An attitude-behavioral model to understand people's behavior towards tourism during COVID-19 pandemic

Yogesh K. Dwivedi [a,b,*], Mahmud Akhter Shareef [c], Muhammad Shakaib Akram [d], F. Tegwen Malik [e], Vinod Kumar [f], Mihalis Giannakis [g]

[a] Digital Futures for Sustainable Business & Society Research Group, School of Management, Swansea University, Bay Campus, Fabian Bay, Swansea SA1 8EN, Wales, UK
[b] Department of Management, Symbiosis Institute of Business Management, Pune & Symbiosis International (Deemed University), Pune, Maharashtra, India
[c] School of Business & Economics, North South University, Bangladesh
[d] Lecturer in Marketing, Essex Business School, University of Essex, UK
[e] School of Management, Swansea University Bay Campus, Swansea SA1 8EN, Wales, UK
[f] Sprott School of Business, Carleton University, Ottawa, Canada
[g] Audencia Nantes Business School, 8 Route de La Jonelière, B.P. 31222, 44312 Nantes Cedex 3, France

ARTICLE INFO

ABSTRACT

The impact of pandemics on the tourism industry should be explored from the perspective of those who will travel, go to the tourist places on vacation, and avail services from tourism and hospitality-related organizations. This study has aimed to identify the reasons for the changed human psychology towards tourism during the COVID-19 Pandemic to develop an attitude-behavioral model. This investigation thus conducted an extensive empirical study among tourists to capture their social, emotional, and financial beliefs. The research then examined the measurement model through confirmatory factor analysis (CFA) before investigating the cause-effect relationship through the structural model. Analysis revealed that the negative effect of attitude on behavioral intention toward this new equilibrium is controlled by the emotional aspect of attitude. Furthermore this paper made several contributions to the literature on human psychology, crisis management, human behavior, marketing, and tourism.

1. Introduction

The Covid-19 pandemic created a devastating situation for the tourism and hospitality business sector (Lew et al., 2020) As a consequence, this study has focused on understanding tourists' behavioral intentions to re-engage with this sector again as destination sites re-open. Whilst it is acknowledged that many industries which are severely impacted from lockdowns and its negative consequences, the tourism and hospitality business sector was one of the worst hit and taking longer to start to recover (Brouder, 2020). Lockdown stopped professionals from traveling and social isolation barred vacation lovers from visiting tourist destinations and from visiting family and friends. This was also coupled with the mental and emotional stress of many in the sector who lost their jobs due to the pandemic which crippled the tourist industry (Lew et al., 2020; Shareef et al., 2021). It has been a real challenge for tourism and hospitality related business organizations to regain the trust of the public and to subsequently promote and grow their business by motivating potential tourists to, once again, start travelling freely for recreation to tourist places (like they did pre-pandemic) and to go on vacation (without worry) where they would boost the economy by occupying hotels, eating and drinking in restaurants, and seeking service from tourism related organizations (Kumar, 2020; Frye et al., 2020). Will that time come again? When? The sector simply does not know. What are the reasons behind this stagnant scenario in the tourism and hospitality sector?

As a starting point, it is imperative to explore and understand the devastating and most pragmatic reasons lying behind the mental numbness of vacation-lovers and tourists who are choosing to not partake in any vacation tours nationally or internationally. This will potentially reveal the conditions that might encourage them back intore-

engaging once again with the tourist industry like they did pre-pandemic. This million-dollar question is significantly important for both tourism-related business organizations and tourists. This issue is being investigated by many researchers and government policy-makers and practitioners from the organizational point of view (Brügger et al., 2016; Lew et al., 2020; Li et al., 2020). More specifically, small and medium enterprises (SMEs) in the tourism sector are trying to understand and identify their losses and the long-term impact due to the covid-19 situation. That said, there is a significant research gap in the existing literature when it comes to assessing the impact on tourism and the particular vulnerabilities (and crisis) this sector has found itself in. Thus the potential question is not only to understand the present impact of social isolation due to this pandemic but also to identify and explore the future consequences of this pandemic on tourists and vacation lovers which might have barred them to return to their normal recreational life and to start to once again seek service from tourism organizations (Aebli et al., 2022; Benjamin et al., 2020; Gossling et al., 2021; Higgins-Des-biolles, 2020). Whilst researchers (Brouder, 2020; Kumar, 2020; Lew et al., 2020; Neuburger & Egger, 2021) are looking and analyzing this issue from the organizational side (i.e., from the service providers' perspective) but there are currently no studies thatare striving to synthesize the same issue from the service seekers perspective, something this paper attempts to do.

This current study has thus endeavored to explore the following two objectives: i) to address and reveal the physical, financial, and mental/emotional reasons which may have an impact on general tourists and vacation-lovers attitudes pragmatically to re-start normal tourist activities (like they did pre-pandemic) whereby they seek service from tourism organizations and ii) to systematically organize, structuralize, and classify the identified reasons under three components of attitudes to develop an attitude-behavioral model to understand general people's behavioral intention for new equilibrium (BNE) of tourism.

The consequences of pandemics should be explored and understood from the service seekers' perspective, i.e., from the perspective of those who will travel, go to tourist places on vacation, and avail service from the tourism and hospitality-related organizations (Gössling et al., 2021). This is reasonably important to identify whilst at the same time postulating a systematic future plan to overcome the worst consequences of a pandemic in this sector. In this regard, understanding tourists' behavior during the current pandemic situation can contribute to the literature on human psychology, crisis management- (and change management), human behavior, marketing, and tourism.

The main research question of this study is: *What are the factors which can pursue the potential tourist to return to a new equilibrium of life in the post-Covid-19 era?*

This issue has been investigated through a detailed quantitative empirical study among general people who are traditionally interested in, and familiar with, seeking service from tourism organizations in the past before this pandemic situation started. However, prior to the quantitative study, the proposed constructs were verified through multiple interviews of with related stakeholders within the tourism industry (i.e., the tourism and hospitality-related business organizations).

The next section reviewed the connected literature on tourism business and human psychology during the current pandemic. Based on this review, the theoretical framework of this study has been set out which led on to the overall research methodology which included the model analysis. The results section followed this before the paper embarked on the interpretations and discussions around the findings. The subsequent section then explained the theoretical and managerial implications before drawing together the key findings and conclusion of this study. Finally, limitations and future research directions are discussed.

2. Literature review

Identifying the potential gap with the expectation to contribute to the existing literature of tourism and hospitality in the post-covid-19 world substantially depends on the investigation of the three areas of the future of tourism business. These are i) Tourism business and its probable sustainability due to the enormous impact of Covind-19 and enforcement of quarantine, ii) Human psychology to adjust with the new normal life along with a desire to embrace tourism again, and iii) Mental stress and agony — swinging between life and death panic, and desire to overcome a health crisis that was thrust upon us globally and suddenly creating much fear in the process.

2.1. Tourism and impact of Covid-19

Researchers in the tourist sector agree that the most important and burning issue in the post-covid-19 era is to ensure a resilient and sustainable tourism industry which might still face serious challenges and limitations when trying to boost the local economy (Gössling et al., 2021; Kim et al., 2016; Sigala, 2020). Kumar (2020) has deliberated over the unprecedented impact of this pandemic on the relentless downfall of the tourism sector of India, which lures tourists from all over the world with its rich cultural and spiritual appeal. Market survey and report analysis by this scholarly study indicated that the tourism sector in India may suffer declining revenue of around 50 percent in respect to the previous year 2019. Around 80 percent of hotel bookings were canceled in the middle of 2020. The hospitality business has declined 12–15 percent in earning revenue. The more devastating picture revealed that due to the severe spreading of this pandemic in Italy, Spain, and France, globally this sector is forecasted to be declined around 50 percent which costs almost 300–450 billion USD (One-third downfall of 1.5 Trillion USD in 2019). The airline industry acknowledged a 44 percent decline in earning revenue in comparison to the previous year (Kumar, 2020).

Researchers (Aebli et al., 2022; Cui et al., 2023) pointed out that the pivotal threat that may have an enduring impact on the mobility of people in the future is the possibility of change in the human life pattern. Akin to this behavior, another suspected transformation of the human mind is about the conceptual change of hedonic enjoyment which can enforce rethinking of people associated with the tourism and hospitality business. Since the factors which instigate extrinsic and intrinsic motivations on people's mind is a complicated psychological, financial, and cultural issue, with any change in the perception of hedonic enjoyment along with the hardship of transactional money potentially leading to a serious negative impact on the business of tourism and hospitality for many years to come (Carracedo et al., 2021; Jang & Kim, 2022; Lim et al, 2021). Wen et al. (2005) have investigated the changed behavior of human beings due to the impact of any pandemic, for instance, SARS (severe acute respiratory syndrome), and delineated that this kind of mass people-related contagious pandemic has the most prominent impact on the psychological status of the human mind. Unexpectedly, a life-threatening pandemic that may spread due to travel and people contact can severely contribute to transforming the human mind (Chen et al., 2007; Pine & McKercher, 2004). At the same time, climate change due to over-tourism, greenhouse gas emissions, and contagious infection due to human mobility — these issues might create a severe negative perception on future tourism business and human mobility (Scott et al., 2019; Yao et al., 2023).

2.2. Human psychology and the new normal life

This is an important aspect of future human behavior to anticipate the intangible impact of covid-19 on the tourism sector. To shape the future world and formulate an effective strategy for the tourism and hospitality sector, understanding human psychology to adjust to the new normal life is the pivotal issue for the researchers (Kock et al., 2020). How this pandemic is continuously wrecking the tourism industry all over the world is a potential issue for researchers; however, this finding can only contribute to designing immediate and short-term planning (Wachyuni and Kusumaningrum, 2020). Based on the concrete

epistemological and ontological paradigms of generic human psychology literature, the authors (Kock et al., 2020) have argued that the traditional taken-for-granted determinants of tourism and hospitality will be reshuffled and redesigned reflecting the paradigm shift of human psychology.

