Is Product Return Worth My Time?

: Time as Money Effect
ABSTRACT

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Although the old adage that “time is money” has been commonly accepted to be true, it is not easy to recall and apply this lesson to various decisions of everyday lives. Since returning a purchased product inevitably involves consumers’ temporal costs, the current research posits that prompting people to consider the value of time, which is rarely considered in usual settings, may influence consumer product returns. The present research investigates this intriguing relationship, hypothesizing that provoking consumers to see their time in terms of money reduces their willingness in returning a slightly unsatisfactory product (Study 1). The results also reveal that priming the monetary value of time decreases consumer product returns, because those consumers tend to perceive more time pressure when involved in the return process (Study 2). In addition, this research proposes that the time as money effect on product return intention is mediated by perceived discomfort in retaining the product as well as perceived time pressure in returning the product, by employing a more global method of operationalizing the value of time and adding a task-neutral priming condition in order to provide more rigorous
evidence (Study 3). This work is further expanded to identify the boundary condition by examining the moderating role of private self-awareness in the relationship between time as money priming and product return intention through perceived discomfort (Study 4). Finally, a level of time pressure (Study 5A) and psychological discomfort (Study 5B) are directly manipulated respectively, expecting that this “manipulation-of-mediator” design produces systematic variance in product return intention and thus supports the thorough causal account. Taken together, the investigations of this dissertation imply that activating the value of time is effective in reducing consumer product returns by amplifying perception of time pressure and alleviating psychological discomfort, and this perceptual intervention works better for people with high private self-awareness.

**Keywords:** consumer product returns, time value, time pressure (time scarcity), psychological discomfort (cognitive dissonance), private self-awareness

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1. INTRODUCTION

“Remember that time is money” – Benjamin Franklin (1748/1961)

Grounded on Franklin’s insight, people have lived with the belief that time is money. People usually feel as if they have not enough time and have been working longer and harder over the last few decades (Menzies, 2005). In fact, “Americans report feeling that their time is more valuable than ever before” (Carroll, 2008; cited in Whillans & Dunn, 2015, p. 44). That is to say, people living in this busy modern society accept the belief, time is money, as true. Moreover, recent research suggests an interesting finding that spending money to buy time can reduce the perception of time famine of the modern life (Whillans, Dunn, Smeets, Bekkers, & Norton, 2017). Increases in wealth have not only triggered a desire to escape from a sense of time scarcity but also provided the means to make the desire real. By investing money on time-saving purchases, people could feel greater happiness and life satisfaction, being liberated from feelings of time pressure. As such, the importance of time as a finite and precious resource cannot be overstated and understanding how people make decisions on spending their time has become a significant issue (DeVoe & Pfeffer, 2007b).

Nevertheless, since time and money have several fundamental differences such that time cannot be inventoried or replaced inherently and time is not as easily measured as money. Hence, people are not familiar with accounting for their time along the same lines as money, often overlooking the value of time (Soman, 2001). In order to overcome this asymmetric perception between time and money, researchers have proposed several
interventions that make people regard time “as having value and as capable of being bought and spent as well as being saved and wasted” (see Becker, 1965; Soman, 2001; cited in Leclerc, Schmitt, & Dube, 1995, p. 110). In the current research, I would like to investigate the effect of priming the monetary value of time on consumer product returns, in order to make people ask themselves the following question before they decide to return the purchased goods: “Is product return worth my time?”

Then, why should this research link the conception of the value of time and consumer product returns? Living in the abundance of materials and being forced into the needs of diverse products, modern consumers often purchase desirable products as for now and decide later whether or not to keep them. Easy product return policy (e.g., no-questions-asked) even accelerates this phenomenon, remarkably increasing product return rates and severely decreasing firms’ revenue in recent years. The striking fact is that the most common reasons for product returns are not due to defective quality but due to “no trouble found (68%)” and “buyer’s remorse (27%)” (Lawton, 2008; Savitz, 2012). Therefore, considering product returns as a big headache incurring tremendous private, corporate, social, and environmental costs, I would like to provide practical solutions for the question of how to reduce product returns in terms of changing customers’ perception.¹

Previous studies have also provided situations that make consumers hesitant to return the purchased goods by using marketers’ interventions. For example, researchers

¹ This study assumes a traditional purchasing and returning environment where consumers search and choose the needed item themselves and consequently have some sort of ownership of the chosen option. A new type of business model, so-called curation commerce, that provides customers a set of items and encourages them to keep or return any or all of the packet (e.g., Stitch Fix, Warby Parker) is not a main focus of this study and thus will not be considered in the current research. I will address the direction of future research related to this curation commerce in the discussion part.
have investigated that the effect of free gift promotions on product returns (Lee & Yi, 2017), revealing that the gift-with-purchase could reduce product returns effectively by intensifying consumer’s sense of perceived loss. However, since this sort of marketing intervention is inevitably accompanied by promotional costs, I would like to find out how to maximize consumers’ perceived efforts and costs when involving in return process.

In the process of returning goods, people only pay attention to receiving money back in exchange for the returned product, but in reality, they also have to put their time-wise resources into such as completing a return sheet, going to the post office, or going back to the store. Because the value of time is not as salient as that of money, people are likely to overlook the temporal costs that must be put in the return process and therefore tend to decide easily for a product return. In the present research, I predict that provoking people to think about the value of time (i.e., making consumers consider their time as actual transaction costs) would significantly reduce consumer product returns. This is because people focus more on the temporal costs that must be paid for than on the monetary benefits that must be received back when involving in return process, meaning that they are more persuaded by the value of time particularly under the time as money manipulation. Overall, the research questions are outlined as follows:

(1) Is it true that seeing time as money reduces consumer product returns?

(2) What is the psychological mechanism underlying the time as money effect on consumer product returns?

(3) When is the time as money effect amplified or attenuated?

The current research attempts to integrate two academic fields by linking the value of time to consumer product returns. Five studies yield findings that have interesting theoretical and practical implications. First of all, I suggest that activating the monetary
value of time can be an effective strategy in reducing consumer product returns. In addition, I empirically examine that the time as money effect on consumer product returns is dually mediated by perceived time pressure in returning the purchase and perceived discomfort in retaining the purchase. Finally, I investigate the moderating role of private self-awareness in the relationship between the value of time priming and consumer product returns through perceived discomfort.
2. THEORETICAL BACKGROUND

2.1. Consumer Product Returns

Despite the increasing trend of consumer product returns, research on this marketing problem is relatively sparse in terms of both theoretical and empirical perspectives. Most of the early studies have been substantially grounded on analytical modeling, providing answers to the questions as to how to profitably manage the returns by suggesting a way to charge customers a nonrefundable fee such as shipping cost (Hess, Chu, & Gerstner, 1996) or developing a model to identify consumers or products with high return probabilities (Hess & Mayhew, 1997). Further, a topic that recently attracted attention in the product return research is about the effect of a lenient product return policy. A firm can ensure a competitive advantage and avoid mere price competition through lenient return policy (Padmanabhan & Png, 1997). Moreover, lenient product return policy help consumers enhance product quality perception (Wood, 2001) and increase their purchase rates via signal effect (Bechwati & Siegal, 2005). In addition, a field study proves that a product return policy can influence consumer repurchase behavior as well (Bower & Maxham, 2006).

While aforementioned studies have discussed some solutions for dealing with consumer product returns, the findings have not provided clues to understand consumers’ minds when deciding to keep or return previously purchased goods. Only very few researchers have tried to take a consumer-oriented approach and to examine consumers’ psychological reasons for deriving product return decision. However, recent studies have attempted to focus on psychological aspects of product return decision by positing sales
promotion as one of the determinants of consumer product returns. The work by Petersen and Kumar (2009) firstly underlined the link between price-oriented promotions and consumer product returns. They identify that consumers are less likely to return products purchased on sale than those purchased at regular price. Going further from this investigation which was limited to price-oriented promotions, Lee and Yi (2017) focus on a gift-with-purchase as the most prevalent practice in non-monetary promotions and find that consumers are less willing to return products that come with a free gift than those with no free gift.

As a topic that is more closely related to the present study, some studies have described the impact of effort on purchasing and returning processes on product returns. One study investigates that the independent and interactive impacts of a return deadline and an effort required for returning the product on the final decision of product returns (Janakiraman & Ordóñez, 2012). Focusing on prepurchase information search behavior, another recent research examines the effect of search (expense vs. experience) on product return intentions (Maity & Arnold, 2013). They suggest that consumers’ investment in product search can be considered as an expense or an experience and thus their product return intentions can be varied depending on which perspective is activated. Nevertheless, there have been no studies to date that have paid attention to the temporal resource spent in the return process as a major determinant of product return intention. The present research first attempts to identify the effect of activating the value of time on consumers’ ultimate product return intentions and decisions.
2.2. Time as Money Effect on Product Returns

Time and money are two basic resources that have different effects on variety of judgments and behaviors. Many studies have been fascinated by the idea that consumers often make product decisions involving the consideration of time and money. For instance, people are likely to endorse the mental accounting model (e.g., sunk-cost fallacy) primarily for money and not for time (Soman, 2001). This is due to the three distinctive features of time that would make it difficult to be explained along the same lines as money: (1) time cannot be inventoried or replaced, (2) time is not as easily aggregated as money, and (3) accounting for time (vs. money) is not a routine activity. Prior research has concentrated on a variety of related topics stemming from these fundamental differences in time and money. For instance, people are less likely to discount money (vs. time) since they believe themselves to have less availability in money than in time in the future (Zauberman & Lynch, 2005). Moreover, people tend to avoid risk when investing in money rather than investing in time (Okada & Hoch, 2004). On the contrary, people tend to be risk-seeking in the domain of losses of money than losses of time since time savings and/or losses cannot be easily estimated and transferred like money (Leclerc et al., 1995). Based on this insensitivity in time, previous work suggests that the currency of search (i.e., time vs. money) plays a moderating role in the relationship between search costs and search behavior (Monga & Saini, 2009). One of the most interesting findings is that focusing on money rather than time would make people less ethical, less socially engaged, but more hardworking (Gino & Mogilner, 2014), thus resulting the decrease in happiness (Mogilner, 2010). Furthermore, grounded on dual-process models, some researcher propose that time and money activate different styles of processing: money is connected with the analytic processing whereas time is connected with the affective processing (Lee,

As found in the above discussion, people tend to have difficulty in accounting for time costs in the same way as they do for money. In order to overcome this asymmetric understanding of time, for instance, the early work of Becker (1965) converts the value of time into opportunity cost, which is commonly assumed as a wage rate. In addition to this, Soman (2001) specifies three different experimental manipulations that can facilitate mental accounting of time costs as followings: (1) the existence of a wage rate so as to equate time to money, (2) education about the economic approach to time, and (3) emphasis on the opportunity cost of time. Throughout these interventions, people come to perceive time as having value and as capable of being bought and spent as well as being saved and wasted. To sum up, although the value of time is usually ambiguous (Okada & Hoch, 2004), putting a monetary value on time by making use of the concept of an hourly wage help people think of their time as money (Soman, 2001).

