand Connection comprised six items. The KMO value of .866 and a significant Bartlett's test (χ^2 = 572.530, df = 15, p < .001) confirmed the suitability of the data for factor analysis (Kaiser, 1974). A single-factor solution was extracted using ML, explaining 47.06% of the total variance. All items loaded positively on the factor, with loadings ranging from .606 to .757, indicating acceptable item convergence (Hair et al., 2019). Cronbach's alpha was .841, supporting good internal consistency (Nunnally & Bernstein, 1994). No further improvements were identified from the item-total statistics. Table 40 presents the EFA and reliability results for Self-Brand Connection.

Exploratory Factor Analysis - Group 1

EFA was conducted on 31 items representing Information Overload, CE (Cognitive, Affective, and Behavioural), and Negative Brand Experience. ML extraction with Oblimin rotation (Kaiser Normalization) was used to examine the underlying structure. The KMO value of .928 and a significant Bartlett's test (χ^2 = 5112.025, df = 465, $p < .001$) confirmed excellent sampling adequacy. The goodness-of-fit test also supported the adequacy of the model (χ^2 = 595.165, df = 347, $p < .001$).

The initial solution based on eigenvalues suggested fewer factors than theoretically expected and indicated cross-loadings among CE items. In line with theoretical expectations and guidance from Hair et al. (2019), the number of factors was therefore fixed, and the pattern matrix was re-examined. The refined solution indicated some overlap between the Affective and Behavioural dimensions of CE. All retained items loaded above .40, demonstrating clear and interpretable factor loadings (Hair et al., 2019). The factors were identified as follows:

- **Factor 1:** Negative Brand Experience (loadings .727 to .912)
- **Factor 2:** Combined Affective and Behavioural CE (loadings .423 to .724)
- **Factor 3:** Information Overload (loadings –.532 to –.744)
- **Factor 4:** CE - Cognitive (loadings –.418 to –.717)

Table 41: EFA Group 1

Construct / Items	Information Overload	CE - Cognitive	CE Affective + Behavioural	Negative Brand Experience
IO_1	−.580			
IO_ 2	−.713			
IO_ 3	−.744			
IO 4	−.532			
CBECE 1		−.689		
CBECE 2		−.674		
CBECE 3		−.717		
CBECE 4		−.527		
CBECE 5		−.580		
CBECE 6		−.418		
CBEAE 1			.423	
CBEAE_ 2			.485	
CBEAE_3			.687	
CBEAE_4			.520	
CBEAE_5			.601	
CBEAE_6			.594	
CBEBE_1			.489	
CBEBE_2			.431	
CBEBE_3			.558	
CBEBE_4			.666	
CBEBE_5			.634	
CBEBE_6			.650	
CBEBE_7			.724	
CBEBE_8			.616	
CBEBE_9			.516	
CBEBE_10			.683	
NEB_1				.912
NEB_2				.756
NEB_3				.727
NEB_4				.851
NEB_5				.762

Note: Extraction Method: ML Rotation Method: Oblimin with Kaiser Normalization Rotation converged in 7 iterations. KMO = .928, Bartlett's $\chi^2 = 5112.025$ (df = 465, $p < .001$). Goodness-of-fit Test: $\chi^2 = 595.165$, df = 347, p = .000

The results indicate clear differentiation between constructs, with minimal cross-loadings and strong item representation. The validity of the factor structure was further confirmed through CFA. Table 41 presents the final four-factor solution.

Exploratory Factor Analysis - Group 2

EFA was conducted on 18 items representing Privacy Concerns, Psychological Safety, Consumer Well-Being, and Perceived Brand Wastefulness. ML extraction with Oblimin rotation (Kaiser Normalization) was used to examine the factor structure. The KMO value of .884 and a significant Bartlett's test ($\chi^2 = 3108.683$, $df = 153$, $p < .001$) confirmed the suitability of the data for factor analysis (Kaiser, 1974). The goodness-of-fit test also supported the adequacy of the model ($\chi^2 = 267.595$, $df = 87$, $p < .001$).

The initial solution based on eigenvalues suggested fewer factors than theoretically expected and indicated cross-loadings among Brand Wastefulness items. In line with theoretical expectations, a four-factor solution was therefore specified (Hair et al., 2019). The rotated solution converged after eight iterations and produced a clear and interpretable structure, with all loadings above .40.

The factors were identified as follows:

- **Factor 1:** Perceived Brand Wastefulness (loadings .428 to .926), combining Inefficient Utilisation and Tangible Waste

- **Factor 2:** Consumer Well-Being (loadings .572 to .754)
- **Factor 3:** Psychological Safety (loadings .605 to .835)
- **Factor 4:** Privacy Concerns (loadings –.810 to –.857)

The results indicate a clear and theoretically consistent factor structure, with minimal cross-loadings. Table 42 presents the final four-factor solution, supporting the suitability of the data for subsequent CFA.

Table 42: EFA Group 2

Construct / Items	Perceived Brand Wastefulness	Consumer Well-being	Psychological Safety	Privacy Concerns
BWIU_1	.429			
BWIU_2	.603			
BWIU_3	.540			
BWIU_4	.428			
BWTW_1	.907			
BWTW_2	.906			
BWTW_3	.917			
BWTW_4	.926			
SWB_1		.572		
SWB_2		.773		
SWB_3		.724		
SWB_4		.754		
PS_ 1			.824	
PS_ 2			.835	
PS_ 3			.605	
PCOBC_1				–.857
PCOBC_2				–.814
PCOBC_3				–.810

Note: Extraction Method: ML. Rotation Method: Oblimin with Kaiser Normalization. Rotation Converged in 8 iterations. KMO = .884; Bartlett's χ^2 = 3108.683 (df = 153, p < .001). Goodness-of-Fit Test: χ^2 = 267.595 (df = 87, p = .000)**

Exploratory Factor Analysis - *Group 3*

EFA was conducted on 17 items representing Value Incongruity, Emotional Exhaustion, and Self-Brand Connection. ML extraction with Oblimin rotation (Kaiser Normalization) was used to examine the factor structure. The KMO value of .922 and a significant Bartlett's test ($\chi^2 = 3321.691$, df = 136, $p < .001$) confirmed excellent suitability for factor analysis (Kaiser, 1974). The goodness-of-fit test also supported the adequacy of the model ($\chi^2 = 266.031$, df = 88, $p < .001$).

The initial extraction supported a three-factor structure, consistent with theoretical expectations. After rotation, all items loaded cleanly onto their respective constructs, with loadings ranging from .453 to .937, and the solution converged after five iterations.

The factors were identified as follows:

- **Factor 1:** Emotional Exhaustion (loadings .676 to .937)
- **Factor 2:** Self-Brand Connection (loadings .634 to .719)
- **Factor 3:** Value Incongruity (loadings .453 to .839)

No significant cross-loadings were observed, and the results indicate clear differentiation between constructs. Table 43 presents the final three-factor solution, supporting the suitability of the data for subsequent CFA.

Table 43: EFA Group 3

Construct / Items	Emotional Exhaustion	Self-Brand Connection	Value Incongruity
EE_1	.676		
EE_2	.693		
EE_ 3	.684		
EE_4	.850		
EE_5	.888		
EE_6	.821		
EE_7	.937		
EE_8	.854		
SBC_1		.634	
SBC_2		.646	
SBC_3		.692	
SBC_4		.719	
SBC_5		.717	
SBC_6		.655	
COCVI_1			.824
COCVI_2			.839
COCVI_3			.453

Note: Extraction Method: ML. Rotation Method: Oblimin with Kaiser Normalization. Rotation Converged in 5 iterations. KMO = .922; Bartlett's χ^2 = 3321.691 (df = 136, p < .001). Goodness-of-Fit Test: χ^2 = 266.031 (df = 88, p = .000)**

Exploratory Factor Analysis Results

To assess the underlying structure of the measurement model, EFA was conducted in three groups using ML extraction with Oblimin rotation (Kaiser Normalization). Several iterations and alternative solutions were explored before arriving at the final factor structures, which were both statistically sound and theoretically consistent. Across all three groups, the KMO values exceeded the recommended threshold of .50, indicating adequate sampling, while Bartlett's tests were significant ($p < .001$), confirming the suitability of the data for factor analysis.

Group 1 included 31 items from Information Overload, CE (Cognitive, Affective, and Behavioural), and Negative Brand Experience. The KMO value was .928, and the analysis produced a clear four-factor structure, with item loadings ranging from –.744 to .912.

Group 2 consisted of 18 items from Perceived Brand Wastefulness, CWB, Psychological Safety, and Privacy Concerns. The KMO value was .884, and the analysis produced a clear four-factor structure, consistent with theoretical expectations, with loadings ranging from .428 to .926.

Group 3 comprised 17 items from Value Incongruity, Emotional Exhaustion, and Self-Brand Connection. The KMO value was .922, and the analysis yielded a three-factor solution, with loadings ranging from .453 to .937.

All items loaded clearly onto their constructs, regardless of the direction of loadings. The resulting factor structures were both conceptually coherent and statistically sound, supporting the inclusion of all retained items in the subsequent CFA. Following this, the measurement model was evaluated using CFA to assess its overall fit.

6.3.4.2. Confirmatory Factor Analysis (CFA)

Model Development and Specification

Following the EFA, CFA was conducted to validate the measurement structure of the proposed model. While EFA explores underlying factor structures, CFA tests how well the observed data fit a theoretically specified model (Hair et al., 2019; Kline, 2016).

In this study, CFA was used to confirm the dimensionality of the latent constructs, including CE, CWB, Emotional Exhaustion, Information Overload, Psychological Safety, and Privacy Concerns, based on their conceptual definitions and previously validated scales.

Constructs in measurement models can be specified as either reflective or formative, depending on the relationship between the latent variable and its indicators. In reflective models, the construct influences the observed items, whereas in formative models, the items combine to form the construct (Hair et al., 2019).

In this study, all constructs were specified as reflective, as they represent underlying psychological states expected to produce consistent responses across items (Byrne, 2016; Hair et al., 2021). Accordingly, the measurement model was

specified with paths directed from the latent constructs to their indicators. Unidimensionality was supported by retaining items with strong loadings and no substantial cross-loadings, ensuring that each set of indicators reflected a single construct (Brown, 2015).

Model Identification and Estimation: Model identification was assessed prior to estimation to ensure that parameters could be uniquely estimated. Degrees of freedom (df) were calculated using the formula:

$$df = \frac{1}{2}[p(p+1)] - k$$

where, p represents the number of observed variables and k the number of estimated parameters (Kline, 2016). All measurement models were overidentified (df > 0), indicating that the number of observed data points exceeded the number of parameters to be estimated, allowing for meaningful evaluation of model fit (Hair et al., 2019; Kline, 2016).

Model parameters were estimated using the ML method in AMOS, which is appropriate for continuous data that are approximately normally distributed (Byrne, 2016). This approach provides reliable parameter estimates and remains robust to moderate deviations from normality (Hair et al., 2019; Kline, 2016).

Model Fit Evaluation: Once the measurement model was specified, its goodness of fit (GOF) was assessed to determine how well it represented the observed data. Model fit reflects how closely the covariance matrix implied by the model matches the covariance matrix observed in the sample (Byrne, 2016; Hair et al., 2019). To evaluate this, a range of fit indices was considered, including both absolute and incremental measures (Hair et al., 2019).

The chi-square (χ^2) statistic was first examined to assess overall model fit by comparing the observed and model-implied covariance matrices. However, χ^2 is sensitive to sample size and often becomes significant in larger samples, even when model fit is acceptable (Kline, 2016). To address this, the normed chi-square (χ^2/df) was also considered. Values below 3.0 are generally taken to indicate acceptable fit, with lower values reflecting better alignment between the model and the data (Byrne, 2016).

Given the sensitivity of the chi-square statistic to sample size, additional fit indices were considered to provide a more balanced assessment. RMSEA was used to evaluate how well the model fits the population covariance matrix, with values below .06-.08 indicating acceptable fit and PCLOSE values above .05 suggesting a close fit (Hu & Bentler, 1999; Schermelleh-Engel et al., 2003). RMSEA is particularly useful as it accounts for model complexity.

Incremental fit was assessed using the CFI and TLI, which compare the proposed model with a null model. Values of .90 or above indicate acceptable fit, while values above .95 reflect good fit (Hair et al., 2019). GFI and AGFI were also examined as supplementary indicators, although they are more sensitive to sample size and were interpreted with caution (Byrne, 2016).

Taken together, these indices provide a comprehensive assessment of model fit. In line with best practice, model adequacy was evaluated holistically instead of relying on a single statistic, with emphasis placed on the pattern of results (Hair et al., 2019; Kline, 2016).

Construct Validity and Reliability: After establishing acceptable model fit, the next step was to assess the validity and reliability of the measurement model. Construct validity refers to the extent to which the observed indicators accurately represent their underlying theoretical constructs (Hair et al., 2019; Kline, 2016). This was evaluated through two key aspects: convergent validity and discriminant validity (Fornell & Larcker, 1981).

Convergent validity assesses whether items intended to measure the same construct are sufficiently correlated. It was evaluated using standardised factor loadings, along with CR and AVE (Hair et al., 2019).

- *Factor loadings* reflect the strength of the relationship between an observed variable and its underlying construct. Higher loadings indicate that an item shares more variance with the construct it measures. Loadings above .50 are generally considered acceptable, with values above .70 indicating stronger convergence (Kline, 2016).
- *CR* assesses the internal consistency of a construct and is generally considered more precise than Cronbach's alpha, as it is based on standardised factor loadings. Values above .70 are typically taken to indicate good reliability (Hair et al., 2019).
- *AVE* reflects the proportion of variance in the indicators that is explained by the latent construct. Values of .50 or higher indicate that the construct accounts for more than half of the variance in its indicators, and not measurement error (Fornell & Larcker, 1981).

CR values ranged from .79 to .95, indicating strong internal consistency across all constructs. AVE values ranged from .43 to .78, with most constructs exceeding the .50 threshold, supporting convergent validity. Two dimensions of CE-Affective (AVE = .478) and CE-Behavioural (AVE = .433) fell slightly below the recommended cut-off. However, both demonstrated CR above .70 and satisfactory factor loadings, indicating that convergent validity remains acceptable (Fornell & Larcker, 1981; Hair et al., 2019; Malhotra & Dash, 2011).

Discriminant validity was assessed to determine whether each construct was empirically distinct from the others. It ensures that indicators of one construct are not excessively correlated with those of another, supporting the uniqueness of each construct. This was evaluated using the HTMT criterion, which is considered a more rigorous approach than earlier correlation-based methods (Henseler et al., 2015). The highest HTMT value observed was .847, below the conservative threshold of .85, confirming satisfactory discriminant validity. The full HTMT matrix is presented in Table 44.

Table 44:Heterotrait-Monotrait Ratio (HTMT) Matrix for Discriminant Validity

	PS	PC	VI	IO	BW	SBC	NEB	EE	CWB	CE-Cog	CE-Affect	CE-Beh
PS												
PC	0.363											
VI	0.451	0.776										
IO	0.262	0.821	0.784									
BW	0.319	0.608	0.741	0.67								
SBC	0.38	0.348	0.204	0.359	0.17							
NEB	0.272	0.644	0.756	0.702	0.779	0.199						
EE	0.181	0.711	0.787	0.842	0.673	0.356	0.778					
CWB	0.199	0.244	0.162	0.344	0.101	0.773	0.155	0.325				
CE-Cog	0.335	0.567	0.519	0.67	0.405	0.684	0.575	0.575	0.585			
CE-Affect	0.308	0.132	0.094	0.184	0.092	0.792	0.089	0.149	0.75	0.601		
CE-Beh	0.367	0.293	0.159	0.36	0.129	0.832	0.137	0.314	0.836	0.654	0.847	

Note: PS: Psychological Safety; **PC:** Privacy Concerns; **VI:** Value Incongruity; I**O:** Information Overload;
BW: Brand Wastefulness; **SBC:** Self-Brand Connection; **NEB:** Negative Brand Experience; **EE:** Emotional Exhaustion;
CWB: Consumer Well-Being; **CE-Cog: CE-Cognitive; CE-Affect: CE-Affective; CE-Beh:** CE-Behavioural

Taken together, the results indicate that the measurement model demonstrates acceptable reliability and validity. These findings provide confidence that the

constructs were measured consistently and remain distinct from one another, supporting their inclusion in the subsequent structural model analysis.

Confirmatory Factor Analysis (Group 1)

Model Specification and Identification

Group 1 comprised four reflective latent constructs: Perceived Brand Wastefulness, Privacy Concerns, Psychological Safety, and Value Incongruity.

Brand Wastefulness was measured using eight indicators across two subdimensions: Inefficient Utilisation (BW_IU1-BW_IU4) and Tangible Waste (BW_TW1-BW_TW4). Privacy Concerns was measured with three items (PCOBC_1-PCOBC_3), Psychological Safety with three items (PS_1-PS_3), and Value Incongruity with three items (CoCVI_1-CoCVI_3). All items were specified to load on their respective latent constructs, with error variances freely estimated. The initial model was overidentified (df = 113), indicating that it was suitable for CFA.

Initial Model and Refinement Process

The initial CFA for Group 1, including all eight Brand Wastefulness indicators, was estimated using the ML method. The model produced an admissible solution; however, the fit indices indicated poor model fit, suggesting the need for

refinement. Specifically, $\chi^2(113) = 463.662$, $\chi^2/df = 4.10$, CFI = .895, TLI = .873, and RMSEA = .106 (90% CI: .096–.116).

Following examination of the measurement model, BW_IU1 and BW_IU4 were removed during model refinement. The remaining six items (BW_IU2, BW_IU3, BW_TW1, BW_TW2, BW_TW3 and BW_TW4) were retained in the final measurement model. This specification was also consistent with the Brand Wastefulness indicators used in the subsequent structural model.

Following this refinement, the remaining six items (BW_IU2, BW_IU3, BW_TW1, BW_TW2, BW_TW3, BW_TW4) demonstrated stronger and more consistent factor loadings, and the overall model fit improved substantially: $\chi^2(83) = 214.07$, $\chi^2/df = 2.58$, CFI = .956, TLI = .944, and RMSEA = .076 (90% CI: .063–.088).

A theoretically justified error covariance was introduced between BW_IU2 and BW_IU3, as both items capture closely related aspects of inefficient product use. This specification was supported by a high modification index and reflects shared variance arising from similar item wording and conceptual overlap. The inclusion of this covariance further improved model fit while maintaining theoretical coherence.

Assessment of Model Fit

The final model demonstrated acceptable overall fit: $\chi^2(83) =$ **192.839**, $\chi^2/df =$ **2.323**, CFI = **.962**, TLI = **.952**, GFI = **.915**, AGFI = **.878**, and RMSEA = **.069** (90% CI: **.056–.082**, PCLOSE = **.008**). In summary, the fit indices indicate that the refined model provides an acceptable representation of the data. Incremental fit indices (CFI and TLI) exceeded the recommended threshold of .90, while RMSEA remained within the acceptable range, supporting model adequacy (Hair et al., 2019; Hu & Bentler, 1999). Absolute fit indices (GFI and AGFI) also suggested acceptable fit, although these indices are known to be sensitive to sample size.

All **standardised factor loadings** were statistically significant ($p < .001$) and ranged from .575 to .915. All but one loading exceeded .60, with most exceeding .70, indicating satisfactory relationships between the indicators and their respective constructs. CR values ranged from .81 to .92, exceeding the recommended threshold of .70 (Hair et al., 2021). AVE values ranged from .60 to .74, all above the .50 benchmark (Fornell & Larcker, 1981), supporting convergent validity.

Notably, the removal of BW_IU1 and BW_IU24increased the AVE for Perceived Brand Wastefulness, further confirming improved measurement quality.

Discriminant validity was assessed using the HTMT criterion, which provides a robust evaluation of construct distinctiveness (Henseler et al., 2015). The highest HTMT value among the Group 1 constructs was .776, below the conservative threshold of .85, indicating that the constructs were empirically distinct.

The final measurement model for Group 1 demonstrated acceptable model fit. Model fit improved substantially following item refinement. Table 45 summarises the model fit indices for both the initial and refined CFA models for Group 1.

Table 45: Comparison of Initial and Refined CFA Model Fit Indices (Group 1)

Model	χ^2 (df)	χ^2/df	CFI	TLI	RMSEA (90% CI)
Initial Model	463.662 (113)	4.10	.895	.873	.106 (.096–.116)
Refined Model (Final)	192.839 (83)	2.323	.962	.952	.069 (.056–.082)

Note. χ^2 = Chi-square; df = degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; RMSEA = Root Mean Square Error of Approximation; CR = Composite Reliability

Interpretation The model refinement process led to a clear improvement in statistical fit. Following the removal of BW_IU1 and BW_IU4, the refined Brand Wastefulness construct retained six indicators (BW_IU2, BW_IU3, BW_TW1, BW_TW2, BW_TW3 and BW_TW4), while the remaining constructs retained stable factor structures and satisfactory internal consistency. Figure 6 presents the final measurement model.

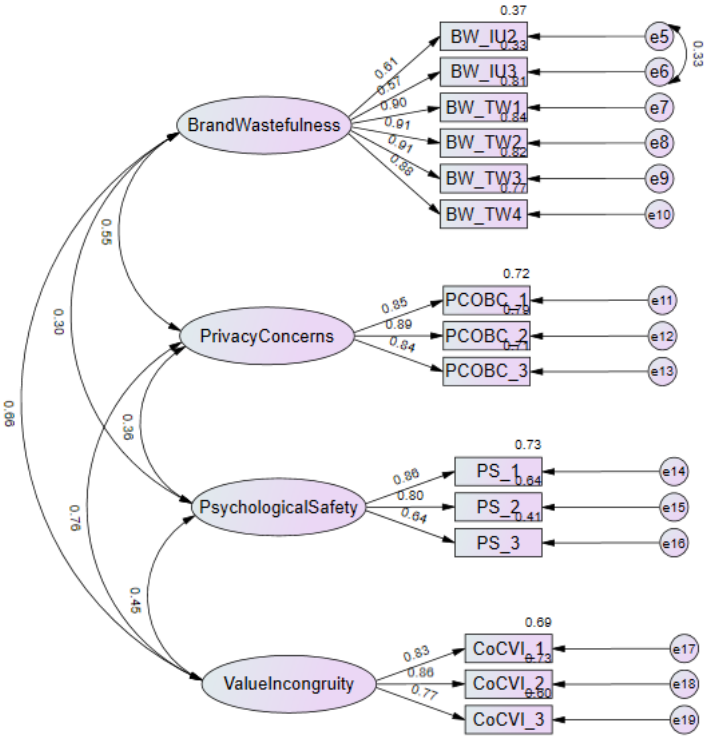


Figure 6: Confirmatory Factor Analysis (Group 1)

Group 2: Model Specification and Identification

Group 2 comprised the remaining constructs in the structural framework, including CE (CE: Cognitive, Affective, and Behavioural), Self-Brand Connection, Emotional Exhaustion, Negative Brand Experience, Information Overload and CWB.

The CE-Cognitive was measured using six indicators (CBE_CE1, CBE_CE2, CBE_CE3, CBE_CE4, CBE_CE5, CBE_CE6), CE-Affective dimension using six items (CBE_AE1–CBE_AE6), and CE-Behavioural dimension using ten

items (CBE_BE1–CBE_BE10). Self-Brand Connection was measured using six items (SBC_1–SBC_6), Emotional Exhaustion using eight items (EE_1–EE_8), Negative Brand Experience using five items (NEB_1–NEB_5), Information Overload was measured using four items (OBCIO_1–OBCIO_4), and CWB using four items (SWB_1–SWB_4).

Each observed indicator was specified to load onto its corresponding latent construct, with measurement errors assumed to be uncorrelated at the initial stage of analysis. The model contained 1225 distinct sample moments and 1099 degrees of freedom, indicating that it was overidentified. This confirms that the number of known values exceeded the number of estimated parameters, supporting the suitability of the model for CFA (Kline, 2016; Hair et al., 2021).

Before estimation, model identification was verified by confirming that the model had positive degrees of freedom ($df > 0$), allowing for statistical testing (Kline, 2016). Parameters were estimated using the ML method in AMOS, which provides reliable and efficient estimates when the data approximate multivariate normality (Byrne, 2016; Hair et al., 2019).

Initial Model and Refinement Process

The initial examination of the Group 2 measurement model indicated acceptable overall fit, although not optimal, with several indicators exhibiting localised areas of misfit, reflected in high modification indices and relatively weaker factor loadings. Specifically, the model yielded $\chi^2(1099) = 2104.510$, $\chi^2/df = 1.915$, CFI = .888, TLI = .880, and RMSEA = .057 (90% CI: .054–.061). While the RMSEA and χ^2/df values indicated good absolute and relative fit, the incremental fit indices (CFI and TLI) fell slightly below the recommended threshold of .90, suggesting the need for further refinement.

A detailed inspection of the standardised factor loadings and modification indices identified several items with relatively weaker loadings and high modification indices, indicating potential issues of redundancy and construct overlap. These items were removed sequentially, while ensuring that the remaining indicators continued to reflect the conceptual domain of each construct.

Within CE, one item from the CE-Cognitive (CBE_CE4: "*Time flies when I am interacting with this brand*") was removed due to its relatively weaker loading and conceptual overlap with adjacent items (CBE_CE3 and CBE_CE5), which already captured the core experience of immersion and absorption.

Within the CE-Affective dimension, items CBE_AE1 ("I *feel enthusiastic about this brand*") and CBE_AE5 ("*I get pleasure from interacting with this brand*") were removed due to high residual correlations and conceptual overlap with other affective indicators, particularly CBE_AE3 and CBE_AE4, which already captured the emotional intensity of brand interaction.

Within the CE-Behavioural dimension, five items (CBE_BE2, CBE_BE4, CBE_BE6, CBE_BE9, and CBE_BE10) were removed due to relatively weaker standardised loadings and high modification indices, indicating redundancy and conceptual overlap. These items primarily reflected repetitive advocacy or context-specific interaction behaviours that did not contribute unique variance to the construct. The retained items (CBE_BE1, CBE_BE3, CBE_BE5, CBE_BE7, and CBE_BE8) continued to capture the core aspects of behavioural engagement (Brodie et al., 2013; Vivek et al., 2012).

During the EFA, items representing CE-Affective and CE-Behavioural initially loaded onto a single factor, indicating substantial empirical overlap between emotional and action-oriented aspects of engagement. However, in the CFA, these dimensions were specified as distinct but related constructs. This decision was grounded in the CE literature, which conceptualises affective and behavioural engagement as interrelated yet separate dimensions (Brodie et al., 2011;

Hollebeek et al., 2014; Vivek et al., 2012). CE-Affective reflects consumers' emotional involvement with the brand, whereas CE-behavioural captures their active participation and brand-related actions.

Within the Self-Brand Connection construct, items SBC_1 and SBC_2 were removed due to their comparatively weaker factor loadings and cross-associations with affective engagement indicators. Conceptually, these items represented broader brand identification and not the more personalised, identity-expressive bond underlying self-brand connection. The remaining items (SBC_3–SBC_6) captured the intended conceptualisation of consumers' self-brand integration, consistent with Escalas and Bettman (2003).

Inclusion of Error Covariances

Modification indices indicated shared variance among several items within the Emotional Exhaustion dimension, which was theoretically justified given their closely related wording. Specifically, correlated errors were introduced between EE_1–EE_2, EE_2–EE_5, and EE_4–EE_5. These item pairs reflect similar expressions of fatigue, emotional depletion, and strain; therefore, their covariances represent substantive overlap and not purely statistical issues (Maslach & Jackson, 1981; Byrne, 2016).

Assessment of Model Fit

Following these refinements, a clear improvement was observed in overall model fit. The refined model yielded: $\chi^2(671) = 1186.93$, $\chi^2/df = 1.77$, CFI = .931, TLI = .924, and RMSEA = .053 (90% CI: .048–.058, PCLOSE = .182). These values indicate good model fit, with incremental indices exceeding .90 and RMSEA below .06 (Hu & Bentler, 1999; Hair et al., 2019). Absolute fit indices, including GFI (.822) and AGFI (.793), also suggest acceptable fit, although they are known to be sensitive to sample size (Byrne, 2016).

Construct Validity and Reliability

Convergent validity was evaluated using factor loadings, CR, and AVE (Hair et al., 2019). All retained items loaded significantly ($p < .001$), with most exceeding .60. CR values ranged from .79 to .95, exceeding the .70 threshold for internal consistency. AVE values ranged from .43 to .78, with most constructs exceeding the .50 criterion. Although the Affective (AVE = .478) and Behavioural (AVE = .433) dimensions of CE fell slightly below this threshold, their strong factor loadings and high CR values indicate that the constructs still capture sufficient variance. The key fit for the refined model are summarised in Table 46, reflecting improved measurement quality and stronger theoretical alignment following the removal of underperforming indicators.

Table 46: Comparison of Initial and Refined CFA Model Fit Indices (Group 2)

Model	χ^2 (df)	χ^2/df	CFI	TLI	RMSEA (90% CI)
Initial Model	2104.51 (1099)	1.915	.888	.880	.057 (.054–.061)
Refined Model (Final)	1186.93 (671)	1.770	.931	.924	.053 (.048–.058)

Note. χ^2 = Chi-square; df = degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; RMSEA = Root Mean Square Error of Approximation;

Figure 7 presents the final measurement model for Group 2.

