

The Effect of Social Exclusion on Consumer Choice Preferences: The Moderating Role of Nostalgia and the Mediating Role of Social Connection

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Abstract

Social exclusion leads to numerous negative consequences, and individuals attempt to mitigate them through various strategies, among which consumption represents an important coping mechanism. This article examines the relationship between social exclusion and consumption choice preferences (experiential consumption vs. material consumption) through three experiments, while simultaneously exploring the moderating effect of nostalgia and the mediating role of social connection. The results reveal that social exclusion can enhance consumers' preference for experiential consumption, nostalgia moderates the relationship between social exclusion and preference for experiential consumption, and further buffers the influence of social exclusion on consumption choice preferences through the mediating role of social connection.

Full Text

The Effect of Social Exclusion on Consumer Choice: The Moderating Role of Nostalgia and the Mediating Role of Social Connectedness

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Abstract

Social exclusion produces numerous negative consequences, and individuals attempt to alleviate them through various strategies, among which consumption

represents an important coping mechanism. This paper investigates the relationship between social exclusion and consumer choice orientation (experiential vs. material consumption) through three experiments, while examining the moderating role of nostalgia and the mediating role of social connectedness. The results demonstrate that social exclusion increases consumers' preference for experiential consumption. Nostalgia moderates the relationship between social exclusion and experiential consumption orientation, further buffering the effect of social exclusion on consumer choice orientation through the mediating role of social connectedness.

Keywords: social exclusion, consumer choice orientation, experiential consumption, nostalgia, social connectedness

Social exclusion pervades everyday life, manifesting in job rejections, romantic rebuffs, being ignored by staff in upscale stores (Lee & Shrum, 2012), and even routine interactions where individuals are rejected, isolated, or neglected by close others (Baumeister et al., 2005). This unpleasant experience exerts significant negative effects, threatening individuals' sense of social connection and belonging (Mourey et al., 2017). Among the strategies for mitigating the discomfort caused by social exclusion, consumption serves as a crucial coping method (Chen et al., 2017; Su et al., 2019). People can obtain psychological satisfaction through consumption, thereby alleviating the negative psychological impact of social exclusion. However, how does social exclusion affect different types of consumption? What are the underlying psychological mechanisms and boundary conditions? These questions remain unanswered. This study examines the relationship between social exclusion and consumer choice orientation by categorizing consumption into experiential and material purchases based on consumption intentions, and further explores the underlying mechanisms.

Literature Review and Hypothesis Development

Social exclusion refers to the emotional experience of being ignored, rejected, or isolated by other individuals or social groups (Williams, 2007). As an unpleasant experience, social exclusion significantly impacts cognitive, physiological, and psychological functioning (Baumeister et al., 2005; Mourey et al., 2017), leading to poorer performance on intelligence tests and learning tasks (Baumeister et al., 2002), lower perceived temperature (Zhong & Leonardelli, 2008), and diminished self-esteem (Williams & Nida, 2011). To buffer these negative effects, individuals typically adopt new behaviors or adjust existing ones to cope with the crisis of social exclusion, with consumption behavior representing one effective strategy (Ding & Gong, 2016; Jiang et al., 2018). Mead et al. (2011) propose that individuals can obtain a sense of social acceptance and achieve belongingness goals through consumption. Consequently, after experiencing social exclusion, individuals tend to prefer products with certain characteristics or symbolic meanings, such as conspicuous consumption, anthropomorphic products, unique products, and hedonic goods (Chen et al., 2017; Liang et al., 2018; Xu & Jin, 2020). Therefore, social exclusion may also influence consumers' choices

between different types of consumption.

