

Hypothesis:

- Under mortality salience, people tend to conduct behaviors that help regain control and keep a balanced state. Since symmetrical designs provide a sense of balance and stability, and people show general aesthetic preferences for symmetrical designs, we propose that individuals are more likely to show preferences for the symmetrical patterns under mortality salience than in the control condition.
- Under mortality salience, high self-esteem people are more likely than low self-esteem ones to retain self-control and keep a balanced state, which drives them to prefer symmetrical designs and patterns. In contrast, people with low self-esteem tend to conduct giving-up behavior and ignore the deviation from a balanced state, which drives them to show less preference for symmetrical product designs and patterns.

Logic flow for the second hypothesis (self-esteem as a moderator):

Mortality salience has different effects on people with different extent of self-esteem. Under mortality salience, high self-esteem people are more likely to engage in activities that help regain self-control and keep a balanced state while avoiding indulgent consumption and giving-up behaviors. However, low self-esteem people tend to ignore self-esteem-related activities more and conduct indulgent consumption under mortality salience. Symmetrical patterns in product designs arouse feelings of balance, stability, and calmness. In contrast, asymmetrical patterns provide a sense of novelty and rule-breaking. Thus, we propose that under mortality salience, high self-esteem people tend to prefer symmetrical designs and patterns, which helps achieve a balanced state. In contrast, low self-esteem people are less likely to prefer symmetrical product designs and artworks.

Literature Review (essence):

1. Terror Management Theory (TMT): The Definition and Mortality Salience (MS) as an Important Part of It

Terror Management Theory (TMT) proposes that people have the instinctive abilities to arouse strong awareness when vulnerability and mortality are made salient, which may result in overwhelming terror and anxiety (Becker, 1997). According to TMT, the most fundamental human motivation is the innate desire for self-protection and continuous life (Greenberg et al., 1986). Based on this motivation, people barely think of death due to their deeply innated fear of it (Solomon et al., 1991). Thus, when mortality is made salient, people will perceive anxiety from their vulnerability and need to manage the error based on TMT (Becker, 1997). According to TMT, the coping way for individuals under mortality salience is to enhance their self-esteem within specific cultural contexts (Rosenblatt et al., 1989). Thus, the two golden rules for cultural anxiety defense under mortality salience are 1) people's faith in the specific cultural worldviews and shared values, and 2) their belief in their behavior's consistency with these values (Greenberg et al., 1990; Rosenblatt et al., 1989). As a result, mortality salient individuals tend to buffer the anxiety by 1) Cultural worldview defense (i.e., maintaining their belief in the cultural worldviews consistent with their values while defending themselves from those who threaten these values) and 2) enhancing their self-esteem in specific self-esteem domains that can provide them with resources to enhance their self-esteem under mortality salience (Pyszczynski et al., 2004).

2. How Mortality Salience Affects Consumers' Sense of Control and Desire for Balance

Snyder (1997) suggested that TMT could also be understood as a control theory. Based on Instrumental conditioning (Dickinson, 1994), people generally tend to control uncertainty by conducting behaviors that result in positive outcomes while avoiding negative outcomes. Under mortality salience, individuals are forced to deviate from the balanced state due to the overwhelming terror, which drives them to restore a balanced state and regain control (Simon et al., 1997). According to TMT, there are generally two motives that are beneath individuals' control behaviors over the mortality salience (Pyszczynski et al., 1997). One is the symbolic-defensive motive, which is defined as the control over existential terror and anxiety by cultural worldview defense (i.e., protective motive). The other is the self-expansive motive, which is defined as the individuals' self-esteem enhancement when faced with mortality salience (i.e., acquisitive motive). Both motives have been discussed within the control theories field for a long time (e.g., Burger, 2013; Deci, 1973; Schlenker, 1980). Regarding the cultural worldview defense, Snyder (1997) emphasized that since cultural standards and values established societal control over individuals, the cultural worldview defense could be viewed as a kind of control and order regain. Besides, as people conduct behaviors that enhance self-esteem under mortality salience, they are actually having self-control and experience higher self-esteem. Some studies have also pointed out that people tended to conduct compensatory action to regain balance when the balanced state is threatened (e.g., Pickett et al., 2002). The cultural worldview defense and self-esteem enhancement under mortality salience can be viewed as means of compensatory action. However, the lack of experimental evidence called for the following studies to further prove the standpoint. Agroskin and Jonas' (2013) study explored the motivation processes underly MS in-group defense, successfully proving that under mortality salience, individuals increased their needs for control and conducted compensatory behaviors to prevent randomness while maintaining order, filling Snyder (1997)'s research gap. Many studies have also indicated that individuals were prone to regain self-control and reduce uncertainty under mortality salience (e.g., Greenberg & Kosloff, 2008; Partouche-Sebban, 2016; Reiss & Jonas, 2019).