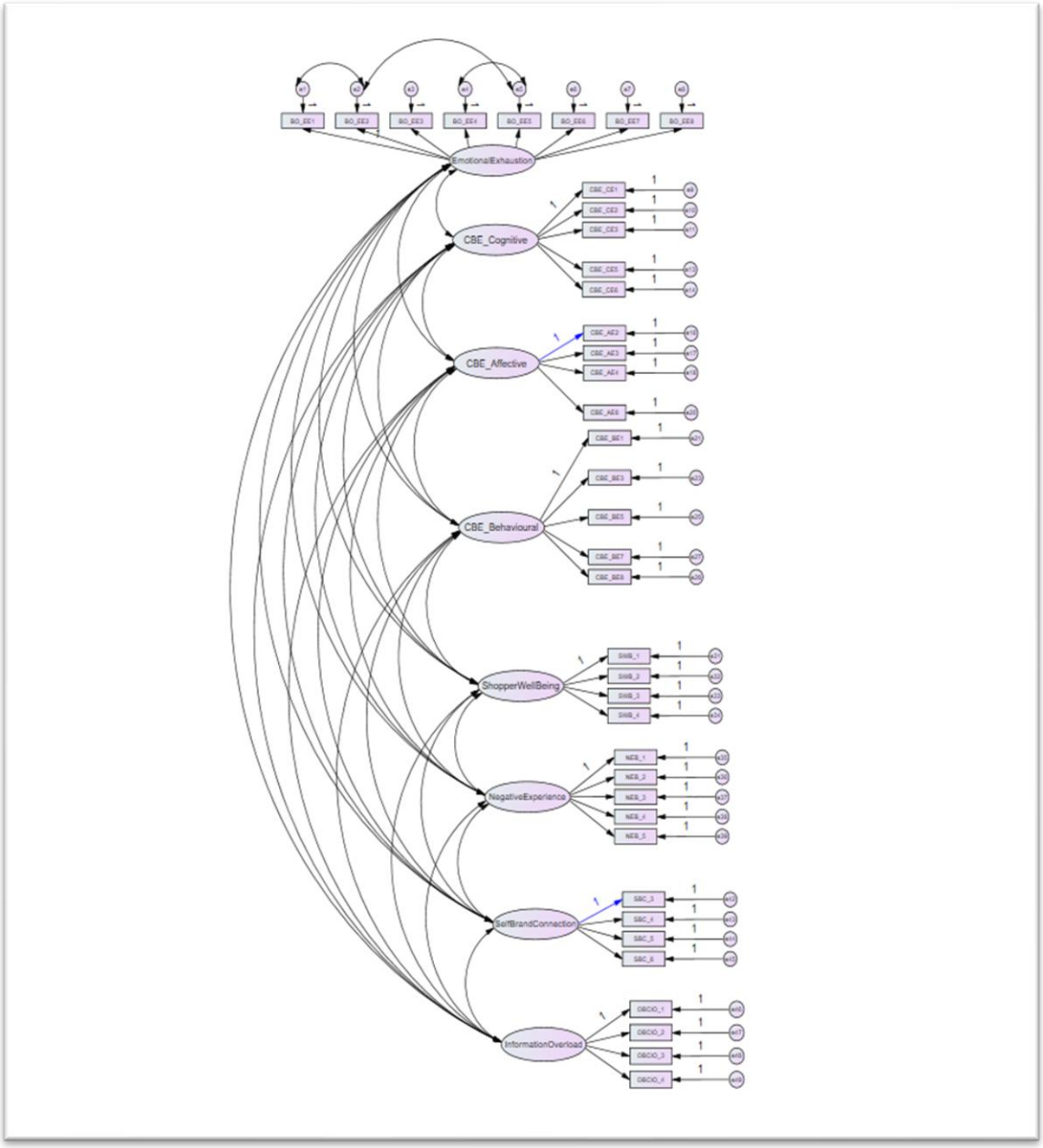


Figure 7: Confirmatory Factor Analysis (Group 2)

The refinement of the Group 2 measurement model improved both model fit and conceptual clarity. The removal of relatively weaker and redundant items within the CE and Self-Brand Connection constructs enhanced model parsimony without compromising theoretical integrity. The final measurement model achieved good overall fit ($\chi^2(671) = 1186.93$, $\chi^2/df = 1.77$, CFI = .931, TLI = .924, RMSEA = .053), with all retained items demonstrating acceptable to strong standardised loadings and satisfactory reliability and validity. Convergent validity was supported by AVE values exceeding or approaching the .50 threshold. These findings indicate that the refined Group 2 model demonstrates sound psychometric properties and provides a robust foundation for subsequent structural analysis.

6.4. Descriptive analyses of the final latent constructs:

All constructs were assessed for normality using skewness, kurtosis, and the Kolmogorov-Smirnov test. Although the Kolmogorov-Smirnov test was statistically significant for all constructs ($p < .001$), this is expected in large samples and does not indicate substantial non-normality (Kline, 2016). Skewness and kurtosis values for all constructs were within acceptable thresholds, supporting the assumption of approximate normality.

a) Information Overload was measured using four items (OBCIO_1-OBCIO_4). The construct had a mean of 4.63 (SD = 1.35), with values ranging from 1 to 7. Skewness (-0.73) and kurtosis (-0.05) were within acceptable

thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 8 illustrates the distribution of the construct.

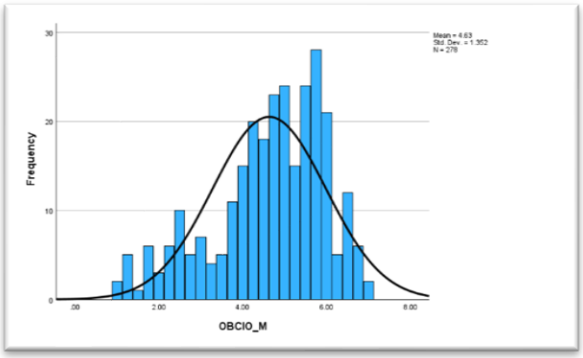


Figure 8: Histogram plot for Information Overload

b) Value Incongruity was measured using three items (CoCVI_1-CoCVI_3). The construct had a mean of 4.30 (SD = 1.59), with values ranging from 1 to 7. Skewness (-0.49) and kurtosis (-0.19) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 9 illustrates the distribution of the construct.

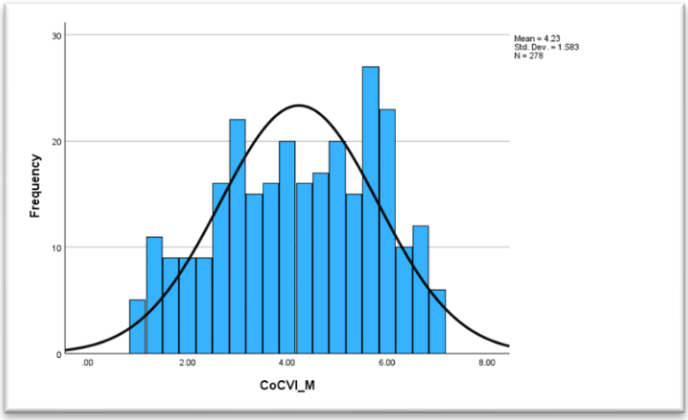


Figure 9: Histogram plot for Value Incongruity

c) Perceived Brand Wastefulness was measured using six items capturing inefficient utilisation and tangible waste. The construct had a mean of 4.33 (SD = 1.35), with values ranging from 1 to 7. Skewness (-0.35) and kurtosis (-0.52) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 10 illustrates the distribution of the construct.

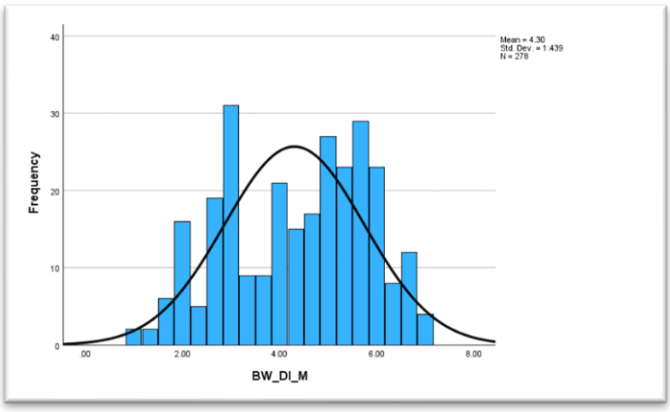


Figure 10: Histogram plot for Perceived Brand Wastefulness

d) Privacy Concerns was measured using three items (PCOBC_1-PCOBC_3). The construct had a mean of 4.65 (SD = 1.65), with values ranging from 1 to 7. Skewness (-0.73) and kurtosis (-0.53) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 11 illustrates the distribution of the construct.

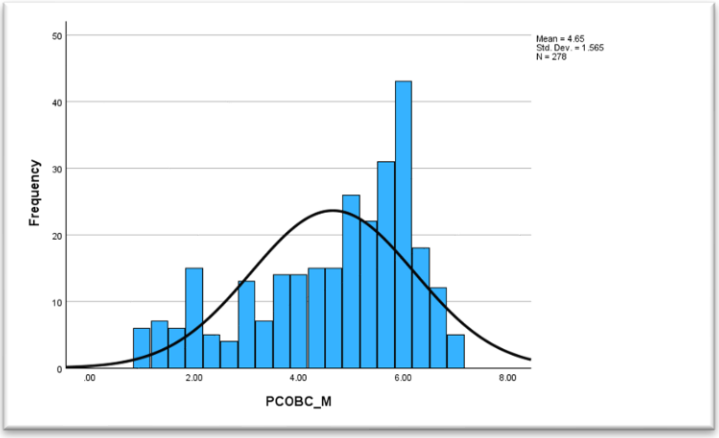


Figure 11: Histogram plot for Privacy Concerns

e) Psychological Safety was measured using three items (PS_1-PS_3). The construct had a mean of 4.92 (SD = 1.27), with values ranging from 1 to 7. Skewness (-0.69) and kurtosis (-0.34) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 12 illustrates the distribution of the construct.

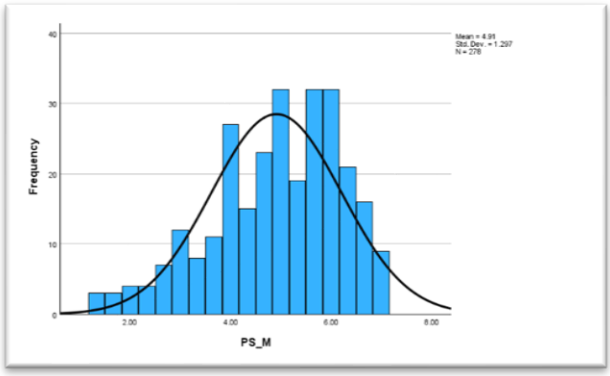


Figure 12: Histogram plot for Psychological Safety

f) Customer Engagement-Cognitive was measured using five items (CBE_CE1-CBE_CE6, excluding CBE_CE4). The construct had a mean of 4.86 (SD = 1.31), with values ranging from 1 to 7. Skewness (-0.47) and kurtosis (-0.62) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 13 illustrates the distribution of the construct.

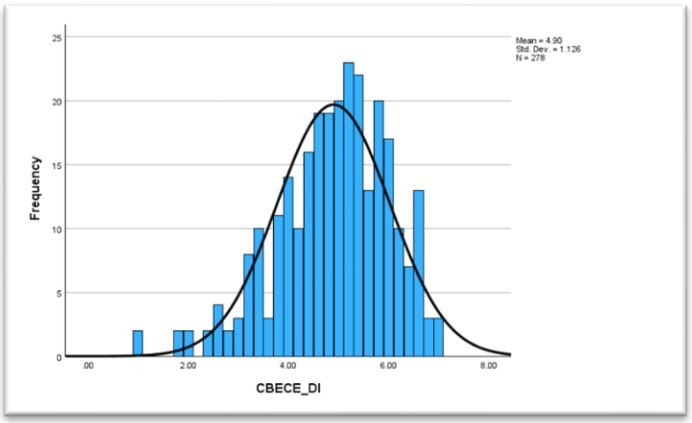


Figure 13: Histogram plot for Customer Engagement-Cognitive

g) Customer Engagement-Affective was measured using four items (CBE_AE2-CBE_AE6, excluding CBE_AE1 and CBE_AE5). The construct had a mean of 5.72 (SD = 0.808), with values ranging from 1 to 7. Skewness (-0.58) and kurtosis (-0.44) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 14 illustrates the distribution of the construct.

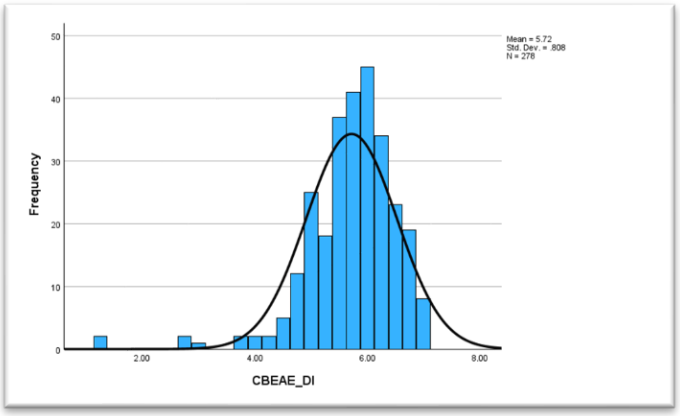


Figure 14: Histogram plot for Customer Engagement-Affective

h) Customer Engagement-Behavioural was measured using five items (CBE_BE1, CBE_BE3, CBE_BE5, CBE_BE7, and CBE_BE8). The construct had a mean of 5.49 (SD = 0.840), with values ranging from 1 to 7. Skewness (-0.61) and kurtosis (-0.58) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 15 illustrates the distribution of the construct.

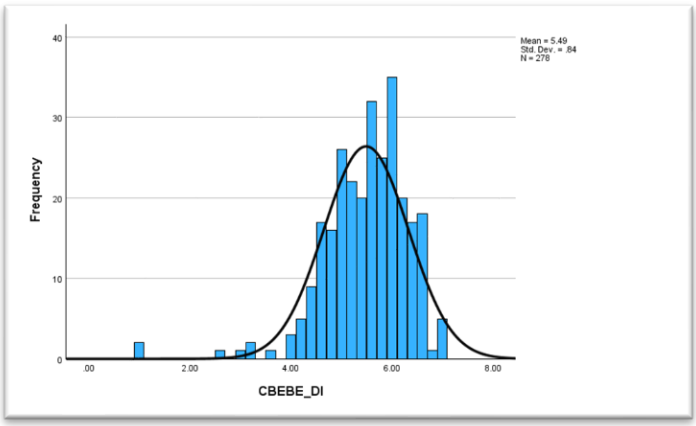


Figure 15: Histogram plot for Customer Engagement-Behavioural

i) Consumer Well-Being was measured using four items (SWB_1-SWB_4). The construct had a mean of 5.45 (SD = 0.925), with values ranging from 1 to 7. Skewness (-0.32) and kurtosis (-0.41) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 16 illustrates the distribution of the construct.

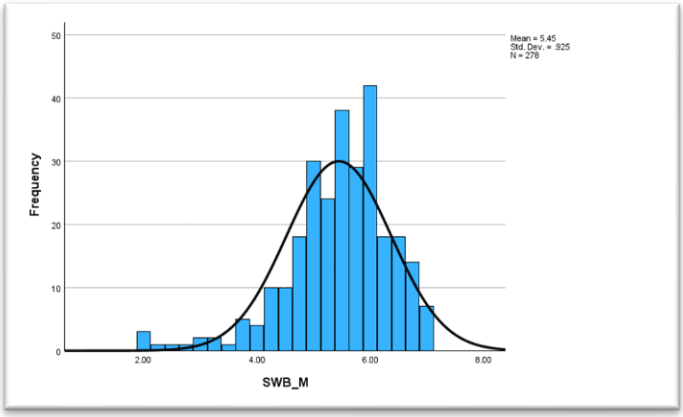


Figure 16: Histogram plot for Consumer Well-being

j) Emotional Exhaustion was measured using eight items (EE_1-EE_8). The construct had a mean of 4.35 (SD = 1.557), with values ranging from 1 to 7. Skewness (0.26) and kurtosis (-0.41) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 17 illustrates the distribution of the construct.

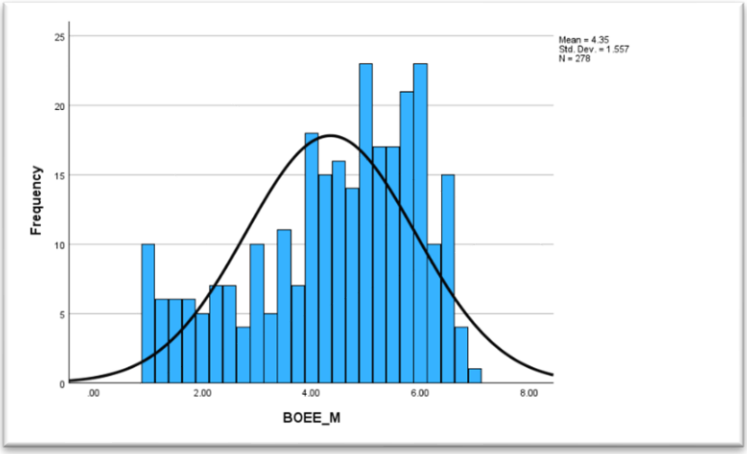


Figure 17: Histogram plot for Emotional Exhaustion

k) Negative Brand Experience was measured using five items (NEB_1-NEB_5). The construct had a mean of 3.54 (SD = 1.689), with values ranging from 1 to 7. Skewness (0.42) and kurtosis (-0.37) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 18 illustrates the distribution of the construct.

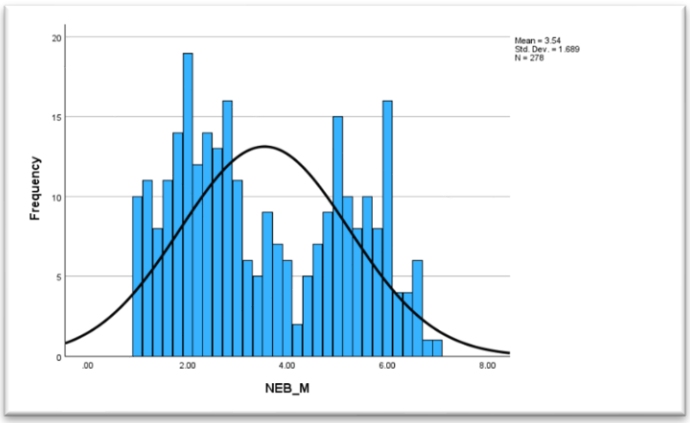


Figure 18: Histogram plot for Negative Brand Experience

l) Self-Brand Connection was measured using four items (SBC_3-SBC_6). The construct had a mean of 5.36 (SD = 0.893), with values ranging from 1 to 7. Skewness (-0.29) and kurtosis (-0.34) were within acceptable thresholds, indicating an approximately normal distribution (Hair et al., 2019; Byrne, 2016). Figure 19 illustrates the distribution of the construct.

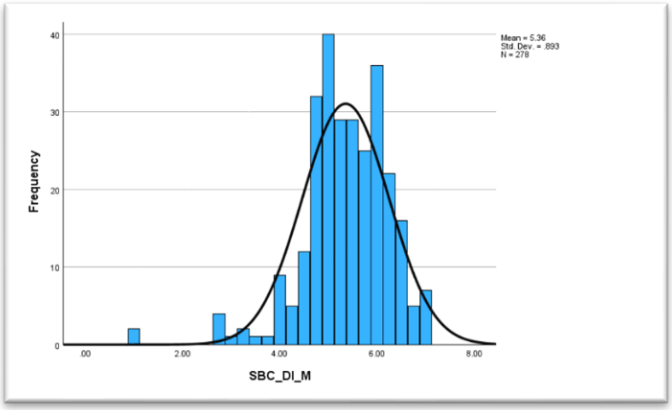


Figure 19: Histogram plot for Self-Brand Connection

Summary of Latent Constructs

The final latent constructs exhibited acceptable statistical properties and approximate normality. Although Kolmogorov-Smirnov tests were significant across all constructs, this is expected in large samples and does not indicate substantial non-normality (Kline, 2016). Skewness and kurtosis values were within recommended thresholds (Hair et al., 2019; Byrne, 2016), and histogram plots indicated reasonably symmetrical distributions. Therefore, the data satisfied the normality assumptions required for SEM using ML estimation.

6.4. Structural Equation Modelling

6.4.1. Overview of Path Analysis

SEM was conducted to examine the hypothesised relationships among the latent constructs. SEM integrates both the measurement model, which links observed indicators to their underlying constructs, and the structural model, which specifies the relationships among the latent constructs (Hair et al., 2019; Kline, 2016).

The structural model was specified based on the theoretical framework outlined in Chapter 5, incorporating hypothesised relationships structured as a fully mediated model. SEM enables the simultaneous estimation of multiple relationships, allowing for the assessment of indirect effects within the model.

SEM involves a series of systematic steps. The initial stages, construct specification, measurement model development and assessment of reliability and validity, were completed through CFA. The subsequent stages involve specifying, estimating and evaluating the structural model, which are presented in this section.

6.4.2. Structural Model Specification

At this stage, the structural model was specified to examine the hypothesised relationships among the latent constructs identified through CFA. In SEM, constructs are classified as exogenous (independent variables) or endogenous (dependent variables) (Hair et al., 2019; Kline, 2016). In the proposed framework, five constructs, namely, Information Overload, Value Incongruity, Perceived Brand Wastefulness, Privacy Concerns, and Psychological Safety, were specified as exogenous variables, representing the key antecedents of consumer responses within OBCs. The endogenous constructs included Self-Brand Connection, Emotional Exhaustion, Negative Brand Experience, CE (Cognitive, Affective, and Behavioural) and CWB. In line with the theoretical framework outlined in Chapter 5, the structural model was specified as a fully mediated model, in which the effects of exogenous variables on engagement and well-being operate through mediating constructs. Specifically, the antecedents influence Self-Brand Connection and Emotional Exhaustion as primary mediators. Self-Brand Connection directly predicts CE and CWB, while a serial mediation process is specified through Emotional Exhaustion and Negative Brand Experience, whereby Emotional Exhaustion leads to Negative Brand Experience, which in turn influences the outcome variables. This configuration captures both parallel and sequential mediation processes within the model. All hypothesised relationships were represented by single-headed arrows, and error terms were

specified for all endogenous constructs to account for unexplained variance (Hair et al., 2019).

The structural model was estimated using AMOS with ML estimation, which provides efficient and unbiased parameter estimates under the assumption of multivariate normality (Byrne, 2016). Model degrees of freedom (df) were calculated using the standard SEM formula:

$$\boldsymbol{df = \frac{1}{2}[p(p+1)] - k}$$

where p represents the number of observed variables and k the number of estimated parameters (Hair et al., 2019). Both structural models were overidentified, indicating that sufficient information was available to estimate the model parameters.

6.4.3. Model Comparison: Fully vs. Partially Mediated Models

To evaluate whether full mediation was empirically justified, an alternative partially mediated model was examined by including direct paths from the exogenous variables to the outcome constructs. However, the model failed to converge due to estimation instability, suggesting model over-specification and redundancy among direct and mediated effects. Therefore, the theoretically

grounded fully mediated model was retained as the final structural model for hypothesis testing (Hair et al., 2019; Kline, 2016; Byrne, 2016).

6.4.4. Model Comparison: With and Without Control Variables

Both structural models, those estimated with and without control variables, exhibited satisfactory model fit, meeting or approaching the recommended thresholds for most indices (Hair et al., 2019; Kline, 2016). Specifically, the χ^2/df ratios for both models were below the recommended upper limit of 3 (1.823 and 1.784), and the RMSEA values (.055 and .053) indicated a good fit with minimal approximation error. The CFI and IFI values (≥ .90) suggested acceptable comparative fit, while TLI values (.895 and .893) were slightly below the conventional .90 cut-off but acceptable for a complex, multi-construct model. Although the AIC and ECVI values were marginally lower in the model without controls, implying a more parsimonious structure, the RMSEA and PCLOSE values improved in the model with controls (.053 and .057, respectively), suggesting a closer fit to the population covariance matrix. Moreover, including the control variables (Gender and Age) provided additional explanatory insight into consumer outcomes without compromising model parsimony. Given that the model with controls demonstrated slightly superior absolute fit (lower RMSEA, higher PCLOSE) and greater theoretical completeness, it was retained as the final model for hypothesis testing and mediation analysis. It should be noted that some

fit indices, including NFI, GFI, and AGFI, fell below recommended thresholds. This is not uncommon in complex structural models with multiple constructs and indicators and may be influenced by model complexity and sample size (Hair et al., 2019; Byrne, 2016). Despite these limitations, the pattern of fit indices, particularly RMSEA, χ^2/df, and CFI, supports the adequacy of the model.

Table 47 presents the comparative model fit indices for the structural models estimated with and without control variables. Both models demonstrated acceptable fit; however, the model including control variables showed slightly better absolute fit and greater theoretical completeness and was therefore retained for subsequent hypothesis testing.

Table 47: Comparison of Structural Model Fit Indices (With and Without Controls)

Fit Index	Recommended Threshold	Without Controls	With Controls
χ^2 (df)	—	2454.274 (1346)	2562.259 (1436)
χ^2/df	< 3	**1.823**	**1.784**
RMSEA	< .07	**.055**	**.053**
PCLOSE	> .05	.015	**.057**
CFI	> .90	**.901**	**.900**
TLI	> .90	.895	**.893**
NFI	> .90 (preferably)	.806	**.800**
IFI	> .90	**.902**	**.901**
GFI	> .80	.748	.748
AGFI	> .80	.722	.720
AIC	Lower = Better	**2732.274**	2882.259
ECVI	Lower = Better	**9.864**	10.405
HOELTER (0.05)	> 200 (adequate)	162	165

Note. χ^2 = Chi-square; df = degrees of freedom; RMSEA = Root Mean Square Error of Approximation; PCLOSE = Test of Close Fit; CFI = Comparative Fit Index; TLI = Tucker–Lewis Index; IFI = Incremental Fit Index; AIC = Akaike Information Criterion; ECVI = Expected Cross-Validation Index.

The structural model, with the control variables, developed in AMOS is demonstrated in Figure 20:

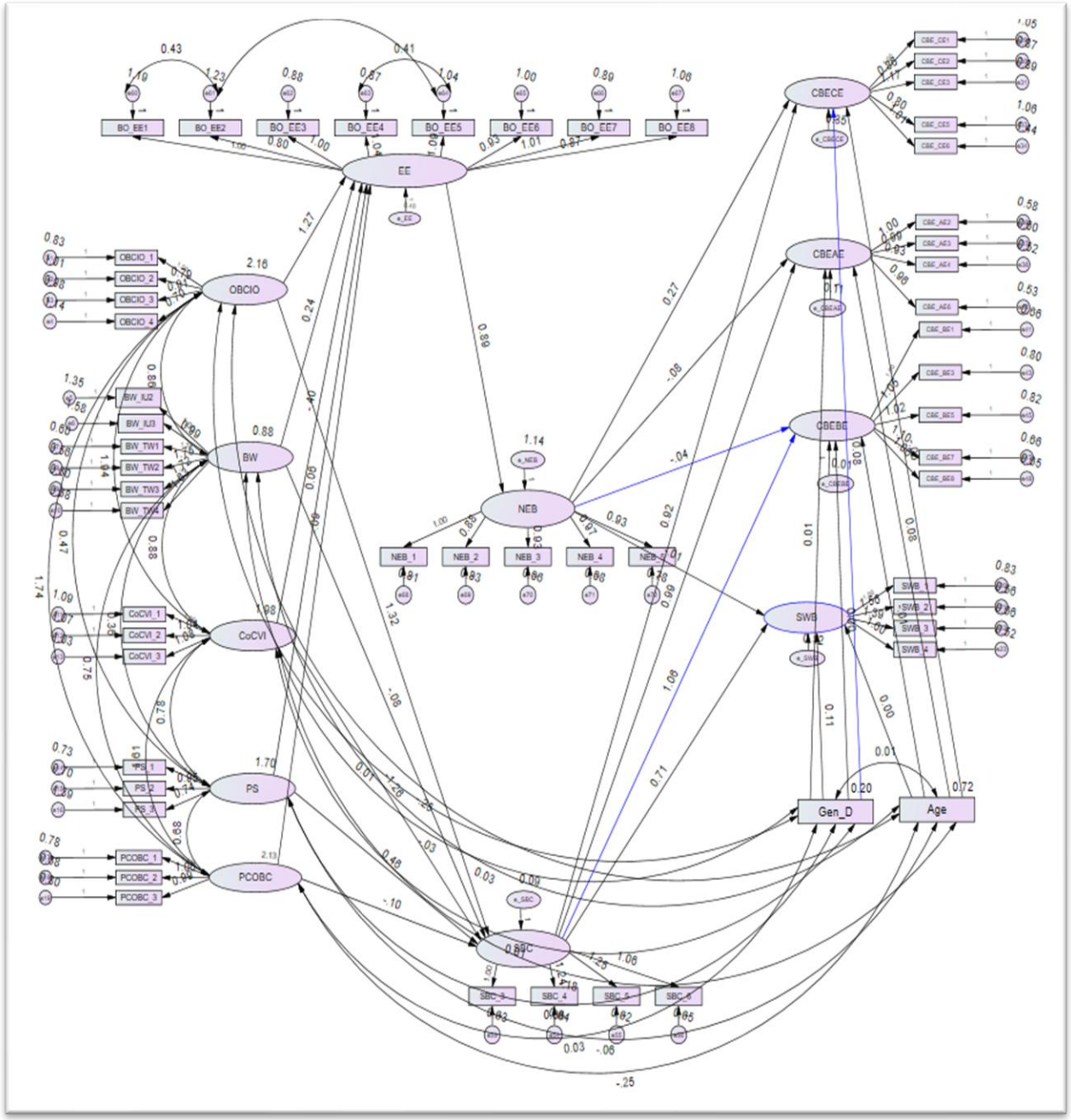


Figure 20: Structural model with control variables

6.4.4 Hypotheses Testing

This section presents the results of hypothesis testing for the structural model. As the model is fully mediated, no direct effects were specified between the exogenous and outcome variables. Instead, the effects of antecedents operate through two mediation pathways: (a) a serial pathway via Emotional Exhaustion leading to Negative Brand Experience, and (b) a parallel pathway via Self-Brand Connection. These mechanisms explain how antecedent factors influence CE and CWB within the OBC context.