In fact, many studies have examined the effect of equating time and money on various consumer-related decisions. For example, thinking about time in terms of money impairs individuals’ ability to derive happiness from pleasurable events by engendering more impatience during unpaid time (DeVoe & House, 2012). Since money priming can develop a mindset with value-maximizing goals (Liu & Aaker, 2008), provoking people to see their time in terms of money increases their willingness to give up more of their leisure time to get more money (DeVoe & Pfeffer, 2007b) and decreases their willingness to volunteer time without compensation (DeVoe & Pfeffer, 2007a).

What I notice is that an hourly wage rate for one’s time evokes the goal of maximizing the economic value of one’s time (DeVoe & House, 2012). Moreover, an hourly wage payment scheme leads people to make an economic assessment of their time
(DeVoe & Pfeffer, 2007b). Therefore, I predict that prompting people to see their time as money can dissuade them from “wasting” their precious time on pointless things such as returning their purchase for minor reasons. In sum, the present research proposes the following hypothesis,

**H1:** Thinking about time as money (time value salient vs. non-salient) reduces consumer product returns.
2.3. Time Value and Time Pressure

The oft-quoted maxim that “time is money” was crystallized by Franklin (1748/1961). This way of thinking has been accepted to be a truism in Western culture that regards time as an economic good (Lakoff & Johnson, 1980; Usunier, 1991). However, while people are expected to think about the economic value of time in their everyday decisions about time allocation (e.g., Becker, 1965), a series of studies argues that people do not tend to regard time as money unless they are urged to do so (e.g., Soman, 2001; Okada & Hoch, 2004). Therefore, placing a monetary value on time can encourage consumers to view their time and money as interchangeable resources (DeVoe & Pfeffer, 2007b) and it thereby can help to increase concerns about using time profitably (DeVoe & House, 2012).

In this way, prompting people to equate their temporal resource with money would be helpful to make salient the ambiguous nature of time value. At this point, this research needs to pay attention the common and conventional heuristic association between value and scarcity. Earlier work proposes that “value and scarcity are always found together and never separated” (Carver, 1908, p. 628). Historically, psychologists shed light on the association between value and scarcity but examine it generally in one direction, such that people tend to highly value something scarce over something abundant (e.g., Lynn, 1992). Meanwhile, recent research suggests that valuable things are appeared to be even scarcer (King, Hicks, & Abdelkhalik, 2009), which means the reversed causal chain. Dai, Wertenbroch, and Brendl (2008) turn this conventional causal direction around, proposing that people would utilize the heuristic that if something were deemed more valuable, it would be presumed to be scarcer as well. Specifically, they argue that people judge the scarcity (frequency) of objects based on the subjective value of the objects, while they judge the value of objects based on the scarcity perception, an
effect referred to as the value heuristic. In line with this research, King et al. (2009) find that the perception of death (the scarcity of life) become more salient when one’s life value in monetary and psychological terms are enhanced. Likewise, recent work examines that the value-scarcity heuristic applies to time as well (i.e., DeVoe & Pfeffer, 2011), aligning with the premise that time is a finite resource. Hamermesh and Lee (2007) contend that people with higher incomes assign a greater value to their time and opportunity cost and further conclude that income levels may explain the variations in the experience of time pressure.

Interestingly, prior research has found that an increase in time pressure is not necessarily grounded in either a lack of substantial leisure time or a heavy workload (i.e., Robinson & Godbey, 1997). Rather, it is considered that the time famine is largely based on a perceptual problem, being consistent with the assumption that a higher level of time pressure results from individuals' high aspirations for the best use of available time. Further, based on King et al.’s (2009, p. 1459) logic that “attaching high value to an object produces biased perceptions of its scarcity,” literatures in the behavioral sciences have examined that the economic value of one’s time affect perceived time pressure. Pursuing this insight, DeVoe and Pfeffer (2011) prove that manipulating the economic value of time causes greater feelings of time pressure and consequently less patient behavior. Grounded on this logic, I expect that placing a dollar value on time would make people feel more pressure not to waste their time, and thereby lower their product return intention.

**H2:** Perceived time pressure mediates the time as money effect (time value salient vs. non-salient) on product return intention.
2.4. Time Value and Psychological Discomfort

An earlier work of Festinger (1957) has defined cognitive dissonance as a psychologically uncomfortable state that motivates a person to seek and implement a strategy to alleviate this unpleasant state (Elliot & Devine, 1994; Sweeney, Hausknecht, & Soutar, 2000). In this sense, cognitive dissonance that can be mainly regarded as a psychological discomfort is associated with the concept of anxiety, uncertainty or doubt (Menasco & Hawkins, 1978; Montgomery & Barnes, 1993) and is used in a similar sense to regret or remorse in the marketplace (Insko & Schopler, 2013).

In line with the dissonance theory of Festinger (1957), Cooper and Fazio (1984) have distinguished between the two conceptual domains of dissonance. First, “dissonance arousal” is characterized as a bodily condition analogous to a tension, being usually discussed in terms of a state of physiological arousal that may be negatively labeled and internally attributed. The dissonance arousal further elicits “dissonance motivation (i.e., psychological discomfort),” which turns out to motivate dissonance reduction (e.g., attitude change process).

As Elliot and Devine (1994) have pointed out, dissonance motivation has received much less attention than dissonance arousal until Cooper and Fazio (1984) reconcile these elements to the integrated dissonance process in their “New Look” model. Taking this comprehensive view, I could understand that people experience both physical arousal and resultant psychological discomfort when they act in a counterattitudinal manner and “in order to reduce this uncomfortable feeling they often change their original attitude to make it consistent with their behavior” (Gawronski & Strack, 2004, p. 535).

Drawing on prior studies of dissonance theory (e.g., Cooper & Fazio, 1984; Elliot & Devine, 1994; Festinger, 1957), I derive my hypothesis about the time as money effect
on consumers’ psychological discomfort in keeping an unsatisfactory product. As I mentioned above, psychological discomfort rises particularly when individuals hold themselves responsible for the incongruency between their behavior and ideal standards (Duval, Silvia, & Lalwani, 2012). In the context of purchase decision making, consumers would experience “post-purchase dissonance” which expresses their concerns of having made the wrong choice. Since “consumers continually receive various kinds of product information from their own experience, associates, advertisements, and salesmen (Anderson, 1973),” they often encounter the situations that two cognitions are inconsistent and psychologically dissonant and thus strive to reduce this mental discomfort by changing one or more of the cognitions or revising their own beliefs to make them more consonant with each other. For instance, as long as the return policy allows, consumers experiencing dissonance after the purchase would like to refund or exchange the product and this behavior change may be sometimes simpler and more advantageous way of resolving dissonance rather than attitude change. However, when consumers feel that returning the product (i.e., changing behavior) is not easy, for whatever reason, they would like to change their attitude as a means of reducing cognitive dissonance (Eagly & Chaiken, 1993). For example, when prompting people to think about the value of time, the temporal resource which inevitably has to be consumed for product return could be visualized as an actual cost. In this context, where the temporal resource converts into a monetary equivalent, consumers will find it difficult to set back their earlier decision (i.e., return the product) and feel relatively easy to apply the attitude change strategy. In other words, prompting the value of time (e.g., how time is a finite and precious resource that one should spend carefully) to be prominent would provide consumers a clue to justify their slightly dissatisfied purchases by alleviating any
lingering discomfort after the purchase. Accordingly, it is expected that consumers persuaded by the value of time would like to change their attitude toward the product while pursuing the suggested adage (e.g., “Time is money. Then, is product return worth my time?”), and thereby feeling less psychological discomfort in retaining that product.

It is somewhat obvious that people who experience strong cognitive dissonance after the purchase are more likely to return the purchased goods. However, it is interesting to note that consumers primed with the monetary value of time tend to feel less discomfort or remorse about the product, compared to the baseline condition, as they turn their attention to other ideal value, and thereby the attenuated discomfort can even lower the product return intention in the end. More simply, thinking about the value of time decreases psychological discomfort in keeping the unsatisfactory product, and thus reduces product return intention. In sum, the following hypothesis is advanced:

**H3:** Perceived discomfort mediates the time as money effect (time value salient vs. non-salient) on product return intention.
2.5. Private Self-Awareness and Time as Money Effect

Duval and Wicklund (1972) starts the discussion with the self-awareness theory assuming that people can only focus either on themselves or the environment, but not both. This early work has suggested that people are not self-focused in nature until they are exposed to a certain situation that can cause them to pay attention inward to themselves. Once individuals’ attention gets directed to the self, they are put into a state of objective self-awareness. Inspired by this original theory of self-awareness (Duval & Wicklund, 1972), social psychologists have refined the concept and definition of the self-awareness more elaborately and further investigated the implications for a variety of cognitive processes and framework.

