How Loneliness Spurs Materialism: Roles of Emotion Regulation, Self-enhancement, and Escapism

ABSTRACT

Loneliness is widespread in the United States afflicting an estimated 58% percent of American adults. Past research has found that loneliness may motivate individuals to compensate for their need for social fulfilment with materialism, however, why, and how this relationship occurs is still unclear. This research uses the compensatory consumer behavior model to reveal the process by which this occurs, specifically finding mediating roles of emotion regulation, self-enhancement, and escapism. Results from this study demonstrate how consumers seek to reduce their loneliness triggered self-discrepancy through compensatory consumer behavior with a consumption outcome of materialism. The key contribution of this research is to shed light on the under researched mechanism via which loneliness leads to materialism. It also contributes to the growing body of research on the psychological underpinnings of compensatory consumer behavior.

Keywords: Loneliness, Escapism, Materialism, Compensatory Consumer Behavior, Emotion regulation, Self-enhancement.

INTRODUCTION

Loneliness is an epidemic in the U.S. with a 2021 nationwide survey finding that 58 percent of respondents considered themselves lonely (Cigna, 2022) isolated and disconnected in their lives potentially due to decreasing household size, delaying marriage, and living longer (Wang, Wong, & Yuen, 2021). It is a subjective experience in which there is "a discrepancy between a person's achieved social relations and desired or expected levels of social relations" (Perlman and Peplau, 1981, p. 45). This self-discrepancy has been linked with many health-related issues ranging from obesity to premature death (Xu, 2018) and often results in unengaged employees resulting in about \$154 billion annually in lost productivity (Cigna, 2022). Loneliness may also negatively impact an individual's financial well-being by way of consumption preferences and behavior (Liu *et al.*, 2020). Indeed, Wang, Lisjak, and Mandel (2023) note that the aversive nature of self-discrepancies may motivate individuals to engage in self-regulation efforts such as different forms of consumption activities, called compensatory consumer behavior, to shift to their desired state.

Compensatory consumer behavior (CCB) refers to "any purchase, use, or consumption of products or services motivated by a desire to offset or reduce a self-discrepancy" (Mandel, Levav, & Galinsky, 2017, p. 134). Building on prior research which establishes that consumers employ compensatory behavior in reaction to self-discrepancies (c.f., Kim & Rucker, 2012), this research empirically tests the compensatory consumer behavior model proposed by Mandel et al. (2017) that theorizes the underlying how and why of self-discrepancies resulting in CCB. As individuals may engage in the process of CCB to diminish their perceived self-discrepancy, a situational outcome of materialism may be temporally engaging in specific consumption activities (Zheng, Baskin, & Peng, 2018). Prior research indicates factors that influence compensatory materialistic behaviors include self-esteem (Zhao, Tibber, & Butler, 2022), family relationship quality (Shrum,

Chaplin, & Lowrey, 2022), and depression (Segev, Shoham, & Gavish, 2015). For example, materialistic consumers place more importance on acquiring possessions merely for display, as ownership can broadcast one's desired self-image (Ryoo, Sung, & Chechelnytska, 2020). Hence, materialism may not only be an integral part of a consumer's consumption activities; it may also motivate a lonely consumer to reduce their self-discrepancy. Current literature, however, does not provide empirical support as to how loneliness influences materialism. Therefore, the purpose of this paper is to answer the following research questions: *Does loneliness influence materialism?* What are the potential mediators in the loneliness-materialism relationship? A cross-sectional empirical study of 557 adult US consumers was conducted to test the CCB model in the context of loneliness and materialism finding support for three sequential mediators: emotion regulation, self-enhancement, and escapism.

This research contributes to literature in several ways. First, it contributes to the existing literature on compensatory consumer behavior by empirically testing the model proposed by Mandel et al. (2017), to explain HOW self-discrepancies, in this case loneliness, can lead to specific consumption behaviors. Second, we identify three mediating factors in the loneliness-materialism relationship: emotion regulation, self-enhancement, and escapism, that form the psychological underpinnings in this relationship. Third, the findings have practical implications for businesses and marketers who can develop targeted marketing strategies and products that cater to the needs of lonely consumers. Businesses can also implement initiatives to promote employee well-being and reduce feelings of loneliness within the workplace. Lastly, While the paper doesn't directly address the role of well-being programs within businesses, its findings can still inform public health and social policy initiatives aimed at addressing loneliness and promoting social connection.

