



The coldness of machines vs. the warmth of humans: social exclusion and compensatory consumption of handmade products

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Abstract

The previous literature provides evidence for the positive impact of handmade products on product evaluation. However, limited research has specifically investigated the preferences of different consumer groups for handmade products. To bridge this gap, this paper aims to investigate the impact of social exclusion on the consumption of handmade products in comparison to machine-made products. The findings of this research reveal that socially excluded consumers have a stronger preference for handmade products than socially included consumers. This effect is mediated by emotional attachment. Furthermore, self-construal (independent self vs. interdependent self) moderates the aforementioned effects. Specifically, interdependent self-construal enhances consumers' emotional attachment and subsequently increases their willingness to purchase handmade products. This paper establishes a theoretical link between social exclusion and the compensatory consumption of handmade products and reveals the mechanisms of emotional attachment and the theoretical boundaries of self-construal. These findings provide valuable insights to enrich the literature on social exclusion and advance our understanding of consumers' attitudes toward handmade products.

Keywords Handmade products · Social exclusion · Compensatory consumption · Emotional attachment

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1 Introduction

Handmade production is a key method of creating products and has been widely adopted by merchants for marketing and promotional purposes. However, it is important to note that the term “handmade” is often used as a marketing and promotional strategy by companies although products labeled as such may not always be entirely or partially handmade (Fan et al., 2024; Fuchs et al., 2015). Previous research on the effects of handmade products has primarily examined consumer attitudes, purchase intentions, and evaluations of product attractiveness, originality, and quality (Droege, 2022; Frizzo et al., 2020; Fuchs et al., 2015; Song et al., 2023; Yi & Anh, 2016). However, limited attention has been given to understanding the specific preferences of consumers who favor handmade products. To address this research gap, the present study aims to investigate the characteristics of consumers who are inclined to purchase handmade products. Moreover, handmade products are often chosen as gifts to express mutual love and affection for loved ones (Fuchs et al., 2015). Therefore, it is worth exploring whether individuals who experience difficulties in their relationships or feelings of social isolation are more likely to engage in compensatory consumption of handmade products to fill an emotional void.

Social exclusion refers to a state in which individuals are unable to meet their fundamental needs for social connection and interpersonal relationships due to rejection or isolation by other individuals or a particular social group (Kumar & Kaushal, 2021; Su et al., 2023; Williams, 2007). Previous marketing research that has examined consumers’ preferences for product categories in the context of social exclusion has focused mainly on dehumanized products. For example, individuals who experience social exclusion tend to prefer unique products (Wan et al., 2014), products that are visually pattern intensive (Su et al., 2019), and unattractive products (Chen et al., 2021). However, few studies have focused on products with distinct human qualities, such as handmade products (Fuchs et al., 2015). Hence, this study explores the influence of social exclusion on the compensatory consumption of handmade products.

Social identity theory (Brewer, 1991) suggests that socially excluded people need emotional comfort more than those who are not socially excluded. Based on emotional attachment theory (Thomson et al., 2005), when people’s need for emotional attachment arises, they seek products with human qualities (Schroll et al., 2018), including handmade products that reflect human qualities such as warmth, passion and love (Fuchs et al., 2015), to fulfill their needs. Consequently, this study suggests that the consumption of handmade products fulfills consumers’ need for emotional attachment and that individuals’ emotional attachment to handmade product consumption varies based on their level of social identification. Specifically, socially excluded individuals exhibit a greater desire for emotional attachment than their nonexcluded counterparts (Li & Han, 2021), leading to an increased likelihood that the former group will consume handmade products. Thus, emotional attachment serves as a mediator of the relationship between social exclusion and handmade product consumption.

The consumption of handmade products may be influenced by consumers' self-construal, which refers to whether consumers have an independent or interdependent self. People with independent self-construal emphasize individual thoughts and feelings, prioritize personal needs, and are less likely to conform to social norms. As a result, individuals with independent self-construal may have weaker emotional attachment and a lower tendency to consume handmade products. In contrast, people with interdependent self-construal value conformity with others, place less emphasis on the self, and emphasize the importance of emotional connection. Consequently, individuals with an interdependent self-construal are more likely to have a stronger preference for handmade products. Therefore, this research considers self-construal as a moderating variable in the relationship between social exclusion and the consumption of handmade products.

2 Theoretical background and hypothesis development

2.1 Social exclusion and the compensatory consumption of handmade products

Handmade products evoke a sense of cultural heritage and aesthetic fascination due to their association with traditional values and the human touch (Sennett, 2008). The craftsmanship involved in creating these products infuses them with a tangible expression of love, which in turn is perceived by consumers as an integral part of the item itself (Fuchs et al., 2015). Consequently, consumers exhibit a preference for handmade products and are often willing to pay a premium when purchasing items for loved ones or to convey feelings of love. This deep connection with seemingly inanimate products reflects individuals' innate desire for meaningful relationships with others (Baumeister & Leary, 1995). When this need is threatened, as in the case of social exclusion (Kumar & Kaushal, 2021; Liu et al., 2022; Su et al., 2019; Williams, 2007), individuals often engage in compensatory behaviors that aim to restore these interpersonal bonds (Mourey et al., 2017).

