Money Loss Priming and Social Exclusion: Effects on Affiliative Product Preferences

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Abstract

This research studied the effects of money loss priming and social exclusion on college students' social distress and affiliative product preferences, exploring the role of persistent financial and social distress during a critical period of financial autonomy and identity formation. Using a 2x2 between-subjects design, this experiment assessed social distress using the State Self-Esteem Scale and emotional state using the Positive and Negative Affect Schedule, with choice of affiliative logo indicating the preference for affiliation. Contrary to expectations, the findings revealed that neither money loss priming or social exclusion significantly increased social distress or affiliative product preference. However, significant differences in positive affect between groups suggest a nuanced impact of treatments on emotional state, independent of the social distress outcome. These results highlight the complexity of simulating financial distress and social exclusion in an online environment and suggest a more resilient or insensitive response to these stressors in the student sample, challenging existing assumptions about these influences on college students.

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Introduction

Money serves a purpose far beyond just a basic financial resource, it plays a significant role in how we handle adversity and navigate our social landscapes. As suggested by Vohs et al. (2006), just the thought of money can induce a state of self-sufficiency, an isolated state where individuals strive for personal goals and prefer to be independent from others. Similarly, the research of Zhou et al. (2009) shows that reminders of money can ease social distress and substitute for social acceptance. These studies underscore the role of money as a social resource, affecting well-being, human behavior, and social interactions.

Money priming, or "exposure to money-related stimuli [to] affect people's thoughts, feelings, motivations and behaviors" (Lodder et al., 2019), is used in the key articles which this research relies on. Studies consistently show that money priming affects psychological states and consumer behavior. In this research, the emphasis was placed on a much less studied subset of money priming that involves having participants reflect on past expenses and will be referred to as money loss priming.

In the self-sufficient state proposed by Vohs et al. (2006), it is shown that handling money led individuals to a state of self-sufficiency, leading to increased independence and a lower chance of seeking or offering help, implying a preference for problem-solving without assistance. This self-sufficient state suggests that those primed with money exude confidence, strength, and efficacy. In the same article, it was suggested that the converse might be true when individuals experience financial loss, "if money brings about a state of self-sufficiency, then a lack of money should make people feel ineffectual." The absence of money, or the reminder of its loss, might prompt feelings of ineffectiveness and an increase in dependency on others. This idea aligns with findings from Zhou et al. (2009), where the act of listing recent expenses

increased participants' social distress following social exclusion. The increase in social distress from money loss suggests that individuals may then instinctively turn to their social network for support. Supporting this connection, Teng & Chen (2012) found that seeking social support can alleviate the negative emotions associated with exclusion. Similarly, Zhou and Gao (2008) identified social support as a primary defense against the distress of social exclusion, with money acting as a secondary defense. So, money has a dual capacity as a social resource, which on one hand can empower individuals with a sense of self-sufficiency, while on the other hand, can increase reliance on social support to cope with feelings of distress and ineffectiveness. This highlights the complex relationship between money, social dynamics, and behavior when facing financial or social distress.

This idea highlights the importance of investigating the complex role of money in our lives. Despite existing studies providing insight into money priming, there is still a significant gap in the literature on the effects of money loss priming. To address this gap, this study examined money loss on college student preferences, which is very relevant to this demographic, as students are navigating financial independence, an essential criteria for the transition to adulthood (Arnett, 2014). Additionally, the transition to college comes with the process of forming a social identity and is often accompanied by the significant influence of peer pressures. Borsari and Carey (2001) highlighted that peer interactions can substantially sway college students' behaviors, especially with high-risk alcohol consumption. Wang (2017) found that an increase in peer pressure can serve as a “relevant trigger for fashion purchase decisions” in both Gen Z and Gen Y. Furthermore, Kim et al. (2014) found peer pressure to be a driving factor behind technology adoption of smartphones, which can parallel the other spending behavior in college students. The current study used money loss priming as a simulation of the persistent

financial distress and expenses that college students may frequently reflect on, while also considering experiences of social exclusion in an environment full of new social dynamics, group memberships, and affiliations, highlighting how students may navigate the use of money as both a financial and social resource.