3. How Sensory Stimuli Affect Consumers' Sense of Control and Perception of Balance

Based on the Drive Theory (Geen & Gange, 1977; Peskin, 1997), people tend to restore Homeostasis (i.e., a balanced state) when the arousal (e.g., the deviated stimuli) is made salient (Steenkamp & Baumgartner, 1992). Many studies have indicated that decision-making could be an effective way to help individuals seek stability when faced with environmental fluctuations (e.g., Cabanac, 1971; Paulus, 2007). For example, when people feel physically cold, they tend to seek both physical and psychological warmth to keep a balanced state. Besides, Hadi et al. (2015) claimed that when individuals perceive the sensory stimuli that significantly transcend the optimal level, they tend to keep Homeostasis through compensation by other sensory dimensions. Thus, when people are exposed to mortality salience derived from some specific stimuli, they may also tend to seek other stimuli that can help them retain a balanced state.

People's need for psychological compensation can also explain why sensory stimuli can affect individuals' sense of control and perception of balance. For a long time, the concept of psychological compensation has been a crucial topic in various fields of psychological research including sensory and cognitive diseases (e.g., Kinnealey & Miller, 1993; Ohlsson, 1986), adult aging (e.g., Dixon, 1992; Seyyedrasooli et al., 2020), interpersonal deficits (e.g., Cappella, 1981; Ferraro, 1984), etc. Bäckman and Dixon (1992) defined the two essential criteria for psychological compensation in specific situations: 1) Individuals' awareness of the mismatch between personal capabilities and the specific demands; 2) The causal relationship between the mismatch and the compensatory behavior. Under mortality salience, individuals are more likely to feel vulnerable and helpless to overcome the terror and anxiety brought by their own death (Becker, 1997), which is consistent with the first criterion. Besides, the vulnerability drives people to conduct cultural worldview defense and self-esteem enhancement as compensatory behavior (Rosenblatt et al., 1989), which meets the second criterion. Thus, people generally have the desire for psychological compensation under mortality salience.

Previous studies have indicated that sensory stimulation could positively compensate for individuals' sensory and cognitive deficits by providing regular training or therapy, which serves as a means of psychological compensation (e.g., Choi & Yoo, 2016; Johansson et al., 1993). Among the sensory stimuli, visual stimuli have a significant impact on both physical and psychological balance. Redfern et al. (2001) have revealed that visual stimuli played the most important role in keeping the physical balance of both healthy and disabled subjects. Vermehren and Carpenter (2020) indicated that under high postural threats, individuals were more likely to have lower balance confidence and higher anxiety, which drove them to pay more attention to visual stimuli in the environment since more careful detection can help them increase the balance confidence. Thus, when people feel anxious and terrified under mortality salience, they may pay more attention to visual stimuli to regain control and keep a balanced state.

4. How Symmetrical vs. Asymmetrical Designs Affect Consumers' Sense of Control and Perception of Balance

Symmetry is an essential and distinct feature of visual stimuli (Bertamini et al., 2018). In the marketplace, symmetry is viewed as one of the most important factors in product design (Creusen et al., 2010; Tinio & Leder, 2009; Wang & Hsu, 2020). Previous studies have linked symmetrical designs with a balanced sense while asymmetrical ones with an imbalanced feeling (e.g., Hansen, 2010; White, 2011). Symmetrical patterns feature in the equal distributions of elements from the central point to both sides of the vertical, horizontal, or diagonal axis, showing a strong sense of stability, certainty, and calm effect (e.g., Bogle, 2013; Bothwell & Mayfield, 1991; White, 2011) and providing people with balanced, stable, and peaceful feelings (Langford, 1936; Jacobsen & Höfel, 2002; Tian et al., 2012). In contrast, asymmetrical patterns feature uneven components (e.g., colors, textures) on either side of an axis, emphasizing various sized elements and the sophisticated distributions of white space to show the dynamic, unstable, and imbalanced state (Hansen, 2010).

Symmetrical patterns evoke the senses of consistency, formality, and classicism (i.e., traditional standards), showing a static state. Besides, symmetry provides order and helps relieve tension. In contrast, asymmetrical patterns arouse feelings of modernism (rule-breakers) and energy (Simonson & Schmitt, 1997), which lack a sense of balance and integrity (Fu et al., 2013). Symmetrical designs are usually adopted in formal designs since it is the most classic and ‘safest’ design philosophy that can provide our minds with a balanced feeling, which is consistent with the paradigm of human brains. However, it is much more difficult for asymmetrical designs to achieve a balanced state since it needs sophisticated designs of sizes, forms, colors, etc. (Hansen, 2010).