Subsequent research makes a distinction between public and private self-awareness (Buss, 1980; Carver & Scheier, 2012; Fenigstein, Scheier, & Buss, 1975; Froming, Walker, & Lopyan, 1982). Fenigstein et al. (1975, p. 523) have manifested the concept of self-awareness such that the public self-awareness factor can be defined as “a general awareness of the self as a social object that has an effect on others,” while the private self-awareness factor can be concerned with “attending to one’s inner thoughts and feelings.” Furthermore, Fejfar and Hoyle (2000) have crystallized the concept of self-awareness as follows: public self-awareness refers to “the awareness of oneself from the imagined perspective of others,” whereas private self-awareness is defined as “the awareness of oneself from a personal perspective” (p. 132). For instance, standing in front of an audience would induce the former response, whereas gazing into a mirror would elicit the latter mode of self-awareness. Focus on the public self makes one’s behavior become more consistent with societal expectations, whereas focus on the private self leads to behavior that reflects personal attitudes and beliefs (Froming et al., 1982).
Consumer behavior research has shown interesting results that whether which one of the public or private self-awareness is activated can induce a distinct effect on consumer choice and preference. The public self-awareness usually triggered by the presence of an audience or video camera would switch individuals’ choice away from their original preferences (Ariely & Levav, 2000; Ratner & Kahn, 2002). On the other hand, the private self-awareness, based on its inherent characteristics, plays a role opposite to the public self-awareness in consumer decision making. If a code of behavior deemed appropriate is accessible, privately self-aware people are likely to perceive a discrepancy between the standard and current behavior. When confronting this situation, their heightened self-attention should promote the motivation to alleviate that discrepancy (Gibbons, 1990). However, even if there is no apparent behavioral standard to conform, privately self-aware people use an internalized standard of correct behavior themselves and tries to conform it (e.g., Vallacher & Solodky, 1979). Moreover, since privately self-focused people are not only conscious of their personal beliefs and attitudes but act in a manner congruent with their own standards, they tend to make it easier for them to develop product preferences (Gibbons, 1990). Subsequent research has enriched the discussion, revealing that privately self-aware people tend to use their personal characteristics and standards as guides for their behavior (Dijksterhuis & Van Knippenberg, 2000). Spurred by these findings, Goukens, Dewitte, and Warlop (2009) has suggested that “privately self-aware consumers are less inclined to opt for a varied choice set and are less likely to select compromise options” (p. 682). This is because privately self-aware people rely more on their personal, distinctive preference weights and thus tend to neither diversify their choice set (i.e., variety seeking) nor choose a compromise option (i.e., compromise effect).
Inspired by the previous findings that situational priming of and/or chronic differences in self-awareness have implications for many of the consumer-related phenomena (e.g., Goukens et al., 2009), I expect that the private dimension of self-awareness would moderate the time as money effect on consumer return intention and behavior. Privately self-aware consumers are clearly aware of their personal beliefs and attitudes and thus construct solid preferences in product choice. Therefore, they would feel a high level of psychological discomfort (i.e., cognitive dissonance) in being trapped in their unsuccessful purchases. That is to say, when people direct their attention inward toward themselves, cognitive dissonances and inconsistencies elicit much more aversive state of discomfort (Gibbons, 1990; Goukens et al., 2009). Hence, this unpleasant tension would motivate consumers to reduce the psychological inconsistency by choosing change in either attitude or behavior.

In addition to the aforementioned explanations, Higgins (1987) links the conception of psychological discomfort to the experience of “a self-discrepancy—a deficit between how one wants to view oneself (ideal self) and how one currently views oneself (actual self)” (Kim & Gal, 2014, p. 527). He explains that the self-discrepancy produces a self-threat that induces psychological discomfort one would like to resolve. In particular, if a purchase does not meet the expectations, privately self-aware people who would have their own standards, attitudes, and preferences may feel threats to their desired identity (e.g., ideal self as a smart shopper) beyond merely experiencing the disconfirmation of expectations (Oliver, 1980). In other words, privately self-focused people tend to feel more psychological discomfort in retaining the indifferent or slightly unsatisfactory products and thus attempt to return the purchase under baseline condition, since they are in need of restoration that should recover their threatened self and
ameliorate the uncomfortable psychological state. However, if privately self-aware people are prompted to think about the monetary value of time, they are related to and persuaded by other domains of ideal value and tend to feel less discomfort in keeping the purchase. Thus, the lower level of psychological discomfort reduces product return intention among privately self-aware people. On the contrary, people with low private self-awareness do not usually have a strong standard or preference and thereby possession of the indifferent products are not a big deal for them, inducing just a low level of discomfort inherently. Hence, people with low private self-awareness indicate no difference in their feelings of discomfort regardless of the priming condition, namely showing a low level of discomfort at any time. Consequently, the time as money effect would be amplified among individuals with high private self-awareness.

H4: Consumers’ private self-awareness moderates the time as money effect on perceived discomfort, such that (a) consumers with high private self-awareness perceive lower discomfort in keeping indifferent products when they are in a time as money (vs. no) priming condition, and (b) consumers with low private self-awareness show no difference in their perceived discomfort regardless of the priming condition.
3. EMPIRICAL STUDIES

Overview

The present research is composed of five studies that examine the time as money effect on consumer product returns. Study 1 examines whether provoking people to see their time in terms of money reduces their willingness in returning a slightly unsatisfactory products. Study 1 directly manipulates the provision of a wage rate as a proxy for the economic value of time. Study 2 further investigates why priming the monetary value of time decreases consumer product returns, proposing perceived time pressure as a potential mediator. Study 3 employs a more global and natural method of operationalizing the value of time and adds a task-neutral priming condition to serve as a control group. Furthermore, Study 3 cultivates the mediating role of psychological discomfort, suggesting that the time as money effect on product return intention is dually mediated by perceived time pressure in returning the product and perceived discomfort in retaining the product. Study 4 improves this work to the boundary condition by examining the moderating effect of private self-awareness on the relationship between time as money priming and product return intention through perceived discomfort. Lastly, Study 5 investigates the psychological mechanisms underlying the time as money effect on product return intention with an experimental manipulation of a mediator, perceived time pressure (Study 5A) and perceived discomfort (Study 5B). Figure 1 displays the conceptual framework and the hypothesized relationships.
Figure 1. Conceptual model for the time as money effect on consumer product returns
3.1. Study 1: Time as Money Effect on Product Returns

I begin my investigation by examining the time as money effect on product returns (H1). The goal of Study 1 is to examine whether thinking about the monetary value of time can reduce consumer product returns. Study 1 manipulates the provision of a wage rate as a proxy for the economic value of time. Further, Study 1 tries to demonstrate that if there could be differences in product return intention depending on the level of wage rate.

Method

Participants and Design. A total of 153 participants in the United States were recruited via the Amazon Mechanical Turk; five respondents who failed the Instructional Manipulation Check were excluded from the dataset (Oppenheimer, Meyvis, & Davidenko, 2009), leaving 148 (70 females, M_{Age} = 36.66 years, age range: 19 to 71) respondents for analysis. Study 1 used a single-factor (wage rate: high vs. low vs. no information) between-subjects design. Participants were randomly assigned to one of the three conditions.

Procedure. Participants read a hypothetical scenario which illustrated that they were supposed to imagine buying a new jacket. Specifically, the following information was presented: they visited to a shopping mall located one hour away by car and purchased a jacket which was good enough for the price of $59.00. When they came home, however, they found that they had some other jackets to wear in fall and winter season. Feeling a little regret at spending their money on unneeded item, they wavered in indecision for a moment pondering whether or not to return (keep) the jacket. According to the experimental conditions, participants were either informed that the wage rate for their
current part time job was $30.00 per hour (the high wage rate condition), $10.00 per hour (the low wage rate condition), or they were not given this information (the no wage rate information). I meticulously designed the scenarios differed only in the availability/level of wage rate but identical in all other respects: mall location, product quality/price, reason of dissatisfaction (i.e., not because of defective quality but because of a buyer’s remorse), and return policy. After reading the scenarios, participants rated their intentions to return the purchase based on three items taken from Lee and Yi (2017) (1 = unlikely/improbable/keep, 9 = likely/probable/return; $\alpha = .98$) and had to decide whether to return the purchase consequently. As a manipulation check, participants evaluated how high the hourly wage was (1 = very low, 9 = very high). In addition, they answered on their price perception (1 = not expensive at all, 9 = very expensive) and also provided demographic information including gender, age, employment status, household income, and their own wage rate.

**Results**

**Manipulation and Confound Checks.** A one-way ANOVA on the manipulation check for the level of wage rate supported that the manipulation worked as intended. In particular, subjects in the high (vs. low) wage rate condition reported that they perceive the given wage rate is relatively high ($M_{\text{High-wage}} = 7.25$ vs. $M_{\text{Low-wage}} = 5.08$, $F(1, 96) = 42.57, p < .001$). Additional ANOVA analyses were performed to rule out the possibility of confounds caused by group differences. The results indicated that there were no

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2 The pretest ($N = 138$; only US based MTurk worker; values below or above 3 SD were eliminated because they represent outliers) revealed that MTurk respondents’ average wage rate was 14.49 USD. Thus, I proposed $30/hour which is about twice the average wage rate of the subjects under the high wage rate condition; while I suggested $10/hour which is relatively lower than the average wage rate of the subjects under the low wage rate condition.
significant differences among the three experimental conditions with respect to participants’ price perception ($p > .2$), employment status ($p > .4$), logged household income ($p > .6$), and logged wage rate ($p > .4$).

**Time as Money Effect on Product Returns.** A one-way ANOVA showed that there was a main effect of time as money manipulation (i.e., wage rate) on product return intention ($M_{\text{High-wage}} = 3.42$ vs. $M_{\text{Low-wage}} = 4.33$ vs. $M_{\text{No-wage}} = 6.68$, $F(1, 145) = 25.95$, $p < .001$).

To control respondents’ perception of product price, a one-way ANCOVA was conducted with price perception as a covariate. Price perception did not significantly differ across the three conditions ($F(1, 145) = 1.71$, $p > .2$), and the key results were not affected when individuals’ price perception was taken into account. In detail, the results of ANCOVA revealed that price perception had a significant effect on product return intention ($F(1, 144) = 16.84$, $p < .001$), but the time as money effect on product return intention remained significant ($F(1, 144) = 28.37$, $p < .001$). Hence, the prediction that thinking about time as money reduces product return intention was supported after controlling for price perception ($H_1$).

In addition, a planned contrast was performed by comparing the conditions of high wage rate, low wage rate, and no wage rate information. The contrast analyses indicated that priming time as money with high wage rate lead to lower product return intention compared to no-priming condition ($t(145) = 6.95$, $p < .001$). Even in the low wage priming condition, participants were less likely to return the product than in the no-priming condition ($t(145) = 5.08$, $p < .001$). Interestingly, there was no significant difference in product return intention between the high versus low wage priming groups ($t(145) = 1.93$, $p > .06$). Since the goal of this paper was to investigate the time as money
effect on product returns but not to identify the linear effect of wage increases on return intention, I ignored the small (but not significant) difference produced by the high versus low wage rate groups. Therefore, I pooled the data from the two groups to investigate the overall effect of wage rate priming on consumer product returns. As a result of one-way ANOVA, I could confirm that priming time as money with wage rate information had a significant effect on consumers’ intention to return the products ($M_{\text{Wage}} = 3.88$ vs. $M_{\text{No-wage}} = 6.68$, $F(1, 146) = 47.30$, $p < .001$). Overall, the findings again supported $H_1$ even after controlling for price perception as a covariate ($F(1, 145) = 54.46$, $p < .001$).