As all hypotheses were directional and theoretically grounded, one-tailed significance tests were employed. One-tailed tests are appropriate when the direction of relationships is specified in advance and supported by theory (Byrne, 2016; Hair et al., 2019; Kline, 2016). Using two-tailed tests in such cases may reduce statistical power and obscure theoretically meaningful effects (Cohen et al., 2003).

6.4.4.1. Mediator-Outcome Hypotheses

This section examines the relationships between the mediators, Emotional Exhaustion, Negative Brand Experience, and Self-Brand Connection, and the outcome constructs of CE and CWB. These relationships capture how psychological and experiential states influence engagement and well-being

within the model. The results for the mediator-outcome relationships are summarised in Table 48.

Table 48: Results of Mediator-Outcome Relationships (H1–H3)

Hypothesis	Proposed Path	Standardized Estimate (β)	p-value	Result
H1	EE → NEB	0.789	$p < .001$	Supported
H2a	NEB → CE-Cognitive	0.438	$p < .001$	Not Supported
H2b	NEB → CE-Affective	–0.189	$p < .001$	Supported
H2c	NEB → CE-Behavioural	–0.096	$p = .040$	Supported
H2d	NEB → Consumer Well-being	–0.030	$p = .582$	Not Supported
H3a	SBC → CE-Cognitive	0.579	$p < .001$	Supported
H3b	SBC → CE-Affective	0.938	$p < .001$	Supported
H3c	SBC → CE-Behavioural	1.015	$p < .001$	Supported
H3d	SBC → Consumer Well-being	0.812	$p < .001$	Supported

Note: EE: Emotional Exhaustion; **NEB:** Negative Brand Experience; **SBC:** Self-Brand Connection

Consistent with H1, Emotional Exhaustion was found to have a significant positive effect on Negative Brand Experience ($\beta = 0.789$, $p < .001$), indicating that consumers who experience higher emotional exhaustion are more likely to report negative experiences with the brand. Hence, H1 is supported.

Regarding hypotheses H2a-H2d, Negative Brand Experience demonstrated a statistically significant positive association with CE-Cognitive ($\beta = 0.438$, $p < .001$), indicating that higher negative experiences were unexpectedly related to higher cognitive involvement. However, Negative Brand Experience was negatively associated with CE-Affective ($\beta = –0.189$, $p < .001$) and CE-Behavioural Engagement ($\beta = –0.096$, $p < .05$), while its effect on CWB was non-significant ($\beta = –0.03$, $p = .582$). These results indicate partial support for the proposed relationships: while H2b and H2c are supported in the expected negative direction, H2a is significant but contrary to the hypothesised sign, and H2d is not supported.

Finally, results for H3a–H3d show that Self-Brand Connection has significant positive effects on all outcome constructs: CE-Cognitive ($\beta = 0.579$, $p < .001$), CE-Affective ($\beta = 0.938$, $p < .001$), CE-Behavioural ($\beta = 1.015$, $p < .001$), and CWB ($\beta = 0.812$, $p < .001$). Therefore, H3a-H3d are fully supported.

In summary, the findings indicate that Emotional Exhaustion and Self-Brand Connection play distinct mediating roles. Emotional Exhaustion is associated with Negative Brand Experience, which in turn relates to lower engagement outcomes, while Self-Brand Connection shows positive associations with both engagement and well-being.

6.4.4.2. Direct Effects of Antecedents on Mediators

This section reports the direct effects of the antecedent variables on the mediators, Emotional Exhaustion and Self-Brand Connection. These relationships correspond to hypotheses H4a-H13a. The results are summarised in Table 49.

Table 49: Direct Effects of Antecedents on Mediators

Hypothesis	Path	β	p-value	Result
H4a	Information Overload → EE	1.21	p < .001	Supported
H5a	Information Overload → SBC	2.829	p < .001	Not Supported
H6a	Value Incongruity → EE	-0.365	p = .042	Not Supported
H7a	Value Incongruity → SBC	-2.581	p < .001	Supported
H8a	Brand Wastefulness → EE	0.147	p = .016	Supported
H9a	Brand Wastefulness → SBC	-0.108	p = .473	Not Supported
H10a	Privacy Concerns → EE	-0.087	p = .338	Not Supported
H11a	Privacy Concerns → SBC	-0.212	p = .346	Not Supported
H12a	Psychological Safety → EE	0.051	p = .396	Not Supported
H13a	Psychological Safety → SBC	0.871	p < .001	Supported

Note: EE: Emotional Exhaustion; **SBC:** Self-Brand Connection

Information overload was positively associated with emotional exhaustion (β = 1.21, p < .001), supporting H4a. However, its relationship with self-brand connection was positive and significant (β = 2.829, p < .001), contrary to the hypothesised negative direction, thus H5a is not supported.

Value incongruity showed a significant negative association with self-brand connection (β = −2.581, p < .001), supporting H7a, but its effect on emotional exhaustion was significant in the opposite direction (β = −0.365, p < .05), thus H6a is not supported.

Perceived Brand wastefulness was positively associated with emotional exhaustion ($\beta = 0.147$, $p < .05$), supporting H8a, but showed no significant relationship with self-brand connection ($\beta = -0.108$, $p > .05$), thus H9a is not supported.

Privacy concerns did not show significant relationships with either emotional exhaustion or self-brand connection, thus H10a and H11a are not supported.

Psychological safety was not significantly associated with emotional exhaustion, thus H12a is not supported, but was positively associated with self-brand connection ($\beta = 0.871$, $p < .001$), supporting H13a.

The next set of hypotheses extends the model to incorporate the indirect effects of the antecedent constructs on engagement and well-being outcomes. These hypotheses capture how various brand- and community-related factors influence consumer experiences and behaviours through the mediating mechanisms of Emotional Exhaustion, Negative Brand Experience and Self-Brand Connection. Consistent with the proposed fully mediated model, the effects of the antecedents on the outcome constructs are assumed to operate entirely through these psychological pathways.

6.4.4.3. Mediation Analysis

Mediation occurs when an independent variable influences a dependent variable through one or more intervening constructs (Preacher & Hayes, 2008). In this study, a multiple mediation framework was employed, incorporating both parallel and serial mediation paths to examine how antecedent variables influence CE and CWB through the specified mediators. Specifically, Self-Brand Connection was modelled as a parallel mediator, while Emotional Exhaustion and Negative Brand Experience formed a sequential (serial) mediation pathway. Figure 21 and Figure 22 illustrate the simple and serial mediation processes adopted in this study.

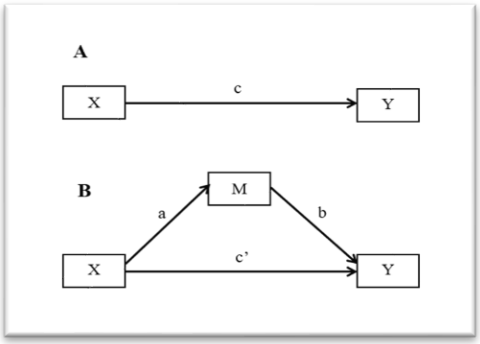


Figure 21: Simple mediation process. ***Adapted from Preacher and Hayes (2008)***

where, *X* = independent variable (e.g., Information Overload)

M = mediating variable (e.g., Self-Brand Connection)

Y = dependent variable (e.g., CE or Consumer Well-being)

a = effect of X on M

b = effect of *M* on *Y* partialling out the effect of *X*

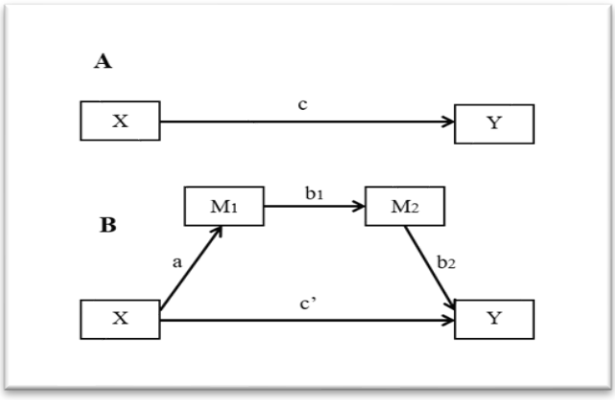


Figure 22: Serial mediation process. ***Adapted from Preacher and Hayes (2008)***

where, X = Independent variable (e.g., Information Overload)

M_1 = First mediator (Emotional Exhaustion)

M_2 = Second mediator (Negative Brand Experience)

Y = Dependent variable (e.g., CE or Consumer Well-being)

a = Effect of X on M_1

b1 = Effect of M_1 on M_2 (controlling for X)

b2 = Effect of M_2 on Y (controlling for X and M_1)

c' = Direct effect of X on Y (controlling for both mediators)

c = Total effect of X on Y (sum of direct and all indirect effects)

In the present study, the serial mediation model examines how the antecedent variables (Information Overload, Value Incongruity, Brand Wastefulness, Privacy Concerns, and Psychological Safety) influence CE and CWB through a sequential process involving Emotional Exhaustion (M_1) and Negative Brand Experience (M_2). This structure reflects the stepwise process through which antecedent conditions shape consumer outcomes within OBCs.

Collectively, in this study, a fully mediated model was tested, where the effects of the exogenous constructs (Information Overload, Value Incongruity, Perceived Brand Wastefulness, Privacy Concerns, and Psychological Safety) on the outcome variables (CE-Cognitive, CE-Affective, CE-Behavioural and CWB) were hypothesised to operate through the (a) simple mediating mechanisms of Self-Brand Connection, and (b) serial mediation of Emotional Exhaustion and Negative Brand Experience. Specifically, Emotional Exhaustion and Negative Brand Experience form a sequential (serial) mediation pathway between the antecedents and the outcomes, while Self-Brand Connection acts as a parallel mediating pathway influencing engagement and well-being directly.

The analysis was conducted using the ML estimation procedure in AMOS with 5000 bootstrapped samples at 95% bias-corrected confidence intervals, as recommended by Preacher and Hayes (2008). This non-parametric bootstrapping approach provides more robust estimates of indirect effects and confidence intervals than traditional Sobel tests, particularly when sampling distributions are non-normal (Hayes, 2018). Effects were deemed significant when the CI excluded zero (equivalently, $p < .05$). Indirect effects were estimated for all hypothesised relationships to assess whether the influence of each antecedent on the outcome variables was transmitted through the mediators. The results are summarised in Table 50.

Key to constructs

- **OBCIO** = Information Overload
- **BW** = Brand Wastefulness
- **CoCVI** = Value Incongruity
- **PCOBC** = Privacy Concerns
- **PS** = Psychological Safety
- **CBECE** = CE-Cognitive
- **CBEAE** = CE-Affective
- **CBEBE** = CE-Behavioural
- **SWB** = Consumer Well-being

Table 50 presents the indirect effects of the antecedent constructs on CE and CWB through the specified mediation pathways.

Table 50: Unstandardised Specific Indirect Effects of Antecedents on Customer Engagement and Consumer Well-Being

Antecedent	Pathway	CE-Cognitive	CE-Affective	CE-Behavioural	Consumer Well-Being
Information Overload	via EE-NEB	**0.309**	**−0.089**	**−0.045**	ns
	via SBC	**1.21**	**1.31**	**1.401**	**0.936**
Value Incongruity	via EE-NEB	**−0.098**	**0.028**	**0.014**	**ns**
	via SBC	**−1.153**	**−1.248**	**−1.335**	**−0.892**
Brand Wastefulness	via EE-NEB	**0.059**	**−0.017**	**ns**	**ns**
	via SBC	Ns	Ns	ns	Ns
Privacy Concerns	via EE-NEB	Ns	Ns	ns	Ns
	via SBC	Ns	Ns	ns	Ns
Psychological Safety	via EE-NEB	Ns	Ns	ns	Ns
	via SBC	**0.42**	**0.455**	**0.486**	**0.325**

The results are summarised below by hypothesis group, with unstandardised specific indirect effects (β), 95% bias-corrected bootstrap confidence intervals (CI), and p-values reported.

H4b-H4e (Information Overload → EE → NEB → Outcomes; predicted negative)

Supported:

- CE-Affective (β = −.089, 95% CI [−.198, −.035], p < .001)
- CE-Behavioural (β = −.045, 95% CI [−.112, −.004], p = .035)

Not supported:

- CE-Cognitive showed a significant effect in the opposite direction (β = .309, 95% CI [.202, .583], p < .001).
- CWB was non-significant (β = −.012, 95% CI [−.067, .034], p = .596)

H5b-H5e (Information Overload → SBC → Outcomes; predicted negative)

Not supported: All four SBC-mediated paths were positive and significant, opposite to the hypothesised direction:

- CE-Cognitive (β = 1.210, 95% CI [.652, 4.637], p < .001).
- CE-Affective (β = 1.310, 95% CI [.704, 4.781], p < .001).
- CE-Behavioural (β = 1.401, 95% CI [.770, 5.241], p < .001).
- CWB (β = .936, 95% CI [.515, 3.783], p < .001).

H6b–H6e (Value Incongruity → EE → NEB → Outcomes; predicted negative)

Partially supported:

- CE-Cognitive (β = −.098, 95% CI [−.425, −.009], p = .031) was significant and in the predicted negative direction

Not supported:

- CE-Affective showed a significant effect in the opposite direction (β = .028, 95% CI [.002, .143], p = .029).
- CE-Behavioural showed a significant effect in the opposite direction (β = .014, 95% CI [.000, .092], p = .039). The lower confidence limit is displayed as .000 because of rounding in the AMOS output.
- CWB was non-significant (β = .004, 95% CI [−.008, .045], p = .410).

H7b–H7e (Value Incongruity → SBC → Outcomes; predicted negative)

Supported:

- CE-Cognitive (β = −1.153, 95% CI [−5.359, −.576], p < .001).
- CE-Affective (β = −1.248, 95% CI [−5.328, −.609], p < .001).
- CE-Behavioural (β = −1.335, 95% CI [−6.029, −.669], p < .001).
- CWB (β = −.892, 95% CI [−4.130, −.449], p < .001).

H8b–H8e (Brand Wastefulness → EE → NEB → Outcomes; predicted negative)

Partially supported:

- CE-Affective (β = −.017, 95% CI [−.049, −.001], p = .034) was significant and in the predicted negative direction.

Not supported:

- CE-Cognitive showed a significant effect in the opposite direction (β = .059, 95% CI [.001, .133], p = .049).
- CE-Behavioural was non-significant (β = −.009, 95% CI [−.032, .000], p = .053).
- CWB was non-significant (β = −.002, 95% CI [−.020, .005], p = .469).

H9b-H9e (Brand Wastefulness → SBC → Outcomes; predicted negative)

Not supported:

- All SBC-mediated paths non-significant (all p > .50).

H10b-H10e (Privacy Concerns → EE → NEB → Outcomes; predicted negative)

Not supported:

- All four serial mediation paths were non-significant (all p ≥ .31).

H11b-H11e (Privacy Concerns → SBC → Outcomes; predicted negative)

Not supported:

- All four SBC-mediated effects were non-significant (all p ≥ .387).

H12b–H12e (Psychological Safety → lower EE → lower NEB → Outcomes; predicted positive)

Not supported:

- All serial paths non-significant (e.g., CE-Cognitive β = .015, 95% CI [−.022, .068], p = .406).

H13b–H13e (Psychological Safety → SBC → Outcomes; predicted positive)

Supported:

- CE-Cognitive (β = .420, 95% CI [.238, 1.341], p < .001).
- CE-Affective (β = .455, 95% CI [.254, 1.343], p < .001).
- CE-Behavioural (β = .486, 95% CI [.283, 1.498], p < .001).
- CWB (β = .325, 95% CI [.181, 1.026], p < .001).

Taken together, the results provide partial empirical support for the hypothesised fully mediated model. *Information Overload, Value Incongruity, and Perceived Brand Wastefulness* demonstrated some significant indirect effects through either the *Emotional Exhaustion-Negative Experience with Brand* or *Self-Brand Connection* pathways, while Privacy Concerns showed no indirect relationships. Conversely, *Psychological Safety* positively influenced engagement and well-being outcomes via *SBC*, underscoring its role as a protective, community-enabling factor within OBCs.

Interpretation of Mediation Patterns

Across the two mediating mechanisms, the findings indicate that the identity-based pathway through Self-Brand Connection exerts a stronger and more consistent influence on CE and CWB than the stress-based pathway involving Emotional Exhaustion and Negative Brand Experience. Self-Brand Connection significantly mediated multiple relationships, particularly for Value Incongruity

(negative direction) and Psychological Safety (positive direction), across all outcome dimensions.

In contrast, the Emotional Exhaustion-Negative Brand Experience pathway demonstrated weaker and less consistent effects, with only limited significant relationships and some effects occurring in the opposite direction to those hypothesised.

These results suggest that, within OBCs, identity alignment and relational connection with the brand play a more central role in shaping engagement and well-being than stress-related mechanisms. While adverse emotional experiences contribute to variations in engagement, the strength of consumers' self-brand connection appears to be the more influential psychological pathway driving behavioural and affective outcomes.

6.4.5. Supplementary PLS-SEM Robustness Check

Given the relatively modest sample size (n = 278) and the complexity of the structural model, the final model was re-estimated using Partial Least Squares Structural Equation Modelling (PLS-SEM) as a supplementary robustness check. The purpose was not to replace the primary covariance-based SEM analysis, but to examine whether the main structural findings remained similar under an

alternative estimation approach. PLS-SEM is commonly used for estimating complex latent-variable models and can be useful where sample size and data characteristics are relevant considerations (Sarstedt, Ringle and Hair, 2022). The analysis was conducted in SmartPLS 4 (Ringle, Wende and Becker, 2024).

To maintain comparability with the CB-SEM analysis, the same retained indicators and structural relationships were specified, with Age and Gender retained as control variables. No further indicators were removed. Reflective indicator loadings ranged from .662 to .919, with all but one exceeding .70. As this analysis was intended to assess the robustness of the structural results and not to refine the measurement model again, the interpretation focused primarily on the structural estimates. Significance was assessed using two-tailed percentile bootstrapping with 5,000 subsamples at the .05 level. The SRMR was .069 for the saturated model and .090 for the estimated model; these values are reported descriptively and are not interpreted using the CB-SEM fit criteria applied earlier in this chapter. The model explained 69.0% of the variance in Emotional Exhaustion, 52.4% in Negative Brand Experience, 21.8% in Self-Brand Connection, 50.6% in CE-Cognitive, 41.5% in CE-Affective, 62.2% in CE-Behavioural, and 40.3% in CWB (Appendix 15, 16, 19).

Table 51: PLS-SEM Robustness Check of the Structural Relationships

Structural relationship	PLS-SEM β	p	Comparison with CB-SEM
Information Overload → Emotional Exhaustion	.464	< .001	Consistent
Information Overload → Self-Brand Connection	.501	< .001	Consistent
Value Incongruity → Emotional Exhaustion	.186	.010	Direction differs
Value Incongruity → Self-Brand Connection	−.436	< .001	Consistent
Perceived Brand Wastefulness → Emotional Exhaustion	.201	< .001	Consistent
Perceived Brand Wastefulness → Self-Brand Connection	−.042	.555	Consistent (non-significant)
Privacy Concerns → Emotional Exhaustion	.104	.084	Consistent (non-significant)
Privacy Concerns → Self-Brand Connection	.150	.131	Consistent (non-significant)
Psychological Safety → Emotional Exhaustion	−.080	.063	Consistent (non-significant)
Psychological Safety → Self-Brand Connection	.327	< .001	Consistent
Emotional Exhaustion → Negative Brand Experience	.724	< .001	Consistent
Negative Brand Experience → CE-Cognitive	.441	< .001	Consistent
Negative Brand Experience → CE-Affective	−.099	.021	Consistent
Negative Brand Experience → CE-Behavioural	−.029	.450	Not replicated
Negative Brand Experience → CWB	−.004	.938	Consistent (non-significant)
Self-Brand Connection → CE-Cognitive	.457	< .001	Consistent
Self-Brand Connection → CE-Affective	.655	< .001	Consistent
Self-Brand Connection → CE-Behavioural	**.783**	< .001	Consistent
Self-Brand Connection → CWB	.616	< .001	Consistent

Note. β = standardised path coefficient. PLS-SEM p values are based on two-tailed bootstrapping with 5,000 subsamples. "Consistent" refers to the substantive conclusion regarding direction and statistical significance and does not imply equality of coefficient magnitudes across the two estimators. Age and Gender controls were retained in the PLS-SEM model but are not reported in the table because they are not focal hypothesised relationships.

The PLS-SEM results reproduced most of the substantive patterns obtained from the CB-SEM analysis. In particular, the positive relationship between Emotional Exhaustion and Negative Brand Experience remained significant, as did the positive relationships between Self-Brand Connection and all three dimensions

of CE and CWB. The relationships of Negative Brand Experience with CE-Cognitive and CE-Affective were also retained, while its relationship with CWB remained non-significant. The main differences concerned two paths. First, Value Incongruity was positively related to Emotional Exhaustion in the PLS-SEM analysis ($\beta = .186$, $p = .010$), whereas the CB-SEM analysis produced a significant negative relationship. Second, the negative relationship between Negative Brand Experience and CE-Behavioural found in CB-SEM was not reproduced in PLS-SEM ($\beta = -.029$, $p = .450$).

The PLS-SEM measurement assessment supported internal consistency reliability and convergent validity, with Cronbach's alpha and composite reliability values within acceptable ranges and all AVE values exceeding .50. All HTMT values were below .90, supporting discriminant validity. Detailed measurement assessment results are provided in Appendix 17 &18.

The indirect-effect pattern was more stable for the Self-Brand Connection pathway. Information Overload, Value Incongruity and Psychological Safety showed significant indirect effects through Self-Brand Connection across all three CE dimensions and CWB, whereas the corresponding indirect effects for Brand Wastefulness and Privacy Concerns were non-significant. Greater variation was observed in the serial Emotional Exhaustion–Negative Brand

Experience pathway, where significance differed across antecedents and outcomes.

Thus, the PLS-SEM analysis reproduced most of the substantive patterns observed in the CB-SEM analysis, although some differences remained. The findings therefore provide supplementary support for the robustness of the main structural results instead of evidence of complete replication across the two estimation approaches.

6.4.6. Multigroup Analysis

A multigroup analysis (MGA) was conducted to examine whether the structural relationships differed across age, gender and education groups. MGA was not undertaken using CB-SEM because splitting the sample produced relatively small and unequal subgroup sizes, particularly for gender (male = 202; female = 76). The analysis was therefore conducted in SmartPLS using 5,000 bootstrap subsamples and two-tailed significance testing at the .05 level.

For age (Appendix 20), respondents were divided into two groups: 18–34 years (n = 160) and 35 years and above (n = 118). The MGA showed no significant differences between the two age groups across the focal structural relationships (all two-tailed $p > .05$). For the age groups, the MICOM assessment supported

compositional invariance for all substantive constructs (all permutation $p > .05$). With the same indicators, coding and estimation settings used across groups, partial measurement invariance was established, supporting comparison of the structural paths.

For gender (Appendix 21), respondents were divided into male (n = 202) and female (n = 76) groups. Significant differences were found for:

- Value Incongruity → Emotional Exhaustion ($p = .015$),
- Information Overload → Emotional Exhaustion ($p = .022$),
- Psychological Safety → Self-Brand Connection ($p = .048$), and
- Self-Brand Connection → CWB ($p < .001$).

The latter three relationships were stronger for females, while Value Incongruity → Emotional Exhaustion was positive and significant only for males. No other focal path differences were significant. For the gender groups, the MICOM assessment supported compositional invariance for all substantive constructs (all permutation $p > .05$). With the same indicators, coding and estimation settings used across groups, partial measurement invariance was established, supporting comparison of the structural paths.

For education (Appendix 22), the relationship between Negative Brand Experience and CE-Affective differed significantly between the two groups (MGA $p = .013$). The relationship was negative and significant for the ≤

undergraduate group (β = −.198, p = .001), but non-significant for the postgraduate/doctorate group (β = .036, p = .622). No other focal structural relationships differed significantly by education. For the education groups, the MICOM results supported compositional invariance for all substantive constructs except Privacy Concerns (p = .018). As the same indicators, coding and estimation settings were used across groups, partial measurement invariance was supported for the remaining constructs.

6.5. Conclusion

This chapter examined the measurement and structural properties of the proposed model using SEM. The results demonstrated acceptable model fit and provided partial support for the hypothesised relationships. The findings highlighted the distinct roles of the mediating mechanisms, with Self-Brand Connection emerging as a stronger and more consistent pathway influencing CE and CWB, while the Emotional Exhaustion-Negative Brand Experience pathway showed more limited and variable effects. A consolidated summary of all hypothesis testing results is presented in Table 52.