This study explored the influences on students' affiliative product preferences, with 'affiliation' referring to the connection and association individuals have with groups, symbols, or brands that signify their belongingness or social identity. Given the dual role of money, the study examined the question of how money loss priming and social exclusion affect college students' affiliative product preferences. Viewing money as both a financial and social resource, this study examines this preference in U.S. college students under the assumption that affiliative products cannot only meet practical needs, but even compensate for experiences of financial distress and social exclusion by gravitating towards these symbols of group identity.

This research sought to shed light on how money acts as a social resource in managing social challenges in addition to serving as a financial resource. Money loss priming is used to simulate the effects of persistent reflections of expenses within the U.S. college student population. The hypotheses of this study are as follows:

1. Individuals who are reminded of their monetary expenses (treatment 1) will exhibit both a higher level of social distress and a stronger affiliative product preference compared to the control group.
2. Individuals subjected to social exclusion (treatment 2) will exhibit both a higher level of social distress and a stronger affiliative product preference compared to the control group.

3. Individuals who were subjected to both treatment 1 and treatment 2 will exhibit the highest level of social distress and the strongest affiliative product preference compared to the control group.
4. In the control group (individuals exposed to neither treatment) there will be no difference in level of social distress or affiliative product preference.

Literature Review

There are significant findings in previous research on money and its relationship with social distress, the negative feeling resulting from social exclusion or rejection. Vohs et al. (2006) found that invoking the concept of money induces a sense of self-sufficiency. This highlights the influence of money, extending beyond its material value, into human interactions and states of being. Later research by Zhou et al. (2009) showed that thoughts of one's money loss or financial outflows can increase the negative impact of social exclusion. In this work, there is also empirical evidence demonstrating how reminders of having money can alleviate social distress and sets ground for viewing money as a social resource. The authors also test the effect that money loss has on participants, finding that individuals primed with thoughts of their expenses then experienced a greater negative impact from social exclusion, complementing the theory presented by Vohs et al. (2006). Duclos et al. (2012) explored the effects of social exclusion on financial decision making, as measured through risk-taking, and shed light on how social exclusion can lead individuals to take greater financial risks. Furthermore, Mead et al. (2010) found evidence that socially excluded individuals will strategically spend money to enhance their chances of forming new social bonds. This suggests an effort to use financial resources to promote affiliation, further highlighting the relationship between one's social dynamics and spending behavior. Lee and Shrum (2012) expand on the effects of social

exclusion on consumer behavior, with a focus on affiliation. Contrary to some previous research suggesting a uniform increase in affiliative responses following social exclusion, their findings show differences based on the type of exclusion. The study showed that being ignored, as compared to being rejected, led to a lack of prosocial or affiliative responses like helping others and donating money, challenging a simplistic or uniform view of social exclusion effects on affiliation. Work by Hansen et al. (2013) indicated that reminders of money not only affect an individual's cognitive processes but also impact their brand perception and evaluation. The authors demonstrated that money primes altered perceptions of quality, where participants favored extensions from high-quality brands and showed less favorable evaluations for those from low-quality brands, showing the influence of money reminders on product evaluation. These findings extend our understanding of money priming's effects by showing the influence on consumer evaluation of products. This suggests that reminders of money play a role in shaping preferences based on product descriptions, emphasizing its impact on consumer behavior.