Now the potential question is, in this time in the post-covid-19 era, if general people return back to the approximate level of pre-pandemic normal life, what will be the time span that this happens? And if they show reluctance to embrace tourism like before, what will be the ultimate behavior of people toward this sector (will they be scared by the pandemic)? Authors (Kock et al., 2020; Neuburger & Egger, 2021; Sigala, 2020) have explored human psychology and analyzed tourists' behavior in the light of the ocean and islands model, and explicitly indicated their heterogeneous doubt based on the psychology of human to try to adjust with the ecological change. Prior studies on human psychology and tourists' behavior have affirmed that triggering of the sense of behavioral immune system can substantially deter people's affiliation and motive to travel to uncommon places with the scope to be surrounded by mass people socially. On these occasions, xenophobia and ethnocentrism can downplay the effort of the tourism and hospitality sector to get back to the normal stream of business growth (Kock et al., 2019). These two psychological traits can trigger the protective attitude of the behavioral immune system with people from any country potentially displaying a negative attitude toward traditional travel, movement and recreational tourism with their desire for a new normal life (not as they knew it) but with a transformed psyche.

2.3. Mental stress and agony

The aforementioned findings of the probable transformation of human psychology should be analyzed in the connection of mental stress, panic, and health vulnerabilities (felt and lived) during this prolonged and uncertain pandemic time which created a lot of fear in the minds of all. The responsible and contributing catalysts that evoked this situation are not only the fatal spread of this pandemic which caused severe health crisis but also the prolonged effect of quarantine, lockdown, and social distancing (Wachyuni and Kusumaningrum, 2020).

Sociologists and psychologists (Foucault, 1977; Spina, 2012) have tracked the historical pattern of human evolution and illustrated with theoretical and practical phenomena that it is almost eternal human characteristics to protect their body and soul from any subversive change, deviations, and deteriorations due to sudden change in mind (i. e., perceived and real threat) and society. This urge is defined by sociologists as the need for a pattern and the appeal for normality (Habermas, 1987). Shedding light on the human urge for readjustment with nature, researchers have acknowledged this attitude under the spectrum of reset equilibrium function (Marks, 2018; Sowislo & Orth, 2013) that make people ever enthusiastic to restore their behavior as soon as they can back to the state of equilibrium they were in before and back to what they felt was normal life.

3. Theoretical framework

Behavioral and cognitive learning theories of marketing (Bloch & Marsha, 1983; Greenwald et al., 1968; Nicosia, 1966; Nord & Peter, 1980) have acknowledged that consumers' behavioral intentions and decision making process are related to their scope of learning from the external world and the internal status of mental ability. This learning is again developed based on the three components of attitude namely, affective, cognitive, and behavioral (Ostrom, 1969). Understanding tourists' behavioral intentions toward a new equilibrium (BNE) of life and developing a theoretical framework is comprehensively rooted in these aforementioned behavioral and cognitive learning theories of marketing. The paradigms of this theoretical framework are also getting support from the evolutionary theory and evolutionary psychology (Ajzen, 1991; Altman & Taylor, 1973; Bandura, 1986; Gagne et al., 1993; Liberman et al., 2002).

In the process of evaluation, people generally tend to use their gathered knowledge, think deeply, analyze constructively, and pursue their logical feelings (Roloff, 1981). This justified evaluation reflecting their thinking process and knowledge is defined as the cognitive component of attitude (Ertmer & Newby, 1993; Shareef et al., 2016). Sometimes, while evaluating a subject and developing their perception, beliefs are generated representing their mere emotion and psychological affection toward the subject (Liberman et al., 2002). This perception based on emotional evaluation is called affective attitude (Ostrom, 1969). Final behavior or behavioral intention is substantially controlled by their attitude, either cognitive or affective; however, behavioral intention is also influenced by the conjoint impact of cognitive and affective components (Ertmer & Newby, 1993). Even sometimes, in response to the context, external environment, and surroundings, ignoring the impact of psychological emotion or logical thinking, people tend to respond leading to behavior in a certain manner (Shareef et al., 2015). This final response is dictated and influenced by behavioral attitude (Gagne et al., 1993). Therefore, evaluation of human beings derived from their certain beliefs is an attitude that has three distinct components, namely cognitive attitude, affective attitude, and behavioral attitude (Bandura, 1986; Gagne et al., 1993).

3.1. Affective attitude toward tourism (AAT)

Academics from multidimensional fields are exploring the impact of this pandemic on the mental health of people and postulating future psychological behavior due to the severe trauma of this pandemic. Psychologists have affirmed that prolonged physical change and subversive impact of mental threat gradually stimulate psychological change (Sowislo & Orth, 2013). Observing several epidemic and pandemic diseases, has led researchers to become more focused on analyzing human behavior for tourism in the light of evolutionary theory and evolutionary psychology (Bastardoz & Van Vugt, 2019; Kock et al., 2018). Following this human psychology about which social psychologists are interested to predict human behavior for any social events, for instance, travels and leisure tours, people inherently tend to adjust to any contextual changes. Shedding light on the gradual transformation of the human mind caused by panic, human motive, evolutionary adjustment for self-protection, and gradual reshuffle of human psychology, it is argued that the following three self-derivatives and contextual phenomena have an integral and subversive effect on abstracting affective motive (Cheer & Lew, 2017; Le et al., 2021).

3.2. Travel anxiety and risk (TAR)

Travelers and tourists are aware and worried of enormous risks due to infectious diseases like the current pandemic (Li et al., 2020; Zhang et al., 2020). Tourists' risk perceptions control their selection process of tours, recreational activities, travel and psychological behavior (Eid & Agag, 2020; Trope & Liberman, 2010). Interestingly, in this aspect, tourists and travelers' perception is potentially different and distinct from that of government policymakers who are not taking all of this into account (Law, 2006). Government policymakers and to some extent, service providers' source of assessment is fundamentally oriented from their capacity and capability to predict, analyze and understand consumers (i.e., the tourists') deep cognition; however, accumulated predisposition of psychological risks evokes mental anxieties which have an overarching effect on affective attitude (Law, 2006; Yao et al., 2023). In the light of construal level theory, researchers reaffirmed that general people perceive risks to travel and tours in accordance with their emotional involvement and ability of abstraction and adaptability (Huang & Wu, 2017). Their perception of risks includes health risks, social gathering risks, resources unavailability risks, information nontransparency risks, image risks, lockdown risks, travel interruption risks (which cumulatively create psychological anxieties), and finally

influence, all of which shape their affective attitude toward tourism (Haldorai et al., 2019). Thus, this research posits the following hypothesis:

H₁: Travel anxiety and risk (TAR) has an impact on the affective attitude of travelers and tourists.

3.3. Paradigm shift of recreation (PSR)

Psychologists have long been endeavored to predict the development process of the human mind to predict the overall surroundings through analyzing others' minds and behavior. In this context, psychologists, shedding light on the theory of mind (Korkmaz, 2011), postulated that human beings have always intended to develop their own mental states considering others mind, reaction, response, and mental condition in any social phenomenon. Abstracting this psychological knowledge about the development process of mind, due to extreme subversive impact of this current pandemic globally across all societies, now travelers and tourists might have mental impairment permanently on their beliefs and attitude which may intend to set its mental path for adopting travels and tours with a new epistemological paradigm. As such, tourists may develop new dimensions of feelings or impressions about any travels and leisure tours based on reshuffled psychology and distressed mind due to the enduring impact of the current pandemic. Thus, this study has an argument to illustrate the following hypothesis:

H₂: Paradigm shift of recreation (PSR) has an impact on the affective attitude of travelers and tourists.

3.4. Emotional trauma & panic (ETP)

Working on the transformation of the human mind, researchers (Aebli et al., 2022; Ćosić et al., 2020) have revealed that since Covid-19 has caused enormous disasters for people, for instance, the death of close relatives, unemployment, loss of scope of income, damage in social life, isolation from friends, families, and society, the continuous threat of death from an invisible enemy, lockdown like a prisoner, unavailability of facilities and commodities, complete uncertainty about future, children and young people's detachment from regular education, turmoil in the national economy, lack of scope for recreation and travel, etc., its long-term impact may cause deep emotional trauma in the human mind. This argument is also supported by several researchers working on the present status of tourism after the devastating effect of the pandemic (Carracedo et al., 2021; Jang & Kim, 2022). This trauma, as per the social psychologists (Li et al., 2020; Wachyuni and Kusumaningrum, 2020), has a compounding effect on the human mind which gradually leads to the drastic transformation of human psychology. This enormous blow and mental impairment may resemble emotional trauma and panic (Cui et al., 2023; Sigala, 2020).

Emotional trauma and panic are also associated with the observation of others' behavior through mentalization of imaginative mental activity described by attachment theory (Bowlby, 1982). Consequently, any such psychological transformation may be visible through mental disorder and destabilized mental health leading to a changed affective attitude toward travels and leisure trips (Yao et al., 2023). Heuristically, this study has proposed the following hypothesis,

H₃: Emotional trauma & panic (ETP) has an impact on the affective attitude of travelers and tourists.

3.5. Cognitive attitude toward tourism (CAT)

Neisser (1987) analyzed the human mind through analytical thinking and argued that human memories basically react, respond to and perceive knowledge from society which ultimately pursues their attitudinal development. This development of the human mind is streamlined with the principle of cognitive psychology. According to this psychological theory, the development process of the human mind and its response is articulated through social interaction and deep analytical thinking. Reflecting this knowledge of the development process of the human mind through socio-cultural interaction, for the present pandemic, it can be referred that the following three issues have a conjoint effect on the cognitive attitude of a human being toward tourism.

3.6. Disposable income and Precaution (DIP)

Several authors referred that (Kumar, 2020; Lim et al, 2021) a global consensus may arise whereby tourists choose to not travel as frequently to ensure an environment-friendly green economy. That aside, budget comes into the equation here whereby the basic theme lies in the limiting behavior of living within ones means and spending only what one can really afford. The necessity of precautionary money may be manifested by tourists in lieu of their traditional demand "need for transactional money" to conserve for future unseen, unexpected, and unbelievable threats. Heuristically analyzing the current pattern of the tourism sector, many researchers (Brouder, 2020; Carracedo et al., 2021; Donthu & Gustafsson, 2020; Gössling et al., 2021; Ćosić et al., 2020) are afraid of and pessimistic about this industry being able to return to the pre-pandemic levels where the primary stakeholders were more care free when it came to spending money than they seem to be post-pandemic where they are also more cautious and mindful when it comes to spending money. Based on the aforementioned articulation, it can be postulated that:

H₄: Disposable income and precaution (DIP) has an impact on the cognitive attitude of travelers and tourists.