From a social identity perspective (Brewer, 1991), humans are inherently social beings who are strongly inclined to form social connections (Loveland et al., 2010; Shafqat et al., 2023). These connections often involve stable and intimate relationships that are characterized by emotional ties (Baumeister & Leary, 1995; Bügel et al., 2011; Leary et al., 1995). When people's goal is to establish human connections, their behavior is influenced (Loveland et al., 2010; Roggeveen & Rosengren, 2022). Individuals continuously monitor how others respond to their actions to determine whether they are being excluded. If they perceive social exclusion (Kumar & Kaushal, 2021), they might experience lower levels of human connection and self-esteem. Consequently, this might prompt them to engage in compensatory behaviors aimed at repairing damaged social relationships (Farivar et al., 2021; Gardner et al., 2005; Pickett et al., 2004). For example, when individuals experience social exclusion in the context of playful social activities, they are likely to engage in social bonding behaviors to reestablish connections with others (Shafqat et al., 2023; Williams & Jarvis, 2006). Furthermore, individuals who have been socially excluded are often more attuned to cues related to human

interaction (Pickett et al., 2004) and may actively seek out new social relationships (Maner et al., 2007; Zhai & Chen, 2023).

Human consumption has profound meaning, and the choice to consume handmade products reflects not only consumers' preferences for quality and uniqueness but also their longing for human connection (Campbell, 2005; Fuchs et al., 2015; Sennett, 2008). Handmade products are often viewed as an extension of one's own identity, and they allow individuals to experience a sense of human presence and connect with the creator (Luckman, 2013). This connection with the maker satisfies their need for human interaction. In contrast, it is challenging for individuals to establish a direct connection with machine-made products, which makes it even more difficult for them to relate to the manufacturer or designer (Frizzo et al., 2020; Fuchs et al., 2015; Yi & Anh, 2016). Machine-made products are often perceived as impersonal or purely functional, and they may fail to fulfill the needs of human consumption (Liebl & Roy, 2003). This paper hypothesizes that the perception of human connections with handmade products varies depending on the level of social exclusion. Specifically, individuals who experience social exclusion and feel isolated from others have a greater desire for human connections. To compensate for their lack of interpersonal relationships, they are more inclined to consume products that reflect human attributes, such as handmade products. On the other hand, individuals who do not feel socially excluded have less motivation to establish human connections and, as a result, have less interest in consuming handmade products. Hence, this paper proposes the following research hypothesis.

H1 Social exclusion (vs. social inclusion) increases the preference for handmade products.

2.2 Mediation of emotional attachment

Human survival is dependent on the ability to establish mutually beneficial relationships with others (Brewer, 2004; Farivar et al., 2021; Zhai & Chen, 2023). Humans also have an inherent need to feel connected, trusted, and loved, as well as to trust and love others in return (Baumeister & Leary, 1995; Hutcherson et al., 2008). The need for emotional attachment is particularly strong when individuals perceive social exclusion, and they seek to achieve emotional attachment through consumption (Hutcherson et al., 2008; Ladhari et al., 2020; Li & Han, 2021). Emotional attachment theory (Thomson et al., 2005) conceptualizes emotional attachment as a multidimensional construct that includes consumers' emotions, passions, and human connections. While it has been suggested that emotional attachment typically develops in long-term relationships (Park et al., 2010; Thomson et al., 2005), more recent research has indicated that it can form rapidly (Dunn & Hoegg, 2014). The marketing literature suggests that a key factor in emotional attachment is the cognitive and emotional link between a brand or product and an individual's identity (MacInnis & Folkes, 2017; Park et al., 2010). The research hypothesis is that individuals who experience social exclusion can establish

emotional attachment through handmade products that incorporate elements of human connection.

Studies have demonstrated that the presence of individuals within a society can evoke feelings of intimacy, bonding, and connection (Yim et al., 2008). Similarly, when consumers perceive a product as being rich in cues related to human connection, their sense of intimacy with the product tends to be stronger (Schroll et al., 2018). Similar to interpersonal relationships, consumers who feel a greater affinity toward a product or brand tend to achieve a higher level of emotional attachment (Park et al., 2010; Thomson et al., 2005). For instance, by enhancing the product's cues of human presence, consumers can develop a direct emotional attachment to products that feature handwritten labels (as opposed to those with machine-written labels) (Schroll et al., 2018), which, in turn, elicits a more robust response toward the product. This includes their attitude toward the product, loyalty to the brand, purchase intention, and willingness to pay a premium (Hadi et al., 2014; Thomson et al., 2005).

Based on this speculation, it can be further inferred that while emotional attachment is a universal human experience, individuals' specific social identities can result in varied needs for emotional attachment (Li & Han, 2021; Schroll et al., 2018). These different needs may also translate into diverse preferences for handmade products. More specifically, individuals who experience social exclusion (in comparison to those who do not) may place greater emphasis on subjective interaction and emotional connection with products (Chen, 2009; Ma & Li, 2023). This increased focus on emotional connection can strengthen or weaken their emotional attachment to products and subsequently influence their preference for handmade products that evoke feelings of love (Fuchs et al., 2015).

This study therefore suggests that the relationship between social exclusion and the consumption of handmade products is mediated by emotional attachment.

H2 Emotional attachment mediates the effect of social exclusion on the consumption preference for handmade products.

2.3 Moderating role of self-construal

Previous studies have demonstrated that social exclusion can lead to an increased tendency for individuals to conform to others to regain social acceptance (DeWall et al., 2009; Mead et al., 2011; Yang et al., 2007). However, social exclusion can also result in aggression and indifference, leading individuals to behave in opposition to social norms (Baumeister et al., 2007; Twenge et al., 2001). These different findings can be attributed to variations in individual personality types (DeWall et al., 2008, 2009; Twenge et al., 2001) because social exclusion is influenced by individuals' perception of their connection or disconnection from others. One key factor that affects the extent to which individuals accept and anticipate social separation is self-construal (Ku et al., 2021; Markus & Kitayama, 1991).