Based on the previous literature (e.g., Agroskin & Jonas, 2013; Vermehren & Carpenter, 2020), visual stimuli can play a significant role in helping with people’s tendency to regain control and keep a balanced state under mortality salience. Since symmetrical designs can provide a sense of balance while asymmetrical ones arouse the feeling of instability, people may tend to prefer symmetrical patterns to asymmetrical ones under mortality salience since they are consistent with their needs for a balanced state. Some theories can also back up the hypothesis of people’s preferences for symmetrical patterns under mortality salience. The sexual selection theory indicated that people preferred symmetrical facial characteristics since they implied higher fertility, healthier offspring, and self-protection abilities (Buss & Barnes, 1986; Jones et al., 2001; Langlois and Roggman, 1990; Rhodes et al., 2001), which can strengthen people’s self-preservation abilities under mortality salience, helping them regain psychological stability and keep a balanced state (Fitri et al., 2020). The perceptual fluency theory and mere exposure effect indicated that people prefer familiar objects more (e.g., Bornstein & D’agostino, 1992; Lauer, 2011), which is consistent with the familiarity feeling of symmetrical designs (Bigoin-Gagnan & Lacoste-Badie, 2018; Friedenberg & Bertamini, 2015; Henderson et al., 2003). Since Agroskin and Jonas’ (2013) study showed that people’s favoritism of the familiar objects under mortality salience was a means to regain control and keep order, they may especially prefer symmetrical designs since they are more familiar to them. These theories further support the hypothesis of individuals’ higher preferences for symmetrical designs under mortality salience.

5. How Self-esteem Moderates People’s Desire for Control and Balance Under Mortality Salience

Self-esteem is one of the most important components of the self-concept (Cast & Burke, 2002). Generally, self-esteem is defined as positivity (i.e., the overall positive self-evaluation) of oneself (Neff, 2011; Rosenberg et al., 1995). According to Gecas (1982), Self-esteem is divided into two dimensions: 1) Competence (i.e., the self-evaluation of one’s survival abilities) and 2) Worth (i.e., the self-evaluation of one’s importance to the world). Many studies have claimed that high self-esteem can positively impact both individuals and society (e.g., Orth et al., 2012; Smelser, 1989; Zeigler-Hill, 2013). In contrast, low self-esteem is related to many physical and psychological problems (e.g., anxiety, schizophrenia) (Irving, 1990; Wardle & Cooke, 2005). Thus, people tend to enhance their self-esteem to maintain mental health (Harmon-Jones et al., 1997; Wylie, 1974). Many studies have also revealed that high self-esteem could enhance individuals’ coping resilience under mortality salience (e.g., Goldenberg et al., 2000; Greenberg & Pyszczynski, 1985; Harmon-Jones et al., 1997; Kashima et al., 2004; Schmeichel, 2009; Schmeichel & Martens, 2005).

Previous studies have revealed the different reactions of high self-esteem and low self-esteem people to mortality salience. Muraven & Baumeister (2000) indicated that high self-esteem individuals tended to show the greatest extent of self-regulation and regain control through rational compensatory behaviors under mortality salience. However, low self-esteem individuals tended to have much poorer self-regulation and conduct giving-up behaviors (O’Guinn & Faber, 1989). Some studies have further supported the standpoint that under mortality salience, high self-esteem people are more likely to seek self-control and a balanced state than low self-esteem ones. Goldenberg et

al.'s (2000) study indicated that under the mortality salience, high body esteem subjects tended to view their bodies as more important sources that provide self-esteem and help remain in a balanced state, while low body esteem subjects tried to defend themselves by identifying less with their bodies. Besides, high body esteem subjects showed more positive attitudes to body-involved activities (physical sex) than low body esteem subjects. This study also revealed that low body esteem subjects showed significantly decreased appearance monitoring (i.e., conduct giving-up behavior) than high body esteem ones under mortality salience though they are all appearance-oriented. Besides, low self-esteem participants made significantly higher indulgent choices and excessive consumption under mortality salience than in the control condition as a means of escaping from self-awareness (e.g., Ferraro et al., 2005; Mandel & Smeesters, 2008). In contrast, the high self-esteem subjects had lower indulgent choices and remain self-regulation and self-control under mortality salience. Ferraro et al.'s (2005) study also showed that under the mortality salience, high virtue self-esteem subjects would have significantly higher donation amounts to the charity and showed significantly higher intentions to engage in socially beneficial activities than in the control condition since virtue is an important resource that provides them with self-esteem and helps them regain control. However, low virtue self-esteem subjects had lower donation amounts and revealed significantly lower intentions to participate in these activities. Thus, high self-esteem people are more likely to strive for self-control and a balanced state than low self-esteem people under mortality salience. Based on this standpoint, we claim that self-esteem may serve as a moderator of individuals' preferences for symmetrical designs under mortality salience. High self-esteem people are more likely to show higher preferences for symmetrical patterns than low self-esteem ones since they have a stronger desire for self-regulation and a balanced state under mortality salience than low self-esteem individuals.

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Hypothesis:

- Under the priming of COVID-19 pandemic, the self-discrepancy (i.e., the gap between individuals' ideal self and actual self) become more distinct. Based on the escape theory and Compensatory Consumer Behavior Model, people tend to increase the escapism from self-discrepancy and conduct compensatory behaviors, which boosts their desire for fantasy appeals and surrealistic things to distract themselves from the real world.