Theoretical Framework

This study is built within the framework of the self-sufficiency theory proposed by Vohs et al. (2006), which focuses on the role of thoughts of money in invoking feelings of self-sufficiency. Expanding on this idea, Zhou et al. (2009) contributes by suggesting that money is capable of either mitigating or increasing social distress, depending on how it is presented to individuals. Further building on the concept of money as a social resource, Mead et al. (2010) introduce the notion that belongingness threats, like social exclusion, can drive strategic spending for affiliation with a group. This implies that individuals, when feeling social distress, might allocate more financial resources to products that facilitate fitting in rather than standing out or asserting social dominance. Insights from Duclos et al. (2013) contribute an additional

layer to this by showing that social exclusion increases the instrumental value of money. When lacking social support, individuals experiencing social distress placed heightened value on money as a means to fulfill their needs within the social system. Furthermore, the work of Hansen et al. (2013) informs our understanding of how different representations of money can alter its effects. They showed that not only do reminders of money influence cognitive processes, but they also shape brand perception and evaluation, emphasizing the need to explore the nuanced ways that money priming can impact consumer preferences.

Methodology

Objectives

My first objective was to replicate the impact of money loss priming on social distress, like that shown by Zhou et al. (2009). This was done by assessing whether recalling money loss over the last 30 days, i.e. invoking money loss priming, induces higher levels of social distress compared to the control condition. Second, to investigate how reminding individuals of their expenses, combined with experiences of social exclusion, influences their affiliative product preferences and degree of affiliative product preference to provide a more nuanced understanding of this measure.

Research Design

This study used a between-subjects experimental design to investigate the impact of money loss priming and social exclusion on individuals' levels of social distress and affiliative product preferences. Participants were randomly assigned to one of four groups (see Figure 1, including two priming conditions (recall of money loss or neutral weather patterns) and two

Cyberball conditions (social exclusion or normal play). The independent variables include money loss and exclusion, while the dependent variables are levels of social distress and affiliative product preference.

Participants

After standard filtering of participant responses, this study analyzed data from a total of 419 college students[1], who were randomly assigned to each of the four experimental conditions.

Independent Variables

Money Loss Priming: Participants in groups A and B (see Figure 1) were assigned to list personal expenses from the past 30 days (money loss priming treatment) while groups C and D listed weather patterns from the same period (control).

Cyberball Condition: Participants in groups A and C (see Figure 1) were assigned to the Cyberball social exclusion (exclusion treatment) condition, while groups B and D were assigned to the social inclusion (normal-play control) condition.

Dependent Variables

Social Distress: Levels of social distress were measured using the State Self-Esteem Scale (Heatherton & Polivy, 1991).

Affiliative Product Preference: Assessed through a selection of four clothing logo options: current school logo, hometown/city name, no logo, or an alternate logo specified by the participant under 'other'. The logo choice served as a binary indicator of affiliation, with no logo

[1]Participant demographics based on currently enrolled degree or program were as follows: Undergraduate (Associate or Bachelor's degree) N = 390 (93.98%), Graduate (Master's degree) N = 21 (5.06%), Professional degree (JD, MD, etc.) N = 2 (0.48%), Postgraduate (Doctorate/PhD) N = 2 (0.48%).

serving as the non-affiliative choice. Participants choosing logos labeled as 'other' were subject to further classification based on the nature of their logo choice to determine its affiliation status[2]. For those who chose clothing with a logo, a continuous measure was also taken to answer the preferred size of the logo, ranging from very small to very large, reflecting the degree of preference for affiliation.

Procedure

In this research study, participants were recruited through the online platform Prolific. In line with the IRB exempt status expectations, participants were informed before starting that they would not have access to all the information of the research study until completed. To maintain participant engagement, a cover story was given at the beginning[3]. This served as a deliberate misdirection to prevent participants from guessing the true intent of the research. Components of the cover story were selected to align with the established treatments, scales and assessments within the experiment so as to minimize suspicion. Participants were randomly assigned to one of four groups without their knowledge (see Figure 1).

The treatment phase involved having participants recall either their expenses over the last 30 days or the weather patterns during the same period. Then, all participants engaged in a Cyberball simulation, a manipulation for social exclusion. All participants played this computerized ball-tossing game which they were led to believe they were playing with 3 other

[2] Of the 419 participants analyzed, 258 (61.58%) preferred a logo, and within these, 25 (5.97%) participants chose 'Other (please specify)'. Each 'other' response was reviewed to determine if it represented an affiliative logo or not. Twelve 'other' logo choices were classified as affiliative, examples include favorite band, basketball team logo, employer's logo, and the name of a place abroad. Logos that did not qualify as affiliative were typically non-affiliative, like food puns, memes, or personal artwork.