Self-construal includes both the independent self and the interdependent self, which correspond at the cultural level to individualism and collectivism,

respectively (Jebarajakirthy & Das, 2020; Lu & Gilmour, 2007). Variations in social equality, power, wealth, and status exist across different cultures (Gao et al., 2016; Han et al., 2017). According to self-construal theory, regardless of their cultural background, individuals experience both types of self-construction simultaneously. However, due to the influence of mainstream culture, individuals tend to be dominated by a particular type of self-construal and display a stable self-orientation. However, self-construal can also be temporarily manipulated (Markus & Kitayama, 1991). Therefore, self-construal may moderate the impact of social exclusion on consumption preferences for handmade products through emotional attachment.

Specifically, individuals who cultivate independent self-construal prioritize and value their distinctiveness, and they adhere to cultural norms that emphasize the discovery and expression of their own unique qualities apart from others (Wang & Keh, 2017). They prefer to rely on their own thoughts and emotions in pursuing their goals rather than depending on others. The concept of the independent self also implies a sense of individuality in terms of consciousness, emotion, and judgment as well as setting oneself apart from various social groups, society at large, and nature (Bakir et al., 2020). This understanding of the self originates from the belief in the inherent singularity of each individual (Das et al., 2021). Consequently, it results in pursuits such as self-actualization, self-expression, cultivating individual rights and abilities, and fostering one's unique potential. At its core, independent self-construal involves perceiving oneself as an autonomous and independent individual, which can be referred to as the independent interpretation of the self (Jebarajakirthy & Das, 2021; Markus & Kitayama, 1991). Other terms for independent self-construal include individualism, egotism, separation, and autonomy. As a result, this paper argues that individuals with independent self-construal have a reduced desire for emotional attachment and a decreased inclination to consume handmade products.

Conversely, interdependent self-construal emphasizes the significance of maintaining interdependence among individuals. This involves perceiving oneself as part of social relationships where thoughts, feelings, and behaviors are influenced by others within the group (Jebarajakirthy & Das, 2020). Individuals with dependent self-construal (Markus & Kitayama, 1991) are connected to society and closely tied to others while maintaining their own identity. As in independent self-construal, self-construal plays a crucial role in social comparison and self-validation. However, in dependent self-construal, these others become the means through which the self connects and assimilates. Thus, interdependent self-construal strengthens the emotional connection of socially excluded consumers and increases their inclination to consume handmade products (Fig. 1).

H3 The effect of social exclusion (vs. social inclusion) on the preference for handmade products is moderated by consumers' self-construal. Specifically, (a) for consumers with interdependent self-construal, the effect is positive, while (b) for consumers with an independent self-construal, the effect disappears. These effects are mediated by emotional attachment.

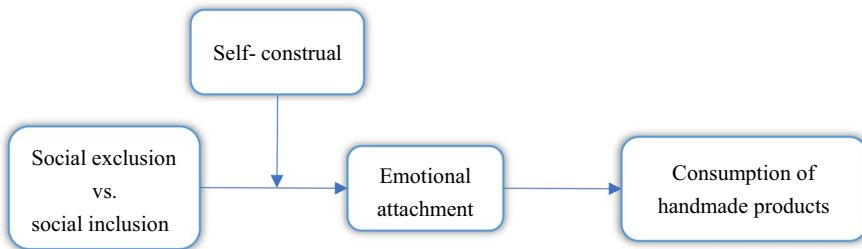


Fig. 1 Theoretical model

3 Study 1

To obtain general findings, the sample for Study 1 was a nonstudent sample chosen from the online platform with the aim of obtaining preliminary evidence of the impact of social exclusion on the consumption of handmade products. Subsequently, a more rigorous discussion of mechanisms and moderation was conducted to determine whether laboratory experiments could better control for external confounding factors (Studies 2 and 3).

3.1 Method

Design and subjects Study 1 was a 3×1 (social exclusion vs. social inclusion vs. control condition) between-subjects single-factor design. This study recruited 123 Chinese participants ($M_{\text{age}}=31$, 55% female) from China’s largest online questionnaire platform (<https://www.wjx.cn/>), which is similar to the MTurk data collection platform and provides a large subject pool of qualified participants (Zhou et al., 2018).

Procedure and Measures The participants’ sense of social exclusion was manipulated through a recall task (Su et al., 2019). Participants in the social exclusion context described social experiences in which they felt excluded (e.g., “Recall one thing that impresses you about being ignored/isolated/rejected by another person or group”). Participants in the social inclusion context described their social experiences of feeling included (e.g., “Recall one thing that impresses you about being accepted/welcome by another person or group”). Participants in the control scenario were asked to recall an ordinary activity.

As a manipulation check of social exclusion, immediately after the participants completed the recall task, they were asked to assess their level of “rejection,” “abandonment,” and “neglect” (1 = not at all, 7 = very much; $\alpha=0.86$). The mean score was used to form an index of social exclusion (Duclos et al., 2013; Su et al., 2019). Participants then read a shopping scenario about purchasing kitchen knives and forks in which they saw pictures of two sets of knives and forks side by side. Product A was advertised as “machine-made knives and forks”, and product B was advertised as “handmade knives and forks” (see Appendix A). The participants were then asked

to respond with their product preferences (e.g., “Which of these two sets of forks and knives is more attractive to you?” and “Which of the two sets of forks and knives are you more likely to buy?” 1=Product A, 7=Product B; $\alpha=0.89$; Yan et al., 2021). Finally, demographic data (gender and age) were collected.

3.2 Results and discussion

Manipulation check One-way ANOVA indicated that the participants perceived stronger social exclusion in the social exclusion context ($M_{\text{social exclusion}}=4.15$, $SD=0.17$) than in the social inclusion ($M_{\text{social inclusion}}=3.10$, $SD=0.17$) and control ($M_{\text{control}}=3.43$, $SD=0.18$, $F(2, 118)=9.88$, $p<0.001$) contexts. In addition, there was no significant difference in perceived social exclusion between participants in the social inclusion ($M_{\text{social inclusion}}=3.10$, $SD=1.37$) and control conditions ($M_{\text{control}}=3.43$, $SD=0.71$, $t(80)=1.33$, $p=0.19$). Therefore, the manipulation of social exclusion was successful.

