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Disillusionment: A Prototype Analysis

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Abstract

Disillusionment is acknowledged to be a painful process with important personal and social consequences. However, scientific conceptualisations of the experience are inconsistent. Across four studies, we examined whether lay conceptions of disillusionment produce a consistent pattern of features. In Study 1 (N = 204), we extracted 19 features of disillusionment from open-ended participant definitions. In Study 2 (N = 131), participants rated the centrality of these features and indicated that features such as *discovery*, *disappointmen*t, and *loss*, were highly representative, while features such as *hopelessness*, *orientation*, and *truth*, were more peripheral. In two further studies, we used experimental designs to test the diagnosticity of these features. In Study 3 (N = 155), participants rated vignettes descriptions as more disillusioning when they were based on more, rather than less, prototypical disillusionment features. Given that disappointment is a feature of disillusionment, we conducted Study 4 (N = 64) to test whether the extracted features effectively distinguish disillusionment from disappointment. Overall, we found evidence to suggest that disillusionment contains a consistent set of features, and represents a state of negative epistemic affect associated with the violation of core assumptions. These results create avenues for research on disillusionment, its antecedents and its consequences.

Keywords: disillusionment, emotion, epistemic affect, meaning, prototype analysis

Disillusionment: A Prototype Analysis

Psychology has a history of examining how people respond when their cherished assumptions or treasured worldviews are challenged (Festinger, 1957; Greenberg et al., 1990; Heine, Proulx, & Vohs, 2006). Recently, there has been a surge in interest in the affective or emotional side of this process (Maher, Igou, & Van Tilburg, 2018; Proulx & Inzlicht, 2012; Van Tilburg & Igou, 2011). For example, researchers have begun investigating epistemic emotions; emotions related to learning and knowledge (Litman, Hutchins, & Russon, 2005; Maher, Van Tilburg, & Igou, 2019; Pekrun, Vogl, Muis, & Sinatra, 2016; Silvia, 2008). Similarly, we approach research on the violation of treasured worldviews, or assumptions, by exploring the experience of disillusionment.

Disillusionment is associated with epistemic challenges that involve a stark contradiction or even a shattering of core beliefs about the world (e.g., Janoff-Bulman & Berg, 1998). Although the experience has been associated with personal and social consequences like divorce (Huston, Caughlin, Houts, Smith, & George, 2001), aggression (Van Tilburg, Igou, Maher, & Lennon, 2019), and political polarization (Block, 2011; Fuchsman, 2008; Maher et al., 2018), conceptualizations of disillusionment are inconsistent. Much previous research has examined how people defensively manage the violation of treasured beliefs (e.g., Festinger, 1957; Festinger, Riecken, & Schachter, 1956), and we view disillusionment as an initial emotional manifestation of having these defences fully breached. To further elucidate the nature of the experience, we examine the common features of disillusionment with the aim of establishing a reliable conceptualisation to augment future research.

Contradictions of Treasured Beliefs

Interest in the defence and maintenance of treasured beliefs has formed the basis of many influential models of social psychology, including one of the foundational works of the

field—the theory of cognitive dissonance (Festinger, 1957). A memorable example of cognitive dissonance research concerns Festinger and colleagues' (1956) case study of "The Seekers"; a UFO cult who believed the world would end in a flood on December 21st , 1954. Festinger and colleagues focused on the fact that after this date passed (with no flood), much of the group strengthened their conviction and became increasingly evangelical about their beliefs. Historical tales provide further examples of proselyting in response to contradiction (see Festinger et al., 1956) and many have documented similar processes today (e.g., "The backfire effect"; Nyhan & Reifler, 2010). Thus, the cognitive processes and behavioural consequences of attempts to defend threatened beliefs have been well-documented (Festinger, 1957; Greenberg et al., 1990; Heine et al., 2006).

Importantly, strong epistemic contradictions do not always lead to defensive bolstering (Park, Edmondson, Fenster, & Blank, 2008) and might be subject to preconditions (Festinger et al., 1956). Furthermore, recent research suggests that people will most often update their views in line with new information, even if it contradicts their beliefs (Guess & Coppock, 2018; O'Connor, Maher, & Kadianaki, 2019). Overall, there is more to the experience of epistemic contradictions than dissonance (e.g., Park, 2010; Janoff-Bulman & Berg, 1998). Experiences that threaten important meaning frameworks can penetrate defensive barriers and shatter core beliefs, leaving people in a state of disillusionment (Janoff-Bulman & Berg, 1998). Although disillusioning experiences may have important consequences for individuals and society as a whole (Block, 2011; Huston et al., 2001; Fuchsman, 2008; Maher et al., 2018), there is little consensus among researchers over what disillusionment is.

Conceptualizations of Disillusionment

Definitions of the term disillusionment are many and varied. The *Merriam-Webster* dictionary defines disillusion as "being defeated in expectation or hope" ("disillusionment,"

[def. 1], n.d.). The reference to expectations conveys the epistemic nature of disillusionment, but the definition also portrays an affective state of negative valence. Interestingly, the etymology of the word *disillusion* suggests that early use of the term referred to the feeling of "being free from illusion", which indicates a more positive valence, at least with regard to criteria of rationality and living without (the so dearly held) illusions. Nevertheless, most current conceptualizations, which focus on immediate experiences of disillusionment, are overtly negative, and this notion is reflected in definitions provided in the psychological literature.

Researchers from various domains in psychology provide different definitions of disillusionment. In political psychology, Block (2011) defines disillusionment as a gap between 'what is' and 'what ought to be', which is quite broad. In relationship research, Niehuis and Bartell (2006) operationalize disillusionment as a decline in positive affect, positive perceptions of a partner, and a corresponding increase in negative affect and negative perceptions, or more generally, as a perceived change for the worse in relationship quality over time (Niehuis, Reifman, & Lee, 2015). Besides defining disillusionment in relationship terms, this approach also places an emphasis on the role of self-deceiving idealization in disillusioning experiences (Niehuis, Lee, Reifman, Swenson, & Hunsaker, 2011). Similarly, Janoff-Bulman and Berg (1998) describe disillusionment as a painful despair that arises from the violation of the fundamental assumptions people rely on to make sense of the world. Contrastingly, in decision making research, disillusionment has been operationalized as a feeling that accompanies performing below expectations on a simple puzzle (Heath & Jourden, 1997). Overall, academic conceptualizations point to remarkable, and in part fascinating, aspects of disillusionment, but are quite inconsistent.