[3] Cover story provided to participants: “This study seeks to uncover how memory recall, interacting in an online social setting, and mood can influence your choices. You'll be asked to recall memories, engage in an online ball-tossing game with other students, provide feedback on your experience, and participate in a decision-making task related to consumer preferences.”

live student participants connected to our network, but actually the computer simulated the other players. At the start of the game, the ball was tossed equally among the 4 players, ensuring equal participation. In the social inclusion version of the game (normal-play condition) this equal distribution of ball tosses between players continued from start to finish. In the social-exclusion version (exclusion condition) after about 10 throws between the players, the virtual players stopped passing the ball to the actual participant. Before beginning, participants were given instructions on how to play and a description that the purpose of the game was to "practice mental visualization to enhance the immersion and interaction as we explore the impact of online interactions on mood and decision-making." Participants were asked to mentally visualize the whole scenario of the other players, what they looked like, what type of people they were and where they were playing, etc. This narrative around visualization was intended to shift focus away from their level of ball-tossing performance in the game.

Levels of social distress following Cyberball were measured using the State Social Self-Esteem Scale (Heatherton & Polivy, 1991). Then, the Positive and Negative Affect Schedule (Watson et al., 1988) a tool for evaluating emotional states, was administered to assess if any of the observed effects could be attributed merely to affect, like that done in Duclos et al. (2013).

To assess participant's affiliative product preference following all treatments, they underwent a task adapted from experiment 3 in the study conducted by Lee & Shrum (2012). The current study presented two T-shirt options, one embodying masculine features and the other feminine, equal in terms of high-quality material and customization in size and logo[4]. Participants were asked to imagine choosing one of these T-shirts (see Figure 2) with a preferred

[4] Instruction wording provided to participants for affiliative product preference task: "Below are two options for T-shirts available for purchase. Made from high-quality fabric, either can be tailored to your size for a perfect fit, ensuring comfort and durability for everyday wear. Both shirts come in a variety of colors and offer the option to customize with a logo of your choice. Please take a moment to review the shirts and provide your feedback."

logo, with options of either their current school logo, their hometown or city name, a logo-free option, or another logo of their choosing if they specified. Following their selection, those who opted for 'No logo' were prompted to explain their preference for a plain T-shirt. Participants who chose a logo were asked to specify their desired logo size from a range of very small to very large, providing more insight into their level of affiliation they wished to show through their preferences.

To conclude, a demand characteristics check was implemented to gauge whether participants had guessed the true purpose of the experiment[5]. Finally, all participants who completed the experiment were given a full debrief of the true purpose of the study, Primary Investigator and IRB contact information, and options to formally voice concerns, give feedback, or withdraw their data from the study.

Simulating Social Exclusion

To induce a feeling of social exclusion within participants, all participants after their respective writing conditions (expense-recall or weather-recall) underwent a simulation of Cyberball, with half being exposed to the social exclusion condition, and the other half the normal play condition. Following the procedure found in Wirth (2016), participants were given instructions in line with the cover story provided at the start of the study. These instructions on what to visualize helped to direct participant's attention to their game with the other players, rather than on focusing on ball-tossing effectively.

Cyberball is a widely cited task known for its effectiveness in creating feelings of exclusion, "Cyberball is a mainstay of ostracism research. Demonstrating its utility, Cyberball

[5] One participant accurately identified the goals of the treatments and scales and was removed from the dataset.

has been used in close to 200 publications throughout the world" (Wirth, 2016). This task has been extensively used in previous research to reliably induce feelings of social exclusion within participants. In the Cyberball task, participants engage in a virtual ball-tossing game with two computer-generated players. Participants are led to believe these are real players also participating in the experiment. After a brief period of inclusion, participants in the social exclusion manipulation are systematically excluded from the game, simulating a real-world social exclusion scenario (Williams & Jarvis, 2006; Eisenberger, 2003).