Product preferences The results of the one-way ANOVA showed that consumers in the social exclusion context ($M_{\text{social exclusion}}=4.79$, $SD=0.18$) preferred handmade products over machine-made products more than those in the social inclusion ($M_{\text{social inclusion}}=3.53$, $SD=0.18$) and control ($M_{\text{control}}=3.74$, $SD=0.18$, $F(2, 118)=13.97$, $p<0.001$) conditions.

Additionally, the results showed that there was a significant difference between the social exclusion and social inclusion conditions in terms of preferences for handmade products ($M_{\text{social exclusion}}=4.79$, $M_{\text{social inclusion}}=3.53$; $t(81)=4.72$, $p<0.001$). However, there was no significant difference in the preference for handmade products between the social inclusion and control groups ($M_{\text{social inclusion}}=3.53$, $M_{\text{control}}=3.74$; $t(80)=1.06$, $p=0.29$).

Discussion The findings suggest that with the manipulation of participants' social exclusion, consumers in the social exclusion condition showed a more significant preference for handmade products than those in the social inclusion and control conditions. In addition, consumers in the social inclusion and control conditions did not show significant differences in their preference for handmade products. Therefore, the next study manipulated only two contexts, social exclusion and social inclusion (Su et al., 2019). Study 2 examined whether this preference was driven by emotional attachment or had other potential explanations.

4 Study 2

Study 2 aimed to examine the mediating role of emotional attachment (H2). Potential mechanisms for positive handmade effects (product uniqueness and quality, Fuchs et al., 2015) were excluded.

4.1 Method

Design and subjects Study 2 was a 2×1 (social exclusion vs. social inclusion) between-subjects single-factor design. This study recruited 209 college students ($M_{\text{age}} = 20.12$, 51.2% female) who earned credits.

Procedure and measures Social exclusion and social inclusion were manipulated in the same way as in Study 1. Subsequently, the participants were asked to assess the extent to which they felt “rejected,” “abandoned,” and “ignored” (1 = not at all, 7 = very much; $\alpha = 0.94$) as a manipulation check of social exclusion. The participants were then directed to an apparently unrelated study of a bread-shopping scenario. They were presented with two images of bread (see Appendix B) in which product A was machine-made bread and product B was handmade bread. The participants were asked to choose their preferred product (1 = product A, 0 = product B). The participants’ emotional attachment was subsequently measured (“I want the product I buy to be full of emotion, enthusiasm, and connection to people”; 1 = strongly disagree, 7 = strongly agree; $\alpha = 0.89$; Schroll et al., 2018; Thomson et al., 2005). Next, consumers’ need for product uniqueness (“I want the product I buy to be original, uncommon, special, atypical”; 1 = strongly disagree, 7 = strongly agree; $\alpha = 0.78$; Fuchs & Diamantopoulos, 2012) and need for quality (“Product quality is important to me; I am concerned about the quality of the product, and I seek the best-quality product”; 1 = strongly disagree, 7 = strongly agree; $\alpha = 0.84$; Ordabayeva & Fernandes, 2018) were assessed. Finally, demographic data (gender and age) were collected.

4.2 Results and discussion

Manipulation check The results of the t test analysis showed that there was a significant difference in the participants’ perception of social exclusion in both contexts ($M_{\text{social inclusion}} = 3.07$, $SD = 1.03$ vs. $M_{\text{social exclusion}} = 5.23$, $SD = 0.94$; $t(207) = 15.80$, $p < 0.001$). Thus, the manipulation of social exclusion was successful.

Product choice The data analysis revealed that 76.1% of the participants chose handmade products. Binary logistic regression revealed (1 = handmade, 0 = machine-made) that social exclusion had a significant effect on the choice of handmade products ($\beta = 2.88$, $\text{Wald} = 54.31$, $p < 0.001$), with participants in the social exclusion condition (73.4%) favoring the choice for handmade products more than participants in the social inclusion condition (20.0%).

Mediation analyses To examine the mediating role of emotional attachment in the effect of social exclusion on the consumption of handmade products, this study used bootstrapping mediation analysis (Hayes, 2017; Model 4, $n = 5000$). The results showed that the mediating effect of emotional attachment was significant ($b = 1.46$, $SE = 0.40$; 95% CI 0.7884, 2.3659), specifically with regard to a) the effect of social exclusion on emotional attachment ($b = 1.68$, $t = 13.57$, $p < 0.001$), b) the effect of emotional attachment on the consumption of handmade products ($b = 0.87$, $t = 4.03$, $p < 0.001$), and c) the effect of social exclusion on the consumption of handmade

products ($b=1.65$, $t=3.47$, $p<0.001$). Therefore, emotional attachment was a partial mediator.

Alternative mechanisms To verify whether the effect of social exclusion on handmade product preferences was transmitted by both emotional attachment (mediator) and the need for uniqueness and quality (alternative mediator), this study used a multiple mediator model (Hayes, 2017; Model 4, $n=5000$), which showed that only the indirect effect of emotional attachment was significant ($b=1.60$, $SE=0.45$; $CI_{95\%}$ 0.9135, 2.6629). The indirect effects of the need for uniqueness ($b=-0.34$, $SE=0.22$; $CI_{95\%}$ - 0.8317, 0.0388) and the need for quality ($b=0.33$, $SE=0.25$; $CI_{95\%}$ - 0.1094, 0.9038) were not significant.