Table 52:Summary of Hypothesis Testing Results

Hypothesis (Hypothesized Sign)	Result
Mediator-Outcome Relationships	
H1: Emotional Exhaustion → Negative Brand Experience (+)	Supported
H2(a): Negative Brand Experience → Cognitive Customer Engagement (–)	Not Supported
H2(b): Negative Brand Experience → Affective Customer Engagement (–)	Supported
H2(c): Negative Brand Experience → Behavioural Customer Engagement (–)	Supported
H2(d): Negative Brand Experience → Consumer Well-being (–)	Not Supported
H3(a): Self-Brand Connection → Cognitive Customer Engagement (+)	Supported
H3(b): Self-Brand Connection → Affective Customer Engagement (+)	Supported
H3(c): Self-Brand Connection → Behavioural Customer Engagement (+)	Supported
H3(d): Self-Brand Connection → Consumer Well-being (+)	Supported
Direct Effects	
H4(a): Information Overload → Emotional Exhaustion (+)	Supported
H5(a): Information Overload → Self-Brand Connection (–)	Counter-intuitive
H6(a): Value Incongruity → Emotional Exhaustion (+)	Counter-intuitive
H7(a): Value Incongruity → Self-Brand Connection (–)	Supported
H8(a): Brand Wastefulness → Emotional Exhaustion (+)	Supported
H9(a): Brand Wastefulness → Self-Brand Connection (–)	Not Supported
H10(a): Privacy Concerns → Emotional Exhaustion (+)	Not Supported
H11(a): Privacy Concerns → Self-Brand Connection (–)	Not Supported
H12(a): Psychological Safety → Emotional Exhaustion (–)	Not Supported
H13(a): Psychological Safety → Self-Brand Connection (+)	Supported
Mediation	
H4(b): Information Overload → Emotional Exhaustion → Negative Brand Experience → Cognitive Customer Engagement (–)	Not Supported
H4(c): Information Overload → Emotional Exhaustion → Negative Brand Experience → Affective Customer Engagement (–)	Supported
H4(d): Information Overload → Emotional Exhaustion → Negative Brand Experience → Behavioural Customer Engagement (–)	Supported
H4(e): Information Overload → Emotional Exhaustion → Negative Brand Experience → Consumer Well-being (–)	Not Supported
H5(b): Information Overload → Self-Brand Connection → Cognitive Customer Engagement (–)	Counter-intuitive
H5(c): Information Overload → Self-Brand Connection → Affective Customer Engagement (–)	Counter-intuitive
H5(d): Information Overload → Self-Brand Connection → Behavioural Customer Engagement (–)	Counter-intuitive
H5(e): Information Overload → Self-Brand Connection → Consumer Well-being (–)	Counter-intuitive
H6(b): Value Incongruity → Emotional Exhaustion → Negative Brand Experience → Cognitive Customer Engagement (–)	Supported
H6(c): Value Incongruity → Emotional Exhaustion → Negative Brand Experience → Affective Customer Engagement (–)	Not Supported
H6(d): Value Incongruity → Emotional Exhaustion → Negative Brand Experience → Behavioural Customer Engagement (–)	Not Supported

H6(e): Value Incongruity → Emotional Exhaustion → Negative Brand Experience → Consumer Well-being (–)	Not Supported
H7(b): Value Incongruity → Self-Brand Connection → Cognitive Customer Engagement (–)	Supported
H7(c): Value Incongruity → Self-Brand Connection → Affective Customer Engagement (–)	Supported
H7(d): Value Incongruity → Self-Brand Connection → Behavioural Customer Engagement (–)	Supported
H7(e): Value Incongruity → Self-Brand Connection → Consumer Well-being (–)	Supported
H8(b): Brand Wastefulness → Emotional Exhaustion → Negative Brand Experience → Cognitive Customer Engagement (–)	Not Supported
H8(c): Brand Wastefulness → Emotional Exhaustion → Negative Brand Experience → Affective Customer Engagement (–)	Supported
H8(d): Brand Wastefulness → Emotional Exhaustion → Negative Brand Experience → Behavioural Customer Engagement (–)	Not Supported
H8(e): Brand Wastefulness → Emotional Exhaustion → Negative Brand Experience → Consumer Well-being (–)	Not Supported
H9(b): Brand Wastefulness → Self-Brand Connection → Cognitive Customer Engagement (–)	Not Supported
H9(c): Brand Wastefulness → Self-Brand Connection → Affective Customer Engagement (–)	Not Supported
H9(d): Brand Wastefulness → Self-Brand Connection → Behavioural Customer Engagement (–)	Not Supported
H9(e): Brand Wastefulness → Self-Brand Connection → Consumer Well-being (–)	Not Supported
H10(b): Privacy Concerns → Emotional Exhaustion → Negative Brand Experience → Cognitive Customer Engagement (–)	Not Supported
H10(c): Privacy Concerns → Emotional Exhaustion → Negative Brand Experience→ Affective Customer Engagement (–)	Not Supported
H10(d): Privacy Concerns → Emotional Exhaustion → Negative Brand Experience → Behavioural Customer Engagement (–)	Not Supported
H10(e): Privacy Concerns → Emotional Exhaustion → Negative Brand Experience → Consumer Well-being (–)	Not Supported
H11(b): Privacy Concerns → Self-Brand Connection → Cognitive Customer Engagement (–)	Not Supported
H11(c): Privacy Concerns → Self-Brand Connection → Affective Customer Engagement (–)	Not Supported
H11(d): Privacy Concerns → Self-Brand Connection → Behavioural Customer Engagement (–)	Not Supported
H11(e): Privacy Concerns → Self-Brand Connection → Consumer Well-being (–)	Not Supported
H12(b): Psychological Safety → Emotional Exhaustion → Negative Brand Experience → Cognitive Customer Engagement (+)	Not Supported
H12(c): Psychological Safety → Emotional Exhaustion → Negative Brand Experience → Affective Customer Engagement (+)	Not Supported
H12(d): Psychological Safety → Emotional Exhaustion → Negative Brand Experience → Behavioural Customer Engagement (+)	Not Supported
H12(e): Psychological Safety → Emotional Exhaustion → Negative Brand Experience → Consumer Well-being (+)	Not Supported
H13(b): Psychological Safety → Self-Brand Connection → Cognitive Customer Engagement (+)	Supported
H13(c): Psychological Safety → Self-Brand Connection → Affective Customer Engagement (+)	Supported
H13(d): Psychological Safety → Self-Brand Connection → Behavioural Customer Engagement (+)	Supported
H13(e): Psychological Safety → Self-Brand Connection → Consumer Well-being (+)	Supported

As shown in Table 52, the results provide mixed support for the proposed model, with stronger and more consistent effects observed for the self-brand connection

pathway compared to the emotional exhaustion–negative brand experience pathway.

The following chapter discusses these findings in relation to the existing literature, theoretical contributions and qualitative findings.

Chapter 7: Discussion

This chapter brings together the findings of the study and considers them in relation to the RQs and the broader literature. It uses both the qualitative and quantitative results, including the SEM analysis in Chapter 6, to examine the key relationships in the model. The chapter then reflects on the study's contributions and its relevance.

7.1. Introduction: Revisiting the Purpose of the Study

This study set out to examine how brand- and community-related conditions within OBCs shape psychological experiences, and how these experiences relate to CE and CWB. Instead of treating engagement as a fixed outcome, it is approached here as something that develops through ongoing interaction.

The study was guided by 3 RQs, which together explore how engagement is experienced, how well-being is understood, and how different cues within the brand and the community relate to these outcomes. A sequential exploratory design was used, where the qualitative phase first explored participants' experiences and identified two underlying processes, followed by a quantitative phase that examined these relationships more systematically using SEM.

By bringing these stages together, the study offers a way of understanding engagement that reflects both its more positive and more demanding sides. The following sections discuss how these findings relate to the RQs and what they add to current understanding in this area.

7.2. Research Questions and Answers

7.2.1. RQ1. How is Customer Engagement experienced as a psychological process across cognitive, affective, and behavioural dimensions within Online Brand Communities?

The qualitative findings suggest that CE in OBCs is experienced less as a fixed state and more as something that develops through participation. This matters because, as discussed in Chapter 2, engagement is still often treated as relatively static, with less attention given to how it changes through ongoing interaction. In Chapter 2, CE is described as involving cognitive, emotional and behavioural effort, particularly in digital settings where customers make sense of their interactions with brands and communities over time. The qualitative findings support that view, but they also add something more by showing how these dimensions are actually lived in everyday participation. This suggests that CE within OBCs may be better understood as an evolving psychological process, where engagement develops through continued interaction and does not exist as a stable state from the outset.

At the cognitive level, participants described engagement as active sense-making. They used OBCs to read reviews, compare experiences, ask questions and reduce uncertainty before making decisions. This is very much in line with earlier work that treats engagement as involving cognitive investment and mental involvement, but the findings here show that this does not happen in the abstract. It builds up over time as participants engage with what others are saying and how interactions unfold within the community. In that sense, CE-cognitive felt practical and interpretive at the same time. This highlights that cognitive engagement in OBCs is not only about information processing, but also about making sense of participation within a social context, where meaning is shaped through interaction with others.

The affective side of engagement came through in a more fluid way. Participants spoke about enjoyment, excitement, anticipation and the simple pleasure of knowing what was going on. At times, engagement felt energising. At other times, it became less absorbing or more routine. This sits quite closely with work by Brodie et al. (2011), Vivek et al. (2012), and Dessart (2017), all of whom treat engagement as more than observable activity alone. What the qualitative findings make clearer is that these emotional responses are not steady. They shift depending on how interactions unfold and the kind of responses participants receive from others. This suggests that affective engagement is closely tied to the

social nature of OBCs, where emotional responses are shaped by interaction and feedback and do not remain internally generated or stable over time.

Behavioural engagement was visible in contribution. Participants described posting, responding, sharing advice, attending events and helping others. What matters here is that these behaviours did not seem to appear in isolation. They were often described as growing out of earlier stages of involvement. People first learned, then became more comfortable and only then started to contribute more openly. That gives a slightly richer picture than some of the more outcome-focused studies in the CE literature, which have tended to pay less attention to how engagement develops (e.g., Hollebeek & Macky, 2019; Lim et al, 2022). This indicates that behavioural engagement is not simply an outcome, but a stage within a broader process, emerging gradually as individuals become more familiar and comfortable within the community.

Across the findings it appears that these dimensions were closely connected in participants' accounts. Engagement was often experienced as a movement between thinking, feeling, and acting and not as neatly separated elements. This reinforces the idea that CE operates as an integrated psychological process, where its dimensions are interdependent and unfold together over time. This reflects the gap identified in Chapter 2, where CE was recognised as multidimensional but still not fully understood as a psychological process unfolding through ongoing

interaction. The qualitative phase suggests that engagement in OBCs develops through that ongoing interplay. It deepens when participation feels meaningful, but it can also become harder to sustain when involvement begins to feel demanding.

The way participants described these dimensions can be summarised in Table 53. In sum, RQ1 shows that engagement in OBCs develops over time as individuals think, feel and take part in different ways. In doing so, it extends existing CE theory by making the processual nature of engagement more visible, showing how it unfolds through ongoing participation instead of existing as a fixed or stable condition.

Table 53: Experiencing Customer Engagement as a Psychological Process in OBCs

Dimension	How it is Experienced	Process Insight
Cognitive	Active sense-making through reading reviews, comparing experiences, asking questions and reducing uncertainty	Develops through ongoing interaction, where understanding is shaped by engagement with others over time
Affective	Feelings of enjoyment, excitement, anticipation and at times reduced interest or routine engagement	Fluctuates depending on interactions and responses within the community
Behavioural	Participation through posting, responding, sharing advice and helping others	Emerges gradually as individuals become more familiar and comfortable within the community
Integration	Movement between thinking, feeling and acting during participation	Engagement unfolds as an interconnected psychological process and not as separate dimensions

7.2.2. RQ2. How is Consumer Well-Being experienced from a psychological perspective within Online Brand Communities?

The findings suggest that CWB within OBCs is not experienced as a fixed outcome, but as something that shifts depending on how participation feels over time. Participants did not describe well-being as separate from engagement. Instead, it appeared closely tied to their day-to-day involvement in the community. This suggests that CWB in OBCs may be better understood as an embedded experience, shaped within participation itself.

In more supportive situations, participation was linked to positive psychological experiences. Participants described feeling reassured, more at ease and less alone when interactions were helpful and respectful. Seeing others share similar experiences, or receiving responses from the community, often reduced uncertainty and created a sense of comfort. At these points, engagement felt manageable and, at times, emotionally uplifting. This is consistent with the broader view of CWB in Chapter 2, where well-being is understood in terms of how consumption experiences shape individuals' emotional states and sense of satisfaction (Diener, 1984; Sirgy and Lee, 2008). It also reflects research suggesting that interaction within OBCs can contribute to positive emotional experiences and community-level well-being (Zhou et al., 2020). This highlights that well-being in OBCs is closely connected to the social nature of participation,

where supportive interactions and shared experiences play a central role in shaping how individuals feel within the community.

At the same time, participants also described moments where well-being was negatively affected. When engagement became more intense or harder to manage, it began to interfere with routines and personal balance. Some spoke about spending longer than intended on the platform or feeling mentally tired after extended use. In these situations, participation no longer felt supportive but instead became draining. This aligns with earlier work showing that consumption and digital interaction can also create pressure, or fatigue depending on how they are experienced (Lee and Ahn, 2016; Ho and Ito, 2019). This indicates that the same engagement processes that support positive experiences can also contribute to strain, depending on how involvement is managed and experienced over time.

Looking across these accounts, well-being did not seem to depend on participation alone, but on how that participation was experienced and interpreted. This reinforces the idea that well-being is not determined by the level of engagement itself, but by how individuals interpret and regulate their participation within the community. The same community could feel supportive at one point and demanding at another. Participants often adjusted their involvement in response, either by stepping back or by limiting how they engaged. This reflects the view in Chapter 2 that CWB is shaped not only by what

consumers do, but by how they experience and make sense of those experiences in their everyday lives (Sirgy and Lee, 2008; Zhou et al., 2020).

Another important point is that well-being appeared to include both immediate and deeper elements. Some experiences were linked to enjoyment or relief in the moment, while others related more to feeling balanced or in control over time. This fits with the distinction between hedonic and eudaimonic perspectives of well-being discussed in Chapter 2, where well-being includes both emotional responses and broader evaluations of life and personal functioning (Diener, 1984; Ryan and Deci, 2001). This suggests that well-being in OBCs operates across multiple layers, combining immediate emotional responses with more reflective evaluations of balance and personal functioning. These patterns in how well-being is experienced within OBCs are summarised in Table 54.

Taken together, RQ2 shows that well-being in OBCs develops alongside engagement and changes as experiences unfold. It is shaped by how individuals interpret what happens in the community and how they manage their involvement over time. At the same time, well-being did not depend on participation alone, but on how the participation was experienced. In doing so, it extends existing research, which has often treated well-being as an outcome of consumption (e.g., Zhong & Mitchell, 2010), by showing how it is experienced as part of an ongoing psychological process within interactive brand environments.

Table 54:Experiencing Consumer Well-Being as a Psychological Process in OBCs

Aspect of Experience	How it is Experienced	Process Insight
Supportive Participation	Feeling reassured, less alone, emotionally supported through interaction	Well-being is strengthened through positive social experiences within the community
Demanding Participation	Feelings of fatigue, overuse, or difficulty managing involvement	Well-being can decline when engagement becomes difficult to regulate
Interpretation of Participation	Same community experienced as supportive or demanding at different times	Well-being depends on how participation is experienced and interpreted
Managing Involvement	Adjusting participation by stepping back or limiting engagement	Individuals actively regulate their engagement to maintain well-being
Temporal Experience	Immediate emotional responses and longer-term sense of balance	Well-being develops over time through ongoing participation

7.2.3. RQ3. How and why do brand-related and community-related cues influence Customer Engagement and Consumer Well-Being within Online Brand Communities?

The findings suggest that brand- and community-related cues do not shape engagement or well-being in any straightforward way. Their effects depend on how they are interpreted internally. The S-O-R framework helps explain this by showing that cues do not directly produce outcomes but are first interpreted through internal psychological processes. Instead of assuming that cues lead directly to outcomes, the model shows that they first pass through internal psychological processes. In this study, those processes took two forms. One followed a strain mechanism, where difficult or demanding conditions contributed to emotional exhaustion and then to more negative evaluations of brand experience. The other followed an identity mechanism, where cues shaped

the extent to which participants felt connected to the brand through self-brand connection.

Looking across the quantitative model, the identity mechanism was the clearer and more consistent pathway. Self-brand connection had positive effects on all 3 dimensions of engagement as well as on CWB. This fits closely with the qualitative findings, where participants described engagement becoming stronger when they felt recognised, and aligned with the brand or community. In those accounts, engagement was not driven by activity alone. It deepened when participation felt personally meaningful. This also fits with the literature on self-brand relationships, which has long suggested that perceived fit and identification strengthen customer responses over time (Escalas & Bettman, 2003, 2005; Bhattacharya & Sen, 2003). In that sense, the quantitative results do not differ from the findings of the qualitative phase. They confirm quite clearly that connection to the brand is one of the main ways through which OBC conditions are translated into engagement and well-being outcomes. This suggests that identity-based processes provide a more stable route through which OBC conditions shape both engagement and well-being, compared to more reactive or situational mechanisms.

Psychological safety is the strongest example of this. It did not work through the strain route, but it consistently worked through self-brand connection. This makes

sense when placed alongside the qualitative findings. Participants often described safe and respectful environments as the starting point for more open participation. Feeling comfortable did not simply reduce discomfort. It created the conditions in which people could contribute, feel recognised, feel safe and gradually become more connected. This helps explain why the psychological safety hypotheses through emotional exhaustion and negative brand experience were not supported. Psychological safety may matter less because it lowers exhaustion directly, and more because it supports relational security and identification. Earlier work on psychological safety also points in this direction, linking safe settings with participation, and continued involvement and not only with the absence of strain (Kahn, 1990; Edmondson, 1999). This indicates that psychological safety operates less as a protective factor against strain and more as an enabling condition for identity development within the community.

Value incongruity also showed a very clear pattern, but in the opposite direction. Through self-brand connection, it was associated with lower cognitive, affective, and behavioural engagement, as well as lower well-being. It also fits very well with both the qualitative insights and the literature. In the interviews, participants were very sensitive to situations where brand values or actions did not sit comfortably with their own. When this happened, connection weakened quite quickly. The literature on self-congruity and person-environment fit helps make sense of this, since misalignment tends to weaken identification and produce less

favourable responses (Sirgy, 1986; Kristof, 1996; Edwards, 2008). What is interesting, though, is that value incongruity also showed some effects through the strain pathway, and these were not entirely as expected. While it reduced cognitive engagement in the predicted direction, it showed small positive indirect effects on affective and behavioural engagement. Although these results may appear surprising, they can still be meaningfully explained. One possibility is that value misfit does not always produce quiet withdrawal straight away. In some cases, it may increase emotional intensity and visible reaction, especially when people feel strongly about what the brand represents. In other words, disagreement may still keep people emotionally and behaviourally involved, even if that involvement becomes more critical than supportive. This highlights that engagement does not always decline immediately in response to misalignment but may shift in form before it reduces in intensity. The qualitative findings hint at this too. Participants did not always disengage immediately when something felt misaligned. Some became more watchful, more cautious or more reactive before stepping back.

The strain mechanism appeared to be less stable. Emotional exhaustion significantly increased negative brand experience, which is very much in line with the logic set out in Chapter 5. When people are already depleted, they are less able to process later encounters in a neutral way. That part of the model worked well. What happened after that, though, was more mixed. Negative brand

experience reduced affective and behavioural engagement, which is easy to understand. When interactions feel frustrating or disappointing, people are less likely to feel positive and less likely to contribute. This is consistent with service and engagement research showing that negative encounters can reduce willingness to participate further (Bitner et al., 1990; Tax et al., 1998; van Doorn et al., 2010). The more surprising finding is CE-Cognitive. Negative brand experience was positively associated with it and not negatively. A similar pattern appeared in some of the indirect paths, particularly for information overload and brand wastefulness. This may look odd at first, but it is not necessarily inconsistent with the qualitative findings. Cognitive engagement in this study is not simply positive attention. It also includes active evaluation, and monitoring. When participants had negative experiences, they did not always stop thinking about the brand. In some cases, they seemed to think about it more. Qualitatively, this is evident in the way participants described reassessing or becoming more cautious after difficult experiences. A negative evaluation may therefore reduce positive feeling and active participation while still heightening mental attention. In that sense, the finding may reflect scrutiny instead of constructive involvement. The literature does not rule this out either completely. Appraisal-based perspectives suggest that negatively evaluated encounters can redirect attention toward the source of the problem instead of simply switching attention off altogether (Lazarus, 1991). So, the counterintuitive result may be less a contradiction than a reminder that CE-Cognitive is not always positive. This

suggests that cognitive engagement can reflect different forms of involvement, including evaluative attention and critical monitoring, and not purely constructive or positive engagement.

Information overload is another case where the results are mixed. Through the strain route, it reduced CE-Affective and CE-Behavioural, which is fully in line with expectations and with the qualitative insights. Participants often described overload as tiring and mentally cluttered. But through self-brand connection, information overload showed positive indirect effects on all outcomes, including well-being, which is against the original hypothesis. One possible reason is that not all high levels of information are experienced as harmful. In OBCs, a large volume of content may sometimes signal activity or richness of interaction. For members who are already interested and involved, greater exposure may reinforce instead of weakening connection. Some of the qualitative findings suggest something close to this. Participants sometimes described returning repeatedly to content because it felt interesting, useful or exciting, even when it also became tiring at other points. So, information overload may not be uniformly negative. It may depend on whether the volume of information is experienced as meaningful engagement or as unmanageable clutter. This indicates that the impact of information overload depends on how it is experienced, suggesting that the same condition can either support or weaken engagement depending on context and interpretation.

Brand wastefulness was weaker overall. It showed a small negative effect on CE-Affective through the strain pathway and a small positive effect on CE-Cognitive, but no effect through self-brand connection. This may suggest that brand wastefulness was noticed and evaluated critically but did not always become central enough to reshape identity-based ties with the brand. The qualitative findings support that reading to some extent. Participants did mention brand wastefulness cues, but not always in the same deeply personal way as value incongruity.

Privacy concerns were even more limited, with no significant indirect effects. This may reflect the possibility that privacy concerns remained more background concerns than active drivers of engagement or well-being in this context. Participants in the qualitative phase were aware of such concerns, but they did not always describe them as immediate enough to shape participation strongly. This suggests that not all negative cues are equally central to how individuals relate to the brand, and that some may remain peripheral in shaping engagement and well-being.

One of the clearest findings in relation to CWB is that it was shaped mainly through self-brand connection and not through negative brand experience. This matters because it suggests that well-being in OBCs is not simply reduced by bad

encounters. It is more closely tied to whether participation feels aligned, safe, supportive and personally meaningful. That fits well with the qualitative phase, where well-being was linked less to engagement alone and more to the quality of the experience and whether people felt balanced within it. This reinforces the idea that well-being is more closely tied to the quality and meaning of participation than to engagement alone.

Table 55:Interpreting the Influence of OBC Cues on CE and CWB through Identity and Strain Mechanisms

Element	Type	Primary Mechanism	Observed Pattern	Interpretive Insight
Psychological Safety	Antecedent	Identity (SBC)	Strong positive effects on CE and CWB	Supports a sense of comfort and relational security, which appears to strengthen connection and participation
Value Incongruity	Antecedent	Identity (SBC) + Partial Strain	Strong negative via SBC; mixed via strain	Weakens connection, while in some cases increasing attention or reaction before disengagement
Information Overload	Antecedent	Mixed (SBC + Strain)	Negative via strain; positive via SBC	May be experienced as either engaging or overwhelming, depending on how participation is interpreted
Brand Wastefulness	Antecedent	Weak Strain	Limited and inconsistent effects	Not always central enough to meaningfully influence connection or well-being
Privacy Concerns	Antecedent	Limited	No significant effects	Appears to remain a background concern and not an active driver of engagement or well-being
Identity Pathway (SBC)	Mechanism	Identity	Strong positive effects across CE and CWB	Provides the most consistent route linking cues to engagement and well-being
Strain Pathway (EE → NEB)	Mechanism	Strain	Reduces affective and behavioural CE; mixed cognitive effects	Shapes negative experiences, but does not uniformly reduce all forms of engagement

RQ3 shows that brand- and community-related cues influence engagement and well-being through different internal routes, and that these routes are not equally strong. The identity mechanism emerges as the more consistent and central pathway, while the strain mechanism operates in a more variable and context-dependent way. Taken together, the findings suggest that what matters is not simply the presence of a cue, but how it is psychologically processed, highlighting the role of both connection and depletion in shaping engagement and well-being within OBCs. These patterns in how brand- and community-related cues influence engagement and well-being are summarised in Table 55.

7.2.4. Discussion

Figure 23 provides a useful way of bringing the findings of this study together. It shows how CE and CWB develop through a set of interconnected psychological processes within OBCs. The discussion that follows draws on both the qualitative and quantitative findings to provide an integrated understanding of these processes.

Looking across the 3 RQs, a clear pattern emerges. CE is not a fixed state or a simple outcome of interaction. Instead, it develops gradually through ongoing experiences within OBCs. The qualitative findings showed that participants moved from initial observation to deeper involvement over time, as they became more comfortable and more connected. This supports the view of CE as a

dynamic and interaction-based process, and not something static (Brodie et al., 2011; Hollebeek et al., 2019). The quantitative findings further reinforce this by showing that engagement is shaped through underlying psychological mechanisms, instead of direct effects from external conditions. This suggests that engagement is shaped less by the presence of external cues alone and more by how these cues are psychologically processed over time.

At the same time, CWB follows a related but distinct path. It develops alongside engagement but is not directly determined by it. The findings show that well-being is more closely linked to how individuals experience and interpret their participation. In particular, self-brand connection plays a central role in supporting well-being, whereas negative brand experience does not show a direct effect. This suggests that feeling aligned, comfortable, safe and supported within OBCs matters more for well-being than simply being active or engaged. This extends prior research, which has often treated well-being as an outcome of consumption, by showing how it is experienced as part of an ongoing process within interactive environments (Sirgy & Lee, 2008; Anderson et al., 2013; Zhou et al., 2020). This highlights that well-being is embedded within participation and depends on how individuals experience and regulate their involvement and not just on engagement levels.

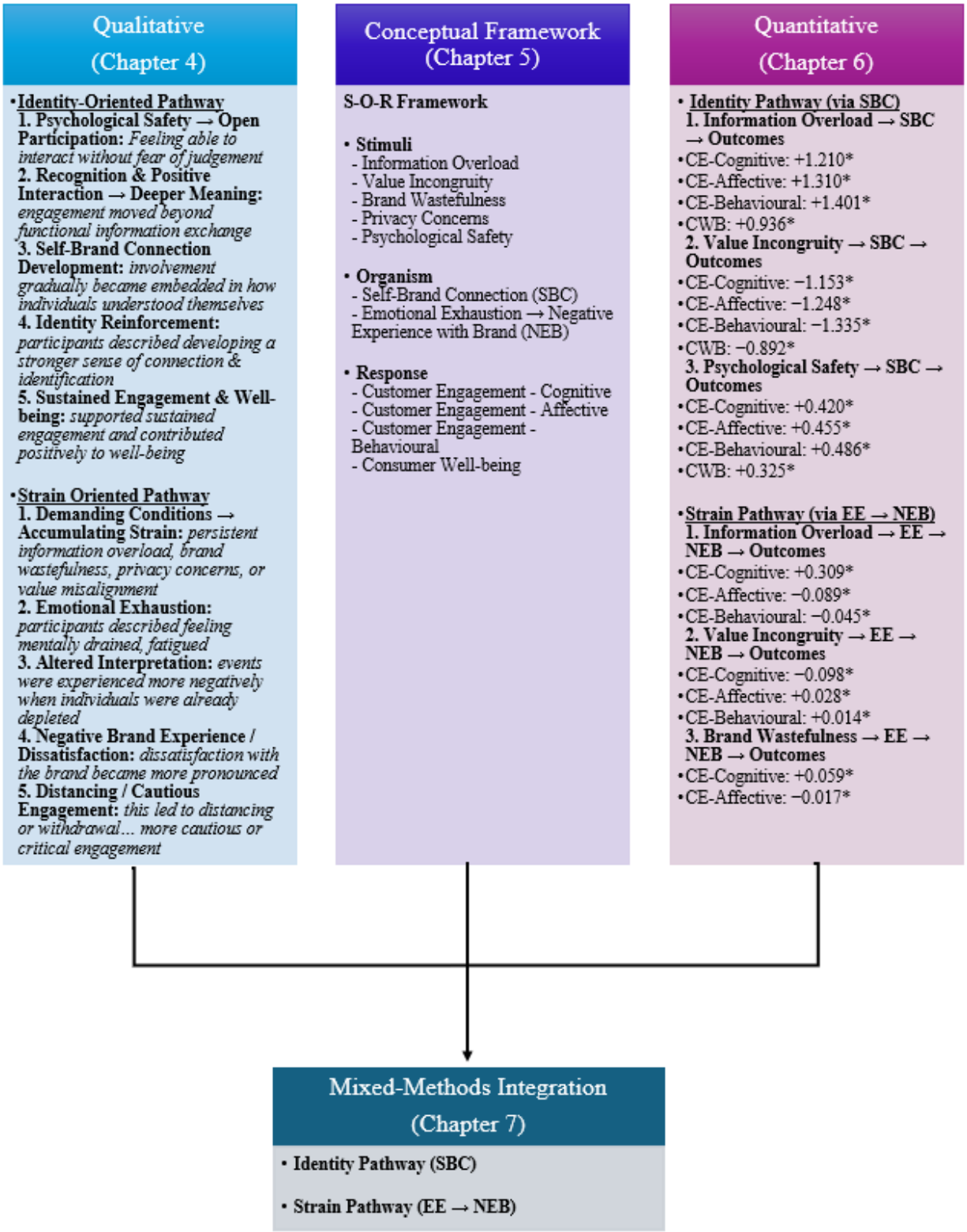


Figure 23: Integrated Mixed-Methods Model of Identity and Strain Pathways in OBCs.

Adapted from: Creamer (2025)

Legend: * p < .05

Note: Only statistically significant indirect effects are displayed. Full results are reported in Table 52. Arrows indicate integration across the qualitative, conceptual and quantitative stages. Numerical values are unstandardised indirect effects; only statistically significant effects are shown ($p < .05$).

Bringing these insights together, the S-O-R framework helps explain how different conditions within OBCs are translated into engagement and well-being outcomes by highlighting the role of internal psychological processes. Instead of acting directly, brand- and community-related cues operate through two main mechanisms. The first is an identity-based mechanism, where conditions shape the extent to which individuals feel connected to the brand. The second is a strain-based mechanism, where demanding or uncomfortable conditions contribute to emotional exhaustion and in turn, more negative evaluations of experience.

The identity pathway emerges as the more consistent and influential route across the findings. Self-brand connection strengthens all 3 dimensions of CE as well as CWB. This aligns closely with the qualitative findings, where participants described deeper involvement when they felt recognised, comfortable and aligned with the brand or community. It also supports existing work on self-brand relationships, which highlights the role of identification and perceived fit in shaping customer responses (Escalas & Bettman, 2003, 2005; Bhattacharya & Sen, 2003). In this sense, engagement is not simply about activity, but about the meaning individuals attach to their participation. This reinforces the central role of identity-based processes in shaping how individuals engage with and derive value from OBC participation.

The strain pathway also plays a role, but in a more uneven way. Emotional exhaustion increases the likelihood of negative brand experience, which in turn reduces affective and behavioural engagement. This reflects a process where ongoing demands gradually reduce individuals' willingness to invest effort. However, the effects of strain are not always straightforward. In some cases, negative experiences are associated with higher cognitive engagement, suggesting that individuals may pay more attention when something goes wrong, even if they feel less positive or less willing to participate. This highlights that not all forms of engagement reflect positive involvement. Further, it suggests that engagement can take different forms, including more evaluative or reactive involvement in response to negative experiences.