3.7. Transparency, uncertainty, and trust (TUT)

Reflecting this socio-cultural development process in human attitude, it is arguably remarked that the current long-lasting impact of global disaster due to the pandemic has generated certain phenomenal factors, such as sacredness about the source and authenticity of the information, resource hardship, uncertainty, and lack of trust. In the light of information processing theory, while traveling and taking leisure trip, the human mind acquires information and knowledge from the external environment and surroundings, and then, like a processing computer, they respond to the cumulative meaning of that collected information based on the stimuli which is the focal point of the cognitive development (Miller, 2003).

As per the socio-cultural development process, tourists' minds deeply and deliberately think, analyze, and attempt to understand, particularly about any unfamiliar destinations, transparency of information, accountability of the society as a whole, and availability of supporting resources (Kock et al., 2020; Sukhu et al., 2019). This trend inevitably pursues the search for trustworthiness on travelers and tourists' inquisitive mind and propagates the cognition to avoid any uncertainties which is an inherited effort of surveillance about epidemiology and disease (Baldwin & Weder di Mauro, 2020). Search for transparency and trustworthiness and effort to avoid uncertainties might create a change in cognitive attitude. As such, this study proposes the following hypothesis:

H₅: Transparency, uncertainty, and trust (TUT) has an impact on the cognitive attitude of travelers and tourists.

3.8. Sustainable and ecological adjustment (SEA)

Considering the grave impact of Covid-19 and its unprecedented consequences for tourism and hospitality business in the near and long-term future, this study as well as some other scholarly studies (Cheer & Lew, 2017) is focused on formulating strategy in the glimpse of the new normal life post pandemic in a changed and transformed world. Shedding light on the resilience theory, Gössling et al. (2021) acknowledged the universal law of change of any systems with time, and thus, these types of studies are now finding ways to construct the base of tourism

business in this new pattern of the world. The adaptive cycle of business strategies should promote this business considering the changed thinking and analytical beliefs of the travelers and tourists — new life, new world, and new adjustment of the tourists (Hall et al., 2017). This is the reality, and as quickly as the tourist's cognitive mind can be adaptive to these changing phenomena, they can find constructive ways to start a new journey of travels and tours adjusting with the changed ecological context. This is common human psychology and the eternal urge to turn around with the new hope of sustainability (Gössling et al., 2021; Sun, 2014). This analytical urge for readjustment and sustainability has been proposed by the following hypothesis:

H$_6$: Sustainable and ecological adjustment (SEA) has an impact on the cognitive attitude of travelers and tourists.

3.9. Behavioral attitude toward tourism (BAT)

Behavioral intention and final behavior are an outcome caused by the impact of attitude and subjective norms (Ajzen, 1991; Bandura, 1986). Although, typically cognitive attitude (represented by thinking ability) and affective attitude (represented by emotional feeling) develop human attitude, frequently, the joint impact of these two components of attitude can create a new motive reflected in responsive behavior (Altman & Taylor, 1973). Researchers working in the area of tourism and hospitality utilize the face that there is strong support for the argument that both cognitive and affective attitudes have a combined impact on post-pandemic tourists' behavior (Aebli et al., 2022; Cui et al., 2023; Neuburger & Egger, 2021). Nowadays, tourists consider taking leisure trips from both an emotional and logical perspective (Khlystova et al., 2022; Lim et al., 2021). In that sense, it is a proven phenomenon which can be used to examine the tourism business due to the prolonged and catastrophic impact of the current pandemic by offering the following hypotheses:

H$_{7a}$: Cognitive attitude toward tourism (CAT) has an impact on behavioral attitude toward tourism (BAT).

H$_{7b}$: Affective attitude toward tourism (AAT) has an impact on behavioral attitude toward tourism (BAT).

Social psychologists (Ajzen, 1991; Altman & Taylor, 1973; Bandura, 1986; Ertmer & Newby, 1993) have affirmed that people sometimes respond to any incidents and situations in a certain manner apart from the motives developed due to the influence of cognitive attitude and affective attitude. This attitudinal component which may have a sudden profound impact on tourism is termed as the behavioral attitude. The following factors can create such response to belief in behavioral motive.

3.10. Restriction, avoidance, and protection (RAP)

Researchers have acknowledged that tourists' behavior is very complex and they have heterogeneous characteristics while deciding for travels, selecting destinations and mode of transportations, and finalizing overall staying, locations, mobility, and visualizations (Matias et al., 2020). Several other attributes also influence and shape the behavior of tourists, such as availability of resources, accessibility to resources, income, age, cultural values, safety and security, personal traits (love and fascination for adventure, risk aversion nature etc.), social orientations, and many more (Simon, 2009). Due to the attack and spread of the corona pandemic, now tourists may try to find out close link between the destination of travel and the availability of medical support in that place which was not previously a precondition or consideration. This anxiety can create a certain response among the tourists to avoid vulnerable situations, locations, and social gatherings which ultimately leads to a behavioral attitude of protectionism. Due to apparently unstoppable spread of infection and prolonged contamination of Covid-19, the above phenomena can put a permanent footprint of behavioral response of restriction, avoidance, and protection on the attitude of people. Thus, this study has proposed the following hypothesis:

H$_8$: Restriction, avoidance, and protection (RAP) has an impact on the behavioral attitude of travelers and tourists.

3.11. Appeal for deglobalization and localization (ADL)

Change in mental status can create change in tourists' behavior (Jang & Kim, 2022; Yao et al., 2023). Hence, taking safety measures, avoiding disease, protecting from any vulnerability during travels and leisure tours — are certain prevalent nature of travelers and tourists (Brouder, 2020; Ćosić et al., 2020). On-going lockdown, social distancing, stay home, travel restriction and sudden interruption, visa and migration prohibition, sudden and frequent changes in national policies imposed by the respective governments regarding entrance in many countries have brought and raised a new consciousness and awareness of avoiding any uncommon, remote, and unfamiliar places and countries (Brouder, 2020; Khlystova et al., 2022; Lim et al., 2021). This sentiment may have a prolonged and detrimental effect resemble ethnocentrism which may lead to a propensity for staying in a local and familiar area and avoiding foreign countries (Benjamin et al., 2020; Brouder et al., 2020). After the ends of the pandemic, this sentiment may not survive in and rise from emotional and analytical motive; however, may create a new perception in certain behavioral response which may have an impact on behavioral attitude in the form of nationalism and deglobalization (Brouder, 2020). Thus, this study has proposed the following hypothesis:

H$_9$: Appeal for deglobalization and localization (ADL) has an impact on the behavioral attitude of travelers and tourists.

Considering behavioral intention for a new equilibrium (BNE) after the Covid-19 era, this perception is substantially dependent on the affective, cognitive, and behavioral components of the attitudes of tourists toward tourism (Khlystova et al., 2022; Lim et al., 2021). This is the ultimate cause-effect relationship where the three independent variables (three components of attitudes) are hypothesized to pursue the behavioral intentions for tourism represented by the concept of behavioral intention for new equilibrium (BNE) (Bastardoz & Van Vugt, 2019; Kock et al., 2018). Here, the three components of attitudes have a conjoint effect in pursuing behavioral intentions for tourism in the post-Covid-19 era after getting many unwanted, unexpected, and unbelievable experiences, knowledge, and prolonged impact. These are the proposed hypotheses:

H10a Cognitive attitude toward tourism (CAT) has an impact on the behavioral intention for new equilibrium (BNE).

H10b Affective attitude toward tourism (AAT) has an impact on the behavioral intention for new equilibrium (BNE).

H10c Behavioral attitude toward tourism (BAT) has an impact on the behavioral intention for new equilibrium (BNE).

4. Method

This is a quantitative study which is based on both surveys and interviews. At the very beginning, the Attitude-Behavioral Model of Tourists (ABMT) in the post-Covid-19 (shown in Fig. 1) has been developed and proposed underpinning detailed literature and theoretical review of psychology and human behavior, the destructive effect of Covid-19 in different sectors, and future prediction in the post-Covid-19 era, and tourism industry and tourists' perceptions.