Discussion Study 2 showed that emotional attachment explained the effect of social exclusion on the preference for handmade product consumption, supporting H2. Potential explanatory mechanisms for product uniqueness and quality were excluded. Study 3 explored the boundary conditions of the effect of social exclusion on the consumption of handmade products in relation to self-construal.

5 Study 3

Study 3 examined the moderating role of self-construal (H3). That is, self-construal moderates emotional attachment, which in turn affects the willingness of a socially excluded subject to consume handmade products.

5.1 Method

Design and subjects Study 3 used a 2 (social exclusion manipulation: social exclusion vs. social inclusion) \times 2 (self-construal: independent self vs. interdependent self) between-subjects design and recruited 189 college students ($M_{age}=23$, 62% female) who earned credits.

Procedure and measures Social exclusion was manipulated using the same methods as in Study 1. As a manipulation check, participants rated their feelings of being socially excluded (“rejected,” “abandoned,” and “ignored” extent; 1 = not at all, 7 = very much; $\alpha=0.94$). The participants then read what was described as a handmade sweater shopping scenario (see Appendix C) and were randomly assigned to either the independent-self or interdependent-self advertising situation, with self-construal manipulations adapted from Sui and Han (2007). Both advertisements had the same product price tag and identical content except for the tagline. The sweater in the independent-self advertisement read, “New products arrived! I deserve it!” The advertising propaganda for the interdependent self read, “New products arrived! We deserve it!” The participants were also asked to circle the personal pronouns used in the ads. After reading the ad, the participants assessed their purchase intention for the shirt (“How likely/willing are you to buy this sweater?” 1 = not at all, 7 = definitely buy; $\alpha=0.92$). As a manipulation check, the participants’ self-construal ratings (1 = relying on oneself when making decisions, 7 = relying on others when making decisions) were measured using Rucker et al.’s (2011) scale.

Finally, the participants' emotional attachment ($\alpha=0.74$) and demographics (gender and age) were measured using the scale from Study 2.

5.2 Results and discussion

Manipulation check A 2 (social exclusion vs. social inclusion) \times 2 (self-construal: independent self vs. interdependent self) ANOVA indicated that there was a significant difference between the two contexts in the participants' sense of social exclusion ($M_{\text{social inclusion}}=3.34$ vs. $M_{\text{social exclusion}}=4.56$; $F(1, 183)=80.13$, $p<0.001$). Neither the main effect of production mode ($p>0.05$) nor the interaction effect ($p>0.1$) was significant. Thus, the manipulation of social exclusion was successful. Another 2 \times 2 ANOVA showed that only the effect of self-construal was significant ($M_{\text{interdependent self}}=4.69$ vs. $M_{\text{independent self}}=2.59$; $F(1, 183)=218.76$, $p<0.001$), but neither social exclusion nor interaction was significant ($p>0.1$). Thus, the manipulation of self-construal was successful.

Purchase intention The results of a 2 \times 2 ANOVA revealed that the interaction of social exclusion and self-construal had a significant effect on purchase intentions for handmade sweaters ($F(1, 183)=80.50$, $p<0.001$). Planned contrasts further showed that the effect of social exclusion on the purchase intention for handmade shirts was significant in the interdependent-self context ($M_{\text{social exclusion}}=5.05$ vs. $M_{\text{social inclusion}}=2.74$; $F(1, 90)=193.96$, $p<0.001$; see Fig. 2). The effect of social exclusion on the purchase intention for handmade products was not significant in the independent-self context ($M_{\text{social exclusion}}=3.72$ vs. $M_{\text{social inclusion}}=3.59$; $F(1, 90)=0.51$, $p=0.48$).

Emotional attachment The 2 \times 2 ANOVA results revealed a significant interaction effect between social exclusion and self-construal ($F(1, 183)=15.13$, $p<0.001$). Planned contrasts showed that the effect of social exclusion on emotional attachment was significant in the interdependent-self context ($M_{\text{social exclusion}}=4.73$ vs. $M_{\text{social inclusion}}=3.84$; $F(1, 90)=36.36$, $p<0.001$). The effect of social exclusion

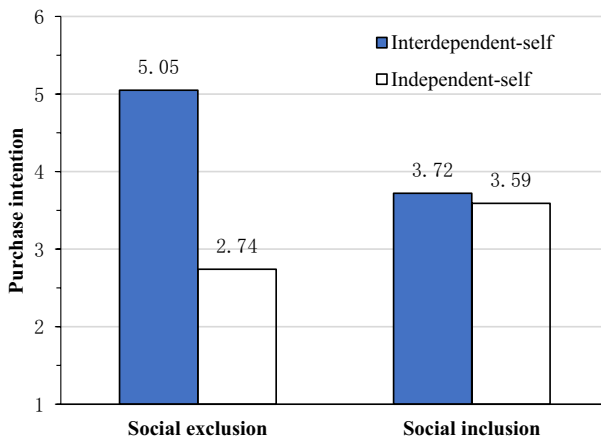


Fig. 2 Interaction effect of social exclusion and self-construal on purchase intentions

on emotional attachment was not significant in the independent-self context ($M_{\text{social exclusion}} = 3.71$ vs. $M_{\text{social inclusion}} = 3.70$; $F(1, 90) = 0.01, p = 0.94$).

Moderated mediation analysis To test whether emotional attachment mediated the effect of the interaction between social exclusion and self-construal on the consumption of handmade products, this study used a moderated mediation analysis (Hayes, 2017; Model 7, $n = 5000$) to confirm the above hypothesis ($b = 0.19$, $SE = 0.11$, $CI_{95\%}: 0.0282, 0.4564$). Specifically, in the interdependent self-context, the mediating effect of emotional attachment on the effect of social exclusion on purchase intentions was significant ($b = 0.19$, $SE = 0.09$, $95\% CI: 0.0415, 0.3948$). In the independent-self context, the mediating effect of emotional attachment on the effect of social exclusion on purchase intentions was not significant ($b = 0.01$, $SE = 0.04$, $95\% CI: -0.1016, 0.0607$).