Literature Review (essence):

1. Self-Discrepancy: Definition and Effects on People's Escapism and Compensatory Behavior

Higgins (1987) defined self-discrepancy as the gap between standard and reality in some essential self-concepts (i.e., the gap and incongruity between individuals' ideal self and actual self). For example, an individual can experience a discrepancy between his or her desired appearance (e.g., a good-looking idol) and actual outlooking (e.g., a common face). When self-related concepts are made salient, people tend to focus more on themselves and compare the ideal self with the actual self, making self-discrepancy more distinct (Duval & Wicklund, 1972). When the self-awareness is negative, people tend to escape from the actual self (Baumeister, 1990; Steenbarger & Aderman, 1979). For example, participants were more likely to get away from the mirrors (as a priming of self-awareness) when they received negative evaluation related to themselves (Duval & Wicklund, 1972). Gibbons and Wicklund's (1982) study also indicated that men were more likely to escape from self-related concepts when received gorgeous women's negative evaluation. Previous studies have explained people's escaping behavior under negative self-awareness and prominent self-discrepancy. For example, the goal systems theory proposed that several means will be triggered to achieve the goal when the motivation to activate that goal is prominent (Kruglanski et al., 2018). Thus, self-discrepancy can serve as an escape motivation and trigger escaping behaviors (Chatard & Selimbegović, 2011) from self-awareness, which echoed the goal systems theory. Since self-discrepancies can bring about negative emotional feelings (e.g., depression and anxiety), people are more likely to conduct compensatory behaviors to alleviate self-discrepancies (Carver & Scheier, 1990; Packard & Wooten, 2013). Mandel et al. (2017)'s Compensatory Consumer Behavior Model also suggested that under self-discrepancies, people are motivated to restore the desired state by conducting self-regulation consumer behaviors. For example, people were more likely to have higher willingness to pay for high-status products when feeling less powerful than others (Rucker & Galinsky, 2009). Among Mandel et al.'s (2017)'s Compensatory Consumer Behavior Model, Escapism (i.e., the escaping consumer behaviors) can serve as a mitigation means of self-discrepancy, which motivates people to distract oneself from the negative self-awareness. Previous studies have indicated that people would focus more on hedonic consumption to escape from self-discrepancy. For example, individuals may engage in binge eating food with more calories to reduce self-awareness (e.g., Cornil & Chandon, 2013; Polivy et al., 1994).

2. COVID-19's Effects on Increasing People's Self-Discrepancies and Escaping Behaviors

a) Terror Management Theory (TMT)

The outbreak and rapid spread of COVID-19 have become the greatest public health and safety threat the world has faced for a century. As of October 2022, in excess of 627 million cases of COVID-19 had been confirmed worldwide and COVID-19-related deaths exceeded 6.58 million (Our World in Data, 2022). The COVID-19 pandemic has induced a salient threat and widespread fears and anxieties about personal health and safety. According to the Terror Management Theory (TMT), people have the instinctive abilities to arouse strong awareness when vulnerability and mortality are made salient, which may result in overwhelming terror and anxiety (Becker, 1997). Under the threats of COVID-19's priming, individual mortality becomes more salient. Under mortality salience, people's negative self-awareness would become more prominent because of the gap between desired safe state and the vulnerability in front of death. Thus, people were more likely to escape from self-awareness under mortality salience (Greenberg et al., 1986). Previous studies indicated that people were more likely to distract themselves from self-awareness by escaping and compensatory behaviors. For example, Mandel and Smeesters' (2008) study revealed that mortality salient subjects used fewer first-person pronouns in a foreign language task than in the control condition, showing greater intentions of self-awareness escape. Besides, mortality salient subjects ate more cookies than control subjects, revealing increased hedonic overconsumption behavior under mortality salience, which is consistent with the escapism compensatory consumer behavior in Mandel et al.'s (2017) study. Since COVID-19 can provide deep threat that leads to mortality salience, people are more likely to have higher self-discrepancy under the COVID-19 priming, which will further lead to escapism and compensatory behaviors.

b) Out-group prejudice increase self and group discrepancy

Self-discrepancies can become prominent when individuals feel socially excluded by an important referent group (e.g., peer students) (Baumeister & Leary, 2017). Besides, social identity is an individual's self-concept related to his or her membership in a social group, which serves as the important source of value, emotional certainty, and self-esteem (Tajfel et al., 1979). When one's social group is discriminated or stigmatized by others, the self-discrepancy between one's desired and actual social identity can become distinct (Mandel, 2017). According to the Terror Management Theory (TMT), when the mortality is made salient, people tend to show stronger out-group prejudice as a means of cultural worldview defense to restore a balanced state (Greenberg et al., 1990; Harmon-Jones et al, 1996; Nelson et al, 1997; Rosenblatt et al, 1989). Previous studies have showed that priming COVID-19 (as a threat) can greatly increase out-group discrimination (e.g., Croucher et al., 2020; Meleady et al., 2021; Roberto et al., 2020) under the Behavioral Immune System (BIS) (Schaller & Park, 2011), especially toward the racial minorities. For example, Lu et al. (2021) showed that the priming of COVID-19 can intensified participants' prejudice of Asian and Hispanics roommates. Since COVID-19 could induce more out-group discrimination and stigmatization, more people may experience self-discrepancies under the priming of COVID-19.