Van Boven and Gilovich (2003) classified consumption activities into two types based on consumption intentions: experiential purchases and material purchases. Experiential consumption refers to consumption behaviors aimed at obtaining life experiences or memories, emphasizing process and experience, whereas material consumption refers to consumption behaviors aimed at possessing tangible goods, emphasizing ownership and possession (Li et al., 2018). Previous research has found that experiential consumption enhances consumer well-being more effectively than material consumption (Lee et al., 2018; Sun et al., 2019; Weingarten & Goodman, 2021). Compared to material consumption, experiential consumption is characterized by stronger social interaction and higher conversational value (Bastos & Brucks, 2017), and people tend to share experiential purchases with others (Lin et al., 2018). Consequently, experiential consumption can more effectively develop social relationships (Gilovich & Gallo, 2020), alleviate the psychological crisis caused by social exclusion, and enhance well-being (Gallo et al., 2019; Weingarten & Goodman, 2021). Therefore, when individuals experience social exclusion, they tend to prefer experiential consumption over material consumption. Accordingly, we propose **H1**: Social exclusion influences individuals' consumer choice orientation; compared to individuals who experience social acceptance, those who experience social exclusion show a greater preference for experiential consumption over material consumption.

The effect of social exclusion on consumer choice orientation may be moderated by other factors, such as nostalgia, which is also a commonly employed coping strategy. Nostalgia is a bittersweet longing for the past, dominated by positive emotions (Li et al., 2015; Wildschut et al., 2006). Nostalgia helps individuals maintain self-esteem, alleviate existential threats, and enhance social connection and belongingness (Juhl et al., 2010; Sedikides & Wildschut, 2019; Wildschut et al., 2006), representing a highly social emotion (Juhl et al., 2021). When individuals experience relational deficits due to group exclusion, nostalgia can buffer this negative effect (Abakoumkin et al., 2017; Gravani et al., 2018). Since nostalgia not only promotes social connection and establishes more meaningful interpersonal relationships but also strengthens individuals' sense of belonging, it can mitigate the negative psychological and cognitive impacts of social exclusion (Cordaro, 2011), thereby reducing the urgency of using experiential consumption to buffer the threats posed by social exclusion. Therefore, we propose **H2**: Nostalgia moderates the effect of social exclusion on consumer choice orientation. Specifically, nostalgia buffers the effect of social exclusion on consumer choice orientation, eliminating or weakening this preference such that no difference emerges between the two consumption types.

Social exclusion further diminishes social connectedness and increases the need for social connection, creating an urgent desire to obtain such connection through experiential consumption. Meanwhile, when individuals engage in nostalgia, it enhances their sense of social connectedness and reduces the need for social connection (Juhl et al., 2021; van Tilburg et al., 2019), thereby

buffering the desire for experiential consumption. Accordingly, we propose **H3**: The interactive effect of social exclusion and nostalgia on consumer choice orientation is mediated by social connectedness.

[Figure 1: see original paper] Research Model

Experiment 1

Experiment 1 employed two sub-experiments to test H1, examining whether social exclusion (vs. social acceptance) influences individuals' consumer choice orientation.

Experiment 1a

Participants and Design We recruited 207 online volunteers for a scenario experiment. After excluding invalid participants who failed attention checks, we obtained 202 valid participants (Mage = 25.30 ± 7.14 years; 96 males, 47.5%). The experiment used a single-factor (social exclusion vs. social acceptance) between-subjects design.

Stimulus Selection To determine the experimental products for the dependent variable, we first recruited 69 participants (Mage = 23.67 ± 1.79 years; 44 females) to screen materials for material and experiential consumption. Participants were asked to recall past consumption experiences based on the definitions of material and experiential consumption and write down typical examples for each type. We selected the top eleven examples for each consumption type, such as “books, movies, travel, mobile phones, brand-name shoes, concert tickets, etc.”

Two psychology experts (one male, one female) then paired the examples based on value and attractiveness. We ultimately selected “buying books” (material consumption) and “watching a movie” (experiential consumption) as the most matched pair representing the two consumption types.

Procedure and Measures Participants were randomly assigned to either the experimental (exclusion) group or the control (acceptance) group. They first completed a task designed to manipulate feelings of social exclusion (or acceptance), adapted from the scenario materials used in Breen and Kashdan (2011). Both groups read the same premise: participants had made plans with friends to attend a performance. The social exclusion manipulation then diverged: participants in the exclusion group were told that their friends went to see the performance without them, whereas those in the acceptance group were told that they attended the performance together with their friends as planned. Participants then reported their feelings of exclusion (e.g., “I feel excluded” ; Breen & Kashdan, 2011, $\alpha = .94$). Subsequently, they made a choice between an experiential consumption activity and a material consumption activity (watching a movie vs. buying books).