Without a coherent definition of disillusionment, it is difficult to discern if these researchers are tapping into different forms of disillusionment, if they are measuring distinct

phenomena, or if they are actually studying disillusionment correlates. A coherent conceptualisation of disillusionment can reveal common contexts and features of the experience that will enable researchers to reliably test and measure disillusion. Ultimately, more conceptual and definitional clarity around this concept can guide future research.

Examining Disillusionment: Adopting a Prototype Approach

A common approach to establishing concept clarity in psychological research is to examine lay conceptions (Fehr & Russell, 1984; Hepper, Ritchie, Sedikides, & Wildschut, 2012; Kinsella, Ritchie, & Igou, 2015). Analyses of lay conceptions reveal how psychological constructs are used in everyday life and thus help researchers to reliably link them to behaviours and contexts (e.g., Kinsella et al., 2015). Indeed, it is important that psychological constructs reflect everyday conceptions; otherwise, they could turn out to be irrelevant to people's lives (Gregg, Hart, Sedikides, & Kumashiro, 2008). Knowing how lay people understand concepts like disillusionment can allow researchers to design studies tailored to these lay conceptualizations and thus improve construct validity. Accordingly, to develop and validate a coherent conceptualisation of disillusionment, we examine the common conceptions people hold.

Given the inconsistent nature of the disillusionment literature, we chose to examine the features of this experience using a prototype approach. This approach provides an inherent hierarchical structure of feature typicality, rather than presenting a definition that aims to be specific. In part, the trouble lies in the nature of affective states, which tend to be fuzzy, complex, and imprecise (Clore & Ortony, 1988; Fehr & Russel, 1984); however, literature shows that for affective states, prototypes are a useful way to represent such concepts. Indeed, similar affective concepts such as gratitude (Lambert, Graham, & Fincham, 2009), love (Fitness & Felcher, 1993), and nostalgia (Hepper et al., 2012), have previously been represented using a prototype approach (Fehr & Russell, 1984; see also Cantor &

Mischel, 1977). Prototype analyses aim to identify representative categories of different concepts by examining affective, cognitive, and motivational features and grouping them according to their centrality (Hepper et al., 2012).

In summary, disillusionment has been rarely, vaguely, and inconsistently defined in psychological literature. Nevertheless, this literature suggests that it has profound personal and social consequences (Huston et al., 2001; Janoff-Bulman & Berg, 1998; Maher et al., 2018). Thus, there are theoretical and practical reasons for researching the nature of disillusionment. We combine a data-driven prototype-approach, in conjunction with a theoretical framework, to suggest that the prototype structure of disillusionment will reflect a state of negative epistemic affect, associated with the contradiction of broad and meaningful knowledge structures. We aim to offer a compelling foundation for future research on the nature of disillusionment, its predictors, its experiences, and its consequences.

Study 1: Common Features of Disillusionment

The aim of Study 1 was to identify common features of the concept of disillusionment. We instructed participants to list the characteristics of disillusionment in an open-ended response format. We then used *NVivo plus* textual analysis software to identify the most commonly occurring features.

Method

Participants. We recruited 204 participants (138 women; M_{age} = 25.52, *SD* = 9.90; age range: 18 – 60 years) via email on an Irish university campus. All university students were sent an email inviting them to participate in a brief online study and providing a link for them to take part. They were required to be fluent English speakers. Participants resided in the UK and Ireland (*n* =196), elsewhere in Europe (*n* = 4), or the USA (*n* = 4).

Procedure. Participants were invited to take part in a study about the characteristics and features of disillusionment. After consenting to participate, participants were given the

following instructions: “We would like you to think about the features and characteristics of disillusionment. Take 5 minutes to jot down as many things that come to mind in the box below. You should write anything you associate with disillusionment; there are no right or wrong answers.” Following this, participants were thanked and debriefed.

Results and Discussion

For the first step in our prototype analysis, participants’ descriptions of disillusionment were divided into 628 different exemplars. An exemplar is either one item or one “unit of meaning” from multiple connected statements (Hepper et al., 2012; Joffe & Yardley, 2004). Each participant generated an average of 3.1 exemplars (e.g., “a sense of loss”, “misunderstanding”, “unmet expectations”). Next, we identified and removed idiosyncratic exemplars that could not be considered features of disillusionment and would confound the analysis. Exemplars were deemed idiosyncratic if they described the object of a participant’s personal experience with disillusionment (e.g., “the game SIM city”), or if they seemed irrelevant to the question (e.g., “the colour purple”).

The remaining exemplars were uploaded to *NVivo plus* for textual analysis. We conducted a word frequency analysis and grouped words that were synonyms of each other using NVivo’s internal dictionary. Through this analysis the 2,633 words within the text were grouped into 871 different categories (i.e., words and synonyms) that were each given a weighted percentage reflecting the frequency of the word relative to the total words analysed. As a word may fit more than 1 category, the weighted percentage assigns a portion of the word's frequency to each one so that the overall total does not exceed 100%. Each category included a list of similar words from the data that help describe the group. We extracted features from these 871 categories in four steps.

Firstly, only categories that received a weighted percentage of over 0.5% were considered eligible to form a feature. This left us with 38 candidate features. Next, we

removed categories that referred to objects of disillusionment (e.g., “something”, “someone”), categories that referred to verbs with no specific relation to disillusionment (e.g., “comes”, “going”) and categories that directly referred to disillusionment (e.g., “disillusioned”, “disillusionment”). This left us with a sample of 24 candidate features. In the third step, we combined categories that described the same feature (e.g., “thought” and “thinking”). We judged categories as describing the same feature if they shared three or more words. The aggregated the weighted frequencies of combined categories as these figures were distributed among all 871 word-groups to ensure that the total did not exceed 100%. In a final step, we sought to add the weighted frequency of categories we excluded in Step 1, to the features we established in Step 3, whenever they described the same feature. This allowed us to estimate a more accurate weighted frequency number for each feature. As in Step 3, categories were combined if they shared 3 or more similar words and only categories that contained a weighted percentage of over 0.1% were combined (e.g., “find” and “discover”). Overall, we extracted of 19 features from the data. Table 1 lists these features alongside an example of their use in the raw data. It is important to note that these examples do not define particular features, but rather embed them into the meaningful context provided by participants in this Study.