c) COVID-19 increases Internet use, social comparison, and further self-discrepancies

Individuals may experience virtual self-discrepancy when they engage in online activities. For example, it is found that exposure to beautiful photos on social media platforms and exposure to slim models in online advertisements make people more concerned about their body shape (Ahadzadeh et al., 2017; Casale et al., 2021; Kim, 2008), which let them further compare themselves with the desired images and experience a greater self-discrepancy. Besides, the Internet connections enable people to acquire different information and compare different social groups more conveniently than in the real world. The group discrepancy derived from the gap between desired and actual social identity can become more evident. For example, young people view the expectations of virtual peer groups as very significant, they try to meet these expectations in order to become popular (Siibak, 2009). Therefore, when they engage in the online social group comparison between the ideal social status and their actual status, they may experience greater self-discrepancy. Previous studies have indicated that due to the COVID-19 pandemic quarantines, the social distance has brought people with loneliness, depression, and anxiety. This, in turn increased their escapism from the real world while indulging themselves in the Internet use to meet their hedonic needs. For example, some studies have showed that COVID-19's outbreak has significantly increased people's Internet addiction (Lin, 2020; Servidio et al., 2021). Approximately half of the respondents in a survey reported using social media more frequently than they ever had before, and this habit was predicted to continue in the post-pandemic era (Hanif, 2020). Thus, COVID-19 pandemic has facilitated the social comparison by increasing Internet use among people, which further increases their self-discrepancies as the consequence.

3. People's Desire for Fantasy Appeals as a Means of Escapism: COVID-19's Priming Effects on Increasing People's Desire for Fantasy Appeals and Surrealistic Things

Fantasy appeals are defined as unreal, unfamiliar, and exciting elements. Through exposure to these elements, people can escape from the self-discrepancy and acquire compensation. For example, virtual makeover and beauty apps can help beautify consumers' appearances on the social media, further narrowing the gap between perceived ideal self and actual self (Chae, 2017). The development and widespread of Internet allowed people to conduct strategic impression management on various online platforms (e.g., social media and virtual games). Individuals can construct their identity in cyberspaces and create a virtual self freely (Suh, 2013). For example, people may beautify their photos to build a more desirable image. In online games, players can use different game avatars to express themselves (Messinger et al., 2008). An individual's virtual self can reflect one's ideal self, which can be deviated from the actual self in the real world (Jin, 2012). Besides, Bessière et al. (2007) indicated that players tend to create game avatars with more favorable attributes than their actual selves in the real world. This can shorten the distance between the virtual self and the actual self. Therefore, people can experience a decrease in self-discrepancy when using the virtual identity online to interact with others. Besides, individuals perceive a lower level of supervision and feel less pressured by social norms online (Hu et al., 2017; Selwyn, 2008). This can serve as a means for people to escape from the real world by lessening the social comparison. Therefore, people may experience a decrease of group discrepancy due to fewer duties and responsibilities on the Internet. Since COVID-19 can increase people's self-discrepancies and their tendency for escapism and compensatory behaviors, it is more likely for people to have higher desire for fantasy appeals and surrealistic things under the COVID-19 priming.

4. Priming and Prime: The Definition, Mechanism, and General Effects: How COVID-19 (as a prime) Could Affect People's Desire for Fantasy Appeals

Janiszewski and Wyer (2014) defined priming as the processing of an initial stimulus (i.e., the prime stimulus) that can affect people's reaction to a subsequent stimulus (i.e., the target stimulus). For example, the priming of promotional advertisements can increase people's positive evaluation of the juice (Braun, 1999). The priming of incidental exposure of brand names can increase consumers' buying intention for the relevant products (Nedungadi, 1990). In our study, we aim to investigate COVID-19 pandemic, as a prime stimulus, and its effects on people's desire for the target stimuli of fantasy appeals and surrealistic things.

Previous studies have illustrated the essential operation mechanism of priming. First, there must exist prime stimulus and target stimulus. Second, the specific characteristic of the prime stimulus (i.e., COVID-19's effects on escapism in our study) must be the causation that can explain people's corresponding reaction to the target stimulus (i.e., Increasing desire for fantasy appeals in our study) (Janiszewski & Wyer, 2014). Third, the priming effect should be temporary and unintended, influencing people without their awareness (Lombardi et al., 1987; Martin et al., 1990). As an essential representation of priming, goal priming can motivate people to increase self-control and conduct goal-consistent behaviors (Förster et al., 2007; Moskowitz & Gesundheit, 2009). Moskowitz (2002) also indicated that goal priming could lead to compensatory behaviors, which is reflected in Kruglanski et al. (2018)'s goal systems theory and Mandel (2017)'s Compensatory Consumer Behavior Model. Since the self-discrepancy is more evident under COVID-19's priming, we propose that under the COVID-19 priming, people tend to achieve the goal of relieving self-discrepancy by exposing to fantasy appeals and surrealistic things.