Results and Analysis We first tested the effectiveness of the social exclusion manipulation. Results showed that participants in the exclusion group reported significantly higher feelings of exclusion ($M = 4.65$, $SD = 1.75$) than those in the acceptance group ($M = 2.82$, $SD = 1.70$), $t(200) = -7.47$, $p < .001$, Cohen's $d = -1.06$, confirming the manipulation was successful.

A chi-square test examining consumption choices under social exclusion versus acceptance revealed significant differences (see Table 1), $\chi^2(1) = 6.80$, $p < .01$. Further analysis indicated that in the social acceptance condition, the proportion choosing material consumption (57.1%) was significantly higher than those choosing experiential consumption (42.9%), $p < .05$. Conversely, in the social exclusion condition, the proportion choosing experiential consumption (61.3%) was significantly higher than those choosing material consumption (38.7%), $p < .05$. These results demonstrate that social exclusion shifted participants' consumer choice orientation, making them more likely to prefer experiential consumption over material consumption.

We further conducted a binary logistic regression analysis with social exclusion as the independent variable, controlling for gender, age, education level, and income, with consumer choice orientation as the dependent variable. The results revealed that social exclusion significantly predicted consumer choice orientation, $B = .88$, $SE = .31$, Wald $\chi^2 = 7.86$, $p < .01$, indicating that social exclusion increased preference for experiential consumption. Thus, H1 was supported.

Experiment 1b

Experiment 1a provided initial support for H1. Experiment 1b aimed to further replicate these findings using a different experimental paradigm to verify the robustness and validity of the results. First, we changed the social exclusion manipulation task, employing a virtual online friendship task (Wan et al., 2014). Second, we altered the measurement of consumer choice orientation by using a single-dimensional preference score (Chan & Mogilner, 2017), which provides a more sensitive measure of consumers' choice orientation.

Participants and Design We recruited 160 online participants. After excluding invalid participants who failed attention checks, we obtained 151 valid participants ($M_{age} = 21.60 \pm 4.32$ years; 53 males, 35.1%). The experiment used a single-factor (social exclusion vs. social acceptance) between-subjects design.

Procedure and Measures Participants were randomly assigned to either the experimental (exclusion) group or the control (acceptance) group. They first completed a task designed to manipulate feelings of social exclusion (or acceptance), adapted from the scenario materials used in Wan et al. (2014). Participants read a story and imagined themselves as the protagonist: they had initiated friend requests with three strangers of interest on a social media platform. After three days, they received different feedback. Participants in

the exclusion group learned that all three individuals had rejected their friend requests, whereas those in the acceptance group learned that all three had accepted their requests. Participants then briefly described their current feelings and reported their sense of exclusion (same measure as Experiment 1a, Breen & Kashdan, 2011, $\alpha = .96$). Next, participants were presented with two mugs accompanied by brief slogans (see Figure 2 [Figure 2: see original paper]): one emphasizing possession (mug labeled “My Coffee Mug”) and the other emphasizing experience (mug labeled “My Coffee Time”). Participants rated their preference on a 9-point Likert scale (1 = My Coffee Mug; 9 = My Coffee Time), with higher scores indicating greater preference for experiential consumption (Chan & Mogilner, 2017).

Results and Analysis The manipulation check confirmed that participants in the exclusion group reported significantly higher feelings of exclusion ($M = 5.51$, $SD = .95$) than those in the acceptance group ($M = 1.64$, $SD = .90$), $t(149) = 25.56$, $p < .001$, Cohen’s $d = 4.18$, indicating successful manipulation.

Analysis of consumer choice preferences across the two social conditions revealed significant differences. Participants in the social exclusion condition showed higher choice orientation scores ($M = 7.78$, $SD = 1.10$) compared to those in the social acceptance condition ($M = 4.23$, $SD = 3.03$), $t(149) = 9.56$, $p < .001$, Cohen’s $d = 1.56$, demonstrating that socially excluded participants preferred experiential consumption more than socially accepted participants.