The features we distilled suggest that disillusionment involves both epistemic (*discovery*, *expectations*, *reality*, *idea*, *truth*) and affective (*feeling*, *disappointment*, *sad*, *loss*, *hopelessness*) components. On an epistemic level, disillusionment is associated with a discovery that violates expectations in a predominantly negative fashion. Features such as *truth* and *reality* reveal that disillusionment concerns topics that are central to people’s understanding of the world. The fact that the affective features were overtly negative and relatively extreme (e.g., “an intense feeling of disappointment”) indicates that disillusionment represents a violation of core knowledge structures. The features of *orientation*, *reality,* and

truth are, in this context, relatively neutral. Finally, categories of *trust* and *betrayal* reflect a social element to disillusionment. These features are associated with the experience of being let down or disappointed by others.

Table 1 provides the weighted percentage applied to each grouping through the NVivo analysis. These ratings provide an initial indication of the representativeness of each feature. More specifically, they reflect how easily different features come to mind when people consider the concept of disillusionment. However, in line with previous prototype research (e.g., Hepper et al., 2012; Kinsella et al., 2015), we sought to further assess the representativeness of each feature by collecting centrality ratings from a separate sample of participants.

Study 2: Centrality of Disillusionment Features

In Study 2, we sought to assess the centrality of the features distilled in Study 1. That is, we assessed the representativeness of the common features of disillusionment. In keeping with earlier research using this approach (e.g., Hepper et al., 2012; Kinsella et al., 2015), we asked an independent sample of participants to rate how well each of the 19 features related to the concept of disillusionment.

Method

Participants. We recruited participants via Mturk. Participants were required to be fluent English speakers to take part. Initially, we had 167 completed survey responses. To screen data for careless responding, the study included an attention check that asked participants to give a specific response to a specific question and there was also a language fluency check that asked participants to describe the experience of disillusionment in their own words. Participants were excluded if they failed the attention check (n = 7), failed to give a description of disillusionment (e.g., wrote nothing; n = 9), completed the study in under 2 minutes (n = 10), or a combination of the three criteria (n = 10). This left us with a final

sample of 131 participants (48 women; M_{age} = 35.73, *SD* = 10.64; age range: 18 – 64 years) for analysis. Each participant was compensated with 0.50 US dollars for their participation.

Procedure. Participants were informed that they would be shown a list of features associated with the word disillusionment and that accompanying each word would be a context that explains how the feature relates to disillusionment (see Table 1). Their task was to rate how closely each feature related to the concept of disillusionment on a scale ranging from 1 *(not at all related) to* 8 *(extremely related)*.

Results and Discussion

The mean centrality rating for each feature is presented in Table 1. Ratings ranged from 4.46 to 6.02, with a mean rating of *M* = 5.34, 95% CI [5.26, 5.41]. To test the reliability of these ratings we computed a two-way mixed effects intra-class correlation (ICC), treating the 19 features as cases and the 131 participants as items (Koo & Li, 2016). ICC assesses the reliability of ratings by comparing the variability of different ratings on the same cases to the total variation across all ratings and all cases. The ICC coefficient ranges from 0 to 1, with values closer to 1 indicating stronger reliability. Importantly, we found that participant ratings displayed strong reliability (ICC = .83, 95% CI [.79, .87]). Overall, in line with the notion that the concept of disillusionment reflects a prototype structure, participants considered some features as more central than others and there was strong consistency across these ratings.

We found that *discovery*, *disappointment*, *expectations*, *false/wrong*, *feeling*, *loss*, and *reality*, rated as highly representative. This corroborated findings from Study 1 where these features received high ‘weighted percentage’ ratings (i.e., ratings above the median), indicating that they come to mind easily for participants when they think of disillusionment. This reinforces the notion that conceptualisations of disillusionment contain both epistemic and affective core components. The presence of *reality* as a core feature highlights the

existential character of disillusionment. Also, in line with Study 1, we found that the features *orientation*, *bad*, *idea*, *sadness*, *truth,* and *hopelessness* ranked among the less representative features. Interestingly, both *orientation* and *hopelessness* are future orientated features, while *idea* refers to the past or antecedents of disillusionment (e.g., preconceived ideas). In contrast, features with higher ratings refer to short-term present experiences.

There was also some discrepancies between the findings of Study 1 and Study 2. Specifically, we found relatively high centrality ratings for *illusion*, *betrayal,* and *trust* in this study, but relatively low weighted percentages in Study 1. Also, features of *thinking*, *goodness*, and *confusion* were given high weighted percentages in Study 1 but received low centrality ratings in Study 2[1]. Thus, these features may be less reliable in their representativeness. Interestingly, *betrayal*, *trust,* and *illusion* refer to the social features of disillusionment. Divergent definitions of disillusionment differentially emphasise either interpersonal relationships (e.g., Huston et al., 2001; Niehuis et al., 2011), or falsified predictions (Block, 2011; Fuchsman, 2008). The variability in findings on the social features across studies may indicate that the Study 1 sample focused more on falsified predictions and less on interpersonal factors as core to the experience of disillusionment compared to the Study 2 sample. This could reflect the fact that the Study 1 participant sample was predominantly students. Nevertheless, the observed variability might enable us to identify the most representative features of disillusionment across different populations.

Study 3: Feature Diagnosticity Tested

In Study 1, we extracted features from open-ended descriptions of disillusionment. In Study 2, a separate group of participants rated the representativeness of these features in abstract form. In Study 3, we created vignettes to embed features in a novel context and

[1] There was a significant sex difference on ratings for one of the 19 features. The feature of *good (goodness)* was rated as more central to disillusionment by female participants (M = 5.77, SD = 1.92) than by male participants (M = 4.70, SD = 2.23), $F(1, 131) = 7.77$, $p = .006$, $\eta_p^2 = .057$. This may help explain why goodness received a high weighted percentage in Study 1, which featured a higher proportion of female participants.

assess their diagnosticity. In other words, we investigated if these features act as cues that distinguish a disillusioning experience from a non-disillusioning experience. Prototypical features should represent the concepts they define in naturally occurring settings and effectively describe these concepts without using the concept term (Fehr & Russell, 1984). Furthermore, more central features should prove more diagnostic.