Looking across the different stimuli, the findings also show that not all conditions operate in the same way. Some, such as value incongruity and psychological safety, work mainly through the identity pathway by strengthening or weakening connection. Others, such as information overload, operate through both pathways, creating both involvement and strain depending on how they are experienced**.** A few cues operate weakly or inconsistently. Brand wastefulness shows only limited effects, while privacy concerns do not demonstrate significant relationships within this model, suggesting that they may remain more peripheral or background concerns in this context. This indicates that not all cues become equally central in shaping engagement and well-being within OBCs. Taken

together, these findings suggest that engagement and well-being are shaped through an ongoing balance between processes that build connection and those that introduce strain. They develop through how individuals interpret and respond to their experiences over time and are not driven by single factors. This provides a more complete view of participation in OBCs, showing that both engagement and well-being are grounded in underlying psychological processes and not merely observable behaviour alone.

Boundary Conditions of the Identity-Strain Model

The identity- and strain-based processes identified in this study need to be understood within the context in which the model was developed. The study examined participants from a range of OBCs, but it did not test whether these processes operate in the same way across different types of communities. The model therefore suggests that identity and strain can help explain how members experience OBC participation, but their relative importance may vary depending on the nature of the community.

One possible boundary is whether the community is hedonic or utilitarian. Prior research suggests that motivations for participation and the role of social identity can vary across different types of virtual communities (Dholakia, Bagozzi and Pearo, 2004). In hedonic communities, where participation is more closely linked with enjoyment and emotional experience, identity-related processes may be

more prominent, although this has not been directly tested against utilitarian communities. In utilitarian communities, participation may be driven more by the need for information or help with a specific problem, consistent with evidence from technical-support communities where informational value is an important driver of participation (Wiertz and de Ruyter, 2007). Identity may still develop in these settings, but it may not have the same importance. Strain may also arise differently where participation requires continued attention or effort. The present study did not directly compare hedonic and utilitarian communities, so these differences remain possible boundary conditions of the model.

A further boundary concerns high-stakes credence environments, such as healthcare or support communities. These settings differ from conventional OBCs because members may depend on information that is difficult for them to evaluate and the consequences of that information may be more personally significant. Research on patient-centred online healthcare communities shows that participation can be influenced by perceived information credibility and identification with the community. It also shows that support-seeking can affect uncertainty surrounding illness and treatment (Liu, Tong and Chan, 2020). In such settings, identity and strain may still be relevant, although the processes through which they operate may differ from those observed in conventional OBCs. The relative importance and meaning of these processes may therefore vary in high-stakes settings. This study does not test these possibilities, and further research

would be needed to establish whether the model operates in a similar way in such communities.

These contextual differences suggest that the identity- and strain-based processes identified in this study should not be assumed to operate in the same way across all types of OBCS.

7.3. Theoretical Contributions

This study builds on the research gaps identified in Chapter 1 by offering a more process-oriented and context-sensitive understanding of CE and CWB within OBCs.

7.3.1. Understanding Customer Engagement as a Process

One contribution of this study is a shift in how CE is understood within OBCs. Instead of viewing engagement as a stable state or a direct outcome of interaction, the findings suggest that it develops over time through ongoing experiences within the community. The qualitative findings show that individuals often begin by observing and gradually become more involved as they grow more familiar and comfortable within the environment. The quantitative results further support this by showing that engagement is shaped through underlying psychological processes, and not through direct effects from external conditions.

This contributes to existing CE research (Hollebeek, 2011; Brodie et al., 2011; Hollebeek et al., 2019; Dessart et al., 2015) by offering a more process-based account of how engagement unfolds in practice. While prior work has recognised the multidimensional nature of CE, it has often treated these dimensions as relatively stable or outcome focused. The findings of this study suggest that these dimensions are better understood as interconnected and evolving, shaped through continuous interaction within socially embedded environments.

In doing so, the study highlights that engagement is not simply a function of participation intensity, but a dynamic psychological process that develops through how individuals interpret and respond to their experiences over time. This provides a more grounded understanding of CE within OBCs, where interaction is ongoing and meaning is co-created through participation.

7.3.2. Integrating Customer Engagement and Consumer Well-Being Through Psychological Processes

A second contribution lies in integrating CE and CWB within a shared psychological framework. While these areas have often been studied separately, the findings indicate that both are shaped through similar underlying experiences within OBCs. In particular, the study shows that engagement and well-being are influenced by how individuals interpret their interactions, and not just by external conditions alone.

Importantly, the results indicate that well-being develops alongside CE as part of a broader psychological process. This provides a more integrated view of CE and CWB, where both evolve in parallel through participation, without following a simple cause-and-effect relationship. In doing so, the study highlights that engagement and well-being reflect different aspects of how individuals experience their involvement within OBCs.

7.3.3. Extending S-O-R and COR through Identity and Strain Pathways

The study contributes to S-O-R by giving a more specific account of the psychological processes linking OBC conditions to engagement and well-being. S-O-R provides the broader explanation that external stimuli relate to responses through internal organismic states (Jacoby, 2002). Building on this, the present study identifies two pathways grounded in participants' accounts and examined together in the quantitative model. The identity pathway operates through self-brand connection, while the strain pathway operates through emotional exhaustion and negative brand experience. The contribution lies in specifying these mechanisms within OBCs and showing how each relates to different aspects of engagement and well-being.

This distinction helps explain why similar conditions within a community may be associated with different responses. Through self-brand connection,

information overload, value incongruity and psychological safety showed significant indirect effects across all three engagement dimensions and CWB, although the positive effects of information overload were contrary to expectations. The strain pathway showed a less consistent pattern, with effects differing across engagement dimensions and no significant indirect effects on well-being. These findings develop the application of S-O-R by showing the value of distinguishing both the internal process involved and the particular outcome being explained. They suggest that connection to the brand and experiences of strain provide different explanations for how members respond to OBC participation.

The contribution to COR concerns how resource-related strain is reflected in engagement. COR explains stress through the threatened or actual loss of valued resources and recognises that individuals seek to protect and build those resources (Hobfoll, 1989, 2001). In this study, emotional exhaustion provides a way of understanding the strain associated with demanding participation. Its positive relationship with negative brand experience is consistent with the proposed process in which feeling depleted is connected with less favourable evaluations of brand encounters. The framework makes this process more explicit by linking exhaustion to brand experience evaluations and then to separate engagement and well-being outcomes.

The findings also suggest that strain does not necessarily correspond to a general reduction in engagement. In the quantitative analysis, negative brand experience was associated with lower affective and behavioural CE but higher cognitive CE. One possible interpretation is that members may remain mentally occupied with a brand even when they feel less positive towards it or become less willing to participate. This interpretation is consistent with qualitative accounts of becoming more cautious after difficult experiences. It refines the application of COR to OBCs by drawing attention to the form that engagement takes under strain. Greater cognitive involvement therefore need not automatically be understood as a positive experience.

Taken together, the contribution is a more specific account of how identity and strain relate to participation within OBCs. S-O-R provides the overall structure, while COR helps explain the exhaustion-related part of that structure. Self-brand connection adds a complementary explanation based on the personal meaning of the brand. Examining these pathways together helps explain why engagement and well-being do not respond uniformly to community conditions. The findings support these ideas in OBCs, although the proposed sequence was not tested over time.

7.3.4. Providing a Context-Specific Understanding of OBC Experiences

The study also contributes by offering a more contextualised understanding of engagement and well-being within OBCs. The findings highlight that these environments can be both supportive and demanding, creating opportunities for connection and participation while also introducing levels of activity and expectation that are not always easy to manage.

By linking these contextual features to underlying psychological experiences, the study helps explain why participation in OBCs can feel engaging at some moments and more effortful at others. These processes unfold within socially embedded environments where participation is visible and interaction is shared among members, shaping how individuals experience their involvement.

In doing so, the study extends existing CE research by emphasising the role of context in shaping engagement and well-being. The findings highlight that engagement is not only an individual response but is also shaped by the social and interactive nature of OBCs. This shifts the focus from describing engagement behaviours to understanding how individuals experience and interpret the environment in which those behaviours occur.

Taken together, these contributions offer a more integrated and process-oriented understanding of CE and CWB within OBCs, highlighting the role of underlying

psychological mechanisms and the importance of context in shaping how these outcomes develop.

7.4. Methodological Contributions

This study also offers some methodological value by showing how qualitative and quantitative approaches can be combined to develop and test a process-based understanding of CE and CWB in OBCs.

7.4.1. Using a Sequential Approach to Study Engagement as a Process

One contribution lies in the use of a sequential exploratory design to examine engagement and well-being as it unfolds over time. The qualitative phase was used to explore participants' experiences in depth and to identify the underlying processes shaping their interactions within OBCs. These insights were then carried forward into the quantitative phase, where the proposed relationships were tested within a structured model.

This approach made it possible to move from understanding how participants describe their experiences to examining how these patterns hold more broadly. In doing so, the design supports closer alignment between lived experience and model-based testing, which is particularly useful when studying processes that are not directly observable. It also demonstrates how process-based insights can

be developed inductively and then examined systematically, offering a way to study engagement as something that evolves through participation.

7.4.2. Using Straussian Grounded Theory and SEM to Capture and Test Psychological Processes

The study also highlights the value of combining SGT with SEM to examine CE and CWB from a process perspective. The qualitative phase allowed key patterns to emerge from participants' accounts, showing how individuals make sense of their experiences within OBCs and how feelings such as connection and strain develop over time. These insights were then translated into a quantitative model and examined using SEM.

By building the model from participants' experiences, and not just applying an existing framework directly, the study demonstrates how process-based insights can be grounded in qualitative data and then tested systematically. This combination makes it possible to capture how these processes are experienced and to examine how they operate more broadly within a structured model. In this way, the approach offers a way of linking process-oriented understanding with empirical testing, while maintaining a clear connection between the model and the underlying qualitative insights.

7.5. Practical / Managerial Implications

The findings of this study offer several practical insights for managers responsible for OBCs. By showing how engagement and well-being develop through underlying psychological processes, the results suggest that managing the quality of the environment is as important as encouraging participation. In particular, the findings highlight that engagement is more likely to deepen when individuals feel connected, safe, comfortable and able to relate their experiences to the brand. These implications are grounded in the identity and strain mechanisms identified in the study, which help explain how different aspects of the OBC environment influence participation.

7.5.1. Supporting Identity and Connection

The findings highlight the importance of self-brand connection as a central pathway shaping both CE and CWB. This suggests that managers can benefit from focusing on how community environments support identity development, instead of merely encouraging activity or interaction.

In practice, this may involve creating spaces where customers can express themselves and see their values reflected in the brand. Encouraging user-generated content and sharing customer stories can help strengthen this sense of connection. For example, brands such as Nike build engagement through campaigns that emphasise identity and personal meaning, including community

challenges and storytelling around achievement and self-expression (Nike, Inc., 2023).

These approaches are likely to be effective because they support the identity-based processes identified in this study, where engagement strengthens when participation feels personally meaningful and aligned with the brand.

7.5.2. Creating a Psychologically Safe Environment

The findings also show that psychological safety plays an important role in supporting engagement and well-being. When individuals feel comfortable interacting without fear of negative judgement, they are more likely to remain involved and contribute over time. Importantly, the results suggest that psychological safety operates less by reducing strain and more by supporting a sense of connection and belonging within the community.

In practice, this can be supported through clear community guidelines and careful moderation, which help create a more respectful and predictable interaction environment. For instance, Sephora has developed a strong OBC where users share experiences and advice in a supportive setting, helping sustain participation over time (Sephora, 2023).

These findings highlight that engagement is influenced not only by activity levels, but also by how safe and comfortable individuals feel within the space, as this shapes their willingness to participate and connect with others.

7.5.3. Managing Information Load and Avoiding Fatigue

Although CE can be strengthened through connection, the findings also show that demanding conditions, such as information overload, can contribute to emotional exhaustion and reduce participation. This reflects the strain pathway identified in the model, where high levels of activity become difficult to manage and begin to affect how individuals experience their involvement.

This suggests that managers may need to pay closer attention to the volume and pace of content within OBCs. Instead of constant updates, it may be more effective to organise content in ways that are easier to follow and navigate, helping individuals manage their participation without feeling overwhelmed. For example, Samsung structures its OBC content into different sections, which can make large volumes of information more manageable for users (Samsung, 2023).

These findings highlight that sustaining engagement is not only about maintaining activity, but also about ensuring that participation remains manageable over time, so that it does not lead to fatigue or reduced involvement.

7.5.4. Reducing Negative Experiences and Value Misalignment

The findings also suggest that when interactions are perceived negatively, individuals may reduce their involvement and feel less satisfied with the experience. This can arise when individuals feel that the brand does not align with their values or when interactions within the community become difficult or frustrating. Importantly, the results indicate that such experiences can weaken self-brand connection, which in turn affects both engagement and well-being.

At the same time, the findings show that misalignment does not always lead to immediate disengagement. In some cases, individuals may become more attentive or reactive before reducing their involvement, suggesting that negative experiences can change the nature of engagement before reducing its intensity.

For managers, this highlights the importance of maintaining consistency between brand messaging and actual practices, as well as responding carefully to negative interactions when they occur. For example, Patagonia has been able to maintain strong engagement partly by aligning its communication with clear values, helping reduce potential tension or disconnect (Patagonia, 2023).

These findings suggest that managing alignment is not only about avoiding dissatisfaction, but also about maintaining the sense of connection that underpins continued engagement and positive experiences within OBCs.

7.5.5. Balancing Engagement and Well-Being

Finally, the findings suggest that CE and CWB develop alongside each other, but one does not automatically lead to the other. This indicates that increasing activity alone is not sufficient; the overall experience also needs to remain manageable and meaningful for participants.

The results show that engagement is more likely to be sustained when individuals feel able to balance their involvement with other demands and not experiencing participation as effortful or overwhelming. This reflects the broader pattern identified in the study, where both identity and strain processes shape how engagement and well-being develop over time.

In practice, this suggests that managers may benefit from allowing greater flexibility in how individuals choose to participate, instead of assuming constant or high levels of activity. Supporting different forms and levels of involvement can help maintain both engagement and well-being over time.

7.6. Chapter Summary

This chapter integrates qualitative and quantitative findings to show that CE and CWB within OBCs develop through underlying psychological processes. In particular, the findings highlight the role of two key pathways. Identity-based

processes strengthen both engagement and well-being by supporting connection and alignment, while strain-related processes can limit certain forms of engagement by making participation more difficult to sustain.

Taken together, these insights offer a more nuanced understanding of how engagement and well-being unfold within OBCs, showing that they are shaped by how individuals experience and interpret their participation over time. The chapter also outlined the theoretical, methodological, and practical contributions of the study. The following chapter builds on these insights by drawing the study together, reflecting on its conclusions, and considering its limitations and directions for future research.

Chapter 8: Conclusion

This final chapter builds on the discussion presented in Chapter 7, where the findings were interpreted in relation to the RQs and theoretical framework. It brings these insights together to reflect on the study as a whole, summarising the key conclusions while also considering its limitations and possible directions for future research.

8.1. Overview of the Study

This thesis set out to develop a process-based understanding of CE and CWB within OBCs, with a particular focus on how brand- and community-related cues shape psychological experiences, and how these experiences relate to both CE and CWB. Instead of treating engagement as a fixed or purely positive outcome, the study approached it as something that develops through ongoing interaction and can vary depending on how participation is experienced.

The research was guided by two main objectives: to explore CE as a dynamic process by examining how and why customers' interactions with brands and OBC contexts influence cognitive, affective and behavioural engagement; and to explore CWB from a psychological perspective within socially intensive OBCs. To address these aims, a sequential exploratory MMD was adopted.

The qualitative phase, guided by SGT, explored participants' lived experiences across different OBCs. This phase showed that participation is not experienced in a uniform way. Instead, individuals appeared to interpret brand and community conditions through two broad patterns. On the one hand, some experiences supported a sense of alignment and connection with the brand, which strengthened involvement. On the other hand, certain conditions were experienced as more demanding or difficult to manage, contributing to feelings of strain. These insights pointed to two underlying psychological processes, later conceptualised as identity (self-brand connection) and strain (emotional exhaustion leading to negative brand experience).

Building on these insights, the quantitative phase translated these processes into a structured model within the S-O-R framework. Using SEM, the study examined how different stimuli, namely information overload, value incongruity, brand wastefulness, privacy concerns and psychological safety, relate to identity and strain, and how these, in turn, shape cognitive, affective and behavioural engagement, as well as well-being. The findings suggest the presence of both pathways. The identity-based process shows a more consistent influence across CE and CWB, while the strain-based process appears to operate in a more selective way, particularly in relation to affective and behavioural engagement.

Looking across both phases, the study offers a more nuanced account of CE and CWB in OBCs, showing that both engagement and well-being are shaped through an ongoing interplay between processes that strengthen connection and those that introduce pressure or fatigue.

8.2. Summary of the Research Design and Approach

This study adopted a sequential exploratory MMD, combining qualitative exploration with quantitative testing. This approach was chosen to capture both the depth of participants' experiences and the broader patterns through which these experiences relate to CE and CWB.

The first phase used SGT to explore how individuals experience participation in OBCs. Through iterative coding and analysis, this phase identified two key psychological processes. One reflected identity, where individuals felt safe, connected, recognised and aligned with the brand or community. The other reflected strain, where participation became effortful, tiring, imbalanced or at times frustrating. These processes emerged directly from participants' accounts and formed the foundation for the conceptual model.

The second phase translated these insights into a quantitative framework. A survey-based study was conducted and analysed using SEM to examine how

brand- and community-related cues relate to identity and strain, and how these processes shape engagement and well-being outcomes. This phase suggests that both processes operate at the same time, although not always with the same strength.

By bringing these phases together, the study moves from understanding how participants describe their experiences to examining how these patterns hold more broadly. This helps bridge the gap between lived experience and model testing, offering a more grounded understanding of CE and CWB within OBCs.

8.3. Conclusions

Looking across the study, several key conclusions can be drawn.

First, CE within OBCs does not appear to be experienced as a fixed or stable state. Instead, it develops gradually through participation and is shaped by how individuals interpret their experiences over time. CE appears to reflect an ongoing interplay between thinking, feeling and acting, instead of existing as neatly separated dimensions.

Second, CE is closely linked to underlying psychological processes. The findings suggest that identity and strain provide two useful ways of understanding how

individuals respond to the same environment. When participation supports a sense of alignment and connection, engagement tends to deepen. When it becomes more demanding or difficult to manage, engagement may become more selective or harder to sustain. This highlights that the same context can give rise to different forms of engagement depending on how it is experienced.

Third, CWB develops alongside engagement but is not determined by engagement. The findings indicate that well-being is more closely tied to how participation is experienced, particularly whether individuals feel supported and able to manage their involvement. This also suggests that higher activity does not necessarily translate into better well-being.

Fourth, brand- and community-related cues do not seem to influence outcomes directly. Instead, their effects appear to be carried through internal processes. The identity pathway, through self-brand connection, shows a more consistent influence across outcomes. The strain pathway also plays a role, although in a less uniform way. Some findings, such as increased cognitive attention following negative experiences, suggest that engagement is not always positive in nature, but can also involve closer evaluation or monitoring.

In sum, the study suggests that engagement in OBCs is shaped by a balance between processes that build connection and those that introduce strain. This helps explain why engagement may fluctuate over time and why individuals may remain involved even when some aspects of participation feel demanding.

8.4. Final Reflection

This thesis set out to provide a more process-based understanding of CE and CWB within OBCs. By combining qualitative insights with quantitative testing, it suggests that both engagement and well-being are not simply outcomes that can be increased but develop through ongoing interaction and psychological experience.

The findings highlight that OBCs can be both supportive and demanding environments. They can create opportunities for connection and involvement, while also introducing pressures that are not always easy to manage. Recognising both sides offers a more balanced understanding of how individuals experience digital brand communities.

In doing so, the study offers a framework that helps in understanding how CE and CWB unfold together within OBCs, without treating them as separate outcomes.

It also suggests that creating meaningful and manageable participation experiences may be just as important as encouraging activity itself.

The study provides a more grounded view of CE and CWB, one that reflects how engagement is experienced in practice and how it develops over time within increasingly interactive digital environments. This perspective may help guide future work in examining how these processes evolve across different contexts and forms of digital participation.

8.5. Limitations

While this study provides useful insights, there are a few limitations that are important to recognise. These do not take away from the findings, but they do help place them in context and show where further work could add more understanding.

8.5.1. Contextual and Sample-Related Limitations

8.5.1.1. Absence of Community-Level Contextual Control in the Quantitative Phase

The qualitative phase included participants from a range of OBCs, which helped capture different types of experiences. However, in the quantitative phase, participants were not linked to any specific community. This makes it difficult to see how engagement might differ across particular platforms or types of

communities. Many studies in this area focus on clearly defined communities because their culture and interaction patterns can shape how people engage (Brodie et al., 2013; Dessart, 2017; Mousavi & Roper, 2023). In comparison, the findings here require to be understood as more general patterns, which may look slightly different depending on the context. This is particularly important given that engagement in OBCs is often shaped by how people interact within a community and the expectations that develop over time, suggesting that some of the relationships identified in this study may vary in strength or form across different settings.

In addition, the study does not explicitly account for cultural or geographic differences in how OBCs are experienced. Engagement practices and interpretations may vary across contexts, suggesting that the findings may not fully reflect how these processes operate in different cultural settings.

It is also worth noting that platform-specific features, including algorithmic curation and content visibility, may influence how individuals encounter and engage with brand-related content. These factors were not explicitly considered in the model but may shape engagement patterns in ways that extend beyond the variables included here.

8.5.1.2. Self-Selected and Highly Engaged Participants

The participants in both phases had chosen to take part and already had some level of involvement in OBCs. This means the study is more likely to reflect the views of people who are relatively active or interested in these communities. As previous research suggests, such samples often include individuals who feel more connected or engaged (Vivek et al., 2012; Bowden, 2009). Because of this, the experiences of less active or more peripheral members may not be fully captured. As a result, the findings may reflect a more engaged segment of users and may not fully account for how engagement operates among individuals who participate more passively or intermittently.

8.5.1.3. Cross-Sectional Survey Design

The quantitative data were collected at a single point in time. It limits the ability to see how engagement changes over time. Although engagement is often described as something that develops and shifts, cross-sectional designs are still common in this area due to practical reasons (Hollebeek et al., 2019; Pansari & Kumar, 2017). This study has the same limitation, and future research could look more closely at how these processes evolve. This is particularly relevant given that the study treats engagement as a process, meaning that the temporal dynamics implied in the model cannot be fully observed within a single time frame.

8.5.2. Methodological and Measurement Limitations

8.5.2.1. Reliance on Self-Reported Data

All of the quantitative measures in this study are based on self-reported responses. While established scales were used, responses can still be influenced by memory, or the desire to present oneself in a certain way (Podsakoff et al., 2003; Malhotra & Dash, 2011). Using behavioural data or platform-based measures in future work could help provide a more complete picture of how engagement actually takes place. This may be especially relevant in OBC contexts, where there can be a gap between how individuals perceive their participation and how they actually engage within the platform.

8.5.2.2. Potential Common Method Variance

Since all the data were collected through a single survey, common method variance cannot be completely ruled out. This is a common issue in survey-based research (Podsakoff et al., 2003). Although steps were taken to reduce this risk, the use of a single data source means that some observed relationships may be slightly inflated, which should be considered when evaluating the strength of the findings.

8.5.2.3. Scope of Strain Operationalisation

In this study, strain was examined through emotional exhaustion and negative brand experience. These capture important aspects of strain, but they do not cover everything that might shape negative experiences in online environments. For example, issues such as social comparison, conflict within the community, demands of continued participation or broader digital fatigue may also play a role. These were outside the scope of the current model, so the strain pathway here reflects only part of the picture. This suggests that the strain pathway identified in this study represents a focused operationalisation, and that additional forms of strain may further influence how engagement is experienced in more complex or socially dynamic settings.

8.5.3. Theoretical Boundaries of the Process Model

8.5.3.1. Focus on Two Central Organismic Mechanisms

The model focuses on identity and strain as the main processes shaping engagement. While both are supported by the findings, it is likely that engagement is influenced by other factors as well. Things like habits, group dynamics, or emotional influence from others in the community may also be relevant. These were not included here, but they could be explored further in future studies. This indicates that while the model captures central processes, it

does not fully represent the broader range of influences that may shape engagement in more socially embedded or interaction-heavy environments.

8.5.3.2. Absence of Temporal Modelling

The study does not track how identity or strain develop over time. Engagement in OBCs can shift depending on how individuals experience and respond to their participation, so looking at these processes over time could offer a deeper understanding. Future research could take this further by following participants across different stages of their engagement. Such approaches may help to better capture how individuals move between states of connection and strain, where these are understood as evolving and not as fixed conditions.

8.5.4. Mixed-Methods Integration Considerations

8.5.4.1. Translation from Qualitative Constructs to Measurable Variables

Moving from the qualitative phase to the quantitative model required deciding which insights could be measured and how. This meant that some aspects of the qualitative findings could not be included in the final model. For example, participants spoke about the impact of offline brand events and the visual feel of the community space. These seemed important in shaping their experiences, but they were difficult to measure in a consistent way and so were not included in the SEM. This reflects the balance between keeping the richness of qualitative

insights and building a model that can be tested in a clear and manageable way. This highlights a common trade-off in MMR, where the richness of qualitative insights must be balanced against the need for measurement and model testing.

8.5.5. Summary of Limitations

The findings need to be understood with these points in mind. The use of cross-sectional survey data, self-reported measures, movement from qualitative to quantitative stage and a focused set of constructs means that the results offer one way of understanding engagement and well-being in OBCs, and not a complete account. These limitations help define the scope of the study and, at the same time, point toward areas where further work can extend and refine the understanding developed here.

8.6. Future Research

This study opens up a number of directions that could be taken forward, although it is difficult to capture all of them in a single model. In particular, the findings highlight several areas where further exploration could help to better understand the complexity of engagement and well-being within OBCs. One area that would be worth exploring further is how engagement develops over time. The present study offers only a snapshot, so it cannot show how identity and strain pathways change as people continue to participate. Following individuals over a longer

period might give a clearer sense of how these experiences shift. This may be especially useful for understanding how individuals transition between different engagement states over time.

It may also be useful to look more closely at particular types of communities. The participants in this study referred to a range of OBCs, which makes the findings more general, but at the same time it means that some of the detail linked to specific contexts is less visible. Engagement may not unfold in quite the same way in all settings, and a more focused approach could help to bring out these differences. Such work may also help to identify whether certain community features strengthen identity-based engagement or contribute to strain. There is also a scope to examine whether similar patterns emerge in other types of digital communities. While this study focuses on OBCs, participation in other online environments, like, social media groups or professional networks, may be shaped by different expectations and interaction styles. Exploring these contexts could help to determine whether the psychological processes identified in this study operate in similar ways, or whether they vary depending on the nature of the community.

There is also a scope to look beyond the two mechanisms examined here. Identity and strain offer one way of making sense of engagement, but they are unlikely to

capture everything that shapes how people take part in these communities. Other experiences may sit alongside these processes, especially in situations where participation becomes more complex or demanding.

The way engagement is measured could also be developed further. This study relies on how participants describe their experiences, which is valuable, but it does not always reflect what they actually do. Bringing in behavioural data may help to connect these accounts with observable patterns of activity. This may help to address potential gaps between perceived and actual engagement behaviour.

At the same time, the process of moving from qualitative insights to measurable constructs meant that some of the more context-specific or situational aspects of engagement could not be carried forward into the quantitative model. For example, participants described how particular interactions within the community shaped how they felt about their involvement, but these kinds of experiences are difficult to represent in a structured survey. One way forward might be to combine survey data with more open or experience-based approaches, so that these moments can still be captured alongside measurable patterns. Such approaches may help retain the richness of lived experience while still allowing for systematic analysis. This may help to retain more of the detail that is often lost in the transition between qualitative and quantitative phases.

Finally, well-being could be considered in more detail. In this study, it is treated as a single outcome, but it may be experienced in different ways depending on how individuals relate to the community. Looking more closely at these differences may help to build a fuller understanding of how it connects to people's wider experiences. This could provide a more differentiated view of how well-being is shaped within OBC participation.

8.7. Chapter Summary

Looking across the study as a whole, what emerges is not a single or straightforward explanation of how CE and CWB operate within OBCs, but a more grounded understanding of the processes through which they take shape. Engagement and well-being appear to develop through ongoing participation, where individuals interpret their experiences in ways that can both strengthen connection and introduce moments of strain. These processes can exist at the same time, shaping how people remain involved and how they feel within that involvement.

Seen in this way, CE and CWB are closely related but remain distinct. The findings suggest that engagement reflects how individuals think about, feel toward and act within their participation, while well-being relates more to how that participation is experienced. These two do not always develop in the same

way within OBCs. In particular, well-being appears to depend more on whether individuals feel able to manage their involvement and find it meaningful over time.