A regression analysis with social exclusion as the independent variable, controlling for gender, age, education level, and income, with consumer choice orientation as the dependent variable, revealed that social exclusion significantly predicted consumer choice orientation, $B = 3.65$, $SE = .41$, $t = 9.01$, $p < .001$. This indicates that social exclusion increased preference for experiential consumption, consistent with the results of Experiment 1a. Thus, H1 was again supported.

Experiment 2

Experiments 1a and 1b consistently validated H1, demonstrating that socially excluded individuals show greater preference for experiential consumption compared to socially accepted individuals. Experiment 2 aimed to replicate these findings with a larger sample while further investigating the underlying mechanism of this effect, specifically examining the moderating role of nostalgia and the mediating role of social connectedness.

Participants and Design

We recruited 712 online volunteers for a questionnaire survey. After excluding invalid participants who failed attention checks, we obtained 699 valid participants ($M_{age} = 28.96 \pm 9.67$ years; 365 males, 52.2%). The experiment used

a 2 (social exclusion vs. social acceptance) \times 2 (nostalgia vs. control) between-subjects design, with consumer choice orientation as the dependent variable. All participants were randomly assigned to one of four experimental conditions.

Procedure and Measures

The procedure was similar to Experiment 1a, with the addition of a nostalgia manipulation. Participants first completed the social exclusion (or acceptance) manipulation task and reported their feelings of social exclusion (same measure as Experiment 1, $\alpha = .88$). They then completed an event recall task to manipulate nostalgia (Juhl et al., 2021). After being presented with the concept of nostalgia, participants were asked to recall either their most nostalgic event or an ordinary event from their past and write down four keywords related to the nostalgic (or ordinary) event. Participants then reported their feelings of nostalgia (e.g., “I feel quite nostalgic right now” ; Zou et al., 2019, $\alpha = .90$) and their sense of social connectedness (e.g., “I feel closely connected to my family and friends” ; Hepper et al., 2012, $\alpha = .81$). Finally, they made a choice between an experiential consumption activity and a material consumption activity (watching a movie vs. buying books).

Results and Analysis

The manipulation check for social exclusion confirmed that participants in the exclusion group reported significantly higher feelings of exclusion ($M = 3.51$, $SD = 1.65$) than those in the acceptance group ($M = 3.11$, $SD = 1.43$), $t(697) = -3.41$, $p < .01$, Cohen' s $d = -.26$, indicating successful manipulation. The nostalgia manipulation check also showed that participants in the nostalgia group reported significantly higher nostalgia ($M = 3.61$, $SD = 1.45$) than those in the control group ($M = 3.04$, $SD = 1.25$), $t(697) = -5.33$, $p < .001$, Cohen' s $d = -.42$, confirming successful manipulation.

Analysis of consumption choice proportions across different social exclusion and nostalgia conditions (see Figure 3 [Figure 3: see original paper]) revealed that in the control condition, the proportion choosing experiential consumption was significantly higher in the social exclusion group (73.6%) than in the social acceptance group (18.0%), $\chi^2 = 83.82$, $p < .001$. In the nostalgia condition, the difference between social exclusion (58.2%) and social acceptance (25.7%) groups remained significant, $\chi^2 = 45.44$, $p < .001$, but the gap was smaller than in the control condition, suggesting a buffering effect of nostalgia. Further analysis revealed that when participants felt socially accepted, there was no significant difference in experiential consumption choice proportions between the nostalgia (25.7%) and control (18.0%) groups; both preferred material consumption, $\chi^2 = 2.71$, $p > .05$. This indicates that nostalgia does not significantly influence consumer choice orientation under social acceptance. However, under social exclusion, although both groups preferred experiential consumption, the proportion choosing experiential consumption was significantly lower in the nostalgia group (58.2%) than in the control group (73.6%), $\chi^2 = 8.69$, $p < .01$, provid-

ing preliminary evidence that nostalgia buffers the effect of social exclusion on experiential consumption preference.

