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### Article

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# **Predicting consumers' cheating behavior. The role of mental representation of goods and psychological ownership**

## **Abstract**

This study examines the likelihood of cheating when consumers are offered with the option of using postponed payment plans after purchasing hedonic goods. It addresses how the nature of the good combined with payment timing affects its perceived psychological ownership, which in turn influences consumers' cheating behavior. Three experimental studies indicate that when consumers mentally represent a hedonic (vs. utilitarian) good, they are more likely to cheat. This effect is greater with a postponed payment than with an immediate one. Findings also show that perceived psychological ownership is lower for hedonic goods and this explains different levels of cheating behavior. The paper offers managerial guidance on how to increase perceived psychological ownership for hedonic goods, with the goal of reducing cheating behavior.

**Keywords:** hedonic good, utilitarian good; postponed payments; consumer cheating behavior, psychological ownership

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## 1 INTRODUCTION

The Global Economic Crime and Fraud Survey (PriceWaterhouseCoopers, 2018) reports that 49% of companies have suffered from consumer misbehaviors in the last two years. Cheating behavior is becoming a cause for concern in online realms where 37% of online visitors get around rules and modify codes to acquire special benefits (Forbes, 2018). More than 1 in 5 Americans (21%) report deliberately missing their credit repayments, which costed the US Economy \$23 billion in the first quarter of 2018 (Nerdwallet, 2018). These examples illustrate how cheating behavior occurs across different industries (Rosenbaum, Kuntze & Wooldridge, 2011). We therefore need a deeper understanding of the drivers of consumer cheating behavior.

In this research we propose that consumers' mental representation of a good (i.e., hedonic vs. utilitarian) along with the timing of its payment might explain cheating behaviors. Goods, defined as purchases that provide consumers with an experiential enjoyment (i.e., hedonic goods) or a practical functionality (i.e., utilitarian goods; see Okada, 2005; Bigné, Mattila & Andreu, 2008), are inevitably linked to their payment, although payment can happen at a different moment in time (Kamleitner & Kirchler, 2006). Paying in future installments might trigger unexpected and/or negative consumer behaviors such as missing payments (Heath & Fennema, 1996), requiring additional postponing payments (Auh, Shih & Yoon, 2008) or compulsive behaviors (Harnish et al., 2018).

Previous literature has investigated consumers' negative reactions towards companies (e.g. Fisk et al., 2010; Grappi & Romani, 2015; Greer, 2015; Stöttinger & Penz, 2015) and post-purchasing behaviors of hedonic vs. utilitarian goods (Alba & Williams, 2013). However, this stream of research has overlooked the role played by the nature of the good (hedonic vs. utilitarian). We argue that the way consumers mentally view the relationship between the good and the payment time plays a pivotal role. Specifically, that the mental representation of hedonic goods, in relation to delayed payments, can predict consumers' cheating behavior, i.e., a form of behavior that accrues benefits to the self while violating accepted standards or rules (Jones, 1991; Shu, Gino & Bazerman, 2011). Furthermore, we propose and test why and how perceived psychological ownership is part of the mechanism that explains the relationship between the mental representation of the good and consumers' cheating behavior. It is more likely that hedonic goods activate a lower level of psychological ownership due to their fleeting nature in comparison to utilitarian goods (Reb & Connolly, 2007).

This research contributes to knowledge in several ways. First, we show that the mental representation of hedonic purchases, compared to utilitarian ones, enhances consumers' negative post-purchase behaviors (i.e., cheating). Second, our research further extends previous literature on payment timing (Hoelzl et al., 2011; Soman, 2001) by demonstrating how the effect of postponed payments on consumers' cheating behaviors is more severe for hedonic purchases. Third, we advance existing theory on cheating behavior by identifying the mediating role of psychological ownership. Fourth, we provide actionable levers to managers on how to reduce cheating behaviors by focusing on the utilitarian features of the good and by actively managing postponed plans.