In this sense, the study offers a way of understanding CE and CWB that is closer to how they are experienced in practice. By shifting the focus from outcomes to underlying processes, it highlights the importance of considering how engagement is experienced and sustained within the context of OBCs, reflecting the complexity of participation in contemporary digital environments.

In addition, the study contributes to CE research by showing how engagement develops through underlying psychological processes instead of emerging as a direct outcome of interaction. By identifying identity- and strain-based pathways, it provides a more process-oriented understanding of CE within OBCs, while also showing how these processes shape CWB alongside engagement. From a managerial perspective, the findings highlight the importance of creating environments that support connection while also managing demands that may lead to fatigue. This suggests that fostering meaningful and manageable participation is key to sustaining both CE and CWB over time.

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Appendices

Appendix 1. SLR Searches conducted in Scopus and Web of Science

Search Terms in Scopus (OBC+CE)		
Field Tag	Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts *("online brand community"* OR *"virtual brand community"* OR *"digital brand community"* OR *"social media brand community"* OR *"brand community")*
Boolean	AND Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts ("*customer engagement*" OR "*consumer engagement*" OR "*brand engagement*" OR "*customer brand engagement"* OR "engagement behaviour" OR "*engagement behavior*" OR "*actor engagement*")
Document Type	Articles	(LIMIT-TO (DOCTYPE, "ar")
Boolean	AND	
Language	English	LIMIT-TO (LANGUAGE, "English")
Boolean	AND	
Subject Area	Business, Management, & Accounting	LIMIT-TO (SUBJAREA, "BUSI")
Boolean	AND	
Year of Publication	2009-2025	PUBYEAR > 2009 AND PUBYEAR < 2026

Search Terms in Scopus (OBC+CWB)		
Field Tag	Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts *("online brand community"* OR *"virtual brand community"* OR *"digital brand community"* OR *"social media brand community"* OR *"brand community")*
Boolean	AND Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts ("*well-being*" OR "*wellbeing*" OR "*ill-being"* OR *"burnout*" OR "*emotional exhaustion"* OR "*stress*" OR "*fatigue*")
Document Type	Articles	(LIMIT-TO (DOCTYPE, "ar")
Boolean	AND	
Language	English	LIMIT-TO (LANGUAGE, "English")
Boolean	AND	
Subject Area	Business, Management, & Accounting	LIMIT-TO (SUBJAREA, "BUSI")
Boolean	AND	
Year of Publication	2009-2025	PUBYEAR > 2009 AND PUBYEAR < 2026

Search Terms in Web of Science (OBC+CE)		
Field Tag	Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts *("online brand community"* OR *"virtual brand community"* OR *"digital brand community"* OR *"social media brand community"* OR *"brand community")*
Boolean	AND Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts ("*customer engagement*" OR "*consumer engagement*" OR "*brand engagement*" OR "*customer brand engagement"* OR "engagement behaviour" OR "*engagement behavior*" OR "*actor engagement*")
Document Type	Articles	(Article)
Boolean	AND	
Language	English	(English)
Boolean	AND	
WoS Category	Business, Management, & Accounting	(Business or Management)
Boolean	AND	
Year of Publication	2009-2025	PUBYEAR > 2009 AND PUBYEAR < 2026

Search Terms in Web of Science (OBC+CWB)		
Field Tag	Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts *("online brand community"* OR *"virtual brand community"* OR *"digital brand community"* OR *"social media brand community"* OR *"brand community")*
Boolean	AND Titles, Abstracts, and Full texts	Titles, Abstracts, and Full texts ("*well-being*" OR "*wellbeing*" OR "*ill-being"* OR *"burnout*" OR "*emotional exhaustion"* OR "*stress*" OR "*fatigue*")
Document Type	Articles	(Article)
Boolean	AND	
Language	English	(English)
Boolean	AND	
WoS Category	Business, Management, & Accounting	(Business or Management)
Boolean	AND	
Year of Publication	2009-2025	PUBYEAR > 2009 AND PUBYEAR < 2026

Appendix 2 (A). Ethical approval – Qualitative Study

University of Essex ERAMS

18/04/2023
Mrs Sweta Srivastava
Essex Business School
University of Essex
Dear Sweta,

Ethics Committee Decision

Application: ETH2223-1052

I am pleased to inform you that the research proposal entitled "The prowess and perils of Customer Engagement" has been reviewed on behalf of the Ethics Sub Committee 2, and, based on the information provided, it has been awarded a favourable opinion.

The application was awarded a favourable opinion subject to the following **conditions**:

Extensions and Amendments:

If you propose to introduce an amendment to the research after approval or extend the duration of the study, an amendment should be submitted in ERAMS for further approval in advance of the expiry date listed in the ethics application form. Please note that it is not possible to make any amendments, including extending the duration of the study, once the expiry date has passed.

Covid-19:

Please note that the current Government guidelines in relation to Covid-19 must be adhered to and are subject to change and it is your responsibility to keep yourself informed and bear in mind the possibility of change when planning your research. You will be kept informed if there are any changes in the University guidelines.

Yours sincerely,
Casper Hoedemaekers

Ethics ETH2223-1052: Mrs Sweta Srivastava

Appendix 2 (B). Ethical approval – Quantitative Study

University of Essex ERAMS

02/09/2024
Mrs Sweta Srivastava
Essex Business School
University of Essex
Dear Sweta,

Ethics Committee Decision

Application: ETH2324-2061

I am pleased to inform you that the research proposal entitled "The prowess and perils of Customer Engagement" has been reviewed on behalf of the Ethics Sub Committee 2, and, based on the information provided, it has been awarded a favourable opinion.

The application was awarded a favourable opinion subject to the following **conditions**:

Extensions and Amendments:

If you propose to introduce an amendment to the research after approval or extend the duration of the study, an amendment should be submitted in ERAMS for further approval in advance of the expiry date listed in the ethics application form. Please note that it is not possible to make any amendments, including extending the duration of the study, once the expiry date has passed.

Covid-19:

Please note that the current Government guidelines in relation to Covid-19 must be adhered to and are subject to change and it is your responsibility to keep yourself informed and bear in mind the possibility of change when planning your research. You will be kept informed if there are any changes in the University guidelines.

Yours sincerely,
Casper Hoedemaekers

Ethics ETH2324-2061: Mrs Sweta Srivastava

This email was sent by the University of Essex Ethics Review Application and Management

Appendix 3 Participant information sheet

University of Essex | Essex Business School | AMBA

Participant Information Sheet for Research Project: The prowess and perils of customer engagement

Dear participant,

I, Sweta Srivastava, am currently carrying out a piece of research entitled, 'the prowess and perils of customer engagement' under the supervision of Dr. Abhisek Kuanr and Prof. Neeru Malhotra.

The study is being undertaken as a part fulfilment of the requirements for PhD degree at University of Essex. We are investigating the bright and dark sides of online customer engagement and its implications for the customers and the firms. It is a mixed-methods study, and this is the qualitative part, comprising of 30 semi-structured interviews. This phase takes place from July 2023 to September 2023. This information sheet provides you with information about the study and your rights as a participant.

What does taking part in the research involve?
Taking part in the research will comprise filling a screening questionnaire, which will take 2 to 3 minutes to complete followed by one-to-one semi-structured interview with me, the researcher, which will be digitally recorded with your agreement. Recording the interview gives the researcher the opportunity to transcribe, analyse and reflect on the responses you give. Your interview will last approximately for 45 to 60 minutes, during which you will be asked a series of semi-structured questions, regarding the way you engage with online brand communities. The interview will take place via Zoom at a mutually convenient time. All responses given by you will be de-identified (including the names of individuals) and will be treated in strict confidence.

Do I have to take part?
Naturally, there is no obligation to take part in the study. It's entirely up to you. If you do decide to take part, you will be given this information sheet to keep and be asked to give consent to take part. If you decide to participate in the study and then change your mind in the future, you can withdraw at any point, even after the data has been collected. If publications or reports have already been disseminated, these cannot be withdrawn, however, these will only contain anonymised or aggregated data. If you wish to withdraw from the study at any time, please contact the researcher on the details provided.

Will my taking part in this study be kept confidential?
All information collected will be kept strictly confidential (subject to legal limitations) and confidentiality and privacy will be ensured in the collection, storage, and publication of research material at all times. Research data will be kept securely at all times and will only be accessible by the researcher and the supervisors. If you are mentioned individually in any publications or reports, then a pseudonym will be used and identifying details will be removed. A list may be kept linking the pseudonyms to names, but this will be kept securely and will only be accessible by those listed above. A copy of the information which we record about you, but not other participants, will be provided, free of charge, on request. However, this research forms part of my study at the University of Essex and therefore may be subject to scrutiny by other University staff in determining the outcome of my degree.

The research data generated by the study would be retained for a period of ten years after the completion of the project and made available for access and re-use where legally, ethically, and commercially appropriate, taking note of any relevant safeguards. The data would be permanently destroyed electronically at the end of the above-mentioned period.

Are there any possible disadvantages or risk of taking part?
There are no possible risks or disadvantages of taking part in the study.

University of Essex | Essex Business School | AMBA

What are the possible benefits of taking part?
Through your participation in the study, you will help brands improve the engagement with customers. Also, it will create an opportunity for you to share your thoughts, feelings, and opinions. Moreover, it will aid in providing insights into your own behavior.
.

What is the legal basis for using the data and who is the Data Controller?
The legal basis for processing the data collected from this project is informed consent. The Data Controller for his project is the University of Essex and the contact is the University Information Assurance Manager (dpo@essex.ac.uk).

What should I do if I want to take part?
If you wish to opt into the research, please sign the Consent Form (attached) and return it via email to ss22985@essex.ac.uk. Remember you can opt out of the research at any time, without giving a reason.

Who is funding the research?
Self-funded.

What will happen to the results of the research study?
On completion of the study, the results will be incorporated into the PhD thesis, published as journal articles, and used as a conference paper. All responses given by you will be de-identified (including the names of individuals) and will be treated in strict confidence. If you are mentioned individually in any publications or reports, then a participant number or pseudonym will be used and identifying details will be removed. A copy of the information which we record about you, but not other participants, will be provided, free of charge, on request.

Who has reviewed the study?
My application was reviewed and approved by the Social Sciences Ethics Sub-Committee at the University of Essex.

What happens if something goes wrong?
If you are harmed by taking part in this research project, there are no special compensation arrangements. Regardless of this, if you wish to complain, or have any concerns about any aspect of the way you have been treated during the course of this study then you should immediately inform the student and/or their supervisor (details below). If you are not satisfied with the response, you may contact the Essex Business School Research Ethics Officer, Dr Casper Hoedemaekers (choedem@essex.ac.uk) or Sarah Manning-Press (sarahm@essex.ac.uk) who will advise you further.

Name of the Researcher/Research Team Members
I would be very grateful for your participation in this study. If you need to contact us in future, please contact me (ss22985@essex.ac.uk), Dr. Abhisek Kuanr (abhisek.kuanr@essex.ac.uk) or Prof. Neeru Malhotra (N.Malhotra@kingston.ac.uk). You can also contact us in writing at: EBS, University of Essex, Colchester CO4 3SQ.

You are welcome to ask questions at any point.

Yours,

Sweta Srivastava

Appendix 4. Consent Form

University of Essex

Consent Form

Title of the Project : **The prowess and perils of customer engagement**
Research Team : Researcher Name: Sweta Srivastava
Supervisors: Dr. Abhisek Kuanr, Prof. Neeru Malhotra

Please initial box

1. I confirm that I have read and understand the Information Sheet dated xx for the above study. I have had an opportunity to consider the information, ask questions and have had these questions answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw from the project at any time without giving any reason and without penalty. I understand that any data collected up to the point of my withdrawal will be destroyed. ☐
3. I understand that the identifiable data provided will be securely stored and accessible only to the members of the research team directly involved in the project, and that confidentiality will be maintained. ☐
4. I understand that my fully anonymised data will be used for PhD thesis, published as journal articles, and used as a conference paper. ☐
5. I understand that the data collected about me will be used to support other research in the future and may be shared anonymously with other researchers. ☐
6. I give permission for my responses to be digitally recorded and saved so that they will be available for current and future research and learning activities by other individuals. ☐
7. I agree to take part in the above study. ☐

Participant Name	Date	Participant Signature
_____	_____	_____

Researcher Name	Date	Researcher Signature
_____	_____	_____

Consent Form – Interviews - Version 1 -
ERAMS reference: ETH2223-1052

Date: 19/03/2023

Appendix 5. Interview Guide

University of Essex

Interview Guide

Hello, my name is Shweta Srivastava, a doctoral student at University of Essex and I am studying the bright and dark sides of online customer engagement. I am grateful that you could join me for this one-to-one interview, where we will spend the next 60 minutes discussing about experiences you would have had while engaging with online brand communities.

The study is being done in partial fulfilment of the requirements for my doctoral degree. What I learn from today's discussion will help the academicians and practitioners gain deeper insights into the phenomenon of online customer engagement. All responses given by you will be de-identified and will be treated in strict confidence, as already mentioned in the invitation letter, participant information sheet, and consent forms. Further, if you are interested to have a copy of the report, I will share it with you, approximately by end of next two years. I will be recording our conversation, so that we don't miss out on any of the conversation. Recording the interview gives the researcher the opportunity to transcribe, analyse and reflect on the responses you give.

Now, a couple of ground rules that might help us:

- I would appreciate if you would turn-off or turn your cell-phone on silent mode.
- There are no right or wrong answers today in our conversation and we are here to understand your opinions, experiences, feelings, thoughts, emotions, and understanding.

[START RECORDING THE CALL]

Q1. Please tell me your name and the name of your favourite online brand community that you regularly engage with?
Probe 1.1 When did you join this community and why?
Probe 1.2 Why do you engage with xyz more than any other online brand community?
Probe 1.3 Can you think of some notable experiences you have had in the community? Any stories or incidence that you would like to share?
Probe 1.4 Do you engage with xyz on a daily, weekly, or monthly basis?

Q2. How do you spend time on xyz? How do you engage with xyz?
Probe 2.1 Can you give some examples of what activities you do while on xyz?
Probe 2.2 How does it makes you feel?
Probe 2.3 Why do you indulge in positive WOM, or why do you feel like providing feedback?

Q3. How do you think your engagement with xyz has been beneficial to you?
Probe 3.1 Has it helped you in your life? How?
Probe 3.2 Is this affecting your day-to-day life in any ways? How?

Q4. How do you think this kind of engagement can be harmful to you?
Probe 4.1 Has it impacted your mental and physical health?

University of Essex

Probe 4.2 Is this affecting your day-to-day life in any ways? How?
Probe 4.3 Do people you spend most time with or live with complain about your habit of spending time interacting with xyz or talking about it?

Q5. How do you think your engagement with xyz has been beneficial to the firm?
Probe 5.1 – Give some examples.
Probe 5.2 – Probe for the consequences.

Q6. How do you think this kind of engagement can be harmful to the firm?
Probe 6.1 Can you think of an example where someone you know, engaged heavily with any online brand community and then started to spread negative WOM or started to become disloyal or disengaged?
Probe 6.2 Why do you think this would have happened?
Probe 6.3 Probe for the consequences.

Q7. How do you think your engagement with xyz has evolved since you started engaging and led to the consequences you have just mentioned?"
Probe 7.1 What happens? Please give examples.

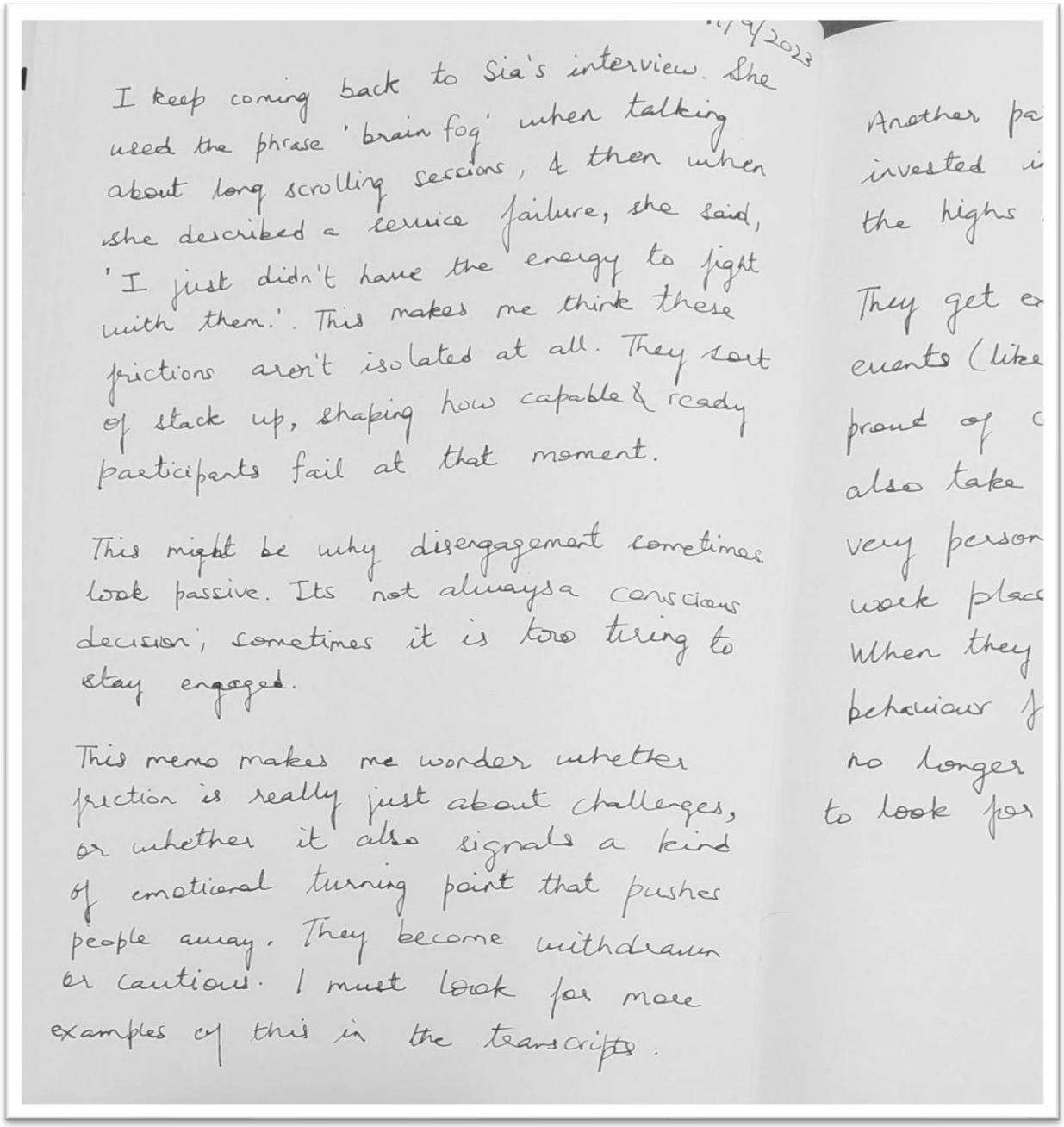
Q8. What external or internal factors do you think can improve your engagement with XYZ?
Probe 8.1 Why do you think so?

Q9. Can you think of any situations when your engagement with xyz will not positively impact you or the firm.
Probe 9.1 Why would you do so? Please give examples.
Probe 9.2 Do you feel strongly for xyz? Would you stop engaging positively with xyz if this feeling was missing.

Q10. Please share an experience where you stopped engaging with a brand community that you previously loved
Probe 10.1 What made you take that decision?
Probe 10.2 Did you try solving the problem? How? What happened?
Probe 10.3 How did you feel when this happened?
Probe 10.4 How do you feel now?

Generic Probes:
- Would you explain further?
- Can you give an example?
- I don't understand.
- Tell me more.
- So, what happened?

Appendix 6. Example of a Memo



11/9/2023

I keep coming back to Sia's interview. She used the phrase 'brain fog' when talking about long scrolling sessions, & then when she described a service failure, she said, 'I just didn't have the energy to fight with them.'. This makes me think these frictions aren't isolated at all. They sort of stack up, shaping how capable & ready participants fail at that moment.

This might be why disengagement sometimes look passive. Its not always a conscious decision; sometimes it is too tiring to stay engaged.

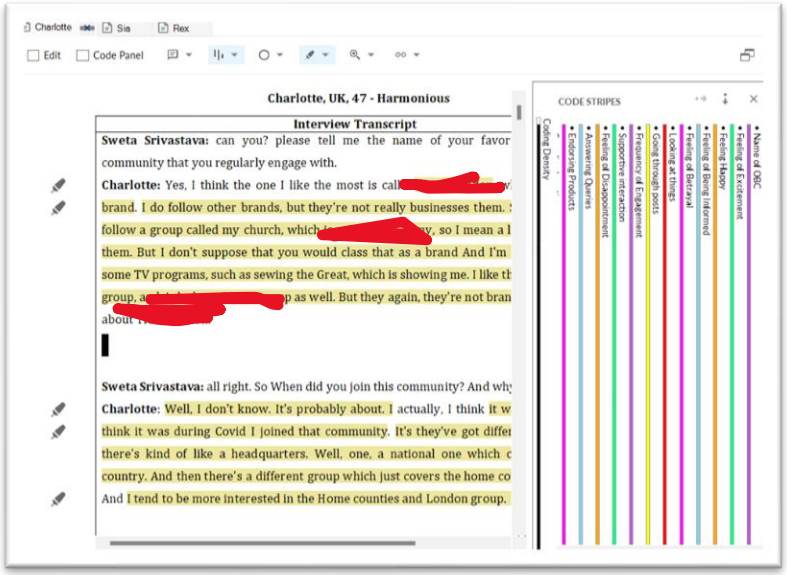
This memo makes me wonder whether friction is really just about challenges, or whether it also signals a kind of emotional turning point that pushes people away. They become withdrawn or cautious. I must look for more examples of this in the transcripts.

Another pa
invested i
the highs

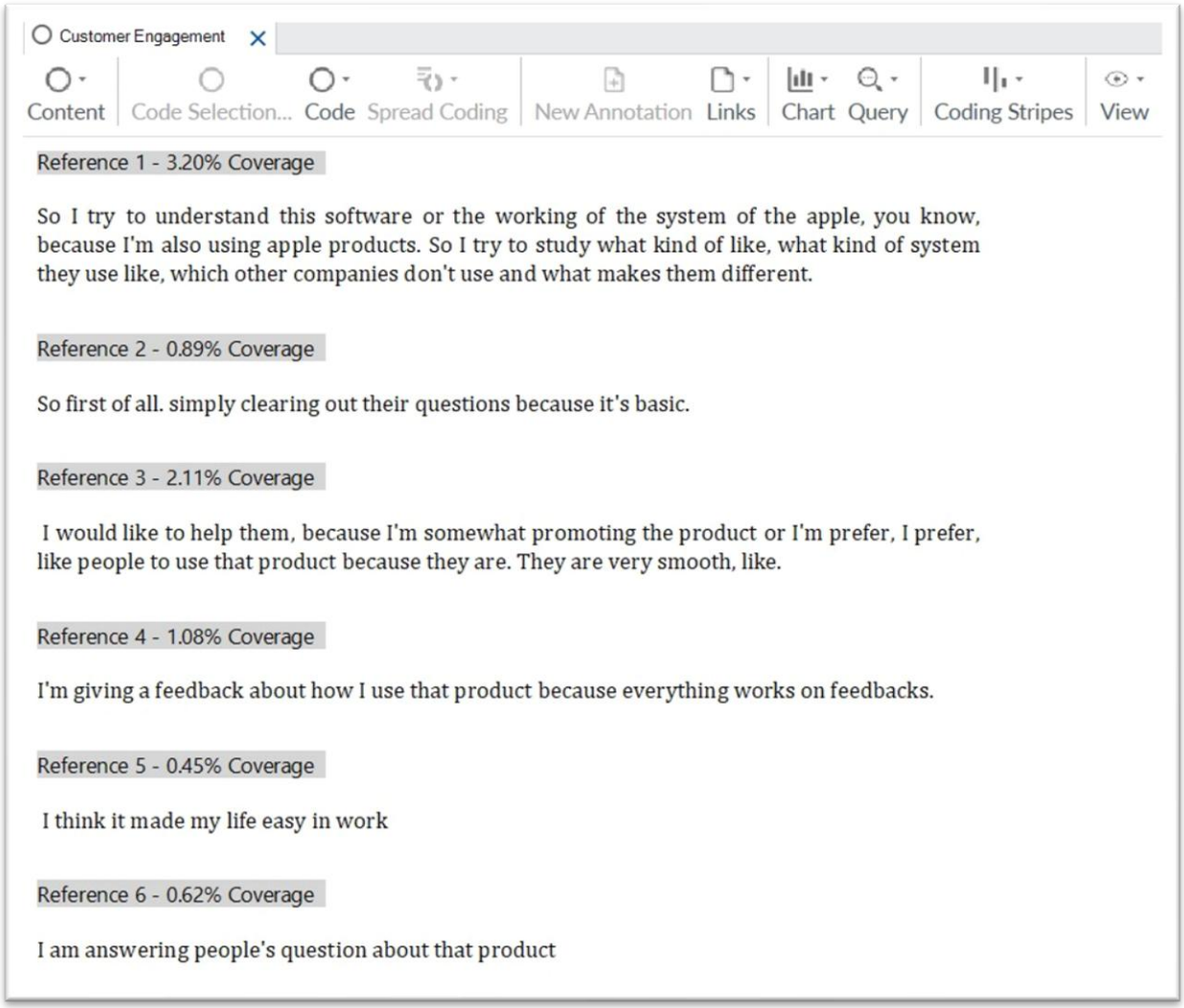
They get ex
events (like
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work plac
When they
behaviour
no longer
to look for

Appendix 7. Open Coding Exhibits

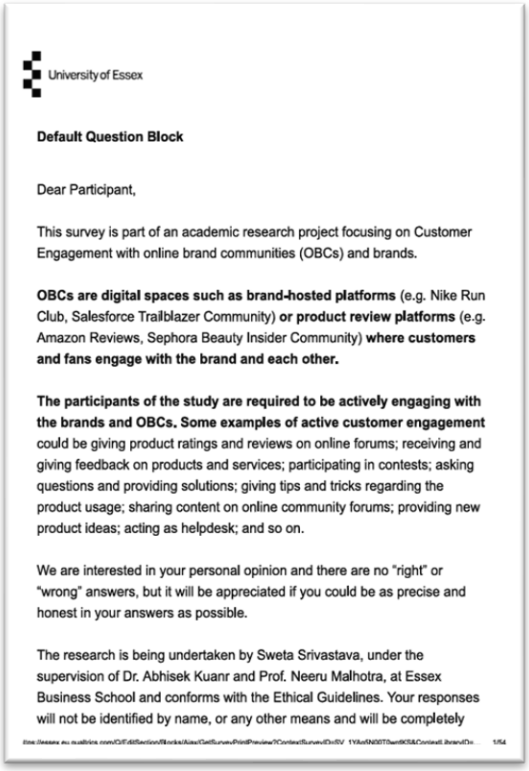
Sweta Srivastava: And do you think that this kind of engagement can be harmful to the firm in any ways? **Charlotte:** Yes, I think it can be harmful as well, I think every now and then you get people who will write a post and say I would need to be totally honest. I'm not impressed with this brand. I've used this make up. And I've used this skin care, and it doesn't work, or it doesn't do this, and it's a scam and so that must put people off as well.	**Harmful effects of OBC CE. People positing that they are not impressed with the brand, make-up, skin care. Negative WOM.**
Sweta Srivastava: So, Can you think of someone you know who engaged heavily with a brand community. And then they started to spread negative word of mouth or started to become disloyal or disengaged. **Charlotte:** No, I don't know anyone in that position?	
Sweta Srivastava: Is there anything that can make you stop engaging with Triny London? **Charlotte:** Are there any chances I particular might come disloyal to the brand or stopping in there	**Participant clarifies the question**
Sweta Srivastava: yes **Charlotte:** If I had a negative experience or a reaction to a product, maybe let's say, or if I don't know if maybe [redacted] was in some scandal and her name was brought into disrepute that kind of thing might put me off **Sweta Srivastava:** all right. Okay, so why would that put you off?	**Reasons for disengagement – negative experience with product. Brand or founder brought into disrepute.**
Charlotte: Well, if she was doing something immoral or illegal, or you know there was I, I would I would not feel comfortable with that. So I would that would put me off. Yeah. I would associate with the brand, I guess, if let's say they were. It was involving. I don't know poor work practices or exploitation or something. Then I wouldn't want to be known that I was engaging with that brand.	**Reason for being put-off - Founder doing something immoral or illegal. Continued association with brand unless poor work practices or exploitation. Doesn't want to be known to be engaging with irreputable brand.**
Sweta Srivastava: all right? Okay? So that's when you see yourself not engaging with the band any longer. Yeah, all right. So you said that when you engage like, when you like the post or leave feedback or Sometimes ask	



Appendix 8. NVivo Coding Output for Customer Engagement



Appendix 9. Survey Questionnaire



University of Essex

Default Question Block

Dear Participant,

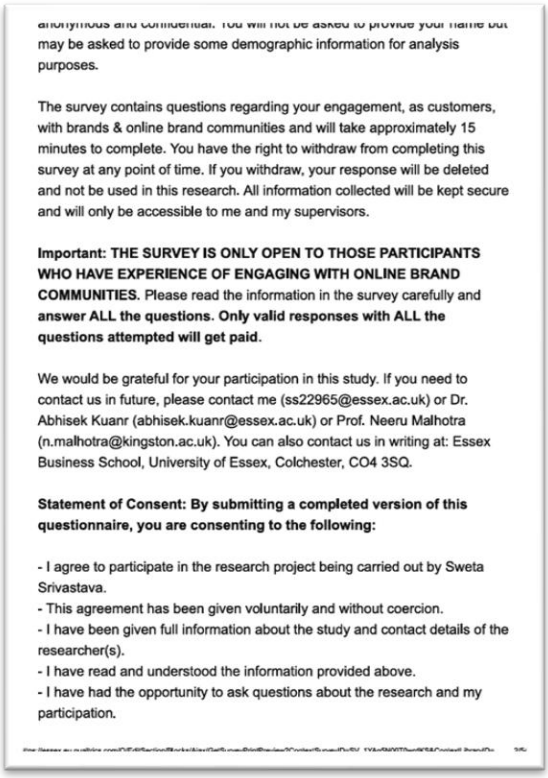
This survey is part of an academic research project focusing on Customer Engagement with online brand communities (OBCs) and brands.