4.1. Research design

The proposed independent and dependent constructs have been operationalized through the deliberation of a Focus group. The plausible constructs and measuring scale items were examined and suggested by interviews with service providers (i.e., tourism and hospitality organizations) in Bangladesh. A detailed survey was also carried out among prospective tourists (i.e., service receivers) throughout Bangladesh.
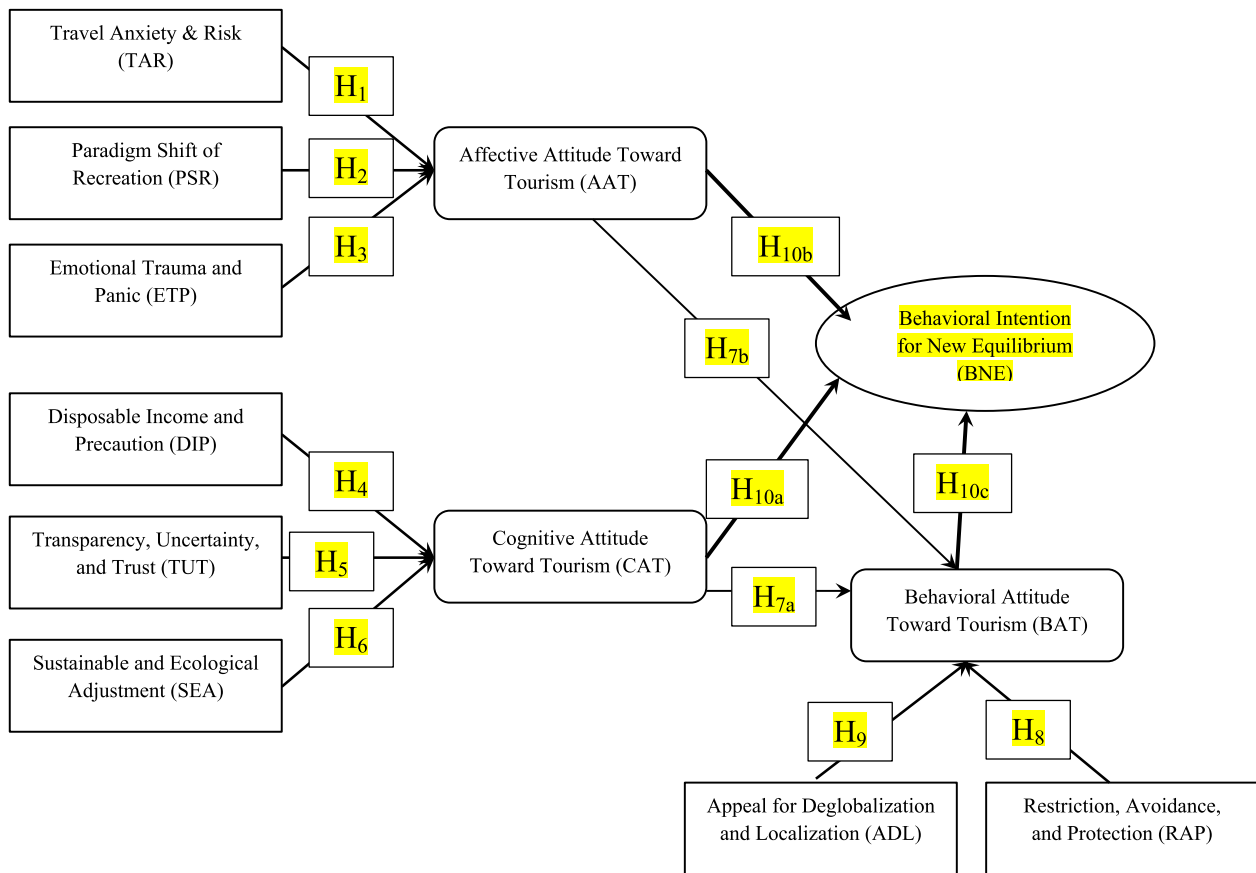
Fig. 1. Attitude-Behavioral Model of Tourists (ABMT) in the Post Covid-19.

4.2. Research operationalization

All the constructs and their measuring items of the theoretical framework *Attitude-Behavioral Model of Tourists (ABMT) in the Post Covid-19* (shown in Fig. 1) is examined and verified by executives of the associations of service providers of tourism and hospitality business in Bangladesh. In this connection, the researchers of this study communicated with the three leading organizations engaged in this sector, namely, i) Association of Travel Agents of Bangladesh (ATAB), ii) Tour Operators Association of Bangladesh (TOAB) and, iii) Bangladesh International Hotel Association (BIHA). In total, a list of 15 managers was randomly selected from the member organizations of these three associations. At first, all the independent and dependent constructs and their respective measuring items were sent to these 15 managers to be reviewed. Then a researcher of this study carried out telephone interviews with these study participants to capture their opinions about the following three issues: i) the eight first-order and the three-second order variables and their convergent and discriminant validity as the formative constructs of the three attitudes ii) content and concepts of the constructs, i.e., their relations with the measuring items to measure those constructs with nomological and predictive validity and, iii) wording, content, and pattern of the measuring items. On average, each interview took around 30 min.

4.3. Questionnaire and constructs

Measuring items of the eight first-order independent constructs: Travel Anxiety & Risk (TAR), Paradigm Shift of Recreation (PSR), Emotional Trauma and Panic (ETP), Disposable Income and Precaution (DIP), Transparency, Uncertainty, and Trust (TUT), Sustainable and Ecological Adjustment (SEA), Appeal for Deglobalization and

Localization (ADL), and Restriction, Avoidance, and Protection (RAP), three second-order independent constructs: Affective Attitude Toward Tourism (AAT), Cognitive Attitude Toward Tourism (CAT), and Behavioral Attitude Toward Tourism (BAT), and the dependent construct: Behavioral Intention for New Equilibrium (BNE) are primarily adopted from two sources: i) service provider, i.e., tourism and hospitality organizations in Bangladesh and ii) several scholarly studies on human psychology and tourists behavior during and after Covid-19 (Brouder, 2020; Ćosić et al., 2020; Gössling et al., 2021; Karim et al., 2020; Kock et al., 2020; Kumar, 2020; Lew et al., 2020; Li et al., 2020; Matias et al., 2020). The service providers, i.e., tourism and hospitality organizations continuously collect their prospective customers' feedback about their attitudes and perceptions toward taking leisure trips and tours during the Covid-19 period through their self-designed questionnaire.

A Focus group with seven experts examined the questionnaire for wording, sentence structure, meaning, and significance. The members of this focus group are two managers from tourism and hospitality organizations, three university professors having expertise in launching surveys to capture consumers' perceptions, and two members from the government tourism board. The scale items of all the first- and second-order independent and dependent variables were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). When it came to the 11 independent variables, there were 63 measuring items and for the 1 dependent construct, there were 5 measuring items. To keep the numerical values of scoring consistent, systematic, and synchronized when it came to the positive and negative statements, questions that were phrased such that they were considered in a negative sense were reversely coded. This was all captured by inputting the scores from the Likert scale into an excel spreadsheet.

4.4. Survey and participants

The empirical study was conducted in eight major districts in Bangladesh. According to the information obtained from the three leading tourism and hospitality associations in Bangladesh (namely, ATAB, TOAB, and BIHA), around 80 percent of prospective tourists live in these eight big districts. The aforementioned three organizations supplied the email addresses and telephone numbers of their prospective tourists who had previously used their services at least three times in the past three years to ensure practical tourists' behavior could be captured. A list of 5895 tourists was arranged from the mentioned districts. From this list, 300 addresses were selected randomly. The study then utilised two research assistants to mail the questionnaire with return pre-paid postage. However, before sending this out in the mail, all the 300 tourists were called on the telephone to ensure their availability and willingness in partaking in this study which was was conducted in the period between January and March 2021. Finally, a total of 209 completed questionnaires were returned with three of those questionnaires being almost blank (and thus had to be discarded). Therefore, considering only valid/complete questionnaires (206 in total out of 300), the response rate was around 69 percent.

4.5. Model analysis

Anderson and Gerbing (1988) and Chou and Huh (2012) suggested that for this kind of consumer-based study where the target is to validate a cause-effect model, a two-step approach consisting of a measurement model followed by a structural model is appropriate. Following this approach, this study first examined the measurement model through confirmatory factor analysis (CFA) and then investigated the cause-effect relationship through the structural model.

5. Results

Respondents had significant variations in terms of demographic factors, particularly in age and education. As a consequence, a demographic analysis was performed to evaluate the sample characteristics to better understand the participants of the study. In terms of age, it was found that the average age of the respondents was around 29 years. Gender distribution was quite acceptable as the number of males and females was almost the same (male versus female ratio being 47:53). Since most tourists are representing higher middle class to upper class, yearly family income is USD 15.75 thousand. The average education was a bachelor's degree and study participants (the respondents) were found to have on average, 4 immediate family members. The length of experience of travel and leisure tours was found to be 7 years with 21 percent of all respondents having experience in travel and leisure tours in 2020. According to several reports published by the tourism and hospitality organizations of Bangladesh, this demographic analysis indicated that the sample has adequate representativeness when it comes to the tourist group (TOAB, 2022).

5.1. Measurement model: Reliability and validity assessment and common method bias

Since all the constructs, their concepts, and measuring scale items of this study were extracted from established theory, published literature, and actual tourists' direct feedback available through the service providers, and were examined and modified by brainstorming of the focus group and detailed interviews of 15 managers from the service providers, exploratory factor analysis (EFA) was not conducted.

The scale items were loaded on the respective constructs with the values of the loading over 0.50 except for 12 measuring items from the independent first-order and second-order constructs. CFA was conducted while considering the cut-off value to remove any item loaded with a magnitude less than 0.50 (Kline, 2010). It is suggested on the

assumption that any scale item loaded less than 0.50 does not contribute significant variance to form the concept of the construct. Therefore, with low significance or negligible, these scale items can be removed (Fornell & Larcker, 1981). The correlation matrix of the removed scale items under each construct was also examined for justification of this removal. The items which have loading values lower than 0.50 have high correlations with some scale items that showed high loading values (greater than 0.50). So, those scale items were dropped. Finally, 51 accepted scale items of the independent variables and 5 scale items of the dependent construct satisfied the minimum cut-off point requirements. To ensure discriminant validity through the examination of parametric values, this research investigated internal validity through the variance-extracted test (Fornell & Larcker, 1981). From the results shown in Table 1, it is verified that the lowest square root of AVE is 0.899 (SEA), which is higher than the largest squared correlation between any pair of constructs (0.449, between AAT and TAR). Therefore, discriminant validity among all the independent constructs is confirmed. Since the constructs have AVE higher than 0.50, this result of CFA for the scale items and their respective constructs confirmed the convergent validity.

It is also important to verify the reliability of the constructs before moving further. In this regard, this research used a composite reliability score for verification as suggested by Fornell and Larcker (1981). According to this reference and the scholarly article of Hair et al. (2013), the score of composite reliability should be greater than 0.7. This study has calculated the composite reliability score for all the independent and independent constructs based on standardized factor loadings and the indicator's measurement error which ranged from 0.954 to 0.987. Therefore, internal reliability is ensured for all the constructs (see Table 2).

Effect of common method variance is not certain for quantitative research (Malhotra et al., 2006). However, following several valid techniques to collect data and assess its validity, this research has attempted to reduce any probable effects of the common method variance. To achieve this, this study adopted both the survey and interview to collect and validate data. It also formed a focus group to validate the questionnaire. This investigation and examination of the theoretical framework and measuring constructs and scales also helped to reduce the risk of common method variance (Burton-Jones, 2009).