Based on results from Studies 1 and 2, we created three separate categories to represent our overall findings on the prototype structure of disillusionment. Previous research used a similar procedure to model levels of prototypicality of a relatively complex everyday concept (modesty; Gregg et al., 2008). Accordingly, we divided the features of disillusionment into three categories. We performed median splits of the weighted percentage scores from Study 1 and centrality ratings in Study 2. A feature was considered central if it ranked in the top split in both Studies 1 and 2. Features ranked in the lower split in both Studies 1 and 2 were labelled as peripheral. Features that ranked in the top split of Study 1 or Study 2, but not both, were labelled as intermediate. We tested the diagnosticity of disillusionment features using these three categories.

More prototypical features are more representative, or closer to the meaning, of the superordinate concepts they define (Rosch, 1978). Thus, the more central a category of features is to the concept of disillusionment, the more effectively they should convey the experience in a natural context. We created four vignettes to test this. One vignette was constructed using only central features of disillusionment, one using only intermediate features, and one using only peripheral features. Importantly, we also included a control vignette that described a negative experience of similar content, without referring to any of the features of disillusionment. Based on Study 1 and 2 findings, we hypothesised that vignettes constructed using disillusionment features would be more characteristic of disillusionment than the control vignette. Furthermore, we predicted that the prototypicality

of each category would be reflected in disillusionment ratings. Specifically, the scenarios described using central features and intermediate features should be more prototypical of disillusionment than the scenario described using peripheral features.

Methods

Participants and design. As in Study 1, we recruited participants with an invitation via email to the entire student population on an Irish university campus. Initially, the survey received 221 responses. As in Study 2, participants were excluded if they spent under 2 minutes on the survey (n =45) or were non-native English speakers (n =21). Overall, 155 participants (91 women; M_{age} = 23.98, SD =7.76; age range: 18-53 years) took part in Study 3 and met these criteria[2]. We used a within-subjects design, meaning that each participant read all four vignettes (central, intermediate, peripheral, and control).

Materials and procedure. Participants were invited to take part in a study about identifying emotional experiences, and read four short scenarios describing a person's experience in a new job (Appendix A). Each scenario featured the same unpleasant job experience. Across three of the four scenarios, the description of the character's experience was embedded with either central (centrality: M = 5.68, SD =.33), intermediate (centrality: M = 5.51, SD =.45) or peripheral features (centrality: M = 4.80, SD =.28) of disillusionment. For the control vignette, the same negative job experience was described using words of negative valence that we did not identify as features of disillusionment in Study 1 (e.g., difficult, distress, challenge, and struggle).

After each vignette, participants rated the extent to which the scenario described a disillusioning experience on a seven-point scale from 1 *(not at all disillusioning)* to 7 *(extremely disillusioning)*. To control for any effect of the described characters' gender,

[2] The student sample and the lack of financial compensation offered here may explain the lower percentage of retained participants compared to the Study 2.

approximately half of participants read a scenario describing a male's experience and the others read the scenario describing a female's experience.

Results and Discussion

We conducted a repeated measures ANOVA to determine the effect of vignette type on disillusionment ratings. The overall omnibus effect of vignette type was significant, $F(3, 462) = 174.56$, $p < .001$, $\eta_p^2 = .531$. We tested planned contrasts between each of the prototypical vignettes and the control vignette. As hypothesised, the experience described in the control vignette ($M = 2.16$, $SD = 1.26$) was rated as significantly less disillusioning than the experiences described in the peripheral ($M = 4.73$, $SD = 1.62$), $t(154) = 15.48$ $p < .001$, $d = 1.27$, intermediate ($M = 5.19$, $SD = 1.64$), $t(154) = 18.56$ $p < .001$, $d = 1.50$, and central ($M = 5.21$, $SD = 1.61$) vignettes, $t(154) = 18.64$ $p < .001$, $d = 1.51$. Furthermore, among the vignettes containing disillusionment features, the peripheral vignette was rated as less disillusioning than both the intermediate, $t(154) = 2.99$ $p = .003$, $d = .24$, and central vignettes, $t(154) = 3.25$ $p = .001$, $d = .27$. There was no significant difference between ratings of the central vignette and ratings of the intermediate vignette.

To explore if the gender of the person described had an effect on disillusionment ratings across vignettes, we ran a 4 × 2 mixed ANOVA on disillusionment ratings with vignette as a within-subjects factor and the gender of the vignette character as a between-subjects variable. Crucially, we found there was no significant vignette × gender interaction, $F(3,459) = 1.33$, $p = .26$, $\eta_p^2 = .009$, indicating that the effect of vignette type on disillusionment ratings was not significantly influenced by the gender of the character in the vignette.

These results demonstrate that the features of disillusionment identified in Study 1 convey the experience when used to describe a negative life event. All three vignettes embedded with features of disillusionment described a disillusioning event more effectively

than the vignette embedded with control words. Moreover, we found support for the prototypical structure we established using the results of Studies 1 and 2. Specifically, vignettes embedded with central or intermediate features were rated as more disillusioning than the peripheral vignette. Thus, the representativeness of these features varies in prototype fashion. Importantly, these results complement our findings from Studies 1 and 2 by demonstrating that these features portray the experience of disillusionment when placed in a meaningful context. These findings support the notion that three prototypical categories may be necessary for particularly complex phenomenon that vary readily across contexts (Gregg et al., 2008)

Study 4: Distinguishing Disillusionment from Disappointment

Study 3 tested and confirmed that the features we derived (Study 1) represent the concept of disillusionment accordingly in a given context. However, we did not test how well these features distinguish disillusionment from other similar experiences. Consistently, an issue with previous operational definitions of disillusionment is that in some cases they seem similar to disappointment (e.g., performing below expectations on a task; Heath and Jourden, 1997; see also "disillusionment," [def. 2], n.d.) and in Studies 1-3 we established that disappointment is a central feature of disillusionment. For these reasons, we investigated if the features we derived can distinguish disillusionment from disappointment—a seemingly similar affective state.