Results

This experiment did not support the primary hypotheses that money loss priming and social exclusion would increase social distress or increase affiliative product preferences within college students. While participants displayed a general preference for clothing with affiliative logos, neither the money loss priming, the social exclusion treatment, or their interaction had a noticeable effect on participant's selection for an affiliative logo (see Figure 4) or any statistically significant effect on the level of social distress rating $F(3, 415) = .33$, $p = .80$ (see Figure 5). Unexpectedly, an ANOVA revealed significant differences in positive affect between the groups $F(3, 415) = 3.43$, $p = .02$ (see Figure 3), implying that the experimental treatments may have impacted the participants' emotional states in a manner not in line with previous research.

Discussion

This experiment's online setting, although considered valid for participant trust and engagement (Plomin et al., 2023) might have contributed to the unexpected significant difference in positive affect and the lack of changes in social distress, findings that conflict with the primary

hypotheses and existing literature. Literature, like Zhou et al. (2009), did not report significant positive or negative affect changes from money loss priming or the Cyberball exclusion condition, but the current study did observe variations in positive affect despite no significant differences in social distress. These inconsistencies may suggest that the online context of the treatments failed to capture the full impact of social exclusion and financial distress from money loss priming as effectively as a physical environment would. Without the immediate physical presence of peers, social contagion and its potential to influence participant behavior, like that needed for Cyberball, might have been weakened (Herrando & Constantinides, 2021).

Additionally, ANOVA revealed some significant differences in the degree of affiliative product preference as measured through the size of the logo selected among the groups (see Figures 3 and 6). While overall preference for products with affiliative logos did not differ significantly, these findings indicate that the participants who underwent money loss priming and the exclusion condition were affected in how prominently they displayed their affiliation by preferring the smallest logo size of the groups. This group subjected to both money loss and social exclusion (dual treatment group) was compared to the group who experienced money loss priming with social inclusion $F(1, 120) = 4.83$, $p = .03$ as well as the group who experienced neutral weather pattern priming and social inclusion $F(1, 122) = 3.1$, $p = .08$. These findings seem to contradict existing literature, which has found that individuals after experiences of rejection intensify their efforts to connect with and gain acceptance from their rejecting group (Loveland et al., 2010; Mead et al. 2011; Williams 2007). These studies set an expectation that the groups exposed to social exclusion would have preferred the largest logos to connect with the group, which was not observed to be the case. There was also no significant difference between the dual treatment group and the group exposed to neutral weather pattern priming and social

exclusion $F(1, 129) = 1.72$, $p = .19$, suggesting that there may be a relatively weak or undetectable interaction between money loss priming and social exclusion in determining how individuals choose to display their affiliation through product preferences.

It is also possible that the sample may have had pre-existing strong affiliative preferences that were resistant to manipulation. The tools used in this study also may not have sufficiently isolated the constructs of social distress and affiliative product preference, which could have failed to detect true effects.

Conclusion

The lack of empirical support for the primary hypotheses emphasizes the intricate nature of the study's chosen constructs, signaling a need for more investigation. Considering the complex role of money as a social resource, ongoing research will be necessary to further clarify the connections between money loss priming and social exclusion on social distress and affiliative product preferences, taking care to refine methods and consider students' pre-existing affiliations.

Appendix

	Yes (Count, %)	No (Count, %)	Total Responses
A (Money Loss x Exclusion)	57 (57.58%)	42 (42.42%)	99
B (Money Loss x Normal Play)	61 (58.65%)	43 (41.35%)	104
C (Weather x Exclusion)	67 (59.29%)	46 (40.71%)	113
D (Weather x Normal Play)	60 (58.25%)	43 (41.75%)	103

Figure 1. Distribution of participants' preferences for an affiliative logo across different treatment groups, including the counts of ‘Yes’ and ‘No’ responses to the affiliative logo choice in the affiliative product preference task.