Previous studies have illustrated some examples of direct goal priming. For example, priming the words "thirst" and "dry" increased participants' consumption of a soft drink called Kool-Aid because the drink served as the direct means of pursuing the goal of solving the "thirsty" problem (Strahan et al., 2002). Priming good performances led to greater efforts and better performances on an intellectual task while priming cooperation spirit drove the participants to attach greater importance to a commonly held resource (Bargh et al., 2001). It is worth noting that the COVID-19 priming's effects on people's desire for fantasy appeals is more like indirect priming than direct priming. Indirect priming occurs when a primed stimulus increases the likelihood of an indirect but relevant consequence of experiencing the primed stimulus (Janiszewski & Wyer, 2014). Previous studies have demonstrated some examples of indirect goal priming. One type is to utilize the metaphor (i.e., people's escapism under COVID-19) retrieved from the initial direct priming (i.e., COVID-19) as indirect priming. For example, the direct priming of a friend increased participants' willingness to lend help because of the indirect priming of cooperation retrieved from the direct one (Fitzsimons & Bargh, 2003). Griskevicius et al. (2009) indicated that priming fearful stimulus could increase participants' desire for safety (i.e., indirect priming) and further increase their desire for social goods that symbolize a safe state. As an important type of indirect priming, spreading activation can facilitate the priming process by allowing the prime stimulus to activate

relevant knowledge and content that are pre-existed in the memory (e.g., COVID as a prime stimulus while escapism as the relevant knowledge), which increases the corresponding reaction to the target stimulus (Increasing desire for fantasy appeals as a means of escapism) (e.g., Anderson, 1983; Berger & Fitzsimons, 2008; Collins & Loftus, 1975; Krishna & Morrin, 2008).

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Hypothesis

- ✚ **Mediator (Main effect):** When people feel they are socially excluded (i.e., a state of being alone, isolated, or ostracized by other individuals or social groups), their self-discrepancy (i.e., the gap between the actual self and ideal self) tends to increase, which drives them to conduct compensatory behaviors to fill the gap. As one response mechanism, some people are more likely to immerse in escapism, distract themselves from reality, and engage in distant realms (e.g., hedonic and indulgent consumption). As significant hedonic stimuli, fantasy appeals and surrealistic things tend to facilitate escapism. Thus, we propose that individuals are more likely to prefer fantasy appeals and surrealistic cues when socially excluded than in the control situation.

- ✚ **Moderator (Interaction effect):** When people feel they are socially excluded (a state of being alone, isolated, or ostracized by other individuals or social groups), people with strong re-affiliation possibilities (i.e., high possibilities for being socially included in the future) are more likely than people with weak re-affiliation abilities to face the prejudice and actively alter their situations. Thus, they are more likely to prefer more realistic stimuli than fantasy appeals (surrealistic things). In contrast, people with weak re-affiliation possibilities tend to indulge in escapism and conduct more hedonic behavior, which drives them to show more preferences for fantasy appeals and surrealistic things.

Literature Review

1. Social Exclusion: Definition and Impacts on Consumer Behaviors

Human beings are social animals that have strong needs for belongingness through social grouping (Baumeister & Leary, 1995). Building strong social ties and being accepted is important for individual development, physical health, and mental well-being (Baumeister, 2005). Thus, having stable social relationships and secure group attachment is critical to individual survival, which features low attachment anxiety and low affiliation avoidance (Smith et al., 1999).

Nevertheless, social relationships are not always stable. Many people have experienced social exclusion to a different extent. According to Baumeister (2005), social exclusion is a state of being alone, isolated, or ostracized by other individuals or social groups (Williams, 2007).

Wesselmann et al. (2016) further divided social exclusion into two core experiences: 1) Being socially ignored (i.e., ostracism) and 2) Being socially rejected (i.e., not wanted by others). Prior studies on intergroup behaviors have indicated two mechanisms that reinforce social exclusion. First, people have significant in-group favoritism and out-group prejudice, which can cause social exclusion of dissimilar others (Byrne, 1997; Tajfel et al., 1971). Second, individuals' failure in self-regulation and conforming to group standards resulted in social rejection, and even punishment (e.g., stigmatization), (Beran et al., 2014; Rosenblatt et al., 1989; Strickland & Crowne, 1962).

Prior studies have indicated social exclusion's negative impacts on individuals. Cacioppo and Hawkey (2003) stated that people who were socially excluded reported more negative physical and psychological health. Besides, social exclusion can cause pathologically negative emotions like distress, sadness, and anger (e.g., Williams, 2007; Williams & Zadro, 2001). Apart from these negative emotions, people also tend to experience a loss of control, which may lead to self-defeating behaviors like unhealthy consumption, impulsive eating, low persistence of failure, etc. (Baumeister, 2005; Twenge et al., 2002). In this situation, individuals either actively behave to restore control or passively accept social exclusion without changing behaviors (Williams, 2007).