We test the distinctiveness of disillusionment features by asking people to generate instances of both disillusionment and disappointment (counterbalanced), before in each case rating how well the features we have established relate to each one. Three possible outcomes to this test vary in how much they support the distinct quality of disillusionment. A null result (i.e., no difference feature ratings), would suggest that these features do not distinguish disillusionment from disappointment. A difference in intensity only (i.e., a main effect of

emotion), would suggest that disillusionment is distinct from disappointment, but may also support the interpretation that it is an extreme form of disappointment. That is, if each feature is rated higher in disillusionment in a uniform fashion. Finally, a difference in content and intensity (i.e., an emotion × feature category interaction) would suggest that disappointment is distinct in quality and quantity. In this case, the difference in feature ratings would not be uniform and not indicative of more intense and less intense instances of the same underlying experience.

Going beyond Study 3, we aimed to examine how well features distinguish disillusionment from disappointment using participants' self-generated instances of both experiences, thus accounting for variations in contextual features. This is important because there may be different forms of disillusionment (e.g., romantic disillusionment; Niehuis et al., 2019) that vary by context and prototypical features of the experience should capture all forms. Testing how well features represent self-generated disillusionment experiences provides a stringent test of the generalizability of our findings.

Methods

Participants. We used a within-subjects design to maximise statistical power and based our sample size on previous prototype research (Hepper et al., 2012; Kinsella et al., 2015). We recruited 64 participants (44 women; M_{age} = 36.94, *SD* = 11.94; age range: 18 – 64 years) for a within-subjects study via Prolific Academic. Participants were required to be fluent English speakers to take part. They were compensated with 1 pound Sterling for their participation. Four participants were removed for failing an attention check that asked them to identify the fourth word in a simple sentence.

Materials and procedure. In two separate writing tasks, participants were asked to provide an example of a disillusioning and a disappointing experience. In particular, we gave them the following instructions: "Think about the experience of disillusionment

(disappointment). In the box below, write about a brief example of a disillusioning (disappointing) experience. It can be about you or about someone else." After writing about each experience (see Appendix B for examples), participants were presented with the disillusionment features from Study 1, accompanied by contextual information (see Table 1), and asked to rate how closely each feature related to the experience they described. That is, each participant gave an example of a disillusioning and a disappointing experience and rated how well disillusionment features related to each experience. We randomized the presentation order of the writing tasks (disillusionment and disappointment) and features (see Table 1).

Results and Discussion

We conducted a 2 × 2 mixed ANOVA on feature ratings; emotion (disillusionment vs. disappointment) was the within-subjects factor and order of presentation was the between-subjects factor. As predicted, there was a main effect of emotion, with participants rating disillusionment experiences (M = 5.23, SD = 1.13) higher than disappointing experiences (M = 4.84, SD = 1.12), $F(1,58) = 6.90$, p =.011, η_p^2 = .11. Importantly, there was no effect of order, ($F < 1$) and no order × emotion interaction ($F < 1$).

To test how feature ratings differed across categories of prototypicality, we conducted a 3 × 2 repeated measures ANOVA with emotion (disillusion vs. disappointment) and category (central vs. intermediate vs. peripheral) as within-subjects factors. There was a main effect of emotion (means as above; $F(1,59) = 6.83$, p = .011, η_p^2 = .10) and a main effect of category, $F(1,59) = 41.23$, $p < .001$, η_p^2 = .41. As predicted, central features were rated highest (M = 5.42, SD = 0.99), followed by intermediate features (M = 5.12, SD = 1.09), with peripheral features rated lowest (M = 4.56, SD = 1.11). A simple effects analysis of category ratings within the disillusionment condition revealed that there was a multivariate effect of category, $F(2, 58) = 21.72$, p <.001. Pairwise comparisons reveal that peripheral features (M

= 4.68, *SD* = 1.40) were rated significantly lower than both central (*M* = 5.54, *SD* = 1.20), t(59) = 6.83 *p* <.001, *d* = .83 and intermediate features (*M* = 5.45, *SD* = 1.21), t(59) = 5.60 *p* < .001, *d* = .72. There was no significant difference between central and intermediate features. This pattern of findings is consistent with those of Study 3.

The mixed design ANOVA also revealed a significant emotion × feature interaction, $F(2,118) = 4.30$, $p = .016$, $\eta_p^2 = .07$. Simple effects analysis showed that, for intermediate features, disillusioning experiences (*M* = 5.45, *SD* = 1.20) were rated significantly higher than disappointing experiences (*M* = 4.78, *SD* = 1.39), $t(59) = 3.68$ $p = .001$, $d = .48$. Disillusioning experiences were also rated more highly on central features (*M* = 5.54, *SD* = 1.20), compared to disappointing experiences (*M* = 5.30, *SD* = 1.13) and the same is true for peripheral features (*M* = 4.68, *SD* = 1.40, *M* = 4.45, *SD* = 1.24, respectively). However, these differences were not significant (*p* =.13, *p* =.22, respectively). These data suggest that intermediate features are particularly useful for distinguishing disillusionment from disappointment, but not central features. Given that disappointment is a central feature of disillusionment, but naturally rated as more closely associated with disappointing experiences, it is plausible that this feature skews the mean ratings of features from the central category. Therefore, to investigate if other core features of disillusionment distinguish these experiences we conducted additional analyses of these simple effects after removing disappointment as a core feature.

Additional Analysis. We removed the confounding feature of disappointment from our analysis and ran a follow-up mixed design ANOVA with the same variables as above. The main effect of emotion was retained $F(1,59) = 8.98$, $p = .004$, $\eta_p^2 = .13$, as was the overall interaction effect, $F(2,118) = 3.29$, $p = .04$, $\eta_p^2 = .05$. However, simple effects analyses revealed that, with the omission of disappointment as a feature, central features were now significantly more associated with disillusioning experiences (*M* = 5.39, *SD* = 1.27),

compared to disappointing experiences (M = 4.94, SD =1.23), $t(59) = 2.62$ p = .011, d = .34. As before, these emotions differ in intermediate features but not peripheral features. These findings offer support for the prototypicality of the central features we derive.

The results of this study further substantiate the prototypical nature of the disillusionment features we distilled. Conforming the results of Study 3, central and intermediate features were more closely associated with disillusionment compared to peripheral features. Furthermore, the findings of this study clarify that these features distinguish disillusionment from a seemingly similar experience.