Figure 2. T-shirt designs shown in the affiliative product preference task, from which participants chose to either prefer an affiliative logo and select its size or opt for no logo.

Measure	Social Distress Rating	Degree of Affiliative Product Preference	Positive Affect	Negative Affect
Group A Mean (SD)	1.7 (0.82)	2.68 (0.79)	24.02 (7.98)	16.64 (6.49)
Group B Mean (SD)	1.72 (0.75)	3.02 (0.88)	25.15 (9.61)	16.13 (7.56)
Group C Mean (SD)	1.8 (0.76)	2.86 (0.74)	21.74 (6.97)	15.62 (6.13)
Group D Mean (SD)	1.76 (0.79)	2.94 (0.81)	24.25 (8.12)	16.16 (7.62)
F(3, 416)	0.33	1.90	3.43	0.38
p-value	0.80	0.13	0.02	0.77
Notes	Scale of 1-5 for distress	For participants who answered "Yes" to Affiliative Product Preferred		

Figure 3. Results of the single-factor ANOVA comparing the four experimental groups (A-D), detailing the F-values and corresponding p-values for the primary dependent variables and measures.

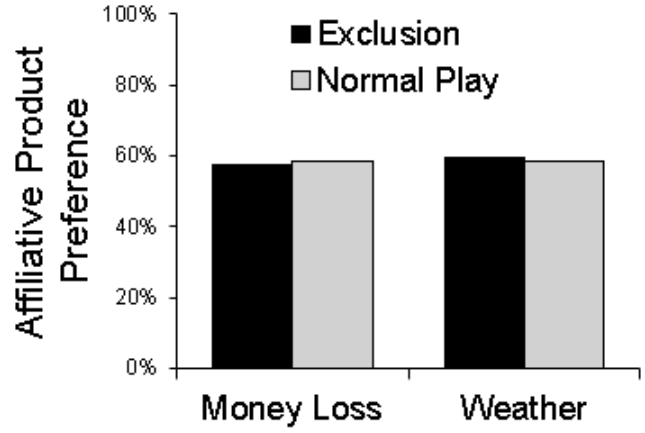


Figure 4. Bar chart showing the proportion of participants in each group who either preferred or did not prefer an affiliative logo on the T-shirt, with no substantial difference among the groups.

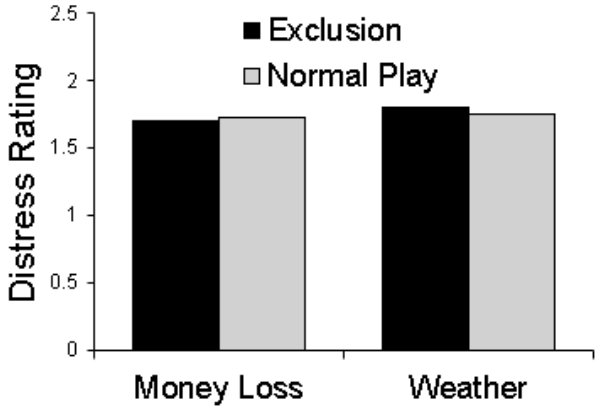


Figure 5. Bar chart showing self-reported social distress ratings as measured by the State Self-Esteem Scale, with no significant variance in average scores across the four groups.



Figure 6. Bar chart showing the differences in the mean size of the logo chosen by participants who preferred an affiliative logo, with 0 representing ‘Very Small Logo’ and 5 representing ‘Very Large Logo.’ Significant differences are present between groups A and B, and A and D..