A chi-square analysis was performed to examine the relationship between wage rate information and consumers’ product return decision. The results revealed that product returns were significantly affected by wage rate ($\chi^2(1,148) = 20.06$, $p < .001$). Specifically, as shown in Figure 2, participants were less likely to return their purchased goods in the high wage rate condition (25%) than in the low wage rate (36%) or no-priming condition (68%). Since there was no significant difference between the high and low wage rate groups ($\chi^2(1,98) = 1.40$, $p > .2$), I pooled the data as I have done in the ANOVA analysis and the result indicated that the time as money effect primed with wage rate had a significant effect on product return decision ($\chi^2(1,148) = 18.86$, $p < .001$).
Discussion

Study 1 suggests that thinking about time as money reduces consumer product returns (H1). As expected, consumers’ product return intention and their final return decisions are affected by time as money thought primed with wage rate. The notable finding here is that consumers show lower product return intentions once they are primed with wage rate, but the increase in wage rate does not make a significant difference. Therefore, in Study 2, I plan to conduct experiment on two independent groups according to wage rate availability.

**Figure 2.** Time as money effect on product return decision
3.2. Study 2: Mediating Role of Time Pressure

The aim of Study 2 is to determine underlying mechanisms behind the time as money effect on product returns while replicating the findings of Study 1. Specifically, I examine whether perceived time pressure mediates the relationship between time as money thought and consumer product returns (H2).

Method

Participants and Design. A total of 138 respondents in the United States participated in this experiment through the MTurk. One hundred and thirty respondents remained for analysis (70 females, $M_{\text{Age}} = 40.10$ years, age range: 21 to 75) after excluding 8 participants who failed the attention check (Oppenheimer et al., 2009). Study 2 used a single-factor (wage rate salience: wage vs. no wage) between-subjects design. Participants were randomly assigned to one of the two conditions.

Procedure. The hypothetical scenario for this study was identical to that of Study 1 but with a little difference in the details. Participants were supposed to imagine buying a new jacket worth $59.00, while they yet wavered in indecision about returning the item due to mild dissatisfaction. Participants in the wage rate provided condition were instructed to give an hourly rate for their time, whereas participants in the no wage rate provided condition were not primed with this instruction. In Study 2, I did not specify the monetary value of wage rate in the scenario. Instead, I made participants come up with a ballpark estimate for their wage rate in the real life. All other aspects which may possibly induce confounding reactions were carefully treated in the same way between the groups. After reading the scenarios, participants assessed their product return intention ($\alpha = .96$)
based on the scales from Lee and Yi (2017) and made a final decision whether to return the purchase. Perceived time pressure ($\alpha = .96$) was rated on a scale used by DeVoe and Pfeffer (2011) and Etkin, Evangelidis, and Aaker (2015) to capture consumers’ feelings of time scarcity. The items were as follows: “When I made a decision on whether or not to return the product,” (1) “I feel pressed for time,” (2) “I feel I’m in rush,” and (3) “I feel like I don’t have enough time” (1 = strongly disagree, 9 = strongly agree). Price perception was measured (1 = not expensive at all, 9 = very expensive) and demographic information was collected on gender, age, employment status and household income. The realism of scenarios ($\alpha = .78$) was checked and the results showed that participants perceived the experimental manipulation as realistic ($M = 7.48$, $SD = 1.52$). After all, the IMC (Oppenheimer et al., 2009) was applied to measure participants’ attention (see Appendix for the detailed items).

**Results**

A one-way ANOVA was conducted to examine that thinking about monetary value of time (i.e., wage rate salience) can affect product return intention. As expected, priming time as money with the provision of a wage rate lead to lower product return intention ($M_{Wage} = 4.80$ vs. $M_{No-wage} = 6.06$, $F(1, 128) = 9.03$, $p < .003$). Additional ANOVA analyses were performed to rule out the potential confounds and the results showed that there were no significant differences between the two groups regarding to participants’ price perception ($p > .6$), employment status ($p > .7$) and logged household income ($p > .1$). Further, a one-way ANCOVA was tested with price perception as a covariate. As in Study 1, the results of ANCOVA revealed that price perception had a significant effect on product return intention ($F(1, 127) = 7.26$, $p < .008$), but the time as money effect on
product return intention was still significant \( (F(1, 127) = 8.71, p < .001) \). Therefore, the hypothesis that thinking about time as money reduces product return intention was supported after controlling for price perception \((H_1)\). Lastly, a chi-square analysis was employed to examine the time as money effect on consumers’ product return decision. The results revealed that product return decision was significantly varied by the salience of wage rate \( (\chi^2(1,130) = 5.79, p < .016) \), indicating that consumers valuing their time as a monetary equivalent are likely to keep the purchased goods rather than returning it.

**Mediation Analysis.** In order to identify the role of perceived time pressure in the link between time as money priming and product return intention, a mediation analysis was employed using the PROCESS macro (Hayes, 2012; Model 4, 5,000 resamples). The bootstrapping results showed that thinking about time as money with the provision of a wage rate reduced product return intention and this relationship was mediated by perceived time pressure \( (\beta = -0.10, 95\% \text{ CI} = -0.27 \text{ to } -0.01) \). Accordingly, the result supported \( H_2 \), illustrating that perceived time pressure plays a significant mediating role in the time as money effect on product return intention.

**Alternative Explanation.** Wage is *money* paid for *time* spent at work. In detail, Oxford dictionary defines wage as “a fixed regular payment earned for work or services, typically paid on a daily or weekly basis.” Thus, by its definition, wage rate information can activate both time and money perception. That is to say, when wage rate information is being actively cued, consumers can infer perceptions of affordability (i.e., subjective financial control) as well as time pressure. For instance, if consumers feel a sense of affordability rather than time pressure from the cue that they make money on their jobs,
it is also plausible to predict that they are less likely to return the purchase.

In order to test the above arguments, perceived affordability ($\alpha = .94$) was measured with the items as follows: “As a purchaser of the scenario,” (1) “I can afford to buy the jacket,” (2) “I have enough money to buy the jacket,” and (3) “The jacket is affordable under my budget constraint” ($1 = strongly disagree, 9 = strongly agree$). A mediation analysis was tested by substituting perceived affordability for perceived time pressure (Hayes, 2012; Model 4, 5,000 resamples). The alternative path through perceived affordability (time as money priming $\rightarrow$ perceived affordability $\rightarrow$ return intention) provided no support for the mediational effect ($\beta = 0.04$, 95% CI = −0.04 to 0.18). Further, a multiple mediator model was performed using the PROCESS macro (Model 4; Hayes, 2012) to examine the role of the two potential mediators simultaneously. As depicted in Figure 3, the indirect effect was significant only with perceived time pressure as a mediator ($\beta = -0.08$, 95% CI = −0.27 to −0.01), indicating that the mediational process via perceived affordability was not different from zero ($\beta = 0.04$, 95% CI = −0.03 to 0.16). Therefore, the findings provided evidence for the mediating role of perceived time pressure, but not for that of perceived affordability.
**Figure 3.** Time as money effect on product return intention via perceived time pressure

Notes: *p < .05, **p < .01; Number of bootstrap samples = 5,000.

**Discussion**

Study 2 confirmed that consumer product returns could vary depending on the conversion of time into a monetary equivalent. The findings suggest that consumers who are explicitly made aware of the wage rate reported lower product return intention (H1). More interesting finding is that the time as money effect on product return intention is mediated by consumers’ feelings of time pressure (H2), ruling out alternative explanation via perceived affordability. The results concluded that consumers primed with wage rate are less likely to return the purchased goods because the wage rate reminds them of the scarcity of time, not because it reminds them of abundant financial resources.
3.3. Study 3: Dual Mediation of Time Pressure and Discomfort

Study 3 has three main objectives. First, I try to activate “time as money” in a purely cognitive sense to improve the constraint that priming wage rate information in self may impose or force a feeling of time pressure. Thus, Study 3 manipulates “the value of time” instead of wage rate in order to operationalize the independent variable in a more global and natural way. Second, the current study adds a neutral priming condition to serve as a control group. The priming (i.e., wage rate information) versus non-priming (i.e., no information) treatment may produce a difference in attention level which possibly affects the outcome variable. Therefore, by adding a task-neutral priming condition, I will be able to prove that there is nothing else but “the value of time” affects product return intention. Third, I propose the possibility of existence of another process mechanism that can increase or decrease consumer product returns. Consumers are experiencing psychological discomfort (i.e., cognitive dissonance) when they are dissatisfied with the purchased product, and they try to rationalize their decisions by developing coping strategies (attitude change process). Of course, if it is possible to return the product, it would be easier and more rational to change behavior rather than to change attitude. However, I believe that when people are primed with the value of time, they can offset the psychological discomfort by pursuing the value that is considered to be ideal and therefore tend to keep the purchase without deciding to spend their time for the returning process. In sum, Study 3 would confirm the hypothesis that perceived time pressure and perceived discomfort mediate the time as money effect on consumer product returns with the use of new experimental method (H₂ and H₃).
**Method**

*Participants and Design.* A total of 234 respondents in the United States were recruited through the MTurk. Sixteen participants were removed from analysis for failing the attention check (Oppenheimer et al., 2009), leaving a sample of 218 (137 females, \( M_{\text{Age}} = 37.27 \) years, age range: 19 to 73) participants. Study 3 was a 3 (priming: time priming vs. task-neutral priming vs. no priming) between-subjects design. Participants were randomly assigned to one of the three conditions.

*Procedure.* The basic scenario for Study 3 was similar to that of Study 1 and 2 but with a significant change in manipulation method. Participants were instructed to think about specific values before they were exposed to the scenario-based task. I primed the value of time with a manipulation introduced by Saini and Monga (2008). In the value of time condition, participants read:

Please take a couple of minutes to write a short essay on the value of time. In this essay, please explain how time is a resource that one should spend carefully, using your own experiences or saying/proverbs regarding “time.”

I manipulated the value of health as a task-neutral priming, since health is not only as important as time but has a neutral characteristic that does not affect purchase decisions. In the value of health condition, participants read:

Please take a couple of minutes to write a short essay on the value of health. In this essay, please explain how health is important, using your own experiences or common knowledge regarding “health.”