The paper proceeds as follows. We begin by reviewing prior research on the nature of goods combined with the payment method and its relationship with consumers' cheating behaviors. Drawing from psychological ownership literature, we then develop our theoretical framework. Three experimental studies measure whether the purchase of hedonic goods with postponed payment exhibits a higher likelihood of consumer cheating behavior. Finally, the article presents some theoretical and managerial implications.

## **2 THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT**

### ***2.1 The relationship between the nature of goods, payment method and cheating behavior***

Holbrook and Hirschman (1982) define utilitarian goods as having objective qualities that serve as primary determinants for the purchase, while hedonic goods are mainly characterized by sensorial experiences. More recent research now conveys that the same good can be classified as hedonic or utilitarian depending on consumers' goal (Botti & McGill, 2011; Khan & Dhar, 2010; Seo, Yoon & Vangelova, 2016). People in hedonic consumption situations place more weight on experiential enjoyment, fun and pleasure. Conversely, people in utilitarian consumption situations are goal oriented and place more emphasis on the usefulness, practicality, functionality and fulfillment of basic needs. In other words, utilitarian purchases are perceived as more permanent, longer lasting and more essential than hedonic purchases (Okada, 2005).

Consumer goods can be financed through different payment modes. In particular, consumers can immediately pay for the good in a single payment (i.e. immediate payment) or they can pay for it in installments at a later date (i.e. postponed payment). As argued by Prelec and Loewenstein (1998), paying immediately by cash produces negative emotions whereby the individual feels negative feelings regarding his or her wealth. As a consequence, consumers may opt to delay their payments (Amyx & Mowen, 1995).

Consumers' mental representations of hedonic and utilitarian goods can affect payments and post-consumption behaviors (Soman, 2001). For example, Kivetz and Simonson (2002) and Wang, Novemsky and Dhar (2009) proved that consumers perceive more pain when paying for hedonic (vs. utilitarian) consumption because this type of consumption is often seen as being non-essential. Furthermore, Auh et al. (2008) hold that consumers base their decisions on mental alignments between the type of goods purchased and the perceived benefits received from these goods.

Cheating has been defined as a form of behavior that accrues benefits to the self while violating accepted standards or rules (Jones, 1991; Shu et al., 2011). The seriousness of consumers' cheating behavior is perceived differently depending on the occasion. For instance, as argued by Gupta et al. (2004), online piracy "does not attract the same level of ethical seriousness as might the theft of physical property" (p. 258).

Moral flexibility is one of the reasons to explain cheating, as individuals adapt their morality based on circumstances and situational factors, which allows them to justify unethical decisions and cheating behaviors (Gino & Galinsky, 2012; Kim, Kim & Park, 2012). Consumers, indeed, tend to maintain a positive self-concept of themselves and thus justify small forms of cheating as being less serious and acceptable (Mazar, Amir & Ariely, 2008; Kleinlogel, Dietz & Antonakis, 2018).

Many forms of consumer cheating behavior can be triggered by thoughtlessness and situational factors. A temporal delay after the purchase provokes a sense of carelessness and reduced attention towards goods, leading to possible negligent behaviors (Bellezza, Arckman & Gino, 2017). Additionally, a postponed (immediate) payment leads to a lower (higher) valuation of the good (Chatterjee & Rose, 2011; Hoelzl, Pollai & Kastner, 2011). Similarly, the way cheating is mentally regarded can vary according to the nature of the good (hedonic vs. utilitarian). Dhar and Wertenbroch (2000) address how the tradeoff between the two categories of goods has an impact on how consumers make decisions, value their purchases and justify their behavior. More specifically, in post-purchases, hedonic goods may be considered wasteful and can provoke a sense of guilt while utilitarian goods tend to be perceived as being necessities (Okada, 2005; Klein & Melynk, 2016). This is consistent with the idea that consumers are more likely to adopt dysfunctional behaviors due to a general disinterest that arise after the purchase of hedonic goods (e.g., Daunt & Harris, 2011, 2012; Harris, 2008, 2013).