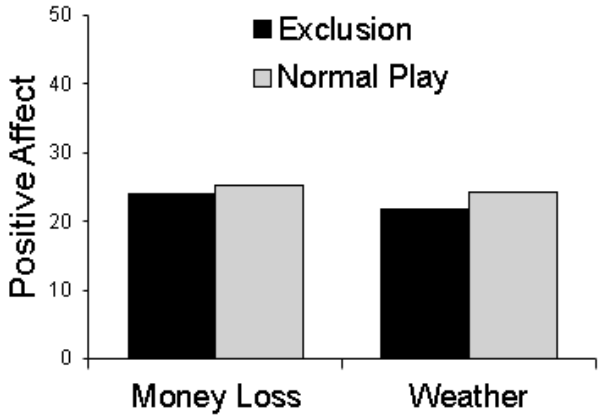


Figure 7. Bar chart showing the levels of positive affect for each group measured by the Positive and Negative Affect Schedule, showing significant differences between all four groups.



Figure 8. Bar chart comparing the negative affect scores of each group as measured by the Positive and Negative Affect Schedule, with the data showing no significant differences among the groups.

References

Arnett, J. J. (2014). Beyond emerging adulthood. Emerging Adulthood, 311–333. https://doi.org/10.1093/acprof:oso/9780199929382.003.0013

Borsari, B., & Carey, K. B. (2001). Peer influences on college drinking: A review of the research. Journal of Substance Abuse, 13(4), 391–424. https://doi.org/10.1016/s0899-3289(01)00098-0

Duclos, R., Wan, E. W., & Jiang, Y. (2012). Show Me the Honey! Effects of Social Exclusion on Financial Risk-Taking. *Journal of Consumer Research*, *40*(1), 122–135. https://doi.org/10.1086/668900

Eisenberger, N. I. (2003). Does Rejection Hurt? An fMRI Study of Social Exclusion. *Science*, *302*(5643), 290–292. https://doi.org/10.1126/science.1089134

Hansen, J., Kutzner, F., & Wänke, M. (2013). Money and Thinking: Reminders of Money Trigger Abstract Construal and Shape Consumer Judgments. *Journal of Consumer Research*, *39*(6), 1154–1166. https://doi.org/10.1086/667691

Herrando, C., & Constantinides, E. (2021). Emotional contagion: A brief overview and future directions. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.712606

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. https://doi.org/10.1086/664039

Lodder, P., Ong, H. H., Grasman, R. P., & Wicherts, J. M. (2019). A comprehensive meta-analysis of money priming. Journal of Experimental Psychology: General, 148(4), 688–712. https://doi.org/10.1037/xge0000570

Loveland, K. E., Smeesters, D., & Mandel, N. (2010). Still preoccupied with 1995: The need to belong and preference for nostalgic products. Journal of Consumer Research, 37(3), 393–408. https://doi.org/10.1086/653043

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. https://doi.org/10.1086/656667

Plomin, J., Schweidler, P., & Oehme, A. (2023). Virtual reality check: A comparison of virtual reality, screen-based, and real world settings as Research Methods for HRI. Frontiers in Robotics and AI, 10. https://doi.org/10.3389/frobt.2023.1156715

Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The Psychological Consequences of Money. *Science*, *314*(5802), 1154–1156. https://doi.org/10.1126/science.1132491

Wang, N. (2017). We're all in this together! Examining the effect of peer pressure on eco-fashion consumption between Generation Z and Generation Y [Unpublished master's thesis]. Universidade Católica Portuguesa.

Williams, K. D., & Jarvis, B. (2006). Cyberball: A program for use in research on interpersonal ostracism and acceptance. *Behavior Research Methods*, *38*(1), 174–180. https://doi.org/10.3758/bf03192765

Williams, K. D. (2007). Ostracism. Annual Review of Psychology, 58(1), 425–452. https://doi.org/10.1146/annurev.psych.58.110405.085641

Wirth, J. H. (2016). Methods for Investigating Social Exclusion. In P. Riva & J. Eck (Eds.), *Social Exclusion: Psychological Approaches to Understanding and Reducing Its Impact* (pp. 25–47). Springer. https://doi.org/10.1007/978-3-319-33033-4_2

Zhou, X., Vohs, K. D., & Baumeister, R. F. (2009). The Symbolic Power of Money. *Psychological Science*, *20*(6), 700–706. https://doi.org/10.1111/j.1467-9280.2009.02353.x