Participants were instructed to spend at least 5 minutes on this task before they move to the scenario-based task. They were supposed to write an essay as much as possible.
without worrying about spelling or grammar. Participants in the no-priming (baseline) condition did not have to do this writing task. After completing the writing task, participants read the identical scenario as in the previous experiments which describes a purchase experience contemplating product return due to mild dissatisfaction. Besides the manipulation of time and health values, all other aspects were carefully treated in the same way among the groups. After reading the scenarios, participants completed their product return intention ($\alpha = .97$), a final decision whether to return the purchase, and perceived time pressure ($\alpha = .95$) on the same scale used in Study 2. Perceived discomfort ($\alpha = .87$) was assessed by using the scale modified from Elliot and Devine (1994). Specific items were as follows: “When I made a decision on whether or not to return the product, I was _________ about sticking to my earlier decision (i.e., keeping the jacket)”: (1) uncomfortable, (2) bothered, and (3) self-critical ($1 = strongly disagree, 9 = strongly agree$). Furthermore, I additionally measured one's chronic time pressure ($\alpha = .90$), materialism ($\alpha = .88$), and perception of financial constraint ($\alpha = .85$) in order to control the individual differences which can affect the link between time as money thought and product returns. Price perception and demographic information were also assessed. The realism of scenarios ($\alpha = .73$) was evaluated and the results indicated that respondents thought the experimental situation as realistic ($M = 7.80, SD = 1.97$). Finally, the IMC (Oppenheimer et al., 2009) was used twice to assess participants’ attention to instructions (see Appendix for the detailed items).

**Results**

A one-way ANOVA was employed to test a prediction that consumers primed with the value of time (vs. neutral priming, no-priming) indicate a lower level of product return
intention. The results showed that the effect of activating the value of time on product
return intention was statistically significant ($M_{\text{Time}} = 4.00$ vs. $M_{\text{Neutral}} = 6.17$ vs. $M_{\text{No-priming}} = 6.57$, $F(1, 215) = 23.93, p < .001$). Additional ANOVA analyses were conducted to
control for the possible confounds of group differences. There were no significant
differences among the three groups with respect to participants’ chronic time pressure ($p > .5$), materialism ($p > .1$), financial constraint ($p > .4$), price perception ($p > .7$), and
logged household income ($p > .5$). A one-way ANCOVA was tested with chronic time
pressure, materialism, financial constraint, and price perception as covariates. The result
of ANCOVA revealed that the effect of time value salience on product return intention
was still significant ($F(1, 211) = 22.92, p < .001$). Overall, the hypothesis that thinking
about the value of time reduces product return intention was supported after controlling
for chronic time pressure, materialism, financial constraint, and price perception ($H_1$).

Furthermore, a planned contrast was used to compare the conditions of the value
of time priming, neutral priming, and no-priming. The contrast analyses indicated that
priming the value of time entailed lower product return intention than no-priming
condition ($t(215) = 6.48, p < .001$). Participants primed with the value of time were even
less likely to return the product than those primed with the value of health, a proxy for
the neutral prime ($t(215) = 5.41, p < .001$). I could find no significant difference in product
return intention between the neutral versus no-priming groups ($t(215) = 1.01, p > .3$).
Therefore, the neutral priming group functions as a control group as well as the no-
priming group.

In addition, a chi-square analysis was performed to examine the effect of
activating the value of time on consumers’ final decision to return. The results revealed
that the salience of the value of time significantly affect product return decision ($\chi^2(1,218)$)
In more detail, as depicted in Figure 4, participants were less likely to return their purchases in the value of time (29%) than in the value of health (61%) or no-priming condition (71%). As in the results of ANOVA, this result is driven by differences between the value of time and the two control groups (the neutral priming: $\chi^2(1,142) = 15.18, p < .001$; the no-priming group: $\chi^2(1,146) = 26.31, p < .001$).

There was no significant difference between the neutral and no-priming groups ($\chi^2(1,148) = 1.63, p > .2$). Hence, all the above results indicated that consumers valuing their time are likely to keep the purchased goods rather than returning it.

**Figure 4.** The effect of time value salience on product return decision

**Mediation Analysis.** The role of perceived time pressure and perceived discomfort in the relationship between the value of time priming and product return intention were tested by using a mediation analysis with the PROCESS macro (Hayes, 2012; Model 4, 5,000 resamples). Figure 5 illustrates the results that activating the value of time reduced
product return intention and this relationship was simultaneously mediated by perceived time pressure and perceived discomfort. That is, consumers primed with the value of time tend to feel more time pressure upon product return process and thus be less likely to return the product ($\beta = -0.44$, 95% CI = $-0.88$ to $-0.13$). The mediatinal process via perceived discomfort was significant but in the reverse direction, indicating that consumers primed to value their temporal resources tend to feel less psychological discomfort in experiencing buyers’ remorse for keeping the unmet products and this reduced discomfort consequently lower the product return intention ($\beta = -0.25$, 95% CI = $-0.62$ to $-0.03$). Consequently, the results of mediation analyses supported H$_2$ and H$_3$, proving the dual path via perceived time pressure and perceived discomfort which mediate the link between the value of time and product return intention.
Figure 5. The effect of time value salience on product return intention via perceived time pressure and perceived discomfort

Discussion

Study 3 confirmed the hypothesis that perceived time pressure and perceived discomfort mediate the time as money effect on consumer product returns, supporting H2 and H3. Moreover, this observation provides meaningful implications since I tried to use a different type of manipulation and add a control group so as to develop more rigorous design and methodology. By obtaining the same results as in the previous studies while manipulating time in a different way (i.e., the value of time instead of wage rate), I could find that people are persuaded with a purely cognitive sense of time value priming. That is, consumers who are valuing their time resource tend to keep the slightly unsatisfactory product without calculating the hourly wage. Furthermore, Study 3 provided evidence that there is nothing else but “the value of time” affects product return intention by adding...
a task-neutral priming condition as a control group. By using this thorough experimental
design, I could convince the mediating role of psychological discomfort in the model as
well as time pressure. Specifically, when consumers are primed with the value of time,
they can offset psychological discomfort in keeping the unmet products because they are
guided to pursue the higher level of value that is considered to be more important and
ideal. Hence, consumers valuing their time resource tend to retain the purchase rather than
to spending their time for the returning process.
3.4. Study 4: Moderating Role of Private Self-Awareness

The objective of Study 4 is to identify boundary condition where consumers feel greater or lesser perceived time pressure and/or discomfort with regard to the decision on returning (keeping) the purchase. I propose a moderating role of private self-awareness (high vs. low), expecting that the time as money effect on product return intention via perceived discomfort would be attenuated among consumers with high private self-awareness (H₄). Since privately self-aware people are likely to use their personal characteristics and standards as guides for their behavior (Dijksterhuis & Van Knippenberg, 2000), they perceive a high level of discrepancy between their internal standards and the actual purchase outcome. For this reason, I anticipate that privately self-aware people tend to feel more psychological discomfort and be motivated to correct their purchase decision even under the situation where they are primed with the time as money thought. Since the concept of private self-awareness is closely related to one’s feeling of discomfort but not to time pressure, this research predicts that the moderating role of private self-awareness will only be applied to the process via psychological discomfort.

Method

Participants and Design. A total of 207 respondents in the United States were recruited through the MTurk. Sixteen participants were eliminated from analysis for failing the IMC (Oppenheimer et al., 2009), leaving a sample of 191 (127 females, \(M_{\text{Age}} = 38.69\) years, age range: 20 to 80) participants. Study 4 employed a single factor (wage rate salience: wage vs. no wage) between-subjects experiment. Participants were randomly assigned to one of the two conditions.
Procedure. The experimental design for this study was identical to that of Study 2 but with the addition of measures to check private and public self-awareness. Respondents reported their private self-awareness based on ten items ($\alpha = .74$) and public self-awareness based on seven items ($\alpha = .84$) taken from Fenigstein et al. (1975). Other variables were identically measured as in previous studies and the reliability coefficients were all greater than .80 (see Appendix for the detailed items).

Results

A one-way ANOVA was examined to test a prediction that consumers primed with the monetary value of time are less likely to return their purchase. The results showed that the effect of activating wage rate on product return intention was statistically significant ($M_{\text{Wage}} = 4.05$ vs. $M_{\text{No-wage}} = 7.22$, $F(1, 189) = 109.14$, $p < .001$). Additional ANOVA analyses were conducted to control for the potential confounds of group differences but the results found no significant differences between the experimental groups with respect to participants’ private self-awareness ($p > .9$), public self-awareness ($p > .6$), chronic time pressure ($p > .7$), materialism ($p > .4$), financial constraint ($p > .5$), price perception ($p > .2$), and logged household income ($p > .1$). A one-way ANCOVA was conducted with chronic time pressure, materialism, financial constraint, and price perception as covariates. The result revealed that the time as money effect on product return intention was still significant after controlling for chronic time pressure, materialism, financial constraint, and price perception ($F(1, 185) = 103.45$, $p < .001$). Therefore, I could confirm my hypothesis that consumers primed with wage rate are less likely to return their purchase ($H_1$).

A chi-square analysis was applied to examine the effect of activating the
monetary value of time on consumers’ return decision. With the preceding results, the wage rate salience influences product return decision ($\chi^2(1,191) = 55.79, p < .001$). Figure 6 plots of participants’ tendency for product returns, revealing a lower intention to return in the wage rate salience (28%) than in the no wage rate condition (81%). Taken together, all the results indicated that consumers valuing their time as a monetary equivalent tend to stick their purchase decisions rather than returning it.

![Figure 6. Time as money effect on product return decision](image)

**Moderated Mediation Analysis.** To examine whether the time as money effect on product return intention via perceived time pressure and perceived discomfort depends on private self-awareness, a moderated mediation analysis was applied (Hayes, 2012; Model 7, 5,000 resamples) with wage rate salience as the independent variable, product return intention as the dependent variable, perceived time pressure and perceived discomfort as the dual mediators, and private self-awareness as the first-stage moderator.
As illustrated in Figure 7, providing support for this moderated mediation model, wage rate salience x private self-awareness had a significant interaction effect on respondents’ perceived discomfort in retaining the unsatisfactory purchase ($\beta = -0.70$; $t(187) = -2.49, p < .014$). In turn, perceived discomfort had a significant effect on product return intention ($\beta = 0.29$; $t(187) = 4.12, p < .001$). In addition, the index of moderated mediation was also significant showing that confidence interval did not include zero ($\beta = -0.20; 95\% \ CI = -0.42 \ to \ -0.06$). Specifically, in the high private self-awareness condition, the time as money effect on product return intention was negatively mediated by perceived discomfort (95% CI = −0.82 to −0.15). On the contrary, in the low private self-awareness condition, the indirect effect of time as money on product return intention via perceived discomfort was not significant (95% CI = −0.22 to 0.26). Meanwhile, as I anticipated, wage rate salience x private self-awareness showed no interaction effect on perceived time pressure in returning the purchase ($\beta = 0.58$; $t(187) = 1.86, p > .06$). Thus, the time as money effect on product returns via perceived time pressure was not moderated by private self-awareness, only replicating the mediational pathway. To probe the moderation of this indirect effect, I plotted significant interactions using estimates obtained from the bootstrap method. Figure 7 shows that the wage rate salience (vs. no wage rate) elicits higher levels of perceived time pressure only among highly self-aware consumers. Consistent with my theory, the findings suggest that the indirect effect of the monetary value of time on product return intention via perceived discomfort depends on individuals’ private self-awareness.
Study 4 provided support for H₄, probing the moderation of the indirect effect. Priming consumers with wage rate information (vs. no wage information) is more beneficial in decreasing consumers’ product return intention by increasing perceived time pressure in returning the product and decreasing perceived discomfort in keeping that purchase. Interestingly, the indirect path through perceived discomfort works only among the privately self-aware people (H₄). Said differently, when privately self-aware consumers buy a product which is turned out to be slightly unsatisfied after the purchase, they would feel a high level of psychological discomfort in keeping the product and thus are more likely to return it even though they are primed with the value of time. However, the
indirect path through perceived discomfort would be disappeared among consumers with low level of private self-awareness, since they are less willing to use their personal characteristics and standards as guides for their behavior and have no strong preference and taste in product choice.
3.5. Study 5: Manipulation of Time Pressure and Discomfort