5.2. Causal relationship by structural model

As the second step of structural equation modeling (SEM), the cause-effect relationship was evaluated through structural model analysis using LISREL with maximum likelihood estimation. From the preliminary analysis, comparing root mean square error of approximation (RMSEA) (0.075), Chi-Square (53.98), degree of freedom (25) P-value (0.00067), and other fitness indices, such as normed fit index (NFI), incremental fit index (IFI), the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), relative fit index (RFI), and comparative fit index (CFI) with the prescribed literature (Kline, 2010; Hair et al., 2013; Hoyle, 2011), it was found that the model did not fit well with the data.

The modification indices from the structural model suggested adding an error covariance between the constructs RAP and BNE to share measurement errors and reduce residuals leads to a decrease in Chi-Square by 13.8. After the inclusion of the modification indices, the model was run again, and a better model was obtained with accepted model fitness in comparison to the literature. RMSEA value is still on the high side (0.067), but any value below 0.10 was deemed acceptable for RMSEA (Kline, 2010; Hair et al., 2013; Hoyle, 2011). Whilst the p value was slightly low, due to the big sample size being used to analyze using SEM (higher than 200), this was also deemed to be acceptable. The final accepted model is shown in Fig. 2.

The evaluated Attitude-Behavioral Model of Tourists (ABMT) in the Post Covid-19 has fundamentally four sub-models. The first one is the cause-effect relations of Affective Attitude Toward Tourism (AAT) with the three independent constructs, Travel Anxiety & Risk (TAR),

Table 1
Squared Root of AVE and Squared Correlation of the Constructs.

	AAT	TAR	PSR	ETP	CAT	DIP	TUT	SEA	BAT	ADL	RAP
AAT	**0.962**										
TAR	0.449	**0.962**									
PSR	0.031	0.019	**0.961**								
ETP	0.085	0.0497	0.00017	**0.932**							
CAT	0.107	0.128	0.061	0.041	**0.97**						
DIP	0.1102	0.0999	0.0185	0.079	0.4096	**0.943**					
TUT	0.0335	0.0324	0.013	0.1362	0.3047	0.2642	**0.945**				
SEA	0.029	0.0303	0.0061	0.086	0.0222	0.0231	0.061	**0.899**			
BAT	0.293	0.133	0.0024	0.083	0.252	0.225	0.144	0.042	**0.967**		
ADL	0.051	0.0204	0.0003	0.0756	0.072	0.094	0.073	0.0299	0.206	**0.929**	
RAP	0.0144	0.00003	0.0004	0.131	0.062	0.056	0.148	0.020	0.167	0.116	**0.955**

Diagonals are the square root of AVE and others are squared correlation.

Table 2
Composite Reliability, Factor Loading, and AVE.

Constructs	Composite Reliability	Factor Loading	AVE
AAT	0.984	0.816	0.925
TAR	0.978	0.767	0.925
PSR	0.984	0.766	0.924
ETP	0.967	0.830	0.869
CAT	0.987	0.836	0.941
DIP	0.968	0.81	0.889
TUT	0.975	0.676	0.893
SEA	0.984	0.766	0.808
BAT	0.983	0.865	0.935
ADL	0.954	0.817	0.863
RAP	0.984	0.697	0.912
BNE	0.981	0.732	0.913

Paradigm Shift of Recreation (PSR), and Emotional Trauma and Panic (ETP). From the analysis, it is observed that TAR and ETP have significant causal relations with AAT with 'z' values 11.7 and 2.92 respectively. Therefore, these two factors are significant at 0.05 level (z score for 0.05 level is 1.96). Even, these two factors are significant at 0.01 level (z score for 0.01 level is 2.576). PSR is not significant at 0.05 level which has 'z' value 1.799.

The second sub-model is the cognitive attitude toward tourism (CAT). It is hypothesized that the three independent constructs Disposable Income and Precaution (DIP), Transparency, Uncertainty, and Trust (TUT), and Sustainable and Ecological Adjustment (SEA) can form a cognitive component of attitude toward tourism (CAT). However, the cause-effect analysis revealed that DIP and TUR have potential contributions in forming CAT. Therefore, the two hypotheses related to these variables are significant at the 0.05 level with z values 8.079 and 4.957 respectively. Due to the contribution of SEA being very low to consider as a potential contributor, the hypothesis that this variable being a
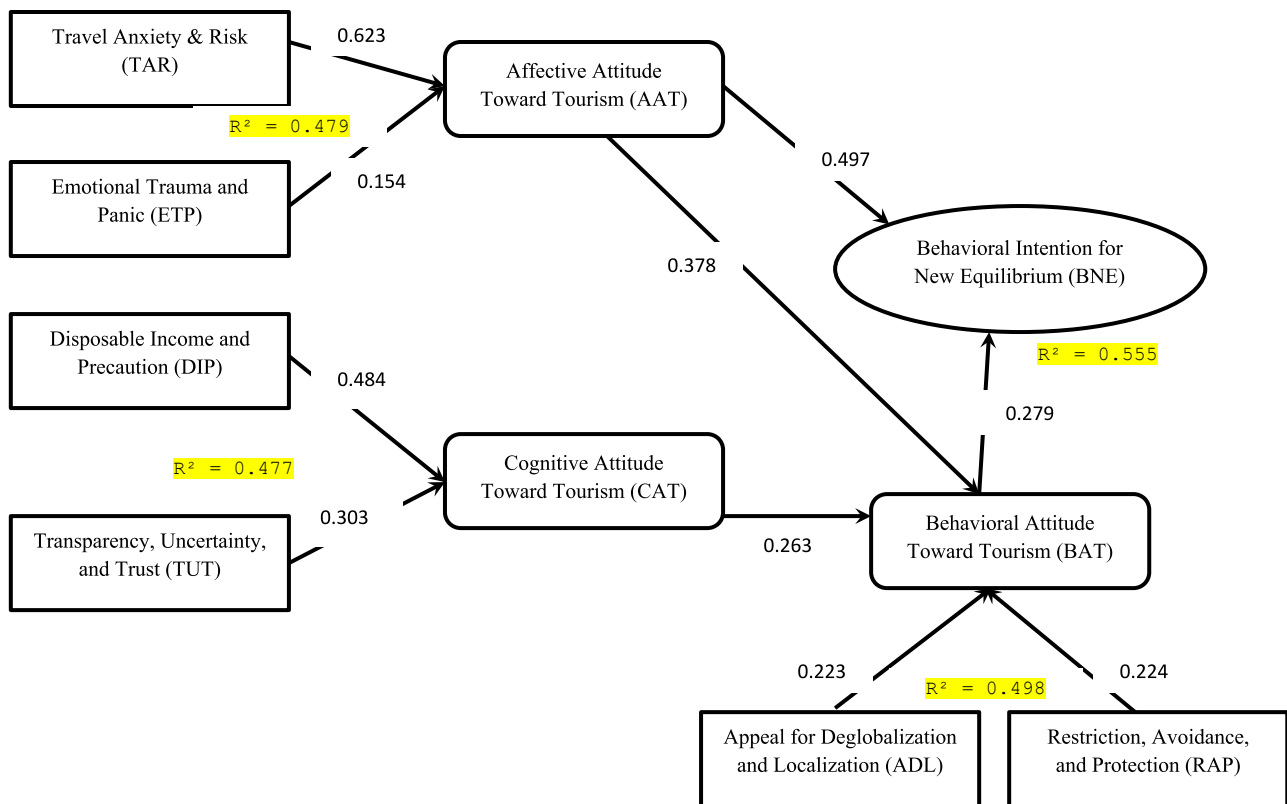

Fig. 2. Final Attitude-Behavioral Model of Tourists (ABMT) in Post Covid-19 with Standardized Loading Values (All the independent variables are considered as significant for confidence interval at least 95 Percent).

contribution in forming cognitive attitude was thus rejected (z value is 0.0107).

The third sub-model is the behavioral attitude toward tourism (BAT). It is hypothesized that the two independent constructs Appeal for Deglobalization and Localization (ADL) and Restriction, Avoidance, and Protection (RAP) can form behavioral components of attitude toward tourism (BAT). At the same time, marketing researchers affirmed that the behavioral component of attitude is also impacted by affective and cognitive components of attitude. Cause-effect analysis revealed that all the four hypotheses which contribute to pursuing BAT are significant at the 0.05 level.

Now the fourth sub-model or the final model of this study is intended to accomplish the second objective. It is hypothesized that the three independent components of attitude namely, affective attitude toward tourism (AAT), cognitive attitude toward tourism (CAT), and behavioral attitude toward tourism (BAT) can form Behavioral Intention for New Equilibrium (BNE) after Covid-19 era. Analysis suggested that the two hypotheses related to AAT and BAT are significant at the 0.05 level with z values 9.269 and 2.771 respectively. Cognitive attitude toward tourism (CAT) is found in-significant to pursue behavioral intention in the post Covid pandemic and thus, the hypothesis that this variable has contribution in forming behavioral intention for new equilibrium can be rejected (z value is 0.813). However, following the suggestion of modification indices, it is suggested to add an error covariance between RAP and BNE.

6. Interpretations and discussions

In the light of findings, it can be recommended that travel anxiety & risk (TAR) with a loading estimate 0.623 and emotional trauma and panic (ETP) with a loading estimate 0.154 have potential contributions to develop an affective attitude toward tourism (ATT) and the related hypotheses were accepted. However, paradigm shift of recreation (PSR) failed to contribute adequately in the formation of affection toward tourism since its contribution is very low 0.093 to pursue affection for tourism. Thus, the hypothesis related to this construct was not accepted.