Multiple studies have shown that individuals are motivated to engage in behaviors that help reduce the negative impacts of social exclusion. When people were implicitly ignored (i.e., ostracized), they tended to have more self-focused responses and restore control through status signaling (Baumeister et al., 1996; Pyszczynski, 2004). For instance, they may engage in conspicuous consumption and become more risk-taking in financial decisions to show their power (Duclos et al., 2013; Lee & Shrum, 2012). However, when they were explicitly rejected, they were more likely to conduct prosocial behaviors (e.g., donation) to restore control through boosting social belongings, showing a response to meet relational needs. Besides, Su et al.'s (2017) study has revealed product and brand switching as significant ways for individuals to regain control under social exclusion since these can reaffirm their efficacy in choices, providing a source of unique decision power. This is consistent with Wan et al.'s (2014) study that socially excluded individuals were more likely to prefer distinctive products that differentiate themselves from the majority of others (especially when the reaffiliation possibilities are low), which shows their tendency for uniqueness-seeking as a way to restore power and control.

However, few existing studies have explored people's escaping behaviors (i.e., distracting themselves from reality instead of resolving problems) under social exclusion. Thus, the current study aims to investigate social exclusion's effects on triggering individuals' escapism and relevant compensatory behaviors.

2. Self-Discrepancy: Definition and Effects on People's Escapism and Compensatory Behavior

When individuals are socially excluded by others, the self-discrepancy between one's desired and actual social identity can become distinct (Mandel, 2017). Higgins (1987) defined self-discrepancy as the gap between standard and reality in some essential self-concepts (i.e., the gap between individuals' ideal self and actual self). This gap becomes more distinct when people try to compare the actual self with the ideal self, especially when self-awareness is negative (Duval & Wicklund, 1972). Mandel et al.'s (2017)'s Compensatory Consumer Behavior Model proposed five strategies that individuals mainly adopt when experiencing self-discrepancy. Specifically, they are 1) Direct resolution (i.e., Purchasing products that can directly resolve the self-discrepancy); 2) Symbolic self-completion (i.e., Signaling symbolic mastery that shows status and power): Individuals' conspicuous consumption and financial risk-seeking under social exclusion can be viewed as examples; 3) Dissociation (i.e., Avoiding purchases in the domain of the self-discrepancy); 4) Fluid compensation (i.e., Affirming the self in a domain distinct from the domain of the self-discrepancy): Individuals' tendencies to product-switching and uniqueness-seeking under social exclusion can be viewed as examples for dissociation and (or) fluid compensation; and 5) Escapism (i.e., Distracting oneself or avoiding thinking about the self-discrepancy).

Escapism (i.e., escaping consumer behaviors) can serve as a mitigation means of self-discrepancy, which motivates people to distract themselves from negative self-awareness instead of directly resolving problems (Baumeister, 1990; Steenbarger & Aderman, 1979). For instance, participants were more likely to get away from the mirrors (as a priming of self-awareness) when they received negative evaluations related to themselves (Duval & Wicklund, 1972). Twenge et al.'s (2003) study indicated people's intention to avoid negative self-awareness when being socially excluded, showing that people tended to engage in escaping behaviors under the social exclusion.

Under escapism, people are motivated to distract themselves from reality and indulge themselves in hedonic stimuli (Heatherton & Baumeister, 1991). Previous studies have indicated that people would focus more on hedonic consumption to escape from self-discrepancy. For example, individuals may engage in binge eating food with more calories to reduce self-awareness (e.g., Cornil & Chandon, 2013; Polivy et al., 1994). Troisi and Gabriel's (2011) study revealed that people tended to consume more comfort food (e.g., chicken soup) to counter loneliness. These were consistent with social exclusion's impact on binge eating (Baumeister, 2005). Since prior studies have also revealed social exclusion's impact on indulgent behaviors, it is plausible to reason that when people try to escape from self-discrepancy caused by social exclusion, they may indulge in hedonic stimuli to distance themselves from reality.

Apart from hedonic consumption, previous studies have also shown that social exclusion predicted more online communication and game-playing behaviors since the Internet provides a virtual world for individuals to escape from reality. Notley's (2009) study revealed that teenagers who were socially excluded were more likely to use online communication to acquire a sense of belonging and inclusion. Gabbiadini and Riva (2018) found that socially excluded adolescents revealed a higher willingness to play violent video games and aggressive inclinations since these can help them regain power and control to encounter negative emotions caused by social exclusion.

From the above, social exclusion can make individuals' self-discrepancy more distinct, triggering compensatory behaviors to fill the gap between actual and ideal selves. Some people may engage in escaping behaviors to distract themselves from reality and indulge in distant, hedonic, and (or) virtual stimuli, which facilitates them to avoid negative self-awareness.