Based on the theoretical grounding above, we expect that consumers are more likely to cheat when they are provided with the option of using postponed payment plans with hedonic goods. More formally:

*H1: Consumer cheating behavior is more likely for hedonic (vs. utilitarian) goods.*

*H2: Consumer cheating behavior is more likely to happen when a hedonic good is paired with a postponed payment rather than an immediate payment.*

## **2.2 Psychological ownership**

Pierce et al. (2001) define psychological ownership as a “state in which individuals feel as though the target of ownership (material or nonmaterial in nature) or a piece of it is ‘theirs’” (p. 299). The conceptual core of psychological ownership is the individual’s sense of possession of an object, manifested in the claim ‘It is MINE!’. Psychological ownership cognitively and affectively influences an individual’s awareness, thoughts and beliefs regarding their possessions and their associated personal meanings (Jussila et al., 2015).

The literature argues that the nature of goods leads to different levels of psychological ownership. Interestingly, mental frames and representation can induce consumers in developing psychological distances from objects (Lu & Jen, 2016) and a gradual feeling of detachment (Bellezza et al., 2017). Consumers can develop feelings of ownership towards a good in different ways; by exercising control over it, investing themselves (i.e. their time) in it and getting to know it intimately (Pierce, Kostova & Dirks, 2003). This can even occur before the good has been purchased (Belk, 1988). In this regard, hedonic goods deliver benefits primarily in the form of experiential enjoyment, which may be more difficult to evaluate and quantify than the practical, functional benefits that utilitarian goods deliver (Okada, 2005). Moreover, postponed payments tend to make the cost and hence the investment less salient than paying immediately, thus decreasing the perceived psychological ownership (Kamleitner & Erki, 2013). Based on this, we propose that consumers are likely to cheat for a hedonic purchase paired with a delayed payment because of having a reduced perception of psychological ownership. Thus, psychological ownership is the mechanism behind the relation between the type of purchase (hedonic vs. utilitarian) and consumers’ cheating behavior. Formally,

*H3: Compared to utilitarian goods, hedonic goods trigger lower psychological ownership and increase consumers’ cheating behavior with postponed payment.*

Figure 1 shows the overarching logic of our studies. We argue that the type of good (hedonic vs. utilitarian) combined with the payment method (immediate vs. postpone) enhances consumers' cheating behaviors (Study 1 and 2). We further suggest that perceived psychological ownership is the underlying mechanism behind the relationship between the type of good and consumers' cheating behaviors (Study 3).

[PLEASE INSERT FIGURE 1 HERE]

### **3 STUDY 1: EFFECT OF TYPE OF GOOD ON CONSUMERS' CHEATING BEHAVIOR**

Study 1 aims to show that the mental representation of a good (i.e., hedonic vs. utilitarian) has a direct effect on consumers' cheating behaviors. Cheating behavior is operationalized through a cheating task (i.e., a bogus game as used by Wiltermuth, 2011), pre-tested on a sample of 32 participants. According to H1, we expect to find significant differences between the two conditions, with consumers in the hedonic condition being more likely to cheat.

#### ***3.1 Method***

We recruited 77 participants ( $M_{\text{age}} = 32.2$ ; male 54.5%) on Amazon Mechanical Turk (AMT). Participants were initially asked to imagine purchasing an outdoor grill for the value of \$500. The type of good (hedonic vs. utilitarian) was manipulated by means of two scenarios that were framed to encourage the participants to think about the outdoor grill as either hedonic or utilitarian good (Botti & McGill, 2011).

To assess respondents' cheating behavior, we asked them to participate in a game where they had to unscramble a list of nine words in the order they appeared. A straightforward measure of consumers' cheating behavior was intentionally avoided to prevent respondents wanting to appear honest and moral, which has social desirability bias implications (Wiltermuth, 2011). We asked the participants to self-report the number of words correctly unscrambled. They were told the best score had a chance to win an Amazon \$50 Gift Card.

#### ***3.2 Results and discussion***

We checked the manipulation by asking participants "to what extent they thought that an outdoor grill was either a utilitarian or hedonic good" (1 = completely utilitarian; 7 = completely hedonic;  $M_{\text{hedonic}} = 5.2$   $M_{\text{utilitarian}} = 4.3$ ;  $F(1, 74) = 4.7$ ,  $p = 0.03$ ).