The findings suggested that tourists and travelers' affective attitude about future travel and leisure tours which basically develops from their emotional perception rooted in their experience during the prolonged effect of Covid-19 on life and society is fundamentally gathered from their psychological feelings of anxiety and risk as well as the unexpected shocks. Ultimately they perceive and pursue certain affective components of their overall attitudes leading to behavioral intention toward tourism in the post-Covid-19 era which is conceptualized in this study as the behavioral intention for new equilibrium (BNE). Nevertheless, although this unbelievable shock also creates a certain belief of emotion of panic and trauma for their affective attitude, its signatory effect is not so wide, enduring, and substantial that may change their motive and eternal idea (paradigm) about the recreational tour. And thus, a paradigm shift of recreation (PSR) does not have a potential impact on the formation of an effective attitude toward tourism (AAT) (low correlation, 0.177). The observed squared multiple correlation coefficient (R^2) of this model is 0.479 which explains the amount of variance (so 47.9%) that the three independent constructs TAR, ETP, and PSR (although its contribution alone is not significant) contribute to developing the conceptual affective component of attitude toward tourism in the post-Covid-19 era. Pragmatically, it can be claimed that TAR and ETP — these two significant constructs contribute significantly in developing tourists' affective attitude for travels and leisure tours based on the effect of this shocking infectious disease. Again, in comparison to ETP, i.e., emotional trauma and panic, TAR, i.e., travel anxiety & risk makes a greater contribution in pursuing effective attitude. It accounts for 0.623 as the standardized loading estimate which indicates that a unit change on the perception of travel anxiety & risk (TAR) can cause a 0.623 unit positive change on forming affective component of attitude toward tourism (AAT) if the contribution of ETP and PSR remains constant.

For cognitive component of tourism, the beliefs are represented by three constructs namely, Disposable Income and Precaution (DIP), Transparency, Uncertainty, and Trust (TUT), and Sustainable and Ecological Adjustment (SEA). Standardized loading values of Disposable Income and Precaution (DIP) and Transparency, Uncertainty, and Trust (TUT) are 0.484 and 0.303 respectively in pursuing CAT. The hypotheses for these two variables are accepted since they have a significant contribution in forming analytical perception of attitude, i.e., cognitive attitude. However, the third construct Sustainable and Ecological Adjustment (SEA) which is basically the substantive thinking of tourists developed through the deliberation over the information and experience about the Covid-19 pandemic and its long-lasting effect in society, country, and globally is revealed as non-significant in pursuing cognitive attitude toward tourists. Its standardized loading value is 000566, which means it has no profound impact on tourists' analytical beliefs, thus, the hypothesis related to this construct is rejected. This finding indicates that logically tourists are aware of their earning and savings during uncertain life, and they have a perception of different levels of reliability and trust for different countries' health policy and safety. And this logical understanding molds their thinking process and purses the cognitive component of attitude. However, they are not intended to search for extensive and long-lasting adjustment shedding light on the environment and nature-related contextual parameters while choosing any destination of travels and tours. And thus, the urge for ecological enduring adjustment is not a potential criterion to form beliefs of cognitive attitude.

The behavioral component of attitude which is basically pursued through the conjoint perception of certain beliefs is hypothesized to be formed by the thinking and emotional beliefs and responses to certain situations. In this regard, these beliefs and situational parameters are represented by the affective attitude toward tourism (AAT), cognitive attitude toward tourism (CAT), appeal for deglobalization and localization (ADL), and restriction, avoidance, and protection (RAP). Therefore, this study claims that including the two independent variables ADL and RAP, affective attitude and cognitive attitude also have an effect on forming a behavioral attitude toward tourism (BAT). Forming a behavioral attitude is substantially dependent on the affective component of attitude (the highest contributor). It accounts for 0.378 as the standardized loading estimate which indicates that a unit change on the perception of affective attitude toward tourism (AAT) can cause a 0.378 unit positive change on forming behavioral component of attitude toward tourism (BAT) if the contribution of CAT, ADL, and RAP remain constant. The contribution of the cognitive component of attitude informing behavioral attitude is the second highest (0.263). These findings have strong support in literature (Brouder, 2020; Khlystova et al., 2022; Lim et al., 2021).

Cause-effect analysis revealed that AAT and BAT have potential contributions in forming behavioral intention for new equilibrium (BNE) which is supported by several scholarly studies (Jang & Kim, 2022; Yao et al., 2023). They contribute 0.497 and 0.279 respectively in pursuing the behavioral intention for new equilibrium (BNE). The contribution of cognitive attitude toward tourism (CAT) is very low (loading value is 0.0423) to consider as a potential contributor, and thus, the hypothesis that this variable has contribution in forming behavioral intention for new equilibrium can be rejected. Following the conceptual significance of the multiple correlation coefficient (R^2) of this model, these constructs can combine to explain the 55.5% variance of BNE. Therefore, this study claims that the three components of attitude AAT, CAT, and BAT (although the contribution of CAT alone is not significant) contribute to forming behavioral intention for new equilibrium (BNE) in the post-Covid-19 era. Nevertheless, CAT contributes to forming BNE through BAT, i.e., indirect contribution, since it has a significant effect on pursuing the behavioral component of attitude BAT (standardized loading value is 0.263 as per the third sub-model).

7. Theoretical and managerial implications

The findings and the subsequent explanations have an overarching impact on future tourism and hospitality businesses. Academics and practitioners can gain deep insight and learning from the outcome of this research to include some new views about the development of attitude during crisis moments.

7.1. Theoretical implications

This research has several contributions in the literature of human psychology, crisis management, human behavior, marketing, and tourism. Behavioral psychologists advocated for the ocean and islands model and anticipated that tourists may have a potential trend to adjust with the ecological change, and this paradigm shift of the tourists about recreation is certain. However, this research suggested several reasons for attitudinal changes, but permanent shift and modification of idea about recreation is not affirmed. Social psychologists analyzed human behavior during the prolonged social crisis and recommended that human psychological traits like xenophobia and ethnocentrism can downplay in the tourism and hospitality sector to get back to the normal stream of business growth.

Psychological distance theory and construal level theory will find new insight about the dimensions which may have a compounding effect on the perceptions of internal consciousness and external surroundings. This research can draw attention to the issue that the mindset of tourists may be severely affected by risk, anxiety, and uncertainty. Trusts may play a crucial role in traveling to unreliable countries. Particularly academics from psychology, human behavior, marketing, and tourism and hospitality can get a new idea about the relationship between financial hardship and cognitive attitude. This is one of the serious and vulnerable issues for the tourism sector to be sustainable. Literature of sustainability can find explicit support and acknowledgment from this finding.

Sociologists (Foucault 1977) have long-sighted arguments that it is almost eternal human characteristics to protect themselves from any anticipated negative changes, deviations, and deteriorations due to sudden disturbance in society and nature. This social trend is characterized as the struggle for normality (Gössling et al., 2021). This research indicated that behavioral attitude has been influenced potentially by the appeal for deglobalization and localization and effort for avoidance and protectionism. Human behavior during crisis moments can provide deep light to sociologists in this aspect. People behave from their attitude which is less affected by their long-term thinking rather by their sudden response to protect themselves. Therefore, this study has a significant contribution for future researchers and academics to develop grounded theory about human psychology during crisis moments if its effects have been prolonged.

7.2. Managerial implications

This research has contributed enormously to the practitioners and managers. They can be benefitted by learning from the development of three components of attitude through the interconnected reasons of social, behavioral, mental, and financial aspects. Human life patterns may be changed slightly if the effect has been prolonged. They may be more careful and take precautions about their earning and savings. Tourists may give more priority and take extra care for precautionary money in lieu of transactional money. The realization that tourists or general people have got from this pandemic is that there is serious uncertainty in life, income, existence, and well-being. Practitioners should provide more thrust on the hedonic enjoyment availed from the leisure tours in their promotional marketing. Yes, the reality is bitter, however, one needs to remember that to overcome these fragile perceptions and mental traumas to be able to come back to normal life, only recreation and leisure (facilitated in part by the tourist industry) can ensure a turnaround!

Strategists and marketing managers should focus on cost-effective vacation trips which should not be more expensive than their daily routine expenditure. Financial hardship is a barrier; however, enjoyment motivation with justified expenditure can be a driver for making decisions to travel or not, to take risks or not. In this connection, marketing managers can get interesting insight from the findings of this research. A potential source of any negative attitude which may prohibit tourists to come back to their normal vacation and travel pattern is substantially dependent on affective attitude which is not deriving from their thinking or long-term analytical approach. Therefore, promotional marketing should figure out enticing slogans that attract consumers to search for a new dimension of recreation and enjoyment from vacation planning and travel.

Due to the devastating impact of this pandemic, people in general are now much more aware and tend to avoid situations and places where safety and access to medical support are not adequate (from the tourist/traveller's perspective) or ensured by the service provider. Findings also suggest that tourists are concerned about uncertainty, risks and unreliability. The possibility of observing a new tendency amongst tourists could come into play wherevythey are seen to be disinterested in traveling to unfamiliar destinations that they feel are not reliable ortrusted. As a consequence of this, tourists may be more interested in traveling closeby such as around their neighborhood. Selection of super optimistic and challenging locations should be avoided by travel operators in the near future until tourists can come back to their original status and mentality. Short vacation planning in nearby resorts (to the potential tourist in question) which are reliable and trustworthy can be more effective for the recovery of this sector in the post-Covid-19 era. This is an explicit indication and outcome from this research that can enrich practitioners' knowledge.

8. Conclusion

Researchers' on this study went to great lengths to try and (i) get to the root of the probable losses the tourism and hospitality industry are experiencing, (ii) understand the anticipated future status of this sector where millions of people are engaged worldwide and (iii) to suggest stimulus from the findings to inspire and expedite this sector that has been facing an unprecedented crisis. Under challenging circumstances, this study made every effort to identify the physical, financial and mental reasons which may have an impact on general tourists and vacation lovers' attitudes to start a normal tourists' life once again. This study also aimed to classify the identified reasons under the three components of attitudes to develop an attitude-behavioral model to understand people's behavior and the future consequences of this on the tourism and hospitality business.