3. People's Desire for Fantasy Appeals as a Means of Escapism: Social Exclusion's Priming Effects on Increasing People's Desire for Fantasy Appeals and Surrealistic Things

Fantasy appeals are defined as unreal, unfamiliar, and exciting elements. Through exposure to these elements, people can escape from self-discrepancy and acquire compensation. For instance, virtual makeovers and beauty apps can help beautify consumers' appearances on social media, further narrowing the gap between the perceived ideal self and the actual self (Chae, 2017).

The development and widespread of the Internet allowed people to conduct strategic impression management on various online platforms (e.g., social media and virtual games), serving as an important source of fantasy appeals that help people escape from reality and self-discrepancy caused by social exclusion. The Internet allows people to construct their identities in cyberspaces and create a virtual self freely (Jin, 2012; Suh, 2013). The players can use different game avatars to express themselves (Messinger et al., 2008). Bessière et al. (2007) indicated that players tend to create game avatars with more favorable attributes than their actual selves in the real world. This can shorten the distance between the virtual self and the actual self. Therefore, people can experience a decrease in self-discrepancy when using a virtual identity online to interact with others. Besides, individuals perceive a lower level of supervision and feel less pressured by social norms online (Hu et al., 2017; Selwyn, 2008). This can serve as a means for people to escape from the real world by lessening perceived social exclusion. Therefore, people may experience a decrease in group discrepancy due to fewer duties and responsibilities on the Internet. Since social exclusion can increase people's self-discrepancies and their tendency for escapism and relevant compensatory behaviors, it is more likely for people to have a higher desire for fantasy appeals and surrealistic things when they are socially excluded than in the control situation.

4. How Reaffiliation Possibilities Moderate People's Desire for Fantasy Appeals and Surrealistic Things Under Social Exclusion

When people are socially excluded, they tend to have different responsive mechanisms to the situation. Specifically, they either try to behave similarly to the reference group (i.e., conformity) or show their uniqueness by differentiating themselves from the prior reference group. According to Wan et al. (2014), whether socially excluded individuals choose conformity or divergence depends on their cognitively assessed possibilities of successfully reaffiliating to the prior reference group, which is greatly influenced by the stability of exclusion causes. Combining the findings from attribution theory (Anderson, 1983; Weiner, 1985), the perceived stability (i.e., the difficulty of altering the current situation) of social exclusion's cause significantly influences individuals' belief in reaffiliation and guides corresponding behaviors. Specifically, people tend to distance themselves from prior reference groups when the social exclusion cause was stable (e.g., race and cultural background), which results in low motivation to seek reconnection and a desire to seek uniqueness (e.g., high preferences for distinctive products) since the reaffiliation possibilities are low. In contrast, they are more likely to believe in future inclusion and conform to the prior reference group when the social exclusion cause was unstable (changeable) (e.g., habits), indicating high motivation to seek reaffiliation and lower uniqueness-seeking needs (Wan et al., 2014).

Apart from the stability of social exclusion causes, several factors could also influence individuals' reaffiliation possibilities under social exclusion. The first factor is the sense of personal control. Personal control refers to individuals' capacity to alter events and master the environment, which provides a sense of stability and security when self-discrepancies occur (Burger, 1989; De Charms, 2013). Prior studies have revealed personal control's moderating effects on socially excluded individuals' reaffiliation abilities. For instance, Lachman and Weaver (1998) found that socially excluded individuals who had a higher sense of personal control reported better health and well-being than those with a lower sense of personal control. The second factor is resilience. Resilience is defined as positive adaptation in the face of adversity (Luthar et al., 2000), which indicates individual beliefs and capabilities to actively resist social exclusion (Iwasaki et al., 2005). Previous studies have shown several positive effects of resilience on individuals' reaffiliation abilities under social exclusion. For example, Arslan's (2019) research indicated that youths with high resilience tended to report higher life satisfaction under social exclusion, showing that resilience can help mitigate social exclusion's negative impacts on individual development.

Since people with high reaffiliation possibilities tend to conform to the prior reference group and (or) show a higher sense of personal control and resilience, they are more likely to actively face social exclusion and take practical actions to resolve the self-discrepancy and make themselves socially included in the future. On the other hand, people with low reaffiliation possibilities tend to distance themselves from the prior reference group and (or) reveal a lower sense of personal control and resilience. Thus, they are more likely to distance themselves from reality, escape from self-discrepancy, and indulge themselves in hedonic, virtual, and surrealistic stimuli.

Because individuals with low reaffiliation possibilities are more likely to escape from self-discrepancy when being socially excluded, we propose that they are also more likely to prefer fantasy appeals and surrealistic things in this situation. On the other hand, individuals with high reaffiliation possibilities are more likely to actively improve their current status by standing on the ground. Thus, they are more likely to believe in reality and work hard to change their situations, resulting in less preference for fantasy appeals and surrealistic things.

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