Previous studies have replicated the association between activating the value of time and consumer product returns and which psychological processes underlie this effect. Although Study 2 to 4 supported the prediction that perceived time pressure and perceived discomfort mediate the relationship between the value of time priming and product return intention in a step-by-step procedure, the results of this correlational approach are not free from a risk of confounding caused by “measurement-of-mediation” methods (Pirlott & MacKinnon, 2016). Moreover, since people apply a heuristic based on the scarcity rule that “scarce objects are more valuable” and that “if a product or opportunity is rare, it must be good” (Cialdini & Goldstein, 2004; cited in Griskevicius et al., 2009, p. 385), the current interpretations in the reverse direction need to be rigorously verified. This study is also necessary to confirm that time pressure and discomfort are meaningful and essential psychological variables in this model as distinct variables from the independent variables. Thus, the aim of Study 5 is to provide a more rigorous test of causal effects by applying “manipulation-of-mediator” designs. Study 5A manipulates a level of time pressure and Study 5B manipulates a level of psychological discomfort each, expecting that the direct manipulation of mediators would produce systematic variance in product return intention. Moreover, Study 5 used different samples other than MTurk workers in order to obtain more generalized implications.
3.5.1. Study 5A: Manipulation of Time Pressure

Method

Participants and Design. Seventy six undergraduate students at a Korean university (33 females, $M_{\text{Age}} = 22.64$ years, age range: 19 to 28) participated in this study in return for a small compensation. Study 5A used a single-factor (time pressure: high vs. low) between-subjects design. Participants were randomly assigned to one of the two conditions.

Procedure. The original theoretical model proposed that perceived time pressure is a mediator of the link between the value of time priming and product return intention such that consumers’ greater perception of time pressure lowers their product return intention relative to other priming or no-priming. To provide more rigorous evidence for a causal effect of perceived time pressure, the current study directly manipulated time pressure by randomly assigning respondents to either a high or low level of time scarcity. Before all, every participants read and wrote about a story regarding “the value of time” as a default setting so as to confirm that the manipulation of time pressure can produce significant variance in product return intention even under the treatment condition where the value of time is already activated. I manipulated the value of time by using the method developed by Saini and Monga (2008) as in Study 3. After completing this task, participants read and responded to the similar scenarios used in previous studies which illustrate a situation of pondering whether to return the slightly unsatisfactory product. Participants in the high time pressure condition were exposed to a high level of time scarcity, whereas those in the low time pressure condition were presented with a low level of time scarcity. Scenarios were carefully controlled not to induce any confounding other
than time pressure. After reading the scenarios, participants completed their perceived
time pressure (manipulation check; \( \alpha = .96 \)), product return intention (\( \alpha = .96 \)), perceived
discomfort (\( \alpha = .94 \)), private self-awareness (\( \alpha = .86 \)), public self-awareness (\( \alpha = .84 \)),
chronic time pressure (\( \alpha = .80 \)), materialism (\( \alpha = .78 \)), and price perception on the same
scale used in previous experiments. The realism of scenarios (\( \alpha = .80 \)) was rated and the
results imposed that respondents thought the experimental situation as realistic (\( M = 7.90, \quad SD = 1.42 \)). Finally, participants were asked to report demographic information and then
were thanked and debriefed.

**Results**

*Manipulation and Confound Checks.* A one-way ANOVA on the manipulation check
for perceived time pressure showed that the manipulation worked as intended.
Participants in the high (vs. low) time pressure condition indicated that they feel more
time pressure (\( M_{\text{High}} = 6.00 \) vs. \( M_{\text{Low}} = 3.33, \quad F(1, 74) = 43.60, \quad p < .000 \)). Additional
ANOVA analyses were run to eliminate possible confounds and no other significant
differences between the two experimental conditions were observed with respect to those
control variables. Especially, I could exclude the effect of psychological discomfort which
has been proposed as another mediator of product return intention in the previous
experiments \( (p > .3) \).

*Effect of Manipulating Time Pressure on Product Return Intention.* A one-way
ANOVA revealed that there was a significant effect of time pressure on product return
intention (\( M_{\text{High}} = 4.99 \) vs. \( M_{\text{Low}} = 6.74, \quad F(1, 74) = 8.98, \quad p < .004 \)). Further, a one-way
ANCOVA was performed with chronic time pressure, materialism, and price perception
as covariates. The results of ANCOVA showed that the effect of perceived time pressure on product return intention was still significant after controlling for individuals’ chronic tendencies ($F(1, 71) = 8.27, p < .005$). Therefore, experimentally manipulating perceived time pressure creates variance in product return intention corresponding with the levels of time scarcity and this result was supported after all controls were applied.
3.5.2. Study 5B: Manipulation of Psychological Discomfort

Method

Participants and Design. Seventy four undergraduate students at a Korean university (20 females, $M_{\text{Age}} = 23.27$ years, age range: 20 to 31) participated in this study in return for a small compensation. Study 5B also used a single-factor (psychological discomfort: high vs. low) between-subjects design. Participants were randomly assigned to one of the two conditions.

Procedure. Psychological discomfort has been suggested as one of the process variables linking the value of time and product return intention such that consumers primed with the monetary value of time tend to feel a lower level of perceived discomfort which is normally caused by possession of the unmet products and thereby show a lower level of product return intention in comparison with the other control groups (i.e., neutral priming or no-priming). To overcome the challenges of the “measurement-of-mediation” design, Study 5B directly manipulated psychological discomfort by randomly assigning respondents to either a high or low level of discomfort and all other experimental procedures followed the same protocol of Study 5A. Simply, participants wrote about a short essay regarding “the value of time” in the first phase and then read and responded to the scenarios of buying and returning situations used in previous studies. Scenarios were carefully controlled not to induce any confounding other than perceived discomfort. Next, participants reported their perceived discomfort (manipulation check; $\alpha = .87$), product return intention ($\alpha = .99$), perceived time pressure ($\alpha = .89$), private self-awareness ($\alpha = .81$), public self-awareness ($\alpha = .82$), chronic time pressure ($\alpha = .78$), materialism ($\alpha = .80$), and price perception on the items used in previous experiments.
Participants perceived the experimental situation as realistic ($\alpha = .67; M = 7.95, SD = 1.26$) and they provided their demographic information at the end of the survey.

**Results**

*Manipulation and Confound Checks.* A one-way ANOVA on the manipulation check for perceived discomfort revealed that the manipulation worked as expected. Participants in the high (vs. low) discomfort condition indicated that they feel more discomfort ($M_{\text{High}} = 6.21$ vs. $M_{\text{Low}} = 4.88$, $F(1, 72) = 6.58$, $p < .012$). Additional ANOVA analyses were employed to eliminate potential confounds and no other significant differences were found with regard to those control variables. Perceived time pressure, in particular, which has been suggested as one of the dual mediators in the model did not reveal any difference between the two groups ($p > .6$).

*Effect of Manipulating Psychological Discomfort on Product Return Intention.* A one-way ANOVA indicated that there was a significant effect of psychological discomfort on product return intention ($M_{\text{High}} = 7.87$ vs. $M_{\text{Low}} = 5.00$, $F(1, 72) = 29.50$, $p < .001$). Moreover, a one-way ANCOVA was conducted with private self-awareness, materialism, and price perception as covariates. The results indicated that the effect of perceived discomfort on product return intention remained statistically significant after controlling for individuals’ chronic tendencies ($F(1, 69) = 25.10$, $p < .001$). In sum, experimentally manipulating perceived discomfort produces systematic variance in product return intention corresponding with the levels of psychological discomfort and this result was supported after all controls were included.
Discussion of Study 5A and 5B

Throughout the previous studies, I had noted that perceived time pressure and perceived discomfort dually mediated the relationship between the value of time and consumer product returns by applying the experimental-causal-chain designs (Pirlott & MacKinnon, 2016; Spencer, Zanna, & Fong, 2005). The results of Study 5A and 5B demonstrate the causal relationship between the value of time and product return intention by directly manipulating perceived time pressure and perceived discomfort respectively. The findings concluded that when consumers primed with the value of time were exposed to a cue of high (vs. low) time pressure, they were less (vs. more) likely to return the purchase. Meanwhile, if consumers were manipulated to feel a high (vs. low) level of psychological discomfort in retaining that unmet products, they were more (vs. less) likely to return it even under the situation that the value of time was activated. Comprehensively, the results indicate that amplifying consumers’ perception of time pressure and alleviating psychological discomfort would be effective strategies in preventing them from returning the purchase (H₂ and H₃).
4. GENERAL DISCUSSION

As two basic resources in human lives, time and money are often discussed together, but they have their own distinct features. Driven by these characteristics, prior studies have examined that time and money could have different effects on a variety of judgments and behaviors. For instance, even though most people may know the adage that “time is money,” they barely apply this lesson to various decisions in daily lives. Soman (2001) has observed this tendency that people are likely to endorse the mental accounting model (e.g., sunk-cost fallacy) primarily for money but not for time, because time has several features that would make it difficult to be accounted for along the same line as money. Therefore, he further suggests several experimental manipulations that can facilitate mental accounting of time costs (e.g., wage rate, opportunity costs).

Inspired by this research, I have started to investigate the impact of thinking about the value of time on consumer decision-making, especially on product returns. Since returning a purchased product necessarily entails consumers’ time-wise inputs, prompting people to engage in the thought of monetary value of time may decrease consumer product returns. The current research sheds light on this unique relationship by empirically examining the time as money effect on consumers’ willingness to return a previously purchased good.