General Discussion

We conducted four studies examining lay conceptions of disillusionment. Our findings organise these conceptions into a prototype structure of more and less representative features. In Studies 1 and 2, we explored the open-ended generation of disillusionment features and ratings of their centrality. Combining the NVivo analysis of Study 1 with the centrality ratings in Study 2 we identified a set of 19 disillusionment features that varied in their representativeness. In Study 3, we embedded these features into meaningful contexts and assessed their diagnosticity. Participants rated scenarios embedded with these features as more disillusioning than similar scenarios embedded with negative, but non-disillusioning features. These vignette ratings also supported the ordinal structure of the prototype categories we created. In Study 4, participants rated self-generated disillusioning experiences as more representative of our features when compared with disappointing experiences. Thus, the features established in Study 1, effectively distinguish disillusioning experiences from highly similar emotional events. Collectively, these studies reveal the prototypical nature of the disillusionment concept.

The central features of disillusionment convey its affective and epistemic nature. Feeling, disappointment, and loss all relate to affective states that, in context, reflect a

negative valence. The remaining central features (discovery, expectations, false/wrong, and reality) highlight the fact that this negative affect is associated with knowledge falsification. We found that the representativeness of confusion, goodness, loss of trust and betrayal varied between Study 1 and Study 2 and choose to categorize these as intermediate features whose representativeness may be less central, but not peripheral. Finally, peripheral features included components related to motivation impulses (e.g., orientation), or the lack thereof (hopelessness). Although negative affect characterizes disillusionment, sadness was rated as a peripheral feature.

Fit with Previous Theory and Research

To date, research on the conceptualization of disillusionment has been rare, yet our research findings fit well with previous studies in related areas. Niehuis and Bartell (2006) made the most systematic attempt to measure disillusionment with the Marital Disillusionment scale (see also Niehuis et al., 2019). Although, this scale measures disillusionment specifically in the context of marriage, many of the items correspond to the features of disillusionment identified here. For example, items specifically refer to disappointment, expectancy violation, feeling tricked/cheated or deceived, confusion, loss of drive and hopelessness. Moreover, these appear to measure a single underlying factor (Niehuis & Bartell, 2006). While there have been few other systematic attempts to measure disillusionment, the experience was previously classified by Clore, Ortony, and Foss (1987) as an affective cognitive condition and the features we have identified in this research confirm this classification. More specifically, disillusionment is conceptualized as a state of epistemic negative affect. The experience also appears to share many common features with the concept of meaning threat.

Knowledge structures form an important basis for a person's well-being and sense of meaning in life (Heine et al., 2006; Janoff-Bulman, 1992). Indeed, constructing assumptions

about the world and the self is an important function of human cognitive and motivational systems (Pekrun et al., 2016). On this basis, the violation of knowledge structures should be associated with affective and emotional turmoil. Recently there has been renewed interest in emotions associated with knowledge falsification and generation. Pekrun et al. (2016) defines epistemic emotions as emotion aroused by cognitive incongruity, with knowledge or knowledge generation as the object focus. While it may not qualify as a prototypical emotion, disillusionment fits the definition of a state of negative epistemic affect. However, unlike other epistemic states such as confusion, disillusionment appears to be broader and associated with more extreme epistemic violations. These features give the experience an existential character (Van Tilburg et al., 2019).

Limitations and Future Directions

A prototype analysis is one way of determining how lay people represent concepts but there are limitations to this approach (Clore & Ortony, 1991; Medin & Ortony, 1989). We acknowledge that prototypical conceptions are insufficient to fully define emotional experiences. As Clore and Ortony (1991) state, prototypes apply more to conceptions of emotions than to emotions themselves. They may nevertheless be useful for the identification, classification, and recognition of emotional occurrences. Consistently, we have demonstrated that people recognise and distinguish the experience of disillusionment based on the prototypical features we established. The functions of conceptions are broader than recognition and classification (see Smith & Medin, 1981), but identifying the prototypical features of lay conceptualisation provides valuable information. For example, knowing how people distinguish disillusionment from similar features like disappointment will allow researchers to better establish divergent validity in their measurements, even if it these features do not fully explain the divergent causes of these experiences.

The demographics of our study samples limit the conclusions we can draw from this research. The average age of our participants was relatively young and given the study recruitment procedure, there was likely to be an overrepresentation of students. A sample of older participants may have different impressions of disillusionment. Also, participants largely originated from English speaking nations. Many emotions (such as fear) have strong cross-cultural consistency, but this may not be the case for more complex affective states. Experiences like disillusionment or nostalgia are likely shaped by social and cultural influences (Shaver, Schwartz, Kirson, & O'Connor, 1987). Indeed, the specific cultural worldview that one applies to their understanding of the world will likely dictate which experiences one finds disillusioning or not. Future research should explore the possibility that disillusionment is conceived differently across cultures.

The choice of disappointment as the comparison emotion in Study 4 complicated our findings. Specifically, the fact that the experience qualified as a central feature of disillusionment confounded our analysis of category effects. Nevertheless, given that disappointment and disillusionment overlap to some extent, it was necessary to demonstrate their distinctiveness. Indeed, previous research has also sought to differentiate these experiences using different methods (Niehuis et al., 2019). Moreover, the experiential overlap of the experiences provided a stringent test of the degree to which the features we distilled are representative of disillusionment. For example, it would be less informative if these features proved more disillusioning in comparison to happiness or anger where there is not much experiential overlap. The fact that they distinguish disillusionment from a highly similar effective state is evidence of their prototypical functions (Rosch, 1978).

Conclusion

Our research systematically examined lay conceptions of a profound, often life-changing, experience: disillusionment. Adopting a prototype approach, we found that people

conceive disillusionment as an experience that concerns a person's knowledge of the truth. It can lead people to question their understanding of reality or to question the benevolence of the world they live in. Lay conceptualizations of disillusionment characterize it as a negative affective state arising from serious violations of core assumptions and resulting in sadness, confusion and disappointment, as well as a loss of trust and hope. This research establishes a prototype concept that can inform future investigations of the nature of disillusionment.

References

Block, R. (2011). What about disillusionment? Exploring the pathways to black nationalism. *Political Behavior, 33,* 27-51. doi:10.1007/s11109-010-9126-9

Cantor, N., & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. *Journal of Personality and Social Psychology, 35,* 38– 48. doi:10.1037/0022-3514.35.1.38

Clore, G. L., & Ortony, A. (1988). Semantic analyses of the affective lexicon. In V. Hamilton, G. Bower, & N. Frijda (Eds.) *Cognitive science perspectives on emotion and motivation* (pp. 367- 397). Amsterdam: Martinus Nijhoff.