OBCs are digital spaces such as brand-hosted platforms (e.g. Nike Run Club, Salesforce Trailblazer Community) **or product review platforms** (e.g. Amazon Reviews, Sephora Beauty Insider Community) **where customers and fans engage with the brand and each other.**

The participants of the study are required to be actively engaging with the brands and OBCs. Some examples of active customer engagement could be giving product ratings and reviews on online forums; receiving and giving feedback on products and services; participating in contests; asking questions and providing solutions; giving tips and tricks regarding the product usage; sharing content on online community forums; providing new product ideas; acting as helpdesk; and so on.

We are interested in your personal opinion and there are no "right" or "wrong" answers, but it will be appreciated if you could be as precise and honest in your answers as possible.

The research is being undertaken by Sweta Srivastava, under the supervision of Dr. Abhisek Kuanr and Prof. Neeru Malhotra, at Essex Business School and conforms with the Ethical Guidelines. Your responses will not be identified by name, or any other means and will be completely



anonymous and confidential. You will not be asked to provide your name but may be asked to provide some demographic information for analysis purposes.

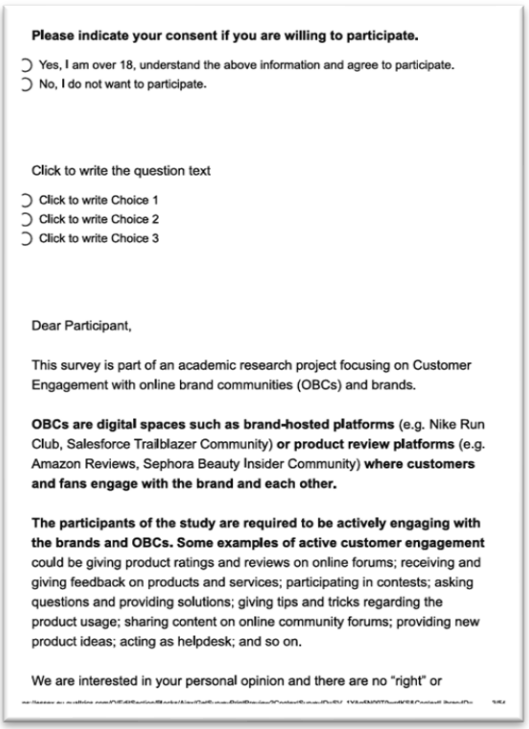
The survey contains questions regarding your engagement, as customers, with brands & online brand communities and will take approximately 15 minutes to complete. You have the right to withdraw from completing this survey at any point of time. If you withdraw, your response will be deleted and not be used in this research. All information collected will be kept secure and will only be accessible to me and my supervisors.

Important: THE SURVEY IS ONLY OPEN TO THOSE PARTICIPANTS WHO HAVE EXPERIENCE OF ENGAGING WITH ONLINE BRAND COMMUNITIES. Please read the information in the survey carefully and **answer ALL the questions. Only valid responses with ALL the questions attempted will get paid.**

We would be grateful for your participation in this study. If you need to contact us in future, please contact me (ss22965@essex.ac.uk) or Dr. Abhisek Kuanr (abhisek.kuanr@essex.ac.uk) or Prof. Neeru Malhotra (n.malhotra@kingston.ac.uk). You can also contact us in writing at: Essex Business School, University of Essex, Colchester, CO4 3SQ.

Statement of Consent: By submitting a completed version of this questionnaire, you are consenting to the following:

- I agree to participate in the research project being carried out by Sweta Srivastava.
- This agreement has been given voluntarily and without coercion.
- I have been given full information about the study and contact details of the researcher(s).
- I have read and understood the information provided above.
- I have had the opportunity to ask questions about the research and my participation.



Please indicate your consent if you are willing to participate.

- ○ Yes, I am over 18, understand the above information and agree to participate.
- ○ No, I do not want to participate.

Click to write the question text

- ○ Click to write Choice 1
- ○ Click to write Choice 2
- ○ Click to write Choice 3

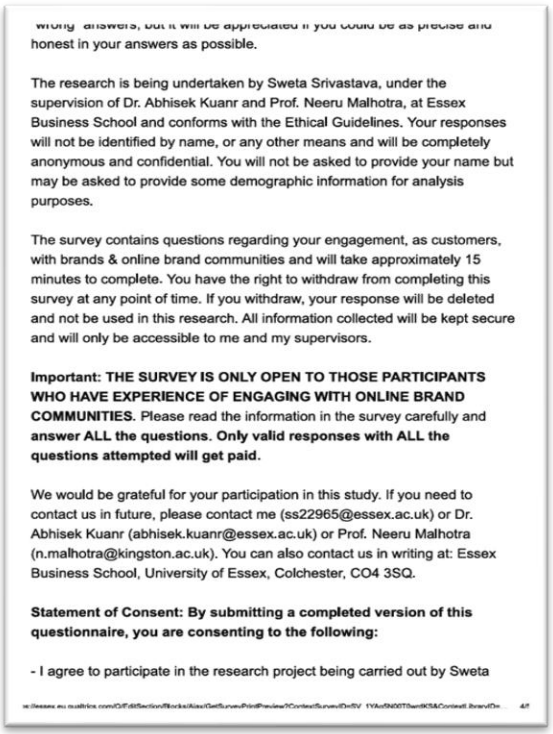
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We are interested in your personal opinion and there are no "right" or



"wrong" answers, but it will be appreciated if you could be as precise and honest in your answers as possible.

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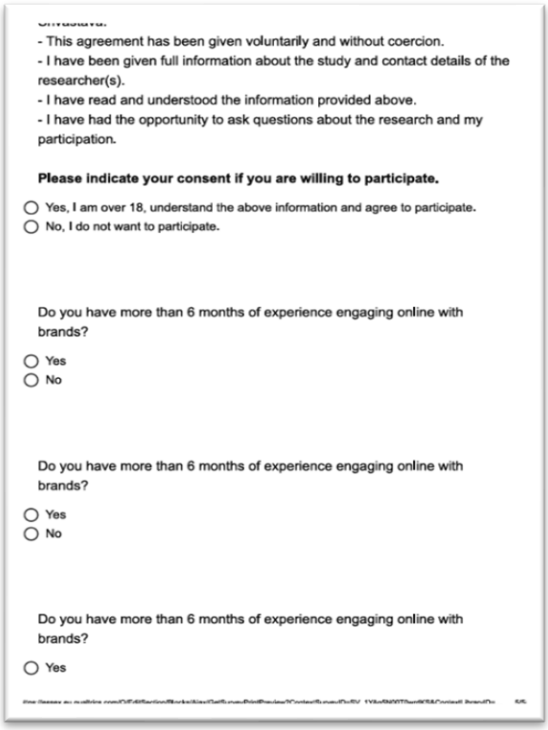
The survey contains questions regarding your engagement, as customers, with brands & online brand communities and will take approximately 15 minutes to complete. You have the right to withdraw from completing this survey at any point of time. If you withdraw, your response will be deleted and not be used in this research. All information collected will be kept secure and will only be accessible to me and my supervisors.

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Statement of Consent: By submitting a completed version of this questionnaire, you are consenting to the following:

- I agree to participate in the research project being carried out by Sweta



Unvalidated:
- This agreement has been given voluntarily and without coercion.
- I have been given full information about the study and contact details of the researcher(s).
- I have read and understood the information provided above.
- I have had the opportunity to ask questions about the research and my participation.

Please indicate your consent if you are willing to participate.

- ◯ Yes, I am over 18, understand the above information and agree to participate.
- ◯ No, I do not want to participate.

Do you have more than 6 months of experience engaging online with brands?

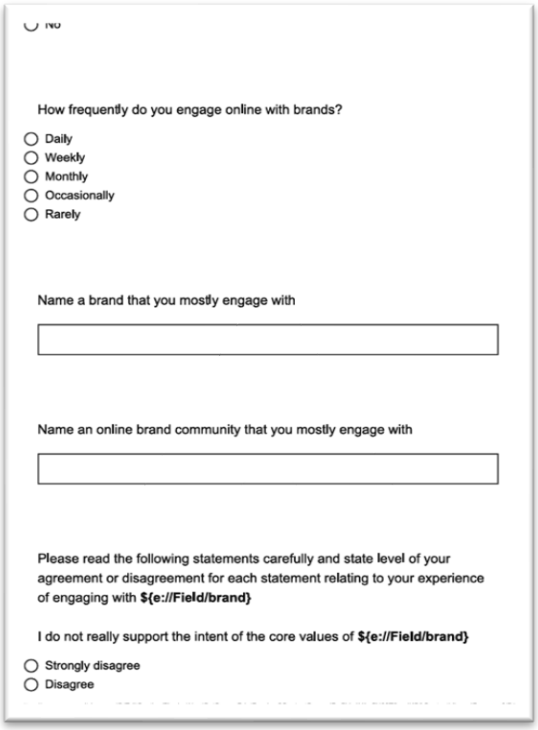
- ◯ Yes
- ◯ No

Do you have more than 6 months of experience engaging online with brands?

- ◯ Yes
- ◯ No

Do you have more than 6 months of experience engaging online with brands?

- ◯ Yes



- ◯ No

How frequently do you engage online with brands?

- ◯ Daily
- ◯ Weekly
- ◯ Monthly
- ◯ Occasionally
- ◯ Rarely

Name a brand that you mostly engage with

Name an online brand community that you mostly engage with

Please read the following statements carefully and state level of your agreement or disagreement for each statement relating to your experience of engaging with **${e://Field/brand}**

I do not really support the intent of the core values of **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree



- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

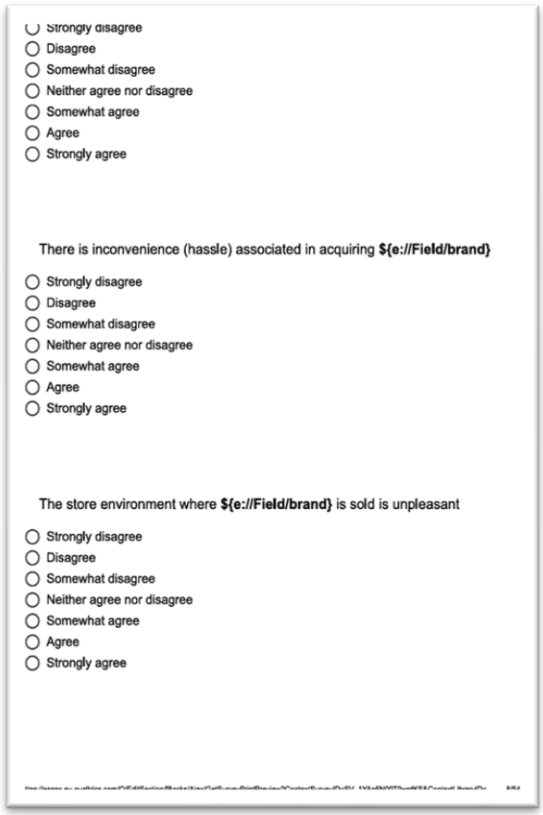
I do not have a clear understanding of the core values of **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I have a great deal of disagreement about what **${e://Field/brand}'s** core values represent

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} has a poor performance



- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There is inconvenience (hassle) associated in acquiring **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The store environment where **${e://Field/brand}** is sold is unpleasant

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} has failed to meet its promised value

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

My expectations of **${e://Field/brand}** were not met during my experience.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I spend a lot of time thinking about **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I make time to think about **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

Time flies when I am interacting with **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

When I am interacting with **${e://Field/brand}** I get carried away

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

When interacting with **${e://Field/brand}**, it becomes difficult to detach

myself

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I feel enthusiastic about **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am interested in anything about **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I find **${e://Field/brand}** interesting

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

When interacting with **${e://Field/brand}**, I feel happy

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I get pleasure from interacting with **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

Interacting with **${e://Field/brand}** is like a treat for me

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I share my ideas with **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I share interesting content with **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I help **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I ask **${e://Field/brand}** questions

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I seek ideas or information from **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I seek help from **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I promote **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I try to get others interested in **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

Blue is my favorite colour

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I actively defend **${e://Field/brand}** from its critics

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I say positive things about **${e://Field/brand}** to other people

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} reflects who I am

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I can identify with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel a personal connection to **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I (can) use **${e://Field/brand}** to communicate who I am to other people

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I think **${e://Field/brand}** (could) help(s) me become the type of person I want to be

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I consider **${e://Field/brand}** to be "me" (it reflects who I consider myself to be or the way that I want to present myself to others)

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel emotionally drained by engaging with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel used up after engaging with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel fatigued when I had to think about or face **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel burned out from engaging with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel frustrated when engaging with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel I was exerting too many efforts in engaging with **${e://Field/brand}**

- ○ Strongly disagree
- ○ Disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Agree
- ○ Strongly agree

I feel like I was at the end of my rope whenever I had to engage with **${e://Field/brand}**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The engagement with **${e://Field/brand}** took more emotional energy from me than it should

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} satisfies my overall engagement needs

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The engagement with **${e://Field/brand}** plays a very important role in my social well-being

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The engagement with **${e://Field/brand}** plays a very important role in my leisure well-being

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The engagement with **${e://Field/brand}** plays an important role in enhancing the quality of life in my community

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am always courteous even to people who are disagreeable

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} encourages people to consume more resources than needed

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} does not utilise resources to their maximum advantage

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There are resources associated with **${e://Field/brand}** which won't be fully utilised

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} does not utilise resources as fully as they could be

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

${e://Field/brand} does not extract the most value from the resources expended

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I expect **${e://Field/brand}** will create waste

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I expect some resources associated with **${e://Field/brand}** will become waste

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There are resources associated with **${e://Field/brand}** that will be wasted

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There are resources associated with **${e://Field/brand}** that will end up as waste instead of serving another purpose

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

The following section is related to your experience of engaging with online brand communities (OBCs), which are **digital spaces such as brand-hosted platforms** (e.g. Nike Run Club, Salesforce Trailblazer Community) **or product review platforms** (e.g. Amazon Reviews, Sephora Beauty Insider Community) where customers and fans engage with the brand and each other.

Please read the following statements carefully and state level of your agreement or disagreement for each statement relating to your experience

of engaging with **${e://Field/obc} online brand community.**

I am concerned about the negative consequences of unknown parties accessing my private information on **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am concerned that my private information on **${e://Field/obc} online brand community** may be misused.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am concerned that unknown parties have access to my private information on **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am not afraid to be myself in **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am not afraid to express my opinions in **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There is no threatening environment in **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There have been occasions where I took advantage of someone

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I am often distracted by the excessive amount of information available on **${e://Field/obc} online brand community**

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I find that I am overwhelmed by the amount of information available on **${e://Field/obc} online brand community** that I have to process on a daily basis

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

There is too much information available on **${e://Field/obc} online brand community** that I find it a burden to handle

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

I find that only a small part of information available on **${e://Field/obc} online brand community** is relevant to my needs

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Somewhat disagree
- ◯ Neither agree nor disagree
- ◯ Somewhat agree
- ◯ Agree
- ◯ Strongly agree

Kindly select your age group

- ◯ 18 - 24
- ◯ 25 - 34
- ◯ 35 - 44
- ◯ 45 - 54
- ◯ 55 - 64
- ◯ 65 & above

State your gender

- ◯ Male
- ◯ Female
- ◯ Non-binary / third gender
- ◯ Prefer not to say

What best describes your current employment status?

- ◯ Employed full time
- ◯ Employed part time
- ◯ Unemployed looking for work
- ◯ Unemployed not looking for work
- ◯ Retired
- ◯ Student

What is your highest education level?

- ◯ Less than high school
- ◯ High school graduate
- ◯ Undergraduate
- ◯ Post graduate
- ◯ Doctorate

Have you participated in this survey through Amazon MTurk?

- ◯ Yes
- ◯ No

Thank you for your time. Here is your completion ID: **${e://Field/Random_Code}**

Please copy and paste the same into the box on Amazon Mechanical Turk, to receive credit for taking our survey.

For payment enquiries, please contact via Amazon Mechanical Turk or email: ss22985@essex.ac.uk

You have not passed the initial screening and hence you cannot participate further and are not eligible to be paid. We thank you for your time.

Block 1

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Appendix 10. Variance Inflation Factor

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.669	.248		18.799	<.001		
	BW_M_Updated	-.075	.052	-.117	-1.446	.149	.530	1.886
	PCOBC_M	.086	.050	.145	1.715	.087	.484	2.066
	PS_M	.097	.046	.136	2.133	.034	.843	1.186
	CoCVI_M	-.052	.057	-.088	-.898	.370	.357	2.801
	OBCIO_M	.110	.053	.183	2.079	.039	.447	2.239

a. Dependent Variable: SWB_M

Appendix 11. Regression Weights (Unstandardized Estimates)

			Estimate	S.E.	C.R.	P	Label
EE	<---	OBCIO	1.275	0.201	6.353	***	a1
EE	<---	BW	0.243	0.101	2.406	0.016	a2
EE	<---	CoCVI	-0.402	0.198	-2.034	0.042	a3
EE	<---	PS	0.061	0.071	0.849	0.396	a4
EE	<---	PCOBC	-0.092	0.096	-0.958	0.338	a5
SBC	<---	OBCIO	1.322	0.353	3.749	***	a6
SBC	<---	BW	-0.079	0.11	-0.718	0.473	a7
SBC	<---	CoCVI	-1.259	0.381	-3.301	***	a8
SBC	<---	PS	0.459	0.114	4.017	***	a9
SBC	<---	PCOBC	-0.1	0.106	-0.943	0.346	a10
NEB	<---	EE	0.885	0.065	13.641	***	c1
SWB	<---	NEB	-0.01	0.019	-0.551	0.582	b4
CBEBE	<---	NEB	-0.04	0.019	-2.05	0.04	b3
CBEAE	<---	NEB	-0.079	0.023	-3.364	***	b2
CBECE	<---	NEB	0.274	0.035	7.787	***	b1
SWB	<---	SBC	0.708	0.096	7.4	***	b8
CBEBE	<---	SBC	1.06	0.11	9.596	***	b7
CBEAE	<---	SBC	0.991	0.107	9.228	***	b6
CBECE	<---	SBC	0.916	0.113	8.124	***	b5
CBECE	<---	Gen_D	0.075	0.11	0.684	0.494	par_75
CBEAE	<---	Gen_D	0.012	0.082	0.143	0.886	par_76
CBEBE	<---	Gen_D	0.004	0.069	0.063	0.95	par_77
SWB	<---	Gen_D	0.109	0.068	1.595	0.111	par_78
CBECE	<---	Age	-0.055	0.059	-0.936	0.349	par_79
CBEAE	<---	Age	0.077	0.044	1.754	0.079	par_80
CBEBE	<---	Age	-0.006	0.037	-0.163	0.871	par_81
SWB	<---	Age	-0.005	0.036	-0.135	0.892	par_82
OBCIO_4	<---	OBCIO	0.701	0.053	13.319	***	par_20
OBCIO_3	<---	OBCIO	0.908	0.055	16.599	***	par_21
OBCIO_2	<---	OBCIO	0.786	0.052	15.032	***	par_22
OBCIO_1	<---	OBCIO	1				
BW_TW4	<---	BW	1.634	0.137	11.939	***	par_23
BW_TW3	<---	BW	1.718	0.142	12.141	***	par_24
BW_TW2	<---	BW	1.748	0.143	12.208	***	par_25
BW_TW1	<---	BW	1.767	0.145	12.173	***	par_26
CoCVI_3	<---	CoCVI	1.076	0.068	15.83	***	par_27
CoCVI_2	<---	CoCVI	1.042	0.067	15.454	***	par_28
CoCVI_1	<---	CoCVI	1				
PS_3	<---	PS	0.739	0.071	10.435	***	par_29
PS_2	<---	PS	0.946	0.072	13.219	***	par_30
PS_1	<---	PS	1				
SWB_1	<---	SWB	1				
SWB_2	<---	SWB	1.56	0.177	8.815	***	par_31
SWB_3	<---	SWB	1.395	0.165	8.435	***	par_32
SWB_4	<---	SWB	1.599	0.179	8.922	***	par_33
CBE_CE1	<---	CBECE	1				
CBE_CE2	<---	CBECE	0.856	0.077	11.096	***	par_34
CBE_CE3	<---	CBECE	1.171	0.093	12.584	***	par_35
CBE_CE5	<---	CBECE	0.803	0.079	10.163	***	par_36
CBE_CE6	<---	CBECE	1.008	0.095	10.595	***	par_37
CBE_AE2	<---	CBEAE	1				
CBE_AE3	<---	CBEAE	0.994	0.1	9.94	***	par_38
CBE_AE4	<---	CBEAE	0.927	0.093	9.952	***	par_39
CBE_AE6	<---	CBEAE	0.963	0.095	10.113	***	par_40
CBE_BE1	<---	CBEBE	1				
CBE_BE3	<---	CBEBE	1.049	0.109	9.634	***	par_41
CBE_BE5	<---	CBEBE	1.018	0.108	9.419	***	par_42
CBE_BE7	<---	CBEBE	1.099	0.106	10.319	***	par_43
CBE_BE8	<---	CBEBE	1.062	0.104	10.201	***	par_44
PCOBC_3	<---	PCOBC	0.988	0.056	17.586	***	par_51
PCOBC_2	<---	PCOBC	1.056	0.057	18.543	***	par_52
PCOBC_1	<---	PCOBC	1				
BO_EE1	<---	EE	1				
BO_EE2	<---	EE	0.804	0.046	17.625	***	par_57
BO_EE3	<---	EE	1.002	0.058	17.407	***	par_58
BO_EE4	<---	EE	1.043	0.059	17.719	***	par_59
BO_EE5	<---	EE	1.094	0.063	17.396	***	par_60
BO_EE6	<---	EE	0.934	0.057	16.369	***	par_61
BO_EE7	<---	EE	1.012	0.058	17.422	***	par_62
BO_EE8	<---	EE	0.872	0.056	15.606	***	par_63
BW_IU3	<---	BW	0.988	0.112	8.805	***	par_64
BW_IU2	<---	BW	1				
SBC_6	<---	SBC	1.062	0.106	9.97	***	par_65
SBC_5	<---	SBC	1.251	0.116	10.797	***	par_66
SBC_4	<---	SBC	1.239	0.116	10.69	***	par_67
SBC_3	<---	SBC	1				
NEB_5	<---	NEB	0.934	0.044	21.349	***	par_68
NEB_4	<---	NEB	0.968	0.043	22.427	***	par_69
NEB_3	<---	NEB	0.932	0.042	22.186	***	par_70
NEB_2	<---	NEB	0.885	0.043	20.42	***	par_71
NEB_1	<---	NEB	1				

Appendix 12. Standardized Regression Weights

Standardized Regression Weights: (Group number 1 - Default mode

			Estimate
EE	<---	OBCIO	1.21
EE	<---	BW	0.147
EE	<---	CoCVI	-0.365
EE	<---	PS	0.051
EE	<---	PCOBC	-0.087
SBC	<---	OBCIO	2.829
SBC	<---	BW	-0.108
SBC	<---	CoCVI	-2.581
SBC	<---	PS	0.871
SBC	<---	PCOBC	-0.212
NEB	<---	EE	0.789
SWB	<---	NEB	-0.03
CBEBE	<---	NEB	-0.096
CBEAE	<---	NEB	-0.189
CBECE	<---	NEB	0.438
SWB	<---	SBC	0.812
CBEBE	<---	SBC	1.015
CBEAE	<---	SBC	0.938
CBECE	<---	SBC	0.579
CBECE	<---	Gen_D	0.031
CBEAE	<---	Gen_D	0.007
CBEBE	<---	Gen_D	0.003
SWB	<---	Gen_D	0.081
CBECE	<---	Age	-0.043
CBEAE	<---	Age	0.09
CBEBE	<---	Age	-0.007
SWB	<---	Age	-0.007
OBCIO_4	<---	OBCIO	0.694
OBCIO_3	<---	OBCIO	0.803
OBCIO_2	<---	OBCIO	0.754
OBCIO_1	<---	OBCIO	0.85
BW_TW4	<---	BW	0.88
BW_TW3	<---	BW	0.902
BW_TW2	<---	BW	0.909
BW_TW1	<---	BW	0.905
CoCVI_3	<---	CoCVI	0.831
CoCVI_2	<---	CoCVI	0.817
CoCVI_1	<---	CoCVI	0.803
PS_3	<---	PS	0.634
PS_2	<---	PS	0.828
PS_1	<---	PS	0.837
SWB_1	<---	SWB	0.55
SWB_2	<---	SWB	0.78
SWB_3	<---	SWB	0.717
SWB_4	<---	SWB	0.8
CBE_CE1	<---	CBECE	0.727
CBE_CE2	<---	CBECE	0.706
CBE_CE3	<---	CBECE	0.804
CBE_CE5	<---	CBECE	0.647
CBE_CE6	<---	CBECE	0.674
CBE_AE2	<---	CBEAE	0.689
CBE_AE3	<---	CBEAE	0.68
CBE_AE4	<---	CBEAE	0.681
CBE_AE6	<---	CBEAE	0.694
CBE_BE1	<---	CBEBE	0.661
CBE_BE3	<---	CBEBE	0.644
CBE_BE5	<---	CBEBE	0.628
CBE_BE7	<---	CBEBE	0.697
CBE_BE8	<---	CBEBE	0.688
PCOBC_3	<---	PCOBC	0.85
PCOBC_2	<---	PCOBC	0.881
PCOBC_1	<---	PCOBC	0.855
BO_EE1	<---	EE	0.818
BO_EE2	<---	EE	0.747
BO_EE3	<---	EE	0.856
BO_EE4	<---	EE	0.867
BO_EE5	<---	EE	0.857
BO_EE6	<---	EE	0.822
BO_EE7	<---	EE	0.856
BO_EE8	<---	EE	0.796
BW_IU3	<---	BW	0.593
BW_IU2	<---	BW	0.627
SBC_6	<---	SBC	0.672
SBC_5	<---	SBC	0.738
SBC_4	<---	SBC	0.729
SBC_3	<---	SBC	0.655
NEB_5	<---	NEB	0.878
NEB_4	<---	NEB	0.898
NEB_3	<---	NEB	0.894
NEB_2	<---	NEB	0.861
NEB_1	<---	NEB	0.888

Appendix 13. User-defined Estimands

User-defined estimands: (Group number 1 - Default model)