Five studies demonstrate that prompting consumers to think about the value of time seems to be an effective strategy which can reduce consumer product returns. Using the wage rate manipulation, Study 1 finds that thinking about time in terms of money reduces consumer product returns. Study 2 reveals that prompting consumers to think
about the monetary value of time leads them to perceive more time pressure, and thereby to be less likely to return the previously purchased products. Furthermore, Study 3 cultivates another mediator, psychological discomfort, suggesting that the time as money effect on product return intention is dually mediated via perceived discomfort in retaining the product as well as perceived time pressure in returning the product. A more global method of operationalizing the value of time and adding a task-neutral priming condition are employed in order to provide more rigorous evidence. Study 4 further develops this work to identify the boundary condition by testing the moderating role of private self-awareness in the link between time as money priming and product return intention via perceived discomfort. Finally, Study 5 confirms the causal accounts explaining why the time as money affects product return intention, by experimentally manipulating mediators, perceived time pressure (Study 5A) and perceived discomfort (Study 5B) respectively. Comprehensively, the findings of this research suggest that activating the value of time is effective in reducing consumer product returns by amplifying perception of time pressure and alleviating psychological discomfort, and this perceptual intervention works better especially for people with high private self-awareness.
4.1. Theoretical Implications

This research theoretically contributes to the current understanding of consumer psychology and resultant decisions, which is related to product return behavior. Therefore, I address the several significant theoretical implications provided by the findings of this work.

First and most importantly, the present research is one of the first attempts to explore the time as money effect on consumer product returns. By associating the value of time with the domain of consumer product returns, the current research suggests a unique relationship that has never been dealt with in any work. It is obvious that people who find it difficult or annoying to involve in return process inherently will be less likely to return the product. However, there is little that marketers can do, if they consider the factors that make consumers reluctant to return the product simply as their permanent dispositions. Considering the return process comprehensively, I have found that consumers often ignore the fact that they have to spend their time in returning the product since time is an intangible cost. Thus, if marketers change the hidden cost to the salient cost by treating time as money, consumers would be hesitant to return their goods. The reason why this paper is novel is that it is the first empirical study testing the prediction that using time as a currency in returning a product leads to lower consumer product returns.

Second, the current research attempts to thoroughly explain the psychological mechanisms for why this phenomenon occurs. This research introduces two mediators, perceived time pressure and perceived discomfort, and repeatedly verifies the indirect path via those psychological factors. The mediating role of perceived time pressure has been replicated from Study 2 to Study 5, and therefore the idiosyncratic role of time
pressure, which is distinct from the value of the time (independent variable), was confirmed. In addition, as another mediator, perceived discomfort has been repeatedly tested from Study 3 to Study 5, not only confirming the dual mediation model but also observing the moderated mediation. Moreover, it is worth noting that, in Study 5, feelings of time pressure and discomfort were directly manipulated to provide reliable evidence for a causal association.

Third, the methodology used in this study is fairly robust and systematic. Study 1, 2, and 4 used a wage rate as a proxy to operationalize the economic value of time. This method can be a powerful manipulation by prompting people to convert time directly into money, but it may impose or force a feeling of time pressure in its own. Hence, Study 3 and 5 activated the value of time in a purely cognitive and universal manner by presenting an old adage such as “time is money” or by prompting to write an essay related to the value of time. Furthermore, employing the neutral priming condition as a control group in Study 3, it is confirmed that there is nothing else but “the value of time” that influences product return intention. Lastly, as mentioned above, Study 5 provides a more rigorous test of causal effects, applying “manipulation-of-mediator” designs in order to rule out the potential risk of confounding caused by using only “measurement-of-mediation” methods (Pirlott & MacKinnon, 2016).

Fourth, drawing on the well-established literature, the current research exhibits a strong theoretical background and enriches the research field on time perception and consumer decision-making. Soman (2001)’s research on the mental accounting of sunk time costs has influenced many subsequent studies. Based on his work, which explains why time is not like money and suggests experimental manipulations to overcome this problem, researchers have found that prompting people to think about time in terms of
money can increase their willingness to give up more of their leisure time (DeVoe & Pfeffer, 2007b), decrease their willingness to volunteer time without compensation (DeVoe & Pfeffer, 2007a), and impair their ability to derive happiness from pleasurable experiences (DeVoe & House, 2012), by making them to be economic evaluators of their time. However, extending the research of conceptual and psychological theme to the domain of practical marketplace, the current research can develop completely different implications from previous research; e.g., prompting consumers to think about the value of time prevents them from returning the product.
4.2. Managerial Implications

As stated in this research, there exists the time as money effect that can deter consumers from returning their purchases. Hence, it is the marketer’s responsibility to understand the effect of facilitation of mental accounting of time costs and to utilize it for reducing product return rates in practical applications.

First, the beauty of this research lies in the fact that no financial costs are involved in crafting a marketing intervention. While many previous studies have devised various ways to control the product return rates profitably, those suggestions have inevitably entailed tangible costs such as promotional cost (Lee & Yi, 2017; Petersen & Kumar, 2009) or shipping cost (Hess et al., 1996) for either firms or consumers. This study presents a very compelling solution for marketers in that they can make a slight change in consumers’ perception and thereby achieve the results of reduced return rates.

Next, in line with the aforementioned implication, it is important to note that this study suggests a tactic to change consumers’ time perception, thereby influencing product returns. In other words, a seemingly insignificant piece of information (e.g., wage rate) affects consumers’ time perception, which leads to lower willingness to return the previously purchased goods. One of the interesting findings of this study is that the role of chronic time pressure was analyzed as a control variable and revealed to have no significant effects upon the findings, such that the effect of situational priming of time as money on product return intention was significant after controlling for chronic time pressure. Marketing managers should therefore think about specific ways to nudge consumers to see their time as money. At this point, they should be careful not to approach with the wrong formula; prompting consumers to think about the value of time is equal to making consumers feel more hassle in returning the products. Since a lenient return
policy can signal a competitive advantage that make firms to avoid mere price competition and consumers to enhance quality perception (Padmanabhan & Png, 1997; Wood, 2001), marketing managers should not change the return process in a way that is disadvantageous to the customers, such as by increasing the actual time costs to return. Consequently, it is important to trigger the economic value of time (i.e., how precious and finite it is) in a point of purchase or return where consumers make a decision.

Finally, practitioners should keep the individual differences in mind when they design the plans to decrease product returns. The current research have investigated the moderating role of private self-awareness in the relationship between the economic value of time and product return intention through perceived discomfort. Although privately self-aware consumers feel more psychological discomfort in a baseline condition, their uncomfortable state of mind can be relieved when they are primed with the value of time. However, consumers with low private self-awareness do not respond to the time as money priming, showing a similar level of psychological discomfort in both experimental conditions. Therefore, marketers might benefit from segmenting the consumer group in accordance with their private self-awareness.
4.3. Limitations and Suggestions for Future Research

Although the present research attempts to provide to a thorough set of experiments to support the theorization, it may have some limitations which offer opportunities for future research.

In this study, demographic variables such as age were not considered as main factors, but consumer age can make fundamental differences in their time perception. Prior research has determined the associations between age and perceived time left in life. Older people perceive their futures as more limited and thus focus more on the present moment, whereas young people have longer futures spanning out in front of them and thus tend to be more future oriented (Carstensen, Isaacowitz, & Charles, 1999; Mogilner, Aaker, & Kamvar, 2011). Therefore, it is plausible to expect that older people who chronically feel a high degree of time scarcity are more persuaded by the monetary value of time. On the other hand, young people who perceive their time as expansive are less likely influenced by the time aspect when they make a decision. Related to this concern, this research merely controlled the effects of consumer age and chronic time pressure by conducting ANCOVA analyses. In the future study, it would be interesting to consider the demographic background such as consumer age and see if this variable can moderate the time as money effect on consumer product returns.

The present research has regarded private self-awareness as an individual difference factor and performed a spotlight analysis and a moderated mediation analysis based on the self-reported responses on private self-awareness. Further, a more rigorous result can be obtained if the moderating role of private self-awareness is verified even under the situational priming. Private self-awareness is usually manipulated by the act of looking at the mirror in an experimental situation, but this research could not take this
method due to experimental constraints. Therefore, if a follow-up study examines the moderating effect of private self-awareness which is contextually boosted by manipulation, it would provide a richer and more rigorous basis for the theorization.

This study clarifies the definition and scope of product returns at the beginning of the research and does not take into consideration a new business model which is differentiated from typical shopping ritual. As an example for that business model, Stitch Fix offers apparel items over the internet like other online shopping merchant, but the unique point is that customers do not need to search and choose the items themselves. Instead, using both an algorithm and human stylists’ judgments, the recommendation system will select a set of five pieces of personalized apparel on behalf of the clients. After receiving and evaluating the items, customers can just pick out their favorites and return any or all of the packet with free shipping both ways. The customers only have to pay for what they decide to keep. This “curation” service is designed to reduce consumers’ search and regret cost simultaneously and thus the product return is not necessarily viewed as a cost anymore. Therefore, it will be interesting to study the positive impact of product returns in the new business model (e.g., curation commerce, access-based consumption) that leverages product returns as a competitive strategy and regards as part of its service.
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APPENDIX

All Measures for Studies 1 to 5

*Product return intention (from 1 to 9, 9-point scale)*
- Please rate your intention to return the product.
  - (1) unlikely (1) – likely (9)
  - (2) improbable (1) – probable (9)
  - (3) keep (1) – return (9)

*Perceived time pressure (1 = “strongly disagree”, 9 = “strongly agree”)*
- When I made a decision on whether or not to return the product, __________.
  - (1) I feel pressed for time.
  - (2) I feel I’m in rush.
  - (3) I feel like I don’t have enough time.

*Perceived discomfort (1 = “strongly disagree”, 9 = “strongly agree”)*
- When I made a decision on whether or not to return the product, I was __________ about sticking to my earlier decision.
  - (1) uncomfortable
  - (2) bothered
  - (3) self-critical

*Perceived affordability (1 = “strongly disagree”, 9 = “strongly agree”)*
- As a purchaser of the scenario, I thought that __________.
  - (1) I can afford to buy the jacket.
  - (2) I have enough money to buy the jacket.
  - (3) The jacket is affordable under my budget constraint.

*Price perception (1 = “strongly disagree”, 9 = “strongly agree”)*
- What do you think about the price of this jacket?
  - low-priced (1) – high-priced (9)

*Chronic time pressure (1 = “strongly disagree”, 9 = “strongly agree”)*
- (1) Most days, I have no time to relax.
- (2) I always seem to be in a hurry.
- (3) I never seem to have enough time for the things I want to do.