Clore, G. L., & Ortony, A. (1991). What more is there to emotion concepts than prototypes? *Journal of Personality and Social Psychology, 60,* 48-50. http://dx.doi.org/10.1037/0022-3514.60.1.48

Clore, G. L., Ortony, A., & Foss, M. A. (1987). The psychological foundations of the affective lexicon. *Journal of personality and social psychology*, *53,* 751. doi:10.1037/0022-3514.53.4.751

Disillusionment[def1]. (n.d.). *In Merriam-Webster's online dictionary*. Retrieved from https://www.merriam-webster.com/dictionary/disillusion

Disillusionment[def2]. (n.d.). *In Oxford Dictionaries*. Retrieved from https://en.oxforddictionaries.com/definition/disillusionment

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General,* 113, 464 – 486. doi:10.1037/0096-3445.113.3.464

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Festinger, L., Riecken, H. W., & Schachter, S. (1956). *When prophecy fails.* Minneapolis,

MN, US: University of Minnesota Press. http://dx.doi.org/10.1037/10030-000

Fitness, J., & Fletcher, G. (1993). Love, hate, anger, and jealousy in close relationships: A prototype and cognitive appraisal analysis. *Journal of Personality and Social Psychology*, 65, 942–958. doi:10.1037/0022- 3514.65.5.942

Fuchsman, K. A. (2008). *The psychology of political disillusionment: Progressives and World War I.* Paper presented at the international society of political psychologists (ISPP) 31st annual scientific meeting, November 25, Paris, France.

Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S. and Lyon, D. (1990). Evidence for terror management theory 11: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology, 58,* 308-318. doi:10.1037/0022-3514.58.2.308

Gregg, A. P., Hart, C. M., Sedikides, C., & Kumashiro, M. (2008). Everyday conceptions of modesty: A prototype analysis. *Personality and Social Psychology Bulletin, 34,* 978 – 992. doi:10.1177/0146167208316734

Guess, A., & Coppock, C. (2018, June 11). Does Counter-Attitudinal Information Cause Backlash? Results from Three Large Survey Experiments. Retrieved from https://alexandercoppock.com/papers/GC_backlash.pdf

Heath, C., & Jourden, F. J. (1997). Illusion, disillusion, and the buffering effect of groups. *Organizational Behavior and Human Decision Processes, 69*, 103-116. doi:10.1006/obhd.1997.2676

Heine, S., Proulx, T., & Vohs, K. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and Social Psychology Review, 10,* 88-110. doi:10.1207/s15327957pspr1002_1

Hepper, E. G., Ritchie, T. D., Sedikides, C., & Wildschut, T. (2012). Odyssey's end: Lay

conceptions of nostalgia reflect its original Homeric meaning. *Emotion, 12*, 102-119. doi:10.1037/a0025167

Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. *Journal of Personality and Social Psychology, 80*, 237-252. doi:10.1037/0022-3514.80.2.

Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a New Psychology of Trauma.* New York, NY: Free Press.

Janoff-Bulman, R., & Berg, M. (1998). Disillusionment and the creation of value: From traumatic losses to existential gains. In J. Harvey (Ed.), *Perspectives on loss: A sourcebook* (pp. 35-44). Washington, DC: Taylor & Francis.

Joffe, H., & Yardley, L. (2004). Content and thematic analysis. In D. F. Marks & L. Yardley (Eds.), *Research Methods for Clinical and Health Psychology* (pp. 56-68). London, England: Sage.

Kinsella, E. L., Ritchie, T. D., & Igou, E. R. (2015). Zeroing in on heroes: a prototype analysis of hero features. *Journal of Personality and Social Psychology, 108*, 114-127. doi:10.1037/a0038463

Koo, T. K., & Li, M. Y. (2016). A Guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine, 15*, 155–163. doi:10.1016/j.jcm.2016.02.012

Lambert, N. M., Graham, S. M., & Fincham, F. D. (2009). A prototype analysis of gratitude: Varieties of gratitude experiences. *Personality and Social Psychology Bulletin, 35*, 1193-1207. doi:10.1177/0146167209338071

Litman, J., Hutchins, T., & Russon, R. (2005). Epistemic curiosity, feeling-of-knowing, and exploratory behaviour. *Cognition and Emotion, 19*, 559-582. doi:10.1080/02699930441000427

Maher, P. J., Igou, E. R., & Van Tilburg, W. A. P., (2018). Brexit, Trump, and the polarizing effect of disillusionment. *Social Psychological and Personality Science*, 9, 205-213. https://doi.org/10.1177%2F1948550617750737

Maher, P. J., Van Tilburg, W. A. P., & Igou, E. R. (2019). Lost and found in multidimensional space: Epistemic motivations define and distinguish negative affective states. *Personality and Social Psychology Bulletin, 45*, 1409–1424. doi: 10.1177/0146167219833395

Medin, D. L., & Ortony, A. (1989). Psychological essentialism. In S. Vosniadou & A. Ortony (Eds.), *Similarity and analogical reasoning* (pp. 179-195). New York, NY, US: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511529863.009

Niehuis, S., & Bartell, D. (2006). The Marital Disillusionment Scale: Development and Psychometric Properties. *North American Journal of Psychology*, *8*, 69-84. doi: 10.1007/s11274-015-1903-5

Niehuis, S., Reifman, A., Al-Khalil, K., Oldham, C. R., Fang, D., O'Boyle, M., & Davis, T. H. (2019). Functional magnetic resonance imaging activation in response to prompts of romantically disillusioning events. *Personal Relationships*, *26*, 209-231. https://doi.org/10.1111/pere.12272

Niehuis, S., Reifman, A., & Lee, K.-H. (2015). Disillusionment in cohabiting and married couples: A national study. *Journal of Family Issues*, 36, 951-973.

Niehuis, S., Lee, K. H., Reifman, A., Swenson, A., & Hunsaker, S. (2011). Idealization and disillusionment: A review of theory, method, and research. *Journal of Family Theory and Review*, 3, 273-302.