THEORETICAL FRAMEWORK AND HYPOTHESES

A few exemplary research studies (c.f., Pieters, 2013; Gentina, Shrum & Lowry, 2018; Loh, Gaur, Sharma, 2021) analyze the loneliness-materialism relationship but the underlying mechanism by which this occurs remains unexplained (Wang, Wong & Yuen 2021). We address this research gap by using the CCB lens to unveil the critical roles of three key mediators.

Compensatory Consumer Behavior Model

As illustrated in Figure 1, Mandel *et al.*'s (2017) compensatory consumer behavior model (CCBM) identifies a sequence of psychological steps that may provoke an individual with a perceived self-discrepancy to participate in CCB. When a self-discrepancy is triggered creating aversive affective, physiological, or cognitive consequences, it can lead to a motivation to reduce the self discrepancy via a coping strategy. The distinct coping strategy then leads to the reduction of aversive consequences by means of consumer behavior, particularly in the form of consumption, which has the potential to reduce the self-discrepancy. Mandel *et al.*'s (2017) CCBM provides a theoretical framework to better understand how self-discrepancies can shape consumer behavior (Mandel *et al.*, 2017). The proposed research model, illustrated in Figure 1, is influenced by the sequential stages of Mandel *et al.*'s (2017) CCBM, in which loneliness is the self-discrepancy. Gierveld et

al. (2010)'s social loneliness scale captures the absence of one's integration within a broader social network of friends, colleagues, and neighbors.

Our proposed conceptual model depicts serial mediation which refers to a process where multiple mediators sequentially transmit the effect of an independent variable on a dependent variable. In this framework, the first mediator influences the second, and so on and so forth, finally impacting the outcome variable. This approach allows researchers to explore complex relationships and understand how various constructs interact within a conceptual model (Babić-Hodović et al. 2022).

Motivation to Reduction of Consumer Nature of Self Aversive **Behavior Coping** Reduce Aversive Consequences Discrepancy Discrepancy Consequences Strategies Emotional Self-Enhancement Escapism Regulation Materialism Loneliness

Figure 1: Proposed Research Model based on Compensatory Consumer Behavior Model

Compensatory Consumer Behavior Model; Mandel et al., 2017, p. 135

Emotion regulation, used as a response to the negative emotions caused by loneliness, may lead consumers to rely on goods and services as a way to compensate and manage their feelings (Trump & Newman, 2021). Self-enhancement serves as a core motivation for consumers to cultivate a positive self-image. Building on this idea, this research selects self-enhancement as a means of alleviating loneliness by facilitating emotional regulation (Shrum et al., 2013; Wu, Niu, Chen, & Zhang, 2021). Post self-enhancement, escapism is employed as the distinct consumer behavior coping strategy as extant research demonstrates that escapism is a central part of the consumption experience (Cova, Caru, & Cayla, 2018), which eventually leads to materialism.

Richins and Dawson (1992) conceptualize materialism as a value, defining it as "the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states" (p. 307). However, Shrum et al.'s (2013) view materialism as a process of socialization and they emphasize the *who*, *how*, and *to what end* of the underlying psychological motivational processes of materialism. They define materialism as "the extent to which individuals attempt to engage in the construction and maintenance of the self through the acquisition and use of products, services, experiences, or relationships that are perceived to provide desirable symbolic value" (p. 1180). These conceptualizations of materialism differ from that of Scott (2009) who defines materialism as a psychological coping mechanism to help manage insecurity and anxiety such as those related to self-worth and mortality. Thus, rather than a value system or behavior

driven by social factors, we adopt Scott's view of materialism as a strategy to cope with psychological concerns, which in the context of this research is loneliness.