We further conducted a logistic regression analysis with consumer choice orientation as the dependent variable, examining the effects of social condition, nostalgia, and their interaction, while controlling for gender, age, education level, and income. As shown in Table 2, the main effect of social exclusion was significant ($p < .001$), replicating H1. The main effect of nostalgia was not significant ($p > .05$), but the interaction between nostalgia and social exclusion was significant ($p < .001$), indicating that the interactive effect significantly predicted consumer choice and supporting H2.

To examine why nostalgia buffers the effect of social exclusion on consumer choice orientation, we tested whether this moderating effect operates through the mediating role of social connectedness. Using Hayes' s (2013, Model 8) mediated moderation analysis with bootstrap procedures (5,000 samples, 95% confidence interval), controlling for gender, age, education level, and income, we found a significant mediating effect of social connectedness under the interaction of social exclusion and nostalgia, $B = .25$, $SE = .10$, 95% CI = [.09, .47]. Specifically, in the control condition, the mediating effect of social connectedness was not significant, $B = -.10$, $SE = .07$, 95% CI = [-.26, .01]; however, in the nostalgia condition, the mediating effect was significant, $B = .14$, $SE = .06$, 95% CI = [.05, .28].

Further analysis of the effect of social exclusion and nostalgia on social connectedness revealed a significant interaction (see Figure 4 [Figure 4: see original paper]), $F(1, 695) = 14.88$, $p < .001$, $\eta^2 = .02$. Under nostalgia, social connectedness was significantly higher in the social exclusion group ($M = 3.79$, $SD = .06$) than in the control group ($M = 3.49$, $SD = .06$), $F(1, 695) = 12.09$, $p < .01$, $\eta^2 = .02$. In contrast, in the control condition, social connectedness was significantly lower in the social exclusion group ($M = 3.15$, $SD = .08$) than in the social acceptance group ($M = 3.38$, $SD = .07$), $F(1, 695) = 4.68$, $p < .05$, $\eta^2 = .01$. This pattern further demonstrates that social exclusion increases preference for experiential consumption by reducing social connectedness, while nostalgia buffers this effect by enhancing social connectedness.

Experiment 2 replicated H1, confirming that social exclusion leads to greater preference for experiential consumption. Moreover, it demonstrated that nostalgia moderates this relationship, with this moderating effect further influencing consumer choice orientation through the mediating role of social connectedness, thereby supporting both H2 and H3.

General Discussion

This research makes several important theoretical contributions by examining the effect of social exclusion on consumer behavior from the perspective of consumption intentions. First, it enriches research on the consequences of social exclusion, particularly in the consumption domain. Previous behavioral research

on social exclusion has primarily focused on antisocial and prosocial behaviors (Chen et al., 2017; Ding & Gong, 2016; Liang et al., 2018; Su et al., 2019). This study investigates how social exclusion influences preferences for new consumption types, exploring whether individuals tend to choose experiential consumption as a compensatory mechanism to alleviate the negative effects of social exclusion. This represents a novel contribution to understanding how people cope with the negative consequences of social exclusion through different forms of consumption.

Second, this research expands the investigation of antecedents of consumption types. Currently, few studies examine how situational and dispositional factors influence consumers' experiential and material purchase behaviors, with only limited attempts in this direction (Li et al., 2018; Yang et al., 2020). The present research contributes to this understudied area by identifying social exclusion as an important antecedent of consumption type preferences.

Third, this study reveals the psychological mechanism underlying the effect of social exclusion on consumer choice orientation. Previous research has shown that social exclusion enhances individuals' desire to establish new social connections (Lakin et al., 2008; Maner et al., 2007). Building on this work, the current research introduces nostalgia as a moderator that enhances social connectedness (Wildschut et al., 2006, 2010; Zhou et al., 2008), thereby providing a more nuanced understanding of the mechanism through which social exclusion influences consumer choice orientation. This undoubtedly advances our comprehension of the relationship between social exclusion and consumption types.