Discussion Study 3 further validated emotional attachment as an explanatory mechanism through which social exclusion affects the consumption of handmade products and revealed a moderating role of self-construal.

6 Concluding remarks and implications

Previous research has demonstrated that consumers' decisions regarding the consumption of handmade products can be influenced by social and psychological factors (Fan et al., 2024; Frizzo et al., 2020; Fuchs et al., 2015; Yi & Anh, 2016). This study comprehensively examined how social exclusion impacts the consumption of handmade products. Through three studies, this paper empirically demonstrated the preference of socially excluded individuals for handmade products, elucidated the mediating role of emotional attachment, and explored the moderating effect of self-construal. Importantly, these findings were consistent across different measurement approaches for gauging product preferences. Overall, this research contributes to the understanding of handmade product consumption and its link to social exclusion and has important implications for practitioners.

6.1 Theoretical implications

First, this paper finds that consumers who perceive social exclusion have a preference for the consumption of handmade products. This finding complements research on the evaluation of handmade products by consumer categories that has previously been missing from the literature on handmade effects (Droege, 2022; Fan et al., 2024; Frizzo et al., 2020; Fuchs et al., 2015; Song et al., 2023). Moreover, this research established a theoretical connection between social exclusion and the consumption of handmade products based on social identity theory (Brewer, 1991; Leonardelli et al., 2010; Yan et al., 2021).

Second, the mechanism of emotional attachment reveals the intrinsic psychology of consumers' compensatory consumption of handmade products. This study reveals the mechanism of the handmade effect from the perspective of consumer demand. Previous studies have focused on product producers and product characteristics

(Frizzo et al., 2020; Fuchs et al., 2015; Song et al., 2023). Moreover, emotional attachment clearly represents consumers' subjective perceptions of both handmade and machine-made methods. This finding supports new theories on the impact of different production methods.

Third, this paper finds that self-construal moderates the process by which social exclusion influences the consumption of handmade products, which contributes an important theoretical boundary to this study at the consumer level. Additionally, the theoretical relationships among self-construal and social exclusion, emotional attachment, and product consumption are constructed within the framework of social identity theory.

6.2 Practical implications

The core finding of this paper is that socially excluded consumers are more likely than socially included consumers to consume handmade products. This finding has significant practical implications for global marketing strategies that target handmade products.

First, feelings of isolation and mistrust are widespread in society, and various technological, economic and social changes have resulted in smaller social networks and a disruption of emotional connections between individuals (Hutcherson et al., 2008; McPherson et al., 2006). However, socially excluded individuals can find solace in the consumption of handmade products that represent human connections. Given that consumers' social exclusion can be easily manipulated in the marketplace (Duclos et al., 2013; Mead et al., 2011; Su et al., 2017), these findings have the potential to provide valuable guidance to marketing practitioners. For instance, social exclusion can be inferred from consumers' income and occupation, living environment, and spending power, and marketing strategies can be tailored accordingly.

Second, this paper demonstrates that embedded advertising messages that employ heuristics can temporarily manipulate consumers' self-perceptions of social exclusion, thereby influencing their desire to purchase handmade products. Specifically, this research finds that consumers who feel socially excluded are more likely to seek emotional fulfillment through products that possess a personal connection, such as handmade products. In contrast, consumers who do not feel socially excluded have weaker emotional attachments and are less influenced by the notion of love in regard to the consumption of handmade products, which reduces their inclination to purchase them. The findings of this study indicate that the mediating effect of emotional attachment is moderated by self-construal. Accordingly, policy-makers and marketers can stimulate consumers' emotional attachment by promoting interdependent self-construal, which underscores the importance of interconnectedness and increases their likelihood of consuming handmade products.

Third, intelligent machines have significantly enhanced productivity and advanced material development. However, these products often lack a sense of human connection or personal experience. Notably, the need for human connection

is a fundamental requirement for individuals. Hence, for products that consumers perceive to be suitable for handmade production, merchants should strive to emphasize handmade cues whenever possible. For manufacturers, when a new product is created that can be crafted either manually or through automation, merchants should consider how these different production methods influence consumers' evaluation of the product rather than focusing solely on the cost-effectiveness of mass production.

6.3 Limitations and future research

This paper provides a preliminary discussion of the relationship between social exclusion and the consumption of handmade products. While it offers contributions to the literature, there are several limitations that need to be addressed. First, the experimental design relied on the use of pictures to stimulate the perception of products made by hand or machine. It would be more informative to use real production processes in future research. Second, this paper only examined the moderating role of self-construal at the individual level of consumers. It would be valuable to explore other potential moderating variables, such as product types and motivations, in future research.

Appendix A

Study 1

Stimuli

Please imagine that you want to buy knives and forks for your home kitchen.

In the following, we will introduce you to new products produced by a company. We are interested in how you evaluate the product. There are no right or wrong answers. Please answer the questions based on what you think and what you feel.



A: Machine-made



B: Handmade

Appendix B

Study 2



A: Machine-made



B: Handmade

Appendix C

Study 3



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Declarations

Conflict of interest None.