*Materialism (1 = “strongly disagree”, 9 = “strongly agree”)*
- (1) Buying things gives me a lot of pleasure.
- (2) I like a lot of luxury in my life.
- (3) I admire people who own expensive homes, cars, and clothes.
- (4) The things I own say a lot about how well I’m doing in life.
- (5) My life would be better if I owned certain things I don’t have.
- (6) I’d be happier if I could afford to buy more things.
### Financial constraint \((1 = \text{“strongly disagree”}, 9 = \text{“strongly agree”})\)

1. My household budget is always tight.
2. My household often has problems making ends meet.

### Private self-awareness \((1 = \text{“strongly disagree”}, 9 = \text{“strongly agree”})\)

1. I’m always trying to figure myself out.
2. Generally, I’m not very aware of myself. (R)
3. I reflect about myself a lot.
4. I’m often the subject of my own fantasies.
5. I never scrutinize myself. (R)
6. I’m generally attentive to my inner feelings.
7. I’m constantly examining my motives.
8. I sometimes have the feeling that I’m off somewhere watching myself.
9. I’m alert to changes in my mood.
10. I’m aware of the way my mind works when I work through a problem.

### Public self-awareness \((1 = \text{“strongly disagree”}, 9 = \text{“strongly agree”})\)

1. I’m concerned about my style of doing things.
2. I’m concerned about the way I present myself.
3. I’m self-conscious about the way I look.
4. I usually worry about making a good impression.
5. One of the last things I do before I leave my house is look in the mirror.
6. I’m concerned about what other people think of me.
7. I’m usually aware of my appearance.

### Perceived reality \((1 = \text{“strongly disagree”}, 9 = \text{“strongly agree”})\)

1. The situation described was realistic.
2. I had no difficulty imaging myself in the situation.
국문초록

시간 가치의 환기가 소비자 반품 의도에 미치는 영향

“시간은 돈이다”라는 격언은 우리의 일상에서 매우 당연하고 익숙한 명제로 여겨진다. 높은 근무 강도와 만성적 시간 부족을 호소하는 현대인들은 시간을 벌기 위해 기꺼이 돈을 지불하기도 한다. 즉, 시간 자원을 현명하게 사용하는 것이 동가의 금전 가치 이상의 편익을 제공한다고 보고, 자신의 시간을 효율적으로 안배할 수 있도록 도와주는 제품과 서비스에 경제적인 대가를 지불하는 것이다. 어찌면 이때는 “시간이 돈보다 귀한” 세상으로 진화하게 되면서, 한정된 시간을 어떻게 사용할 것인가와 관련된 의사결정이 삶의 만족도와 행복감을 좌우하는 매우 중요한 요인이 되었다고 볼 수 있었다.

그러나 시간은 돈과 달리 무형적인 특징을 가질며 사람들은 대체로 시간의 기회비용을 채하는데 익숙하지 않기 때문에, 정작 일상에서 시간의 경제적 가치를 깨닫지 못하고 이를 의사결정 과정에 반영하기란 쉽지 않다. 즉, 시간은 유한하고 소중한 자원이며 돈과 상호 교환될 수 있다는 통념이 있으며도 불구하고, 사람들은 시간에 대한 심적회계(mental accounting)에 덜 익숙하고 더 인색한 경향이 있다. 본 연구는 시간-돈 가치 환산에 있어서의 이와 같은 비대칭적 인식이 극대화되는 맥락으로서, 다시 말해 시간의 경제적 가치를 쉬이 양각하는 영역으로서 소비자 반품에 주목하고 있다.

애초에 합리적인 의사결정을 통해 꼭 필요한 제품만을 구매한다면 구매자 후회(buyer’s remorse) 등에 직면하는 일은 없겠지만, 기업이 제시하는 매력적인 프로모션과 관대한 반품 정책을 외면하고 꼭 필요한 소비만을 하는 것은 오늘날의 소비자에게 거의 불가능에 가까운 미션이다. 물론 제품에 심각한 결함이 있거나 사용이 불가한 사유가 발생한 경우에는 필연적으로 반품 과정을 거쳐야 하지만,
이러한 당위적인 이유보다는 구매자 변심으로 인한 단순 반품이 전체 반품 사유의 95% 이상을 차지한다는 보고는 시사하는 바가 크다. 이처럼 불필요한 반품이 증가하게 되면 제조‐유통기업의 물류비용에 직접적으로 타격을 줄 뿐만 아니라, 개인과 사회, 그리고 환경을 아울러 막대한 대가를 요구한다는 점에서 모든 관련 주체들에게 큰 과거거리가 된다. 그 중에서도 특히 반품 의사결정이 소비자 개인에게 초래하게 되는 비용에 대해서는 구체적으로 언급되거나 연구된 바가 없으며, 소비자들 또한 반품 과정에 자신의 심적‐물적 자원이 투입되는 점에 대해서는 거의 자각하지 못하고 있다. 즉, 구매한 제품을 반품하는 행위는 반품 과정에 소요되는 별도의 시간 비용을 필연적으로 수반하기 마련인데, 소비자가 실제로 반품을 염두에 둔 때에는 제품을 돌려주고 해당 금액을 환불받는 것만을 생각할 뿐 그 과정에 자신의 시간 자원이 투입된다는 사실은 떠올리지 못하거나 혹은 애써 외면하는 사실에 주목할 필요가 있다.

본 연구는 반품 과정에서 반드시 투입되면서도 그간 동반시 되어왔던 비용 요소인 '시간(time)'에 주목하고, 시간 가치를 환가시키는 것이 소비자 반품 의도에 영향을 미칠 수 있을지에 대해 탐구하였다. 5개의 실험을 통해 시간의 경제적 가치를 자각하는 것이 소비자의 반품 의도를 감소시키는지 여부에 대해서 살펴보고 그 메커니즘을 규명한 후, 언제 그러한 영향이 더욱 강화되거나 약화되는지 그 경계 조건에 대해 조망하고자 하였다. 다만, 본 연구는 제품 결함 등에 기인하는 당위적 반품이 아니라, 구매 후 인지부조화 수준에서의 가벼운 불만족이 반품으로 이어지는 상황에 한정하여 실험을 전개하고 있음을 분명히 하고자 한다.

본 연구의 주요 결과는 다음과 같다. 첫째, 시간의 경제적 가치를 떠올린 소비자는 가벼운 불만족으로 인한 반품 의사결정 상황에서 현저히 낮은 반품 의도를 나타낸다(Study 1). 둘째, 시간의 경제적 가치를 떠올렸을 때 소비자 반품이 감소하게 되는 이유는 소비자가 시간을 돈으로 환산하였을 때 더 높은 수준의 시간 압력(time pressure)을 느끼기 때문인 것으로 밝혀졌다(Study 2). 셋째, 시간에 경제적 가치를 부여하는 것이 소비자 반품에 미치는 영향은 시간 압력에 뿐만, 불만족한 제품을 보유할 때의 심리적 불편감(psychological
discomfort)에 의해서도 매개된다(Study 3). 즉, 시간의 가치를 환기하는 행위는 시간을 소중히 여겨야한다는 대의명분을 제시할 뿐만 아니라 반품에 소요되는 시간을 실제 비용(actual cost)으로 가시화함으로써, 반품을 하기 보다는 제품에 대한 태도를 변화시키고자 하는 동기를 갖게 한다. 즉, 시간 가치가 활성화되면 소비자 스스로 구매를 합리화하게 되면서 그 과정에서 불편감이 일부 해소되고 이는 결과적으로 반품을 하지 않는 의사결정으로 귀결될 수 있다. 끝에, 시간 가치의 환기가 소비자 반품 의도에 미치는 영향을 매개하는 심리적 불편감의 정도는 소비자의 사적 자아인식(private self-awareness)에 의해 조절된다(Study 4). 다시 말해, 사적 자아인식 수준이 높은 사람은 본래 확고한 태도와 신념을 가지고 상황에 타협하지 않는 분명한 제품 선호도를 지니므로 이상적인 소비자와 현재 대안 사이의 불일치로부터 높은 수준의 심리적 불편감을 느끼게 되는데, 시간의 화폐가치를 강조하면 이와 같은 영구적인 개인차 변수의 역할을 극복하고 심리적 불편감을 경감시켜 결과적으로 소비자 반품을 감소시키는데 기여하는 것으로 확인하였다. 마지막으로, 시간 압력과 심리적 불편감이라는 두 메개변수를 직접 조작하였을 때에도 앞선 실험과 동일한 결론을 얻을 수 있는지를 검증함으로써, 메개변수의 인과적 연결고리를 보다 철저하게 입증하였다(Study 5).

본 연구의 이론적 함의는 다음과 같다. 지금까지 한 번도 함께 고려된 적이 없던 두 변인인 시간에 대한 가치가 소비자 반품과의 관계를 조명한 최초의 연구로서, 소비자들이 그간 간과해왔던 시간이라는 자원을 두드리지게 하여 이를 반품 과정에서의 화폐로 인식하게 한다면 반품을 감소시키는데 기여할 수 있음을 밝혔다. 나아가 이러한 현상을 설명하는 메커니즘으로서 시간 압력과 심리적 불편감이라는 두 심리적 변인의 역할을 여러 스타디에 걸쳐 단계적, 반복적으로 검증하였으며, 그 과정에서 엄밀하고 체계적인 방법론을 사용하였다. 특히 탄탄한 이론적 배경을 바탕으로 일격이 연결되지 못했던 두 주요 변인(시간 가치와 소비자 반품)을 통합하고, 각각의 연구 영역을 흥미롭게 확장하였다는 점에서도 그 의의가 있다.

또한 본 연구는 그 어떤 실질적인 비용을 들이지 않으면서도, 소비자의
시간 가치 지각에 영향을 줄 수 있는 절묘한 개입을 통해 반품을 줄이는 대안을 제시하였다는 점에서 실무자들에게 큰 시사점을 준다. 더불어 사적 자아인식 수준이 높아 흔히 더 높은 수준의 심리적 불편감에 노출될 수 있는 소비자들에게 자신의 태도를 바꾸고 구매를 정당화할 수 있는 단서(즉, 시간의 화폐가치)를 제공함으로써 그들의 불편감을 경감시키고 나아가 반품을 감소시킬 수 있는 방안을 제공한 것도 본 연구가 기여한 점이라 하겠다.

주요어: 소비자 반품, 시간 가치, 시간 압력(시간 희소성), 심리적 불편감(인지 부조화), 사적 자아인식

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