Loneliness and Materialism

Feelings of isolation and social disconnection can lead to a greater emphasis on acquiring and possessing material goods, as a way of coping with their feelings of social isolation believing that material possessions may compensate for their lack of social connections. (Gentina et al., 2018). This relationship may be driven by the belief that material possessions can provide a sense of security, status, or belonging, which can help to alleviate feelings of loneliness. Previous research has supported this connection between loneliness and materialism (Pieters 2013; Gentina et al., 2018; Loh, Gaur, & Sharma 2021). For example, studies have shown that lonely individuals may view material goods as a way to compensate for a lack of social connections or to boost their self-esteem. Past research has also demonstrated that the aversive nature of self-discrepancies like loneliness can trigger compensatory consumer behaviors, including materialism, as a way to shift towards their desired state. Given the evidence linking loneliness and compensatory consumer behaviors, we hypothesize:

H1: Loneliness is positively related to materialism

Loneliness leads to Emotion Regulation

Emotion regulation refers to an individual's ability to adjust their emotional responses to align with situational demands (van Overveld, 2016). There is an increasing understanding that emotion regulation capabilities can be a significant buffer for loneliness (Eldesouky, Goldenberg, & Ellis, 2024). When individuals experience loneliness, they may feel a sense of emotional distress or discomfort, as their need for social connection is not being met. Given that lonelier individuals fear negative social judgments, perhaps loneliness makes them more cautious of what emotions they express and with whom (Eldesouky et al., 2024, p. 4). This can motivate individuals to seek ways to alleviate their loneliness. As emotion regulation strategies can play a significant role in influencing an individual's experience of loneliness (Yildiz, 2016); lonelier individuals may employ more emotion regulation strategies than those who perceive themselves as socially connected (Marroquin & Nolen-Hoeksema, 2015, p. 843). These strategies help individuals manage unpleasant emotions arising from loneliness to protect their well-being (Yildiz, 2016). Thus, loneliness influences people's ability to regulate emotions effectively (Eres et al., 2021, p.47). Based on this understanding, we propose:

H2: Loneliness is positively related to emotion regulation.

Emotional Regulation leads to Self-Enhancement

Self-enhancement is typically activated in situations where consumers experience a threat that undermines their desired self-view and questions the positivity of their self-concept (Valenzuela, Bonezzi, & Szabo-Douat, 2018). Individuals strive to maintain a positive self-view and often go

to great lengths to achieve positive self-assessments through self-enhancement (Hepper, Gramzow, & Sedikides, 2010). Consumption can help consumers fulfil their self-enhancement goals with the purchase of products and experiences (Consiglio & van Osselaer, 2022, p. 2). Individuals can then communicate identity-relevant data to affirm the self in areas from which they obtain self-worth. For example, individuals consume luxury brands and other noticeable items to indicate positive qualities, such as status, to others or to themselves (Consiglio & van Osselaer, 2022). When an essential aspect of the self is threatened, like loneliness, consumers may experience distress and seek to resolve it through emotional regulation. To substantiate self-enhancement intentions in emotion regulation, it is essential to demonstrate that individuals pursue emotions specifically because they foster positive self-assessments, regardless of whether these emotions are enjoyable. Research indicates that self-enhancing reactions to negative feedback are a result of emotion regulation; enhancing the self in response to disappointment can help preserve psychological well-being (Tamir, 2009, 2016). Based on this understanding, we propose:

H3: Emotion regulation is positively related to self-enhancement.

Self-Enhancement leads to Escapism

Escapism is a coping strategy that mitigates negative emotions, such as loneliness, by distracting oneself or avoiding contemplation of self-discrepancy (Mandel et al., 2017). In several empirical studies, escapism in gaming has been respectively linked to coping processes (Bowditch, Chapman, & Naweed, 2018; Di Blasi et al., 2019; Stenseng, Falch-Madsen, & Hygen, 2021). It involves mentally distancing oneself from the logic, regulations, and pressures of daily life by disengaging from other individuals, organizations, or one's physical environment (Cova et al., 2018). Despite the desire to belong, individuals may be motivated to escape from concerns about others' perceptions, reactions to their product decisions, or various social circumstances (Holmqvist et al., 2020). When individuals cannot or choose not to actively cope with loneliness but demonstrate the need for regulating emotions and enhancing self, they may turn to escapism, engaging in activities aimed at distraction, such as unnecessary purchases (Richins, 2017). For example, a self-enhancement motive can lead to overspending on brands and products, particularly among friends to signal desirable social qualities such as one's wealth (Cannon & Rucker, 2022). Hence, the rise of technology, including online shopping and social media, provides new avenues for escapism (Kuo, Lutz, & Hiler, 2016). By allowing individuals to alter their current reality, escapism encourages self-enhancement from their actual self-image to their desired self-image, promoting a positive self-view (Anseel & Martinescu, 2020). Based on this understanding, we hypothesize:

H4: Self-enhancement motivation is positively related to escapism.