This research also offers practical implications. For marketers, the findings suggest that when promoting experiential products, companies can effectively enhance consumer preference for experiential consumption by activating consumers' need for social connection through narrative advertising, thereby achieving better marketing outcomes. For consumers, the results provide insights into coping strategies when facing self-threatening situations. After experiencing social exclusion, individuals can mitigate the resulting threats to self-esteem and reductions in social connectedness through experiential consumption and nostalgia.

However, this research has several limitations that warrant future investigation. First, regarding the research paradigm, all three experiments were conducted online due to the pandemic. Future research could employ laboratory experiments to strictly control experimental conditions and enhance rigor. Second, regarding psychological mechanisms, certain relevant individual traits such as materialism and social status were not considered, which may also influence consumer decision-making. Future research could examine whether consumers with different traits exhibit varying choice orientations after experiencing social exclusion.

References

- 丁瑛, 宫秀双. (2016). 社会排斥对产品触觉信息偏好的影响及其作用机制. *心理学报*, 48(10), 1302-1313.
- 李斌, 马红宇, 李爱梅, 凌文铨. (2015). 怀旧的触发、研究范式及测量. *心理科学进展*, 23(7), 1289-1298.
- 李斌, 卫海英, 李爱梅, 李方君, 陈晓曦. (2018). 体验性消费与实物性消费的双加工理论模型: 现象、机制及影响因素. *心理科学进展*, 26(5), 761-769.
- Abakoumkin, G., Wildschut, T., Sedikides, C., & Bakarou, M. (2017). Nostalgia in response to group-based exclusion: The role of attachment-related avoidance. *European Journal of Social Psychology*, 47(3), 373-381.
- Bastos, W., & Brucks, M. (2017). How and why conversational value leads to happiness for experiential and material purchases. *Journal of Consumer Research*, 44(3), 598-612.
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88(4), 589-604.
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83(4), 817-827.
- Breen, W. E., & Kashdan, T. B. (2011). Anger suppression after imagined rejection among individuals with social anxiety. *Journal of Anxiety Disorders*, 25(7), 879-887.
- Chan, C., & Mogilner, C. (2017). Experiential gifts foster stronger social relationships than material gifts. *Journal of Consumer Research*, 43(6), 913-931.
- Chen, R. P., Wan, E. W., & Levy, E. (2017). The effect of social exclusion on consumer preference for anthropomorphized brands. *Journal of Consumer Psychology*, 27(1), 22-33.
- Cordaro, F. (2011). *The relationship between nostalgia, social exclusion, and empathy* (Unpublished doctoral dissertation). University of Southampton.
- Gallo, I., Townsend, C., & Alegre, I. (2019). Experiential product framing and its influence on the creation of consumer reviews. *Journal of Business Research*, 98, 214-222.
- Gilovich, T., & Gallo, I. (2020). Consumers' pursuit of material and experiential purchases: A review. *Consumer Psychology Review*, 3(1), 20-33.
- Gravani, M., Soureti, A., & Stathi, S. (2018). Using nostalgia to reduce prejudice toward immigrants. *European Journal of Social Psychology*, 48(2), O168-O174.