Nyhan, B. & Reifler, J. (2010) When Corrections Fail: The Persistence of Political Misperceptions. *Journal of Political Behavior, 32,* 303-330. https://doi.org/10.1007/s11109-010-9112-2

O'Connor, C., Maher, P. J., & Kadianaki, I. (2019). Exploring the relationship between lay theories of gender and attitudes to abortion in the context of a national referendum on abortion policy. *PloS one*, *14*, e0218333.

Park, C. L. (2010). Making sense of the meaning literature: an integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, *136*, 257-301. doi: 10.1037/a0018301

Park, C. L., Edmondson, D., Fenster, J. R., & Blank, T. O. (2008). Meaning making and psychological adjustment following cancer: the mediating roles of growth, life meaning, and restored just-world beliefs. *Journal of Consulting and Clinical Psychology*, 76, 863-875. doi:10.1037/a0013348

Pekrun, R., Vogl, E., Muis, K. R., & Sinatra G. M. (2016). Measuring emotions during epistemic activities: the epistemically-related emotion scales. *Cognition and Emotion*, *31*, 1268-1276. doi:10.1080/02699931.2016.1204989

Proulx, T., & Inzlicht, M. (2012). The five "A"s of meaning maintenance: Finding meaning in the theories of sense-making. *Psychological Inquiry, 23,* 317-335. doi:10.1080/1047840x.2012.702372

Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and categorization* (pp. 27-48). Hillsdale, NJ: Lawrence Erlbaum.

Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology, 52*, 1061-1086. doi:10.1037//0022-3514.52.6.1061

Silvia, P. J. (2008). Interest -- the curious emotion. *Current Directions in Psychological Science*, 17, 57-60. doi:10.1111/j.1467-8721.2008.00548.x

Smith E. E., & Medin, D. L. (1981). *Categories and concepts*. Cambridges, MA: Harvard University Press.

Van Tilburg, W. A., Igou, E. R., Maher, P. J**.,** & Lennon, J. (2019). Various forms of existential distress are associated with aggressive tendencies. *Personality and Individual Differences, 144*, 111-119. doi:10.1016/j.paid.2019.02.032

Van Tilburg, W. A. P., & Igou, E. R. (2011). On boredom and social identity: A pragmatic meaning-regulation approach. *Personality and Social Psychology Bulletin, 37,* 1679–1691. doi:10.1177/0146167211418530

Table 1

Disillusionment features with sample contexts (Study1) and categories of centrality (Study 2)

Vignette Categories	Feature	Context	Study 1 Weighted Percentage	Study 2 Centrality Rating
Central	Discovery	Discovering that something was not as good as one believed it to be	3.63	6.00
Central	Feeling	Feeling upset/feeling lost	3.49	5.34
Central	Disappointment	An intense feeling of disappointment	2.21	6.02
Central	Loss	A sense of loss/ loss of drive	2.00	5.31
Central	Expectations	Expectations have not been meet	1.42	5.89
Central	False/Wrong	Wrong perception/being proved wrong	1.14	5.50
Inter	Reality	Woken up to reality/Reality setting in.	1.03	5.57
Inter	Thinking	I don't know what to think anymore	3.30	4.98
Inter	Confusion	A sense of confusion	1.08	5.10
Inter	Goodness/benevolence	Not as good as you envisioned	0.97	5.09
Inter	Illusion	I felt tricked	0.56	6.00
Inter	Trust (loss of)	More cynical/less trusting	0.52	5.89
Inter	Betrayal/Deception	Feeling cheated	0.51	5.94
Periph	Orientation	Direction/change of direction	0.91	4.57
Periph	Hopelessness	Abandoning hope	0.89	5.16
Periph	Truth	To bring to light the truth of a subject	0.69	4.76
Periph	Sadness	Sadness/unhappiness	0.69	5.09
Periph	Idea	A preconceived idea	0.63	4.46
Periph	Bad	The world is bad	0.50	4.74

Note: central= central category, inter= intermediate category, periph= peripheral category

Appendix A

Central Vignette

When Person X started his(her) new job with a homelessness charity his(her) expectations were high. Finally (s)he would be doing work that would make a difference in people's lives. However, over time (s)he discovered that this job was not what (s)he had hoped it would be. The reality of the situation made him feel increasingly disappointed. There was little (s)he could do to help people struggling to find a home. He had been proven wrong. Now (s)he is feeling down and has lost his(her) drive and motivation.

Intermediate Vignette

Person W has recently started a new job with a homelessness charity. However, now (s)he is beginning to feel cheated. (S)He had been tricked into thinking (s)he would be able to make a big difference in homeless people's lives. Now it is clear to him(her) that this position is not as good as it was made out to be. (S)He feels confused and does not know what to think anymore. The experience has made him(her) more cynical and less trusting.

Peripheral Vignette

Person V has recently started a new job with a homelessness charity. (S)He previously had preconceived ideas of how this job would work but since then (s)he has found out the truth. It is clear to him(her) that (s)he cannot help people in this role the way (s)he had hoped (s)he could. Taking this job was a bad idea. (S)He feels sad and has abandoned his(her) hopes of making it work. (S)He has decided that he needs a change of direction.

Control Vignette

Person Z has recently started a new job at a homeless charity. It requires him(her) to work long hours and (s)he is finding the job difficult. (S)He knew this job would be tough so the situation (s)he finds himself in is not totally unexpected. Fighting homelessness is a serious challenge and it can be hard to watch people in distress. Although, (s)he is struggling

somewhat, (s)he is determined to keep working and believes (s)he can find a way to manage the stresses of this new job.

Appendix B

Examples of Disillusionment	Examples of Disappointment
Participant 1	
During my third year at university, I became very aware that my chosen field of profession was not going to be enjoyable…	*One of my areas of investment has a daily lottery, which is currently ongoing. This is for shareholders, and each has a 6% chance of winning each day. Yet I have not won once.*
Participant 2	
My partner of many years, whom I trusted, left me for someone else with almost no warning.	*I was disappointed when my meal at a restaurant didn't taste good and wasn't a good use of my money.*
Participant 3	
I felt generally disillusioned with British politics after the referendum. It seemed impossible to obtain reliable information both sides of the argument seemed to use misinformation and this seemed to happen across all the political parties.	*As a child I really wanted a particular toy dog for Christmas I did not receive it and felt disappointed*