A one-way ANOVA was performed to test whether the perceived nature of the good had a direct effect on cheating ( $M_{\text{hedonic}} = 4.4$   $M_{\text{utilitarian}} = 3.3$ ;  $F(1, 76) = 12.4$ ,  $p = 0.05$ ). Specifically, cheating behavior (i.e. self-report of words unscrambled) is greater among those in the hedonic condition than those in the utilitarian one. This evidence supports H1.

#### **4 STUDY 2: THE INTERPLAY BETWEEN THE EFFECTS OF TYPE OF GOOD AND TYPE OF PAYMENT ON CONSUMERS' CHEATING BEHAVIOR**

Study 2 aims to test the moderating role of payment time (immediate vs. postponed) on the likelihood of cheating. According to our H2, consumers' cheating behavior increases when a hedonic good is paired with a postponed payment.

##### **4.1 Method**

One hundred and fifty-eight respondents ( $M_{\text{age}} = 32.4$ ; 56% male) were recruited on AMT to participate in the study. A 2 (good: hedonic vs. utilitarian)  $\times$  2 (payment: immediate vs. postponed) between-subject design was adopted. The initial part of this experiment followed the same procedure as for Study 1. Afterwards, we manipulated the type of payment by asking the respondents to imagine either purchasing the outdoor grill with \$500 cash (i.e. immediate payment) or purchasing it by spreading the payment over 10 fixed monthly installments ( $\$50 \times 10$ ; postponed payment) without any added financial costs to avoid potential discounting effects. As in Study 1, to assess participants' cheating behavior, we introduced the same cheating task (jumbled words to unscramble).

##### **4.2 Results and discussion**

We first checked whether the manipulation of the type of good was perceived as intended ( $M_{\text{hedonic}} = 5.1$   $M_{\text{utilitarian}} = 3.6$ ;  $F(1, 158) = 19.8$ ,  $p = 0.000$ ). In order to test H2, a two-way ANOVA was performed, with type of good (hedonic vs. utilitarian) and payment method (immediate vs. postponed) as independent variables. The results show a significant interaction effect between the type of good and the payment method on the participants' likelihood of cheating ( $F(1, 156) = 4.5$ ,  $p = 0.03$ ), while the main effects were found not to be statistically significant. Follow-up planned contrasts support our H2 as participants were found more likely to cheat when purchasing hedonic goods with a postponed payment ( $M = 5.3$ ;  $F(1, 156) = 3.8$ ,  $p = 0.05$ ) than when purchasing utilitarian goods with a postponed payment ( $M = 4.2$ ;  $F(1, 156) = 1.1$ , *n.s.*; see Fig. 2). These results reveal that the condition with a hedonic good combined with postponed payment activates a mental representation that triggers cheating behavior.



[PLEASE INSERT FIGURE 2 HERE]

## 5 STUDY 3: THE MEDIATING ROLE OF PSYCHOLOGICAL OWNERSHIP

As previously theorized and experimentally validated, consumers are more likely to cheat when they mentally represent goods as hedonic (vs. utilitarian; Study 1). Moreover, this effect is moderated by the payment type, in that a hedonic purchase combined with a postponed payment results in consumers' being more willing to cheat (Study 2). Building on this evidence, Study 3 focuses on postponed payment and investigates the mediating effect of psychological ownership in relation to different types of goods (hedonic vs. utilitarian) and cheating behavior. We hypothesize that, when consumers are presented with hedonic goods, they develop a lower level of perceived psychological ownership. As a consequence, they are more likely to cheat.