- Hayes, A. F. (2013). *An introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- 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(1), 102-119.
- Jiang, H. Y., Yang, Z. L., Sun, P. Z., & Xu, M. M. (2018). When does social exclusion increase or decrease food self-regulation? The moderating role of time orientation. *Journal of Consumer Behaviour*, 17(1), 34-46.
- Juhl, J., Routledge, C., Arndt, J., Sedikides, C., & Wildschut, T. (2010). Fighting the future with the past: Nostalgia buffers existential threat. *Journal of Research in Personality*, 44(3), 309-314.
- Juhl, J., Wildschut, T., Sedikides, C., Xiong, X. L., & Zhou, X. Y. (2021). Nostalgia promotes help seeking by fostering social connectedness. *Emotion*, 21(3), 631-643.
- Lakin, J. L., Chartrand, T. L., & Arkin, R. M. (2008). I am too just like you: Nonconscious mimicry as an automatic behavioral response to social exclusion. *Psychological Science*, 19(8), 816-822.
- Lee, J., & Shrum, L. J. (2012). Conspicuous consumption versus charitable behavior in response to social exclusion: A differential needs explanation. *Journal of Consumer Research*, 39(3), 530-544.
- Lee, J. C., Hall, D. L., & Wood, W. (2018). Experiential or material purchases? Social class determines purchase happiness. *Psychological Science*, 29(7), 1031-1039.
- Liang, S. C., He, Y., Chang, Y. P., Dong, X. B., & Zhu, D. H. (2018). Showing to friends or strangers? Relationship orientation influences the effect of social exclusion on conspicuous consumption. *Journal of Consumer Behaviour*, 17(4), 355-365.
- Lin, R. Y., van de Ven, N., & Utz, S. (2018). What triggers envy on Social Network Sites? A comparison between shared experiential and material purchases. *Computers in Human Behavior*, 85, 271-281.
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem". *Journal of Personality and Social Psychology*, 92(1), 42-55.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2011). Social exclusion causes people to spend and consume strategically in the service of affiliation. *Journal of Consumer Research*, 37(5), 902-919.
- Mourey, J. A., Olson, J. G., & Yoon, C. (2017). Products as pals: Engaging with anthropomorphic products mitigates the effects of social exclusion. *Journal of Consumer Research*, 44(2), 414-431.

- Sedikides, C., & Wildschut, T. (2019). The sociality of personal and collective nostalgia. *European Review of Social Psychology*, 30(1), 123-173.
- Su, L., Wan, E. W., & Jiang, Y. W. (2019). Filling an empty self: The impact of social exclusion on consumer preference for visual density. *Journal of Consumer Research*, 46(4), 808-824.
- Sun, Y., Wang, R., Xu, Y. Y., & Jiang, J. (2019). Will recalling a purchase increase your well-being? The sequential mediating roles of post-purchase sharing and relatedness need satisfaction. *Asian Journal of Social Psychology*, 22(4), 391-400.
- van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology*, 85(6), 1193-1202.
- van Tilburg, W. A., Sedikides, C., Wildschut, T., & Vingerhoets, A. J. J. M. (2019). How nostalgia infuses life with meaning: From social connectedness to self-continuity. *European Journal of Social Psychology*, 49(3), 521-532.
- Wan, E. W., Xu, J., & Ding, Y. (2014). To be or not to be unique? The effect of social exclusion on consumer choice. *Journal of Consumer Research*, 40(6), 1109-1122.
- Weingarten, E., & Goodman, J. K. (2021). Re-examining the experiential advantage in consumption: A meta-analysis and review. *Journal of Consumer Research*, 47(6), 855-871.
- Wildschut, T., Sedikides, C., Arndt, J., & Routledge, C. (2006). Nostalgia: Content, triggers, functions. *Journal of Personality and Social Psychology*, 91(5), 975-993.
- Wildschut, T., Sedikides, C., Routledge, C., Arndt, J., & Cordaro, F. (2010). Nostalgia as a repository of social connectedness: The role of attachment-related avoidance. *Journal of Personality and Social Psychology*, 98(4), 573-586.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425-452.
- Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science*, 20(2), 71-75.
- Xu, W., & Jin, X. T. (2020). How social exclusion and temporal distance influence product choices: The role of coping strategies. *Asia Pacific Journal of Marketing and Logistics*, 33(2), 351-370.
- Yang, B. C., Yu, H. Y., Wu, J. F., & Qi, D. Y. (2020). To do or to have? Exploring the effects of social exclusion on experiential and material purchases. *Asian Journal of Social Psychology*, 23(3), 328-338.
- Zhong, C. -B., & Leonardelli, G. J. (2008). Cold and lonely: Does social exclusion literally feel cold? *Psychological Science*, 19(9), 838-842.
- Zhou, X. Y., Sedikides, C., Wildschut, T., & Gao, D. -G. (2008). Counteracting loneliness: On the restorative function of nostalgia. *Psychological Science*,

19(10), 1023–1029.

Zou, X., Lee, M., Wildschut, T., & Sedikides, C. (2019). Nostalgia increases financial risk taking. *Personality and Social Psychology Bulletin*, 45(6), 907–919.

Note: Figure translations are in progress. See original paper for figures.

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