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References

- Bakir, A., Gentina, E., & de Araújo Gil, L. (2020). What shapes adolescents' attitudes toward luxury brands? The role of self-worth, self-construal, gender and national culture. *Journal of Retailing and Consumer Services*, *57*, 102208.
- Baumeister, R. F., Brewer, L. E., Tice, D. M., & Twenge, J. M. (2007). Thwarting the need to belong: Understanding the interpersonal and inner effects of social exclusion. *Social and Personality Psychology Compass*, *1*(October), 506–520.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, *17*(5), 475–482.
- Brewer, M. B. (2004). Taking the social origins of human nature seriously: Toward a more imperialist social psychology. *Personality and Social Psychology Review*, *8*(2), 107–113.
- Bügel, M. S., Verhoef, P. C., & Buunk, A. P. (2011). Customer intimacy and commitment to relationships with firms in five different sectors: Preliminary evidence. *Journal of Retailing and Consumer Services*, *18*(4), 247–258.
- Campbell, C. (2005). The craft consumer: Culture, craft and consumption in a postmodern society. *Journal of Consumer Culture*, *5*(1), 23–42.
- Chen, T., Razaq, A., Qing, P., & Cao, B. (2021). Do you bear to reject them? The effect of anthropomorphism on empathy and consumer preference for unattractive produce. *Journal of Retailing and Consumer Services*, *61*, 102556.
- Chen, Y. (2009). Possession and access: Consumer desires and value perceptions regarding contemporary art collection and exhibit visits. *Journal of Consumer Research*, *35*(6), 925–940.
- Das, M., Habib, M., Saha, V., & Jebarajakirthy, C. (2021). Bandwagon vs. snob luxuries: Targeting consumers based on uniqueness dominance. *Journal of Retailing and Consumer Services*, *61*, 102582.
- DeWall, C. N., Baumeister, R. F., & Vohs, K. D. (2008). Satiated with belongingness? Effects of acceptance, rejection, and task framing on self-regulatory performance. *Journal of Personality and Social Psychology*, *95*(December), 1367–1382.
- DeWall, N. C., Maner, J. K., & Rouby, A. D. (2009). Social exclusion and early-stage interpersonal perception: Selective attention to signs of acceptance. *Journal of Personality and Social Psychology*, *96*, 729–741.
- Droege, J. (2022). The handmade effect: A model of conscious shopping in an industrialised economy. *Review of Industrial Organization*, 1–30.
- Duclos, R., Wan, E. W., & Jiang, Y. (2013). Show me the honey! Effects of social exclusion on financial risk-taking. *Journal of Consumer Research*, *40*(1), 122–135.
- Dunn, L., & Hoegg, JoAndrea. (2014). The impact of fear on emotional brand attachment. *Journal of Consumer Research*, *41*(1), 152–168.
- Fan, X., Lai, A., & Keh, H. T. (2024). Handmade vs. machine-made: the effects of handmade gifts on social relationships. *Marketing Letters*, 1–14.
- Farivar, S., Wang, F., & Yuan, Y. (2021). Opinion leadership vs. para-social relationship: Key factors in influencer marketing. *Journal of Retailing and Consumer Services*, *59*, 102371.
- Frizzo, F., Dias, H. B. A., Duarte, N. P., Rodrigues, D. G., & Prado, P. H. M. (2020). The genuine handmade: How the production method influences consumers' behavioral intentions through naturalness and authenticity. *Journal of Food Products Marketing*, 1–18.
- Fuchs, C., & Diamantopoulos, A. (2012). Customer-perceived positioning effectiveness: Conceptualization, operationalization, and implications for new product managers. *Journal of Product Innovation Management*, *29*(2), 229–244.

- Fuchs, C., Schreier, M., & Van Osselaer, S. M. (2015). The handmade effect: What's love got to do with it? *Journal of Marketing*, 79(2), 98–110.
- Gao, H., Winterich, K. P., & Zhang, Y. (2016). All that glitters is not gold: How others' status influences the effect of power distance belief on status consumption. *Journal of Consumer Research*, 43(2), 265–281.
- Gardner, W. L., Cynthia, L. P., Valerie, J., & Megan, K. (2005). On the outside looking in: Loneliness and social monitoring. *Personality and Social Psychology Bulletin*, 31(11), 1549–1560.
- Hadi, R., & Valenzuela, A. (2014). A meaningful embrace: Contingent effects of embodied cues of affection. *Journal of Consumer Psychology*, 24(4), 520–532.
- Han, DaHee, Lalwani, A. K., & Duhachek, A. (2017). Power distance belief, power, and charitable giving. *Journal of Consumer Research*, 44(1), 182–195.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion*, 8(5), 720.
- Jebarajakirthy, C., & Das, M. (2020). How self-construal drives intention for status consumption: A moderated mediated mechanism. *Journal of Retailing and Consumer Services*, 55, 102065.
- Jebarajakirthy, C., & Das, M. (2021). Uniqueness and luxury: A moderated mediation approach. *Journal of Retailing and Consumer Services*, 60, 102477.
- Ku, H. H., Shang, R. A., & Fu, Y. F. (2021). Social learning effects of complaint handling on social media: Self-construal as a moderator. *Journal of Retailing and Consumer Services*, 59, 102343.
- Kumar, V., & Kaushal, V. (2021). Perceived brand authenticity and social exclusion as drivers of psychological brand ownership. *Journal of Retailing and Consumer Services*, 61, 102579.
- Ladhari, R., Massa, E., & Skandrani, H. (2020). YouTube vloggers' popularity and influence: The roles of homophily, emotional attachment, and expertise. *Journal of Retailing and Consumer Services*, 54, 102027.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518–530.
- Leonardelli, G. J., Pickett, C. L., & Brewer, M. B. (2010). Optimal distinctiveness theory: A framework for social identity, social cognition, and intergroup relations. *Advances in Experimental Social Psychology*, 43, 63–113.
- Li, D., & Han, X. (2021). Assessing the influence of goal pursuit and emotional attachment on customer engagement behaviors. *Journal of Retailing and Consumer Services*, 59, 102355.
- Liebl, M., & Roy, T. (2003). Handmade in India: Preliminary analysis of crafts producers and crafts production. *Economic and Political Weekly*, 5366–5376.
- Liu, F., Wei, H., Zhu, Z., & Chen, H. A. (2022). Warmth or competence: Brand anthropomorphism, social exclusion, and advertisement effectiveness. *Journal of Retailing and Consumer Services*, 67, 103025.
- 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.
- Lu, L., & Gilmour, R. (2007). Developing a new measure of independent and interdependent views of the self. *Journal of Research in Personality*, 41(1), 249–257.
- Luckman, S. (2013). The aura of the analogue in a digital age: Women's crafts, creative markets and home-based labour after Etsy. *Cultural Studies Review*, 19(1), 249–270.
- Ma, J., & Li, F. S. (2023). Does 'chicken soup for the soul' on the product packaging work? The mediating role of perceived warmth and self-brand connection. *Journal of Retailing and Consumer Services*, 70, 103160.
- MacInnis, D. J., & Folkes, V. S. (2017). Humanizing brands: When brands seem to be like me, part of me, and in a relationship with me. *Journal of Consumer Psychology*, 27(3), 355–374.
- Maner, J. K., Nathan DeWall, C., & Baumeister, R. F. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the porcupine problem. *Journal of Personality and Social Psychology*, 92(1), 42–55.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224.
- McPherson, M., Smith-Lovin, L., & Brashears, M. E. (2006). Social isolation in America: Changes in core discussion networks over two decades. *American Sociological Review*, 71, 353–375.