Parameter	Estimate	Lower	Upper	P
OBCIO_SBC_CBECE	1.21	0.652	4.637	0
OBCIO_SBC_CBEAE	1.31	0.704	4.781	0
OBCIO_SBC_CBEBE	1.401	0.77	5.241	0
OBCIO_SBC_SWB	0.936	0.515	3.783	0
OBCIO_EE_NEB_CBECE	0.309	0.202	0.583	0
OBCIO_EE_NEB_CBEAE	-0.089	-0.198	-0.035	0
OBCIO_EE_NEB_CBEBE	-0.045	-0.112	-0.004	0.035
OBCIO_EE_NEB_SWB	-0.012	-0.067	0.034	0.596
BW_SBC_CBECE	-0.072	-0.327	0.295	0.508
BW_SBC_CBEAE	-0.078	-0.346	0.33	0.515
BW_SBC_CBEBE	-0.084	-0.367	0.357	0.517
BW_SBC_SWB	-0.056	-0.265	0.232	0.501
BW_EE_NEB_CBECE	0.059	0.001	0.133	0.049
BW_EE_NEB_CBEAE	-0.017	-0.049	-0.001	0.034
BW_EE_NEB_CBEBE	-0.009	-0.032	0	0.053
BW_EE_NEB_SWB	-0.002	-0.02	0.005	0.469
CoCVI_SBC_CBECE	-1.153	-5.359	-0.576	0
CoCVI_SBC_CBEAE	-1.248	-5.328	-0.609	0
CoCVI_SBC_CBEBE	-1.335	-6.029	-0.669	0
CoCVI_SBC_SWB	-0.892	-4.13	-0.449	0
CoCVI_EE_NEB_CBECE	-0.098	-0.425	-0.009	0.031
CoCVI_EE_NEB_CBEAE	0.028	0.002	0.143	0.029
CoCVI_EE_NEB_CBEBE	0.014	0	0.092	0.039
CoCVI_EE_NEB_SWB	0.004	-0.008	0.045	0.41
PS_SBC_CBECE	0.42	0.238	1.341	0
PS_SBC_CBEAE	0.455	0.254	1.343	0
PS_SBC_CBEBE	0.486	0.283	1.498	0
PS_SBC_SWB	0.325	0.181	1.026	0
PS_EE_NEB_CBECE	0.015	-0.022	0.068	0.406
PS_EE_NEB_CBEAE	-0.004	-0.025	0.006	0.345
PS_EE_NEB_CBEBE	-0.002	-0.016	0.002	0.282
PS_EE_NEB_SWB	-0.001	-0.011	0.001	0.438
PCOBC_SBC_CBECE	-0.092	-0.64	0.122	0.397
PCOBC_SBC_CBEAE	-0.099	-0.681	0.132	0.398
PCOBC_SBC_CBEBE	-0.106	-0.744	0.144	0.394
PCOBC_SBC_SWB	-0.071	-0.49	0.097	0.387
PCOBC_EE_NEB_CBECE	-0.022	-0.111	0.036	0.448
PCOBC_EE_NEB_CBEAE	0.006	-0.009	0.039	0.394
PCOBC_EE_NEB_CBEBE	0.003	-0.004	0.025	0.31
PCOBC_EE_NEB_SWB	0.001	-0.003	0.016	0.42

User-defined estimands: (Group number 1 - Default model)

Parameter	SE	SE-SE	Mean	Bias	SE-Bias
OBCIO_SBC_CBECE	0.843	0.008	1.382	0.172	0.012
OBCIO_SBC_CBEAE	0.866	0.009	1.486	0.176	0.012
OBCIO_SBC_CBEBE	0.945	0.009	1.595	0.194	0.013
OBCIO_SBC_SWB	0.68	0.007	1.081	0.145	0.01
OBCIO_EE_NEB_CBECE	0.134	0.001	0.321	0.012	0.002
OBCIO_EE_NEB_CBEAE	0.05	0	-0.094	-0.005	0.001
OBCIO_EE_NEB_CBEBE	0.032	0	-0.046	-0.002	0
OBCIO_EE_NEB_SWB	0.029	0	-0.014	-0.002	0
BW_SBC_CBECE	0.17	0.002	-0.054	0.019	0.002
BW_SBC_CBEAE	0.182	0.002	-0.058	0.021	0.003
BW_SBC_CBEBE	0.195	0.002	-0.062	0.021	0.003
BW_SBC_SWB	0.134	0.001	-0.043	0.013	0.002
BW_EE_NEB_CBECE	0.036	0	0.061	0.002	0.001
BW_EE_NEB_CBEAE	0.012	0	-0.018	-0.001	0
BW_EE_NEB_CBEBE	0.008	0	-0.009	0	0
BW_EE_NEB_SWB	0.006	0	-0.003	-0.001	0
CoCVI_SBC_CBECE	0.939	0.009	-1.344	-0.191	0.013
CoCVI_SBC_CBEAE	0.967	0.01	-1.444	-0.196	0.014
CoCVI_SBC_CBEBE	1.054	0.011	-1.55	-0.215	0.015
CoCVI_SBC_SWB	0.756	0.008	-1.051	-0.159	0.011
CoCVI_EE_NEB_CBECE	0.147	0.001	-0.11	-0.013	0.002
CoCVI_EE_NEB_CBEAE	0.044	0	0.033	0.005	0.001
CoCVI_EE_NEB_CBEBE	0.025	0	0.016	0.002	0
CoCVI_EE_NEB_SWB	0.018	0	0.005	0.002	0
PS_SBC_CBECE	0.243	0.002	0.466	0.047	0.003
PS_SBC_CBEAE	0.247	0.002	0.502	0.047	0.003
PS_SBC_CBEBE	0.267	0.003	0.538	0.052	0.004
PS_SBC_SWB	0.199	0.002	0.366	0.041	0.003
PS_EE_NEB_CBECE	0.03	0	0.016	0.001	0
PS_EE_NEB_CBEAE	0.009	0	-0.005	0	0
PS_EE_NEB_CBEBE	0.005	0	-0.002	0	0
PS_EE_NEB_SWB	0.003	0	-0.001	0	0
PCOBC_SBC_CBECE	0.188	0.002	-0.113	-0.022	0.003
PCOBC_SBC_CBEAE	0.2	0.002	-0.122	-0.023	0.003
PCOBC_SBC_CBEBE	0.216	0.002	-0.13	-0.024	0.003
PCOBC_SBC_SWB	0.146	0.001	-0.087	-0.016	0.002
PCOBC_EE_NEB_CBECE	0.039	0	-0.026	-0.003	0.001
PCOBC_EE_NEB_CBEAE	0.012	0	0.008	0.001	0
PCOBC_EE_NEB_CBEBE	0.007	0	0.004	0.001	0
PCOBC_EE_NEB_SWB	0.004	0	0.001	0	0

Appendix 14. Model Fit Summary Output (AMOS)

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	160	2562.259	1436	0	1.784
Saturated model	1596	0	0		
Independence model	56	12830.471	1540	0	8.331

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	0.192	0.748	0.72	0.673
Saturated model	0	1		
Independence model	0.967	0.125	0.094	0.121

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	0.8	0.786	0.901	0.893	0.9
Saturated model	1		1		1
Independence model	0	0	0	0	0

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	0.932	0.746	0.839
Saturated model	0	0	0
Independence model	1	0	0

NCP

Model	NCP	LO 90	HI 90
Default model	1126.259	988.848	1271.472
Saturated model	0	0	0
Independence model	11290.471	10932.476	11655.012

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	9.25	4.066	3.57	4.59
Saturated model	0	0	0	0
Independence model	46.319	40.76	39.467	42.076

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	0.053	0.05	0.057	0.057
Independence model	0.163	0.16	0.165	0

AIC

Model	AIC	BCC	BIC	CAIC
Default model	2882.259	2965.168	3462.678	3622.678
Saturated model	3192	4019.018	8981.683	10577.683
Independence model	12942.471	12971.489	13145.617	13201.617

ECVI

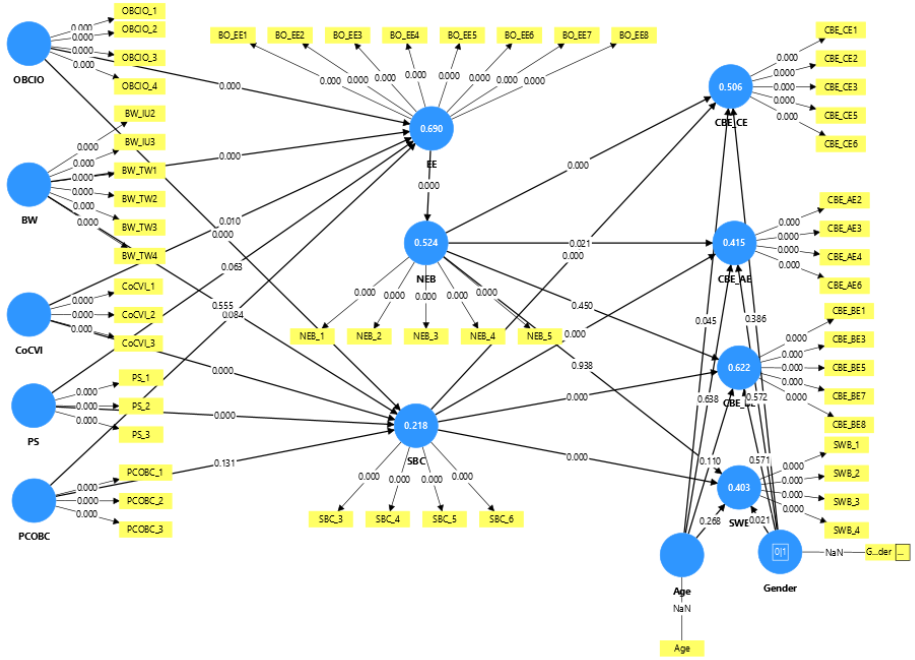
Model	ECVI	LO 90	HI 90	MECVI
Default model	10.405	9.909	10.93	10.705
Saturated model	11.523	11.523	11.523	14.509
Independence model	46.724	45.431	48.04	46.828

HOELTER

Model	HOELTER 0.05	HOELTER 0.01
Default model	165	170
Independence model	36	37

Appendix 15. Supplementary PLS-SEM Robustness Check

PLS-SEM: PLS_Robustness_FullSample >> Bootstrapping results



Appendix 16. Supplementary PLS-SEM Robustness Check

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Age -> CBE_AE	0.024	0.028	0.052	0.471	0.638
Age -> CBE_BE	-0.061	-0.059	0.038	1.598	0.110
Age -> CBE_CE	-0.091	-0.090	0.046	2.004	0.045
Age -> SWB	-0.049	-0.048	0.044	1.108	0.268
BW -> EE	0.201	0.202	0.053	3.787	0.000
BW -> SBC	-0.042	-0.038	0.072	0.591	0.555
CoCVI -> EE	0.186	0.186	0.072	2.582	0.010
CoCVI -> SBC	-0.436	-0.429	0.111	3.934	0.000
EE -> NEB	0.724	0.725	0.030	23.958	0.000
Gender -> CBE_AE	0.053	0.060	0.094	0.565	0.572
Gender -> CBE_BE	0.045	0.048	0.079	0.567	0.571
Gender -> CBE_CE	0.078	0.080	0.090	0.867	0.386
Gender -> SWB	0.195	0.196	0.085	2.307	0.021
NEB -> CBE_AE	-0.099	-0.100	0.043	2.312	0.021
NEB -> CBE_BE	-0.029	-0.029	0.038	0.755	0.450
NEB -> CBE_CE	0.441	0.441	0.043	10.161	0.000
NEB -> SWB	-0.004	-0.005	0.048	0.078	0.938
OBCIO -> EE	0.464	0.465	0.077	6.029	0.000
OBCIO -> SBC	0.501	0.497	0.114	4.387	0.000
PCOBC -> EE	0.104	0.104	0.060	1.729	0.084
PCOBC -> SBC	0.150	0.144	0.099	1.512	0.131
PS -> EE	-0.080	-0.078	0.043	1.858	0.063
PS -> SBC	0.327	0.330	0.065	5.004	0.000
SBC -> CBE_AE	0.655	0.650	0.063	10.373	0.000
SBC -> CBE_BE	0.783	0.782	0.037	20.908	0.000
SBC -> CBE_CE	0.457	0.456	0.057	8.061	0.000
SBC -> SWB	0.616	0.617	0.067	9.137	0.000

Appendix 17. Supplementary PLS-SEM Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BW	0.915	0.917	0.935	0.705
CBE_AE	0.786	0.787	0.861	0.609
CBE_BE	0.793	0.793	0.858	0.547
CBE_CE	0.828	0.832	0.879	0.593
CoCVI	0.858	0.866	0.913	0.778
EE	0.948	0.947	0.949	0.733
NEB	0.947	0.948	0.947	0.825
OBCIO	0.862	0.867	0.906	0.708
PCOBC	0.897	0.897	0.935	0.829
PS	0.807	0.857	0.885	0.72
SBC	0.809	0.811	0.875	0.637
SWB	0.801	0.819	0.871	0.629

Appendix 18. Supplementary PLS-SEM Discriminant Validity

	Age	BW	CBE_AE	CBE_BE	CBE_CE	CoCVI	EE	Gender	NEB	OBCIO	PCOBC	PS	SBC	SWB
Age														
BW	0.052													
CBE_AE	0.075	0.099												
CBE_BE	0.166	0.137	0.849											
CBE_CE	0.19	0.42	0.602	0.656										
CoCVI	0.111	0.731	0.09	0.144	0.482									
EE	0.234	0.682	0.169	0.358	0.631	0.799								
Gender	0.035	0.072	0.083	0.083	0.079	0.031	0.057							
NEB	0.076	0.767	0.098	0.143	0.59	0.789	0.758	0.015						
OBCIO	0.197	0.708	0.186	0.349	0.655	0.787	0.879	0.054	0.729					
PCOBC	0.203	0.581	0.125	0.26	0.516	0.778	0.692	0.048	0.653	0.798				
PS	0.073	0.329	0.3	0.342	0.321	0.452	0.194	0.111	0.296	0.264	0.366			
SBC	0.148	0.179	0.793	0.835	0.68	0.197	0.395	0.08	0.214	0.36	0.333	0.373		
SWB	0.128	0.107	0.75	0.823	0.583	0.156	0.364	0.142	0.167	0.346	0.233	0.195	0.773	

Appendix 19. Specific Indirect Effects from the PLS-SEM Robustness Check

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
PS -> EE -> NEB -> CBE_BE	0.002	0.002	0.003	0.634	0.526
PS -> EE -> NEB -> CBE_AE	0.006	0.006	0.004	1.334	0.182
PS -> EE -> NEB -> CBE_CE	-0.026	-0.025	0.015	1.762	0.078
BW -> SBC -> CBE_AE	-0.028	-0.025	0.047	0.589	0.556
BW -> SBC -> CBE_BE	-0.033	-0.030	0.057	0.589	0.556
BW -> SBC -> CBE_CE	-0.019	-0.018	0.033	0.586	0.558
CoCVI -> SBC -> CBE_AE	-0.286	-0.282	0.085	3.355	0.001
CoCVI -> SBC -> CBE_BE	-0.342	-0.337	0.092	3.695	0.000
CoCVI -> SBC -> CBE_CE	-0.199	-0.198	0.065	3.085	0.002
OBCIO -> SBC -> CBE_AE	0.328	0.326	0.090	3.648	0.000
OBCIO -> SBC -> CBE_BE	0.392	0.390	0.098	4.005	0.000
OBCIO -> SBC -> CBE_CE	0.229	0.229	0.067	3.397	0.001
PS -> SBC -> CBE_AE	0.214	0.216	0.054	3.977	0.000
BW -> SBC -> SWB	-0.026	-0.024	0.045	0.580	0.562
PS -> SBC -> CBE_BE	0.256	0.258	0.055	4.613	0.000
PS -> SBC -> CBE_CE	0.149	0.152	0.040	3.729	0.000
CoCVI -> SBC -> SWB	-0.269	-0.266	0.079	3.407	0.001
PCOBC -> EE -> NEB -> CBE_AE	-0.007	-0.007	0.006	1.294	0.196
OBCIO -> SBC -> SWB	0.309	0.309	0.086	3.577	0.000
PCOBC -> EE -> NEB -> CBE_BE	-0.002	-0.002	0.004	0.624	0.533
PCOBC -> EE -> NEB	0.076	0.076	0.044	1.706	0.088
PCOBC -> EE -> NEB -> CBE_CE	0.033	0.033	0.020	1.673	0.094
PS -> SBC -> SWB	0.201	0.204	0.049	4.127	0.000
PS -> EE -> NEB -> SWB	0.000	-0.000	0.003	0.069	0.945
OBCIO -> EE -> NEB -> CBE_CE	0.148	0.149	0.029	5.163	0.000
OBCIO -> EE -> NEB -> CBE_AE	-0.033	-0.034	0.016	2.119	0.034
OBCIO -> EE -> NEB -> CBE_BE	-0.010	-0.010	0.013	0.748	0.455
CoCVI -> EE -> NEB -> CBE_AE	-0.013	-0.014	0.008	1.605	0.109
CoCVI -> EE -> NEB -> CBE_BE	-0.004	-0.004	0.006	0.671	0.503
CoCVI -> EE -> NEB -> CBE_CE	0.060	0.060	0.025	2.404	0.016
PCOBC -> EE -> NEB -> SWB	-0.000	-0.000	0.004	0.068	0.946
EE -> NEB -> CBE_AE	-0.071	-0.073	0.031	2.268	0.023
PCOBC -> SBC -> CBE_AE	0.098	0.095	0.066	1.490	0.136
EE -> NEB -> CBE_BE	-0.021	-0.021	0.028	0.754	0.451
PCOBC -> SBC -> CBE_BE	0.117	0.113	0.078	1.502	0.133
EE -> NEB -> CBE_CE	0.319	0.320	0.036	8.791	0.000
PCOBC -> SBC -> CBE_CE	0.069	0.066	0.047	1.467	0.142
BW -> EE -> NEB	0.145	0.147	0.040	3.653	0.000
BW -> EE -> NEB -> SWB	-0.001	-0.001	0.007	0.075	0.940
CoCVI -> EE -> NEB	0.135	0.135	0.053	2.563	0.010
EE -> NEB -> SWB	-0.003	-0.003	0.035	0.078	0.938
OBCIO -> EE -> NEB	0.336	0.337	0.057	5.944	0.000
PCOBC -> SBC -> SWB	0.092	0.090	0.063	1.469	0.142
BW -> EE -> NEB -> CBE_CE	0.064	0.065	0.019	3.297	0.001
PS -> EE -> NEB	-0.058	-0.057	0.031	1.852	0.064
BW -> EE -> NEB -> CBE_AE	-0.014	-0.015	0.008	1.837	0.066
BW -> EE -> NEB -> CBE_BE	-0.004	-0.004	0.006	0.699	0.485
OBCIO -> EE -> NEB -> SWB	-0.001	-0.001	0.016	0.077	0.939
CoCVI -> EE -> NEB -> SWB	-0.001	-0.000	0.007	0.072	0.943

Appendix 20. Age-Based PLS-MGA Results + Age MICOM

	Difference (AgeGroup_1 - AgeGroup_2)	1-tailed (AgeGroup_1 vs AgeGroup_2) p value	2-tailed (AgeGroup_1 vs AgeGroup_2) p value
Age -> CBE_AE	-0.160	0.937	0.126
Age -> CBE_BE	-0.043	0.711	0.578
Age -> CBE_CE	0.051	0.288	0.577
Age -> SWB	0.043	0.294	0.587
BW -> EE	0.116	0.116	0.232
BW -> SBC	-0.034	0.594	0.813
CoCVI -> EE	-0.160	0.868	0.264
CoCVI -> SBC	0.292	0.074	0.148
EE -> NEB	-0.099	0.951	0.098
Gender -> CBE_AE	-0.090	0.679	0.642
Gender -> CBE_BE	0.130	0.201	0.402
Gender -> CBE_CE	-0.146	0.779	0.441
Gender -> SWB	-0.089	0.697	0.607
NEB -> CBE_AE	-0.026	0.612	0.776
NEB -> CBE_BE	-0.042	0.690	0.621
NEB -> CBE_CE	-0.076	0.797	0.406
NEB -> SWB	0.050	0.317	0.634
OBCIO -> EE	0.161	0.151	0.302
OBCIO -> SBC	-0.241	0.862	0.277
PCOBC -> EE	-0.175	0.925	0.150
PCOBC -> SBC	-0.278	0.936	0.129
PS -> EE	0.148	0.040	0.079
PS -> SBC	0.150	0.124	0.248
SBC -> CBE_AE	-0.134	0.873	0.254
SBC -> CBE_BE	-0.095	0.903	0.194
SBC -> CBE_CE	-0.008	0.533	0.934
SBC -> SWB	-0.028	0.586	0.828

	Original correlation	Correlation permutation mean	5.0%	Permutation p value
BW	**0.997**	**0.999**	**0.996**	**0.098**
CBE_AE	**0.996**	**0.998**	**0.994**	**0.150**
CBE_BE	**1.000**	**0.998**	**0.995**	**0.945**
CBE_CE	**0.999**	**0.999**	**0.997**	**0.562**
CoCVI	**1.000**	**0.999**	**0.998**	**0.811**
EE	**1.000**	**1.000**	**1.000**	**0.070**
Gender	**1.000**	**1.000**	**1.000**	**0.000**
NEB	**1.000**	**1.000**	**1.000**	**0.544**
OBCIO	**0.998**	**0.999**	**0.998**	**0.104**
PCOBC	**0.999**	**1.000**	**0.999**	**0.058**
PS	**0.956**	**0.985**	**0.951**	**0.070**
SBC	**0.999**	**0.999**	**0.998**	**0.497**
SWB	**1.000**	**0.998**	**0.994**	**0.879**

Appendix 21. Gender-Based PLS-MGA Results + Gender MICOM

	Original (GenderGroup_1)	Original (GenderGroup_2)	Mean (GenderGroup_1)	Mean (GenderGroup_2)	STDEV (GenderGroup_1)	STDEV (GenderGroup_2)	t value (GenderGroup_1)	t value (GenderGroup_2)	p value (GenderGroup_1)	p value (GenderGroup_2)
Age -> CBE_AE	0.005	0.096	0.013	0.102	0.067	0.086	0.076	1.115	0.940	0.265
Age -> CBE_BE	-0.057	-0.081	-0.052	-0.086	0.049	0.073	1.158	1.112	0.247	0.266
Age -> CBE_CE	-0.099	-0.058	-0.097	-0.050	0.056	0.094	1.763	0.614	0.078	0.539
Age -> SWB	-0.047	-0.034	-0.045	-0.029	0.059	0.067	0.783	0.506	0.434	0.613
BW -> EE	0.183	0.230	0.184	0.255	0.062	0.106	2.938	2.181	0.003	0.029
BW -> SBC	-0.097	0.066	-0.092	0.092	0.089	0.172	1.095	0.384	0.274	0.701
CoCVI -> EE	0.300	-0.112	0.297	-0.094	0.083	0.148	3.632	0.761	0.000	0.447
CoCVI -> SBC	-0.394	-0.491	-0.391	-0.421	0.128	0.241	3.086	2.034	0.002	0.042
EE -> NEB	0.711	0.764	0.713	0.768	0.038	0.045	18.657	17.155	0.000	0.000
NEB -> CBE_AE	-0.074	-0.194	-0.076	-0.195	0.053	0.077	1.382	2.540	0.167	0.011
NEB -> CBE_BE	-0.029	-0.020	-0.028	-0.012	0.048	0.067	0.598	0.298	0.550	0.766
NEB -> CBE_CE	0.452	0.390	0.453	0.390	0.053	0.084	8.499	4.671	0.000	0.000
NEB -> SWB	0.014	-0.088	0.013	-0.096	0.062	0.064	0.235	1.373	0.814	0.170
OBCIO -> EE	0.359	0.728	0.361	0.706	0.087	0.127	4.145	5.724	0.000	0.000
OBCIO -> SBC	0.443	0.599	0.444	0.550	0.129	0.256	3.431	2.340	0.001	0.019
PCOBC -> EE	0.134	0.053	0.134	0.042	0.079	0.087	1.703	0.610	0.089	0.542
PCOBC -> SBC	0.203	0.023	0.196	-0.022	0.115	0.184	1.762	0.123	0.078	0.902
PS -> EE	-0.124	0.030	-0.119	0.019	0.049	0.077	2.537	0.389	0.011	0.698
PS -> SBC	0.258	0.527	0.265	0.522	0.078	0.102	3.293	5.148	0.001	0.000
SBC -> CBE_AE	0.619	0.783	0.616	0.761	0.069	0.115	8.958	6.833	0.000	0.000
SBC -> CBE_BE	0.762	0.844	0.762	0.835	0.041	0.068	18.572	12.432	0.000	0.000
SBC -> CBE_CE	0.415	0.582	0.416	0.574	0.063	0.099	6.604	5.905	0.000	0.000
SBC -> SWB	0.544	0.877	0.547	0.870	0.080	0.048	6.827	18.296	0.000	0.000

	Original correlation	Correlation permutation mean	5.0%	Permutation p value
Age	1.000	1.000	1.000	0.316
BW	0.999	0.999	0.995	0.430
CBE_AE	1.000	0.997	0.990	0.933
CBE_BE	0.998	0.998	0.994	0.394
CBE_CE	1.000	0.999	0.996	0.809
CoCVI	0.999	0.999	0.998	0.392
EE	1.000	1.000	1.000	0.397
NEB	1.000	1.000	1.000	0.915
OBCIO	1.000	0.999	0.998	0.974
PCOBC	1.000	1.000	0.999	0.689
PS	0.998	0.978	0.935	0.865
SBC	0.999	0.999	0.997	0.591
SWB	1.000	0.997	0.991	0.982

Appendix 22. Education-Based PLS-MGA Results +Education MICOM

	Original (EduGroup_1)	Original (EduGroup_2)	Mean (EduGroup_1)	Mean (EduGroup_2)	STDEV (EduGroup_1)	STDEV (EduGroup_2)	t value (EduGroup_1)	t value (EduGroup_2)	p value (EduGroup_1)	p value (EduGroup_2)
Age -> CBE_AE	0.015	0.022	0.023	0.025	0.064	0.084	0.239	0.260	0.811	0.795
Age -> CBE_BE	-0.057	-0.085	-0.052	-0.082	0.052	0.062	1.090	1.375	0.276	0.169
Age -> CBE_CE	-0.090	-0.096	-0.087	-0.093	0.067	0.072	1.345	1.335	0.179	0.182
Age -> SWB	-0.054	-0.075	-0.052	-0.078	0.067	0.058	0.806	1.304	0.420	0.192
BW -> EE	0.240	0.104	0.240	0.114	0.076	0.073	3.167	1.423	0.002	0.155
BW -> SBC	-0.084	0.000	-0.088	0.033	0.088	0.153	0.959	0.001	0.337	1.000
CoCVI -> EE	0.185	0.233	0.190	0.233	0.106	0.110	1.744	2.119	0.081	0.034
CoCVI -> SBC	-0.503	-0.370	-0.483	-0.352	0.150	0.159	3.347	2.328	0.001	0.020
EE -> NEB	0.760	0.664	0.762	0.667	0.032	0.054	23.818	12.339	0.000	0.000
Gender -> CBE_AE	0.128	-0.116	0.130	-0.074	0.105	0.202	1.221	0.574	0.222	0.566
Gender -> CBE_BE	0.102	-0.031	0.102	-0.006	0.093	0.171	1.093	0.183	0.274	0.855
Gender -> CBE_CE	0.022	0.231	0.027	0.243	0.115	0.188	0.187	1.228	0.851	0.219
Gender -> SWB	0.181	0.297	0.176	0.314	0.115	0.155	1.573	1.922	0.116	0.055
NEB -> CBE_AE	-0.198	0.036	-0.202	0.032	0.059	0.072	3.384	0.493	0.001	0.622
NEB -> CBE_BE	-0.058	-0.005	-0.059	-0.007	0.053	0.061	1.112	0.077	0.266	0.939
NEB -> CBE_CE	0.375	0.517	0.376	0.521	0.059	0.068	6.389	7.612	0.000	0.000
NEB -> SWB	-0.060	0.060	-0.062	0.057	0.065	0.079	0.916	0.754	0.360	0.451
OBCIO -> EE	0.349	0.588	0.344	0.582	0.101	0.103	3.468	5.699	0.001	0.000
OBCIO -> SBC	0.541	0.419	0.539	0.399	0.134	0.197	4.028	2.123	0.000	0.034
PCOBC -> EE	0.207	-0.006	0.205	-0.006	0.078	0.101	2.661	0.062	0.008	0.951
PCOBC -> SBC	0.203	0.059	0.189	0.028	0.110	0.186	1.847	0.317	0.065	0.751
PS -> EE	-0.037	-0.139	-0.034	-0.134	0.055	0.076	0.675	1.818	0.500	0.069
PS -> SBC	0.358	0.329	0.362	0.341	0.080	0.116	4.494	2.842	0.000	0.005
SBC -> CBE_AE	0.658	0.642	0.653	0.625	0.074	0.113	8.922	5.688	0.000	0.000
SBC -> CBE_BE	0.774	0.791	0.775	0.784	0.047	0.061	16.385	13.059	0.000	0.000
SBC -> CBE_CE	0.488	0.421	0.488	0.411	0.066	0.111	7.414	3.803	0.000	0.000
SBC -> SWB	0.566	0.684	0.569	0.677	0.100	0.089	5.652	7.696	0.000	0.000

	Original correlation	Correlation permutation mean	5.0%	Permutation p value
Age	**1.000**	**1.000**	**1.000**	**0.370**
BW	**0.998**	**0.999**	**0.996**	**0.202**
CBE_AE	**0.998**	**0.998**	**0.994**	**0.524**
CBE_BE	**0.998**	**0.998**	**0.996**	**0.349**
CBE_CE	**0.999**	**0.999**	**0.997**	**0.625**
CoCVI	**0.999**	**0.999**	**0.998**	**0.092**
EE	**1.000**	**1.000**	**1.000**	**0.336**
Gender	**1.000**	**1.000**	**1.000**	**0.000**
NEB	**1.000**	**1.000**	**1.000**	**0.576**
OBCIO	**1.000**	**0.999**	**0.998**	**0.823**
PCOBC	**0.999**	**1.000**	**0.999**	**0.018**
PS	**0.993**	**0.984**	**0.950**	**0.590**
SBC	**1.000**	**0.999**	**0.998**	**0.897**
SWB	**0.999**	**0.998**	**0.994**	**0.742**