### 5.1 Method

One hundred and three respondents ( $M_{\text{age}} = 32.8$ ; 67% male) were recruited on AMT. Respondents were randomly assigned to one of the conditions (hedonic vs. utilitarian) and asked to imagine purchasing a music festival ticket (vs. home music equipment) that included four virtual workshops (vs. four hardware pieces) for \$250. We measured their perceived psychological ownership on a three-item scale adapted from Pena-Marín & Bhargava (2016) ("I feel a very high degree of personal ownership of it", "I feel like I own it", "I feel like it is mine"; 1= strongly disagree; 7= strongly agree;  $\alpha = .95$ ;  $M_{\text{hedonic}} = 3.7$ ,  $M_{\text{utilitarian}} = 4.5$ ;  $F(1, 101) = 2.9$ ,  $p = 0.02$ ). We also included a manipulation check to measure whether they perceived the item as hedonic or utilitarian (1= very utilitarian; 7= very hedonic;  $M_{\text{hedonic}} = 5.3$ ,  $M_{\text{utilitarian}} = 2.5$ ;  $F(1, 101) = 1.7$ ,  $p = 0.000$ ).

When purchasing the goods (music festival ticket vs. home music equipment), we asked the respondents to imagine checking their personal bank account and discovering that they did not have enough money to pay for the good with cash. Therefore, they opted for a 10-month installment plan at no extra financial cost. To assess their likelihood to cheat, we adopted the same dependent variable used in Studies 1 and 2 (i.e. cheating task;  $M_{\text{hedonic}} = 5.4$ ,  $M_{\text{utilitarian}} = 4.8$ ;  $F(1, 101) = 1.6$ ,  $p = n.s.$ ). Finally, we collected demographic data.

### 5.2 Results and discussion

We predicted that consumers would ascribe less psychological ownership when using hedonic goods than utilitarian goods, which would in turn affect consumers' cheating behavior. In order to test whether differences in the perception of goods have differential effects on the perceived psychological ownership of them, we tested a mediation model

(model 4 bootstrap 5,000; Hayes, 2017). Hedonic good was coded as 0, utilitarian good as 1. The outcome of this regression is a statistically significant general model ( $F(1, 101) = 6.0, p = 0.02$ ). As can be seen graphically in Figure 3, the type of good has a significant effect on perceived psychological ownership ( $b = .83$ , Confidence Interval (CI) 95% [0.15, 1.5]), which in turn has a significant and negative effect on cheating behavior ( $b = -.23$ , CI 95% [-0.66, -0.22]). The type of good is no longer a significant predictor of the cheating behavior after controlling for the mediator ( $b = 0.78$ , CI 95% [-0.12, 1.7]), which indicates a fully mediated model. Overall, this study reveals that the lower the perceived psychological ownership of a type of good is, the more likely respondents are to cheat, supporting H3.

**[PLEASE INSERT FIGURE 3 HERE]**

## **6 GENERAL DISCUSSIONS AND IMPLICATIONS**

Consumer cheating behavior, a form of behavior that accrues benefits to the self while violating accepted standards or rules (Jones, 1991; Shu et al., 2011), is an increasing issue in many markets with negative consequences on companies' profitability (Nerdwallet, 2018). In this paper, we propose and test how the mental representation of goods, and its relation with psychological ownership, predicts consumers' cheating behavior.

Across three studies, we show that the purchase of hedonic goods with postponed payment exhibits a higher likelihood of consumer cheating behavior. We found that this can be explained by consumers' perceived psychological ownership, which is greater for utilitarian goods (vs. hedonic). Specifically, Study 1 shows that consumers interpret hedonic and utilitarian goods differently and are more likely to cheat when evoking a hedonic good. The same good represented as hedonic or utilitarian triggers a different level of cheating behavior. Indeed, according to Khan et al. (2005, p. 4) "*both utilitarian and hedonic consumption are discretionary and the difference between the two is a matter of degree or perception*".

Study 2 finds a boundary condition on the impact of hedonic goods on cheating behavior, revealing that consumers' likelihood to cheat is contingent on the timing of payment. Specifically, compared with an immediate payment, the likelihood to cheat increases with a postponed payment. Study 3 further encloses the mechanism driving the differential effect of hedonic vs. utilitarian goods on consumers' cheating behaviors. Specifically, we provide evidence that hedonic goods activate lower levels of psychological ownership which, in turn, increases cheating behavior.