- 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*, 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.
- Ordabayeva, N., & Fernandes, D. (2018). Better or different? How political ideology shapes preferences for differentiation in the social hierarchy. *Journal of Consumer Research*, *45*(2), 227–250.
- Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, *74*(6), 1–17.
- Pickett, C. L., Gardner, W. L., & Knowles, M. (2004). Getting a cue: The need to belong and enhanced sensitivity to social cues. *Personality and Social Psychology Bulletin*, *30*(9), 1095–1107.
- Roggeveen, A. L., & Rosengren, S. (2022). From customer experience to human experience: Uses of systematized and non-systematized knowledge. *Journal of Retailing and Consumer Services*, *67*, 102967.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous paupers and stingy princes: Power drives consumer spending on self-versus others. *Journal of Consumer Research*, *37*(6), 1015–1029.
- Schroll, R., Schnurr, B., & Grewal, D. (2018). Humanizing products with handwritten typefaces. *Journal of Consumer Research*, *45*(3), 648–672.
- Sennett, R. (2008). *The craftsman*. Yale University Press.
- Shafiqat, T., Ishaq, M. I., & Ahmed, A. (2023). Fashion consumption using minimalism: Exploring the relationship of consumer well-being and social connectedness. *Journal of Retailing and Consumer Services*, *71*, 103215.
- Song, J., He, D., & Jiang, Y. (2023). The negative handmade effect: How and why control deprivation thwarts desire for handmade products. *Psychology & Marketing*, *40*(7), 1431–1445.
- Su, L., Jiang, Y., Chen, Z., & DeWall, C. N. (2017). Social exclusion and consumer switching behavior: A control restoration mechanism. *Journal of Consumer Research*, *44*(1), 99–117.
- Su, L., Wan, E. W., & Jiang, Y. (2019). Filling an empty self: The impact of social exclusion on consumer preference for visual density. *Journal of Consumer Research*, *46*(4), 808–824.
- Su, Y., Rao, W., Li, M., Caron, G., D’Arcy, C., & Meng, X. (2023). Prevalence of loneliness and social isolation among older adults during the COVID-19 pandemic: A systematic review and meta-analysis. *International Psychogeriatrics*, *35*(5), 229–241.
- Sui, J., & Han, S. (2007). Self-construal priming modulates neural substrates of self-awareness. *Psychological Science*, *18*(10), 861–866.
- Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The ties that bind: Measuring the strength of consumers’ emotional attachments to brands. *Journal of Consumer Psychology*, *15*(1), 77–91.
- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can’t join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, *81*(12), 1058–1069.
- 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.
- Wang, X., & Keh, H. T. (2017). Consumer susceptibility to cross-selling persuasion: The roles of self-construal and interpersonal harmony. *Journal of Retailing and Consumer Services*, *34*, 177–184.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, *58*(4), 425–452.
- 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.
- Yan, L., Keh, H. T., & Chen, J. (2021). Assimilating and differentiating: The curvilinear effect of social class on green consumption. *Journal of Consumer Research*, *47*(6), 914–936.
- Yang, S., Park, J., & Park, J. (2007). Consumers’ channel choice for university-licensed products: Exploring factors of consumer acceptance with social identification. *Journal of Retailing and Consumer Services*, *14*(3), 165–174.
- Yi, H., & Anh, N. N. (2016). The handmade effect: What is special about buying handmade. *International Review of Management & Business Research*, *5*(2), 594–609.
- Yim, C. K., Tse, D. K., & Chan, K. W. (2008). Strengthening customer loyalty through intimacy and passion: Roles of customer-firm affection and customer–staff relationships in services. *Journal of Marketing Research*, *45*(6), 741–756.

- Zhai, M., & Chen, Y. (2023). How do relational bonds affect user engagement in e-commerce livestreaming? The mediating role of trust. *Journal of Retailing and Consumer Services*, 71, 103239.
- Zhou, X., Kim, S., & Wang, L. (2018). Money helps when money feels: Money anthropomorphism increases charitable giving. *Journal of Consumer Research*, 45(5), 953–972.

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