Escapism leads to Materialism

Consumers may use consumption to avoid undesirable realities, creating experiences that serve as a form of escapism. To escape negative moods, materialism is endorsed by individuals as a coping mechanism (Moldes, Dineva, & Ku, 2022). This helps individuals feel in control of themselves

and their circumstances, even if only temporarily. As a result, individuals who engage in escapism may be in a more positive disposition and thus more likely to indulge in escalated purchasing (Labrecque, Markos, & Milne, 2011). When consumers escape perceived stressful situations, they may be more prone to buying behaviors that reflect materialism (Cova et al., 2018). For example, a study observed that Israelis under constant threat of terrorist attacks were more likely to engage in materialism to find relief and detach from reality (Ruvio, Somer, & Rindfleisch, 2014). Based on this understanding, the following hypothesis is proposed:

H5: Escapism is positively related to materialism.

RESEARCH METHOD AND DATA ANALYSIS

The questionnaire with well-established scales was tested via a pilot study (n=165) with university graduate and undergraduate student. Appendix A has the sample size demographics, descriptive statistics and reliabilities. Based on the findings from the study the questionnaire was amended. The UCLA loneliness scale (Russell, 1996), and the materialism scale (Richins and Dawson, 1992) were removed from the final questionnaire due to both scales having poor convergent validity. The final study sample consisted of Qualtrics' online panel of 557 consumers, representative of the U.S. population in terms of age, gender, ethnicity/racial background, education, and household income. (e.g., 55% female; about 48% between 18-44 years; 77% White and 10% Black; 40% earning <\$50,000 annually; 47% with college degrees). Scales used were: Loneliness with both emotional and social subscales of the 11-item de Jong Gierveld & Kamphuis (1985) loneliness scale (DJG); A modified 6-item Emotion Regulation Questionnaire scale (ERQ; Gross & John, 2003; A modified 5-item self-enhancement strategy scale (SES) (Hepper, Sedikides, & Cai, 2013); A modified 6-item escapism scale (Stenseng, Rise, & Kraft, 2012); Scott's (2009) 9-item instrument materialism scale including instrumental and terminal materialism. All the scales had acceptable alpha levels and were measured on a 5-point Likert scale. SPSS v.28 for descriptive and bivariate statistics and Structural equation modeling (CB SEM) were used for analyzing the normally distributed data. The interrelationships and correlations of the constructs were all below .5 (See Table 1).

The study results support convergent validity with all outer loadings above .70 and all AVE values were above .50. Examination of the inter-correlation coefficients of Escapism items required the removal of one item for the reliability of scales. Table 1 provides the bivariate correlations between maximum observations of 557 subjects. The descriptive statistics are in Table 2. Internal reliability level was achieved across all items with Cronbach's α above .70) (Hair *et al.* 2014). Table 3 summarizes the measures used.

Table 1: Correlations Matrix

7	6	5	4	3	2	1	Variable	#
						1	Loneliness Emotional	1
					1	0.455***	Loneliness Social	2
				1	0.246***	0.039	Emotional Regulation	3
			1	0.388***	0.219***	-0.141***	Self-Enhancement	4
		1	0.207***	0.123***	0.315***	-0.537***	Escapism	5
	1	0.188***	0.363***	0.164	0.068***	-0.129***	Materialism Instrumental	6
1	0.507***	0.272***	0.525***	0.194***	0.105**	-0.161***	Materialism Terminal	7
*	1 0.507**	0.272***	0.363*** 0.525***	0.164 0.194***	0.068*** 0.105**	-0.129*** -0.161***	Materialism Instrumental	6

^{*} Significant at p < .10. ** Significant at p < .05. *** Significant at p < .01.

Table 2: Descriptive Statistics - Central Tendency, Variability and reliability

Scale, Subscale Name	Mean	Median	Standard Deviation	Cronbach's α
Loneliness (Gierveld & Kamphuis, 1985)	30.4	31.0	9.0	0.89
emotional	16.8	16.0	5.7	0.88
social	13.7	14.0	4.8	0.88
Emotion regulation (Gross & John, 2003)	12.9	12.0	4.1	0.87
Self-enhancement (Hepper et al., 2013; 2010)	12.4	13.0	3.4	0.75
Escapism (Stenseng et al., 2012)	16.5	16.0	4.5	0.75
Materialism (Scott, 2009)	28.7	29.0	7.8	0.91
instrumental	11.5	11.0	3.9	0.92
terminal	17.2	18.0	5.1	0.91

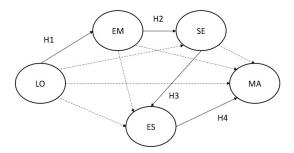
The model fit indices for the described model: CFI - 0.84; NFI - 0.82; TLI - 0.82; RMSEA - 0.08; SRMR - 0.08.