The current research has important theoretical and practical implications. First, we enrich the literature on hedonic and utilitarian purchases (see Okada, 2005) by shedding light on the negative consequences that stem from the consumption of these goods. Specifically, we show that the mental representation of hedonic purchases, compared to utilitarian ones, predicts consumers' negative post-purchase behaviors (i.e., cheating). This is consistent with prior research showing that hedonic purchase decisions are often associated with a sense of guilt (Kivetz & Simonson, 2002; Wang et al., 2009) and a greater need of justification (Okada, 2005; Klein & Melynk, 2016). However, there was a dearth of studies that addressed the consequences of hedonic consumption on post-purchase (Alba & Williams, 2013).

Second, our results complement recent research on payment methods (see Hoelzl et al., 2011) by showing that the timing of payment (i.e., immediate vs. postponed) increases consumers' likelihood to cheat. In this respect, previous literature has mainly focused on the pain resulting from payment (Soman, 2001). Our research further extends this literature by demonstrating how the effect of postponed payments on consumers' cheating behaviors is more severe for hedonic purchases. This makes new payment systems with heavily consumer involvement such as Pay-What-You-Want (Viglia et al., 2019) more risky for hedonic purchases.

Third, we predict, and find evidence for, the mental representation of a hedonic good, coupled with a postponed payment, influences psychological ownership (Pierce, Kostova & Dirks, 2001), which we show to be the mechanism behind consumers' cheating behaviors. While Kamleitner and Erki (2013) found that postponed payment time decreases psychological ownership, we enrich this finding by showing the presence of an interaction between payment time and the nature of the purchase (hedonic vs. utilitarian) on consumers' perceived psychological ownership.

Fourth, our findings inform previous research on consumers' cheating behaviors (Shu et al., 2011) by demonstrating that individuals' likelihood to cheat is driven by their different feelings of ownership toward the purchased good. Specifically, when consumers have a weak feeling of self-possession toward the good, they are more willing to cheat. To our knowledge, this is the first study that empirically tests the mediating role of psychological ownership on cheating behaviors, thus offering a novel theoretical explanation on this issue.

This research has also at least two clear managerial implications. First, managers should recognize that, when consumers elaborate goods as being hedonic, they are more likely to cheat. Focusing on the more utilitarian features and benefits of hedonic goods, such as being essential, longer lasting and permanent (Okada, 2005), would help to mitigate this

effect. Second, businesses of hedonic purchases who offer finance deals that allow consumers to postpone their payments over a period of time, can apply a higher interest rate to discourage consumers from choosing postponed payment options.

This article is not without limitations. First, we manipulated two levels of payment method (cash vs. postponed), thus it would be beneficial to consider further time periods (e.g., shorter vs. longer payment periods) to better understand the effect on consumers' cheating behavior. Furthermore, as our studies were conducted online, a field study or other form of triangulation (e.g., archive data and focus groups) could be worth pursuing to provide a deeper analysis of the phenomenon. Finally, there might be boundary conditions that might reduce or increase cheating behavior. For instance, when consumers co-create a good they might feel more engaged (Tu et al., 2018), increasing psychological ownership. Similarly, peer pressure or social comparison (Viglia & Abrate, 2014) might drive malicious behavior.

This investigation also offers some avenues for future research. First, from a communications' perspective, it would be interesting to study whether descriptions that highlight utilitarian terms rather than hedonic terms (Schellekens, Verlegh & Smidts, 2010) would lead to different levels of mental representation, thus reducing the likelihood of consumer cheating behavior. Second, given the practical nature of goods perceived as utilitarian, self-efficacy (Sharma & Morwitz, 2016) might be an alternative proposed mechanism to explain the reduction of cheating behavior. Finally, looking at alternative forms of payment, such as digital currencies (e.g. Bitcoins, WeChat Pay), might also reveal new and different forms of cheating.

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## **Figures Legends**

*Figure 1: Conceptual Framework*

*Figure 2: Participants' cheating behavior depending on the hedonic or utilitarian nature of good and on the payment method*

*Figure 3: Mediation model of perceived psychological ownership on different types of good*