It is quite evident from the responses that tourists felt severely disturbed by the pandemic both psychologically and behaviorally when it came to their emotions, thinking process, and immediate behavioral responses. Due to the substantive and continual effect that Covid-19 generated, such as financial hardship, creating prolonged anxiety in people (triggered by feelings of being unsafe and always being on high alert and in a flight or fight response), the threat of sickness (and fear of this leading to death), mental trauma (and panic), unreliability (of the whole situation and others behavior around them), non-transparency, untrustworthy, protectionism, avoidance, etc., has all compounded to lead even the most experienced tourists to potentially have a negative attitude toward tourism. From detailed analysis, it is revealed that this negative effect of attitude on behavioral intention toward this new equilibrium is fundamentally controlled by the emotional aspect of attitude which is defined as an affective attitude by marketing literature. The behavioral attitude which is again influenced by the conjoint effect of affective attitude, cognitive attitude as well as certain sudden behavioral causes of response is also a dominant factor to pursue behavioral intention.

9. Limitations and future research directions

As an exploratory study, this research has some limitations. The model developed from this study is verified through the sample of a developing country (specifically Bangladesh). Future researchers can use this theoretical framework to examine its validity in a developed country. The generalizability of this theoretical framework can be claimed if this research is conducted in several developing and developed countries as well. The probable effects of the current pandemic might be prolonged and not completely understood whilst we are still going through it to a certain extent. It is important to also acknowledge that data collection from a very limited time frame might not capture adequate behavioral intentions. Future researchers could collect data about the same issue from a vertical survey. Future researchers could also conduct the same research from a post-hoc sample after the end of the current pandemic.

CRediT authorship contribution statement

Yogesh K. Dwivedi: Writing – review & editing, Supervision, Methodology, Conceptualization. **Mahmud Akhter Shareef:** . **Muhammad Shakaib Akram:** . **F. Tegwen Malik:** . **Vinod Kumar:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Mihalis Giannakis:** Writing – review & editing, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Aebli, A., Volgger, M., & Taplin, R. (2022). A two-dimensional approach to travel motivation in the context of the COVID-19 pandemic. *Current Issues in Tourism, 25* (1), 60–75. https://doi.org/10.1080/13683500.2021.1906631

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–1121.

Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships.* New York: Holt.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411–423.

Baldwin, R., & Weder di Mauro, B. (2020). Introduction. In R. Baldwin, & B. Weder di Mauro (Eds.), *Economics in the time of COVID-19* (pp. 1–30). CEPR Press.

Bandura, A. (1986). *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall.

Bastardoz, N., & Van Vugt, M. (2019). The nature of followership: Evolutionary analysis and review. *The Leadership Quarterly, 30*(1), 81–95. https://doi.org/10.1016/j.leaqua.2018.09.004

Benjamin, S., Dillette, A., & Alderman, D. (2020). We Can't Return to Normal: Committing to Tourism Equity in the Post-Pandemic Age. *Tourism Geographies, 22*(3), 476–483. https://doi.org/10.1080/14616688.2020.1759130

Bloch, P. H., & Marsha, L. R. (1983). A theoretical model for the study of product importance perceptions. *Journal of Marketing, 47*(Summer), 69–81.

Bowlby, J. (1982). *Attachment and Loss. 1, Attachment* (2nd ed.). New York: Basic Books.

Brouder, P. (2020). Reset Redux: Possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Tourism Geographies, 22*(3), 484–490. https://doi.org/10.1080/14616688.2020.1760928

Brouder, P., Teoh, S., Salazar, N. B., Mostafanezhad, M., Pung, J. M., Lapointe, D., et al. (2020). Reflections and discussions: Tourism matters in the new normal post COVID-19. *Tourism Geographies, 22*(3), 735–746. https://doi.org/10.1080/14616688.2020.1770325

Brügger, A., Morton, T., & Dessai, S. (2016). "Proximising" climate change reconsidered: A construal level theory perspective. *Journal of Environmental Psychology, 46*, 125–142. https://doi.org/10.1016/j.jenvp.2016.04.004

Burton-Jones, A. (2009). Minimizing method bias through programmatic research. *MIS Quarterly, 33*(3), 445–471. https://doi.org/10.2307/20650304

Carracedo, P., Puertas, R., & Marti, L. (2021). Research lines on the impact of the COVID-19 pandemic on business. A text mining analysis. *Journal of Business Research, 132*, 586–593. https://doi.org/10.1016/j.jbusres.2020.11.043

Cheer, J. M. & Lew, A. A. (2017). Tourism, resilience and sustainability: Adapting to social, political and economic change. (Eds.). Routledge, USA.

Chen, M. H., Jang, S. S., & Kim, W. G. (2007). The impact of the SARS outbreak on Taiwanese hotel stock performance: An event-study approach. *International Journal*

of *Hospitality Management, 26*(1), 200–212. https://doi.org/10.1016/j.ijhm.2005.11.004

Chou, C.-P., & Huh, J. (2012). Model modification in structural equation modeling. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 232–246). The Guilford Press.

Ćosić, K., Popović, S., Šarlija, M., & Kesedžić, I. (2020). Impact of human disasters and COVID-19 pandemic on mental health: Potential of digital psychiatry. *Psychiatr Danub, 32*(1), 25–31. https://doi.org/10.24869/psyd.2020.25

Cui, H., Yao, F., Jin, X., Zhao, T., Xu, W., & Smyczek, S. (2023). Effect of Regulatory Focus on Food Variety-Seeking Behavior of Chinese Tourists. *Journal of Hospitality & Tourism Research, 47*(1), 153–176. https://doi.org/10.1177/1096348020988893

Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of business research, 117*, 284–289. https://doi.org/10.1016/j.jbusres.2020.06.008

Eid, R., & Agag, G. (2020). Determinants of innovative behaviour in the hotel industry: A cross-cultural study. *International Journal of Hospitality Management, 91*, Article 102642. https://doi.org/10.1016/j.ijhm.2020.102642

Ertmer, P. A., & Newby, T. J. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly, 6*(4), 59–71. https://doi.org/10.1111/j.1937-8327.1993.tb00605.x

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18* (1), 39–50. https://doi.org/10.1177/002224378101800104

Foucault, M. (1977). *Überwachen und Strafen: Die Geburt des Gefängnisses.* Frankfurt/Main: Suhrkamp.

Frye, W. D., Kang, S., Huh, C., & Lee, M. J. (2020). What factors influence generation Y's employee retention in the hospitality industry?: An internal marketing approach. *International Journal of Hospitality Management, 85*, Article 102352. https://doi.org/10.1016/j.ijhm.2019.102352

Gagne, E.D., Yekovich, C. W., & Yekovich, F.R (1993). The Cognitive Psychology of School Learning.

Gössling, S., Scott, D., & Hall, C. M. (2021). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism, 29*(1), 1–20. https://doi.org/10.1080/09669582.2020.1758708

Greenwald, A. G. (1968). Cognitive Learning, Cognitive Response to Persuasion, and Attitude Change. In A. G. Greenwald (Ed.), *Psychological Foundations of Attitudes* (pp. 147–170). New York: Academic Press.

Habermas, J. (1987). *Eine Art Schadensabwicklung: Kleine Politische Schriften VI.* Frankfurt/Main: Suhrkamp.

Hair, J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM).* Thousand Oaks, CA: Sage Publications.

Haldorai, K., Kim, W. G., Pillai, S. G., Park, T., & Balasubramanian, K. (2019). Factors affecting hotel employees' attrition and turnover: Application of pull-push-mooring framework. *International Journal of Hospitality Management, 83*, 46–55. https://doi.org/10.1016/j.ijhm.2019.04.003

Hall, C. M., Prayag, G., & Amore, A. (2017). *Tourism and resilience: Individual, organisational and destination perspectives.* Bristol, UK: Channel View Publications.

Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies, 22*(3), 1–14. https://doi.org/10.1080/14616688.2020.1757748

Hoyle, R. H. (2011). *Structural equation modeling for social and personality psychology.* London: Sage Publications.

Huang, L., & Wu, C. (2017). Conceptual modelling of risk perception deviation mechanism. *Journal of Natural Disasters, 26*, 60–66.

Jang, S., & Kim, J. (2022). Remedying Airbnb COVID-19 disruption through tourism clusters and community resilience. *Journal of Business Research, 139*, 529–542.

Karim, W., Haque, A., Anis, Z., & Ulfy, M. A. (2020). The Movement Control Order (MCO) for COVID-19 Crisis and its Impact on Tourism and Hospitality Sector in Malaysia. *International Tourism and Hospitality Journal, 3*(2), 1–07. https://doi.org/10.6007/IJARBSS/v11-i16/11213

Kim, H. S., Sherman, D. K., & Updegraff, J. A. (2016). Fear of Ebola: The influence of collectivism on xenophobic threat responses. *Psychological Science, 27*(7), 935–944. https://doi.org/10.1177/0956797616642596

Khlystova, O., Kalyuzhnova, Y., & Belitski, M. (2022). The impact of the COVID-19 pandemic on the creative industries: A literature review and future research agenda. *Journal of Business Research, 139*, 1192–1210. https://doi.org/10.1016/j.jbusres.2021.09.062

Kline, R. B. (2010). *Principles and practice of structural equation modeling.* New York: Guilford Press.

Kock, F., Nørfelt, A., Josiassen, A., Assaf, A. G., & Tsionas, M. G. (2020). Understanding the COVID-19 Tourist Psyche: The Evolutionary Tourism Paradigm. *Annals of Tourism Research, 85*(November), Article 103053. https://doi.org/10.1016/j.annals.2020.103053

Kock, F., Josiassen, A., Assaf, A. G., Karpen, I., & Farrelly, F. (2019). Tourism ethnocentrism and its effects on tourist and resident behavior. *Journal of Travel Research, 58*(3), 427–439.

Kock, F., Josiassen, A., & Assaf, A. G. (2018). On the origin of tourist behavior. *Annals of Tourism Research, 73*, 180–183. https://doi.org/10.1177/0047287518755504

Korkmaz, B. (2011). *Theory of mind and neurodevelopmental disorders of childhood. Pediatric Research.* New York City: Springer Nature.