Table 3: Scales and Measures

Author, Year	Scale, Subscale Name	Items
de Jong Gierveld & Kamphuis, 1985	Loneliness	11
	emotional	6
	social	5
Gross & John, 2003	Emotion regulation	6
Hepper et al., 2013; 2010	Self-enhancement	5
Stenseng et al., 2012	Escapism	6
Scott, 2008	Materialism	9
	instrumental	4
	terminal	5

Goodness of fit indices denote a slightly above acceptable fit based on the standardized root mean square residual (SRMR = .08; benchmark < .08). The model fit indices for the described model were CFI - 0.84; NFI - 0.82; TLI - 0.82; RMSEA - 0.08; SRMR - 0.08). Lastly, this study's R² (.297) demonstrates this model explains nearly 30% of the variance on the dependent variable, materialism. The study's structural model, presented in Figure 2, evaluates all the hypothetical dependencies based on path analysis (Hoyle, 1995).

Figure 2: Structural Equation Model



LO – Loneliness; EM – Emotional Regulation; SE – Self Enhancement; ES – Escapism; MA - Materialism H_1 was supported with loneliness being positively related to materialism (β = .235; p<.001). Loneliness had a significant, positive impact on emotion regulation (β = .156; p=.000), which supports H_2 . Emotion regulation had a significant, positive impact on self enhancement (β = .388; p=.001), supporting H_3 . Self-enhancement also has a significant, positive impact on escapism (β = .171; p=.001), supporting H_4 . Finally, escapism has a significant, positive impact on materialism (β = .239; p=.001), providing support for H_5 .

DISCUSSION, LIMITATIONS AND FUTURE RESEARCH

The findings of the present study impart new insight into how consumers manage the effects of loneliness influenced by the psychological stages of CCBM in the tendency toward materialism. Thus, unlike previous research, this study looked into the black box to identify the psychological constructs that drive the compensatory compensation process triggered by loneliness that results in materialism. The first hypothesis (H₁) demonstrated the direct impact of loneliness on materialism as evidenced in prior literature. The second hypothesis (H₂) focused on the relationship between loneliness as the predictor and emotion regulation as an outcome which was found to be significant. Lonelier individuals may use more "emotion regulation strategies than individuals who perceive themselves as socially connected" (Marroquin & Nolen-Hoeksema, 2015, p. 843). One of the main assumptions in the CCBM is the belief that an individual is vulnerable to selfdiscrepancies (Mandel et al., 2017), and it results in how individuals modify, adjust, and change their behaviors. Self-enhancement is a meaningful measurement of the capability of an individual to adapt their emotional occurrences to their circumstantial necessities (van Overveld, 2016). Results confirmed the relationship between emotion regulation as a predictor to self enhancement was significant (H₃). Hypothesis H₄ evaluated self-enhancement as a predictor of escapism. The results deemed the relationship as significant and supportive. As correctly theorized by Holmqvist

et al. (2020), despite the wish to belong, individuals may be inspired to escape from the apprehension of what everyone may assume about them. Escapism serves as a meaningful measurement of a consumer coping strategy. Results confirmed the relationship between escapism and materialism is significant and supportive (H₅). Overall, key findings from this research show every hypothesized relationship is significant and positive. Specifically, these findings provide valuable insight into how loneliness connects to materialism via emotion regulation, self-enhancement, and escapism. Ultimately, this research provides empirical evidence for the influence of CCBM on the link between loneliness and materialism in compensatory consumption.