Kumar, V. (2020). Indian Tourism Industry and COVID-19: Present Scenario. *Journal of Tourism & Hospitality Education, 10*, 179–185. https://doi.org/10.3126/jthe.v10i0.28768

Law, R. (2006). The perceived impact of risks on travel decisions. *International Journal of Tourism Research, 8*, 289–300. https://doi.org/10.1002/jtr.576

Le, A. N. H., Khoi, N. H., & Nguyen, D. P. (2021). Unraveling the dynamic and contingency mechanism between service experience and customer engagement with luxury hotel brands. *International Journal of Hospitality Management, 99*, Article 103057. https://doi.org/10.1016/j.ijhm. 2021.103057

Lew, A., Cheer, J. M., Haywood, M., Brouder, P., & Salazar, N. B. (2020). Visions of travel and tourism after the global COVID-19 transformation of 2020. *Tourism Geographies, 22*(3), 455–466. https://doi.org/10.1080/14616688.2020.1770326

Li, Z., Zhang, S., Liu, X., Kozak, M., & Wen, J. (2020). Seeing the Invisible Hand: Underlying Effects of COVID-19 on Tourists' Behavioral Patterns. *Journal of Destination Marketing & Management, 18*, Article 100502. https://doi.org/10.1016/j.jdmm.2020.100502

Liberman, N., Sagristano, M., & Trope, Y. (2002). The effect of temporal distance on level of mental construal. *Journal of Experimental Social Psychology, 38*(6), 523–534. https://doi.org/10.1016/S0022-1031(02)00535-8

Lim, W. M., Yap, S. F., & Makkar, M. (2021). Home sharing in marketing and tourism at a tipping point: What do we know, how do we know, and where should we be heading? *Journal of business research, 122*, 534–566. https://doi.org/10.1016/j.jbusres.2020.08.051

Malhotra, N. K., Kim, S. S., & Patil, A. (2006). Common Method Variance in IS Research: A Comparison of Alternative Approaches and a Reanalysis of Past Research. *Management Science, 52*(12), 1865–1883. https://doi.org/10.1287/mnsc.1060.0597

Marks, D. F. (2018). *A General Theory of Behaviour*. London: SAGE.

Matias, T., Dominski, F. H., & Marks, D. F. (2020). Human needs in COVID-19 isolation. *Journal of Health Psychology, 25*(7), 871–882. https://doi.org/10.1177/1359105320925149

Miller, G. A. (2003). The cognitive revolution: A historical perspective. *Trends in Cognitive Sciences, 7*(3), 141–144. https://doi.org/10.1016/S1364-6613(03)00029-9

Neisser, U. (1987). *Concepts and conceptual development: Ecological and intellectual factors in categorization*. New York, NY US: Cambridge University Press.

Neuburger, L., & Egger, R. (2021). Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism, 24*(7), 1003–1016. https://doi.org/10.1080/13683500.2020.1803807

Nicosia, F. (1966). *Consumer Decision Processes*. Englewood Cliffs: Prentice Hall.

Nord, W. R., & Peter, J. P. (1980). A behavioral Modification Perspective on Marketing. *Journal of Marketing, 44*(Spring), 36–47. https://doi.org/10.2307/1249975

Ostrom, T. M. (1969). The relationship between the affective, behavioral, and cognitive components of attitude. *Journal of Experimental Social Psychology, 5*(1), 12–30. https://doi.org/10.1016/0022-1031(69)90003-1

Pine, R., & McKercher, B. (2004). The impact of SARS on Hong Kong's tourism industry. *Int. J. Contemp. International Journal of Contemporary Hospitality Management, 16*(2), 139–143. https://doi.org/10.1108/09596110410520034

Roloff, M. (1981). *Interpersonal communication*. Beverly Hills: The social exchange approach.

Scott, D., Hall, C. M., & Gᶜossling, S. (2019). Global tourism vulnerability to climate change. *Annals of Tourism Research*, 77, 49–61. Doi: https://doi.org/10.1016/j.annals.2019.05.007.

Shareef, M. A., Dwivedi, Y. K., Wright, A., & Kumar, V. (2021). Lockdown and Sustainability: An Effective Model of Information and Communication Technology. *Technological Forecasting & Social Change, 165*(April). https://doi.org/10.1016/j.techfore.2020.120531

Shareef, M. A., Dwivedi, Y. K., Laumer, S., & Archer, N. (2016). Citizens' Adoption Behavior of Mobile Government (mGov): A Cross-Cultural Study. *Information Systems Management, 33*(3), 269–285. https://doi.org/10.1080/10580530.2016.1188573

Shareef, M. A., Archer, N., & Dwivedi, Y. K. (2015). An Empirical Investigation of Electronic Government Service Quality: From the Demand Side Stakeholder Perspective. *Total Quality Management & Business Excellence, 26*(3–4), 339–354.

Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of business research, 117*, 312–321. https://doi.org/10.1016/j.jbusres.2020.06.015

Simon, H. (2009). The crisis and customer behaviour: Eight quick solutions. *Journal of Customer Behaviour, 8*(2), 177–186. https://doi.org/10.1362/147539209X459796

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin, 139*(1), 213–240. https://doi.org/10.1037/a0028931

Spina, M. (2012). Norm and Normality, Starting from Merleau-Ponty. *Phenomenology and Mind, 3*, 36–44. https://doi.org/10.13128/Phe_Mi-19606

Sukhu, A., Choi, H., Bujisic, M., & Bilgihan, A. (2019). Satisfaction and positive emotions: A comparison of the influence of hotel guests' beliefs and attitudes on their satisfaction and emotions. *International Journal of Hospitality Management, 77*, 51–63. https://doi.org/10.1016/j.ijhm.2018.06.013

Sun, J. (2014). How risky are services? An empirical investigation on the antecedents and consequences of perceived risk for hotel service. *International Journal of Hospitality Management, 37*, 171–179. https://doi.org/10.1016/j.ijhm.2013.11.008

TOAB. (2022). E-NEWSLETTER, Tour operators association of Bangladesh. https://www.toab.org/.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review, 117*(2), 440–463. https://doi.org/10.1037/a0018963

Wachyuni, S. S., & Kusumaningrum, D. A. (2020). The Effect of COVID-19 Pandemic: How are the Future Tourist Behavior? *Journal of Education, Society and Behavioural Science, 33*(4), 67–76. https://doi.org/10.9734/JESBS/2020/v33i430219

Yao, Y., Zhao, X., Ren, L., & Jia, G. (2023). Compensatory travel in the post COVID-19 pandemic era: How does boredom stimulate intentions? *Journal of Hospitality and Tourism Management, 54*, 56–64. https://doi.org/10.1016/j.jhtm.2022.12.003

Zhang, K., Hou, Y., & Li, G. (2020). Threat of infectious disease during an outbreak: Influence on tourists' emotional responses to disadvantaged price inequality. *Annals of Tourism Research, 84*, Article 102993. https://doi.org/10.1016/j.annals.2020.102993

Yogesh K. Dwivedi is a Professor of Digital Marketing and Innovation and Founding Director of the Digital Futures for Sustainable Business & Society Research Group at the School of Management, Swansea University, Wales, UK. In addition, he holds a Distinguished Research Professorship at the Symbiosis Institute of Business Management (SIBM), Pune, India. Professor Dwivedi is also currently leading the *International Journal of Information Management* as its Editor-in-Chief. His research interests are at the interface of Information Systems (IS) and Marketing, focusing on issues related to consumer adoption and diffusion of emerging digital innovations, digital government, and digital and social media marketing particularly in the context of emerging markets. Professor Dwivedi has published more than 500 articles in a range of leading academic journals and conferences that are widely cited (more than 48 thousand times as per Google Scholar). He has been named on the annual Highly Cited Researchers™ 2020, 2021 and 2022 lists from Clarivate Analytics. Professor Dwivedi is an Associate Editor of the *Journal of Business Research, European Journal of Marketing, Government Information Quarterly* and *International Journal of Electronic Government Research*, and Senior Editor of the *Journal of Electronic Commerce Research*.

Dr. Mahmud A. Shareef is a Professor of School of Business & Economics, North South University, Bangladesh. He is a Research Professor in Sprott School of Business, Carleton University, Ottawa, Canada. His research interest is focused on online consumer behavior, reformation of virtual organization, supply chain management, and social media promotion. He has published many papers addressing consumers' adoption behavior and quality issues of e-commerce, humanitarian supply chain management, and e-government in different refereed conference proceedings and leading international journals.

Dr. Muhammad S. Akram is a Senior Lecturer in Marketing at Essex Business School, University of Essex, UK. He is also the Programme Director of MSc Marketing and Brand Management at the Essex Business School. His research focuses on the intersection of Marketing and Management. He is particularly interested in digital technologies and their impacts on consumer behaviour and marketing strategy. He has published articles in the leading peer-reviewed journals in Marketing & Management.

Tegwen Malik is a lecturer in the School of Management with a focus on International Standards and Operations Management. She is Deputy Programme Director for MSc Management (and pathways) and oversees the coordination of independent learning MSc modules: MSc Dissertation and MSc Business Projects. Tegwen has successfully combined academic interests in both the sciences and management disciplines. For instance, she has carried out research in the field of oncology along with having many years experience in applied project management.

Dr. Vinod Kumar is a Chancellor Professor of Technology and Operations Management of the Sprott School of Business (Director of School, 1995–2005), Carleton University. He received his graduate education from the University of California, Berkeley and the University of Manitoba. Vinod is a well known expert sought in the field of technology and operations management. He has published over 150 papers in refereed journals and proceedings. He has won several Best Paper Awards in prestigious conferences, Scholarly Achievement Award of Carleton University for the academic years 1985–1986 and 1987–1988, and Research Achievement Award for the year 1993 and 2001. Vinod has given invited lectures to professional and academic organizations in Australia, Brazil, China, Iran, and India among others.

Mihalis Giannakis Professor Mihalis Giannakis, PhD HDR is Full Professor of Operations and Supply Management at Audencia Business School in France. He is a chartered mechanical engineer and started his career as field engineer of the national gas supply company of Greece. He has held faculty positions at the University of Warwick, University of Middlesex and the University of Brighton. He holds a BSc/MSc degree in Mechanical Engineering from the University of Patras, an MSc in Engineering Business Management from the University of Warwick and a PhD in Industrial and Business Studies from Warwick Business School, University of Warwick. He has conducted research and consulting work in financial services, construction, defence and aerospace, professional services and pharmaceutical companies.