This study contributes to the marketing literature in several ways. Based on current research, its findings increase scholars' knowledge of the why and how loneliness impacts consumption. It uncovers the underlying psychological mechanisms through which loneliness drives consumer behavior, offering a more nuanced understanding of consumer motivations. Additionally, the study identifies specific consumption patterns associated with loneliness, helping marketers develop more targeted and empathetic marketing strategies. By exploring the emotional and psychological dimensions of loneliness, this research adds depth to the existing body of literature on consumer well-being and mental health. Moreover, this study provides a perspective that enhances and expands consumer research on the critical gaps in loneliness. Second, this study's findings shed light on Mandel et al.'s (2017) theoretical model for examining the compensatory consumer behavior process. It validates and extends Mandel et al.'s model by providing empirical evidence on how loneliness triggers compensatory consumption behaviors. In particular, our research demonstrates that the serial mediation of the CCBM appropriately captures the impact of the multiple mediators involved in the nuanced pathway through which loneliness impacts materialism.

Furthermore, our research highlights the role of loneliness as a significant factor in the compensatory consumer behavior process, offering new insights into consumer decision-making. This study provides practical implications for marketers on how to address consumers' compensatory behaviors through tailored marketing interventions and communications. Lastly, the study findings answer the call for a deeper understanding into how consumers' psychological processes relate to materialism (Kemp et al., 2014). It reveals the intricate relationship between loneliness and materialism, showing how lonely individuals may turn to material possessions as a coping mechanism. The research uncovers the psychological pathways linking loneliness to materialistic tendencies, enhancing our understanding of consumer motivations and behavior. This study offers actionable insights for marketers on how to address and mitigate materialistic behaviors through interventions that focus on emotional and social well-being.

Marketing practitioners can benefit from this research through the application of the findings in targeting lonely consumers. This is especially pertinent as the market segment of lonely consumers continues to increase. As the present study operationalizes loneliness as a self-discrepancy, organizations may utilize marketing initiatives that may help reduce this self-discrepancy. For instance, marketers can host seminars on products and services or merely intimate gatherings of select customers to exchange ideas on pertinent community topics. By staging such events, it may encourage individuals to view themselves as less lonely and, thereby reducing their self

discrepancy. Restaurant marketers can use curative community interface appeals in their communications as a way of developing or strengthening relationship ties with their lonely consumers which subsequently may alleviate their self-discrepancy perceptions. Moreover, marketing practitioners can customize their online messages to lonely consumers with the tagline, "people like you bought this product." This type of promotional message tactfully addresses a consumer's perception of themselves. If a consumer perceives they have a self-discrepancy of loneliness, this message may resonate with them that there exist other lonely consumers. The study's results also give marketers a deeper understanding of the compensatory consumer behavior process of lonely individuals. Marketers may portray products and services to lonely consumers as opportunities for compensatory behavior. For example, by highlighting the instrumentality of products and services in visual cues, marketers can gently nudge lonely consumers toward emotion regulation leading to self-enhancement in their messaging. Tourism marketers may promote products and services not only in the compensatory manner of regulating emotions and motivating self-enhancement, but also as a form of escapism for lonely consumers. Moreover, marketers of nonprofit organizations can emphasize the "joy-of-giving" in their messages. This type of donation message resonates not only with the connection between loneliness and emotion regulation but also with self-enhancement. Hence, findings of this study may advance a better insight for marketers into the compensatory consumer behavior of lonely individuals. Additionally, the findings of the present study provide meaningful implications for public policymakers about the vulnerability of lonely populations that initiate compensatory unhealthy behaviors such as overeating or excess alcohol consumption. Public policymakers may utilize current resources and skills in communities to promote mental healthcare as well as develop loneliness prevention strategies across public sectors. Loneliness prevention strategies may help individuals identify and manage the self-defeating behaviors of loneliness. For example, public policymakers could contemplate mechanisms to persuade individuals to learn how to relish aloneness autonomously, whether this entails being alone in nature, by oneself within a broader social setting, or being engaged in an enjoyable solitary endeavor. Thus, the present study may facilitate public policymakers to foster a greater awareness of the psychological behavior of lonely populations and their related vulnerability to unhealthy compensatory consumption behaviors.

In terms of limitations, the first is the use of a cross-sectional design that can be difficult to interpret as they only identify relationships between variables which may trigger the researcher to interpret the relationships between variables inaccurately. Thus, it may be difficult to derive causal relationships from a cross-sectional designed study. Second, as this study employed a quantitative research approach, the data may not be robust enough to explain a consumer's compensatory consumer behavior from a psychological standpoint. Though the study's collected data allows the researcher to systematically measure variables and test hypotheses, it may fail to ascertain the underlying meanings and explanations of participants' social realities.

In view of the limitations of this study, future research should explore another research design. Instead of the study's cross-sectional design which looks at a specific point in time, a longitudinal designed study might give greater insight on consumers who experience loneliness over a larger time span. Furthermore, as the constructs of emotion regulation, self-enhancement, escapism, and materialism may evolve over time, a longitudinal design may be better suited in response to these

changes. Thus, a more robust approach involving longitudinal data collection may provide a vast amount of meaningful data as well as be further representative of a prevailing prospective of the variables being observed. Future research should also examine utilizing a qualitative or mixed methods approach, instead of the study's quantitative approach. A qualitative approach provides a deeper understanding of the study's constructs which may provide further insight into the relationships between them. A mixed-methods approach allows a research question to be studied thoroughly from different perspectives. Hence, it permits the strengths of one approach to complement the restrictions of another approach.

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Appendix A

Pilot Study Descriptive Statistics - Demography

Variable	n	%	Cumulative %
Age			
18 – 24 years old	110	75.8	75.8
25 – 34 years old	20	13.8	89.6
35 – 44 years old	4	2.8	92.4
45 – 54 years old	7	4.8	97.2
55 years or older	4	2.8	100.0
Gender			
Male	70	48.3	48.3
Female	72	49.6	97.9
Non-binary/3 rd gender	0	0.0	97.9
Prefer not to say	3	2.1	100.0
Ethnicity or Racial Background			
Asian or Pacific Islander	6	4.1	4.1
Black or African American	16	11.0	15.1

Hispanic or Latino	11	7.6	22.7
Native American or Alaskan Native	0	0.0	22.7
White or Caucasian	99	68.3	91.0
Multiracial or Biracial	7	4.8	95.8
A race/ethnicity not listed	6	4.2	100.0
Education			
Some high school	2	1.4	1.4
High school graduate	16	11.0	12.4
Some college or trade school	79	54.5	66.9
College graduate	24	16.6	83.5
Some graduate school	16	11.0	94.5
Completed graduate school	8	5.5	100.0
Marital Status			
Single (never married)	124	85.5	85.5
Married	15	10.3	95.8
Divorced or separated	4	2.8	98.6
Widow/widower	0	0.0	98.6
Other	2	1.4	100.0
Household Income			
Less than \$30,000	40	27.6	27.6
\$30,000 - \$49,999	15	10.3	37.9
\$50,000 - \$69,999	13	9.0	46.9
\$70,000 - \$89,999	20	13.8	60.7
\$90,000 - \$109,999	15	10.3	71.0
\$110,000 - \$129,999	14	9.7	80.7
\$130,000 - \$149,999	8	5.5	86.2
\$150,000 or more	20	13.8	100.0

Pilot Study Descriptive Statistics - Central Tendency & Variability

Scale, Author, Subscale Name	Mean	Median	Standard
			Deviation
Loneliness (de Jong Gierveld, 1985)	25.6	25.0	8.3
emotional	14.6	14.0	5.1
social	11.0	10.0	4.5
Loneliness (Russell, 1996)	60.2	62.0	13.3
Emotion regulation (Gross & John, 2003)	13.5	12.0	4.8
Self-enhancement (Hepper et al., 2013, 2010)	11.5	11.0	3.3
Escapism (Stenseng et al., 2012)	17.1	17.0	4.8
Materialism (Richins & Dawson, 1992)	55.9	55.0	10.9
success	19.6	19.0	4.7
centrality	21.3	21.0	4.9
happiness	15.1	15.0	4.0
Materialism (Scott, 2008)	28.9	28.0	7.4
instrumental	12.2	12.0	4.4
terminal	16.8	17.0	4.4

Pilot Study - Reliabilities

Author, Year	Scale, Subscale Name	Items	Cronbach's α
de Jong Gierveld & Kamphuis, 1985	Loneliness	11	0.90
	emotional	6	0.88
	social	5	0.88
Gross & John, 2003	Emotion regulation	6	0.89
Hepper et al., 2013; 2010	Self-enhancement	5	0.75
Stenseng et al., 2012	Escapism	6	0.77
Scott, 2008	Materialism	9	0.88
	instrumental	4	0.96
	terminal	5	0.84