The Effect of Temporal Landmarks on Conspicuous Prosocial Behavior Intentions

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Abstract

Individuals' willingness to engage in conspicuous prosocial behavior is influenced by environmental factors. Drawing on self-awareness theory and costly signaling theory, this research explores the effect of temporal landmarks on individuals' willingness to engage in conspicuous prosocial behavior. Across six experiments, results demonstrate that at the beginning (vs. end) of a time period, individuals are more likely to engage in conspicuous prosocial behavior (Experiments 1a, 1b, and 1c). The underlying mechanism is that beginning temporal landmarks activate state public self-awareness (Experiments 2a and 2b). Further analysis reveals that self-monitoring moderates this effect; for low self-monitors, temporal landmark activation fails to effectively influence participants' willingness to engage in conspicuous prosocial behavior (Experiment 3). This study extends research on temporal landmarks and conspicuous prosocial behavior, while providing practical guidance for charitable organizations or enterprises planning public welfare marketing campaigns at critical temporal milestones.

Full Text

The Impact of Temporal Landmarks on Willingness to Engage in Conspicuous Prosocial Behavior

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Abstract

Individuals' willingness to engage in conspicuous prosocial behavior is influenced by environmental factors. Based on self-awareness theory and costly signaling theory, this study explores how temporal landmarks affect the willingness to engage in conspicuous prosocial behavior. Through six experiments, the results demonstrate that individuals are more inclined to engage in conspicuous prosocial behavior at the beginning versus the end of a time period (Experiments 1a, 1b, and 1c). The explanatory mechanism lies in the fact that beginning temporal landmarks activate individuals' situational public self-awareness (Experiments 2a and 2b). Further analysis reveals that self-monitoring moderates this effect; for low self-monitors, the activation of temporal landmarks cannot effectively influence participants' willingness to engage in conspicuous prosocial behavior (Experiment 3). This research extends the literature on temporal landmarks and conspicuous prosocial behavior, while providing practical guidance for charitable organizations or enterprises planning public welfare marketing campaigns at key time nodes.

Keywords: temporal landmarks, conspicuous prosocial behavior, situational public self-awareness, self-monitoring
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Since ancient times, China has embraced the philosophy of "beginning with goodness." Regarding how to practice goodness, the ancient text *Guiguzi* states: "Speak of goodness to initiate matters," encouraging people to publicize their virtuous deeds. Scholars refer to prosocial behavior that conveys a positive self-image to others through publicly visible means (such as displaying recognition badges or publicly acknowledging donations) as conspicuous prosocial behavior (Wallace et al., 2020; Yao et al., 2020). Indeed, when organizations provide people with the option, most individuals prefer to publicize their donations rather than remain anonymous (Chen & Gao, 2022). Facebook once launched a feature allowing users to identify themselves as organ donors in their personal status and link to organ donation registration pages, which caused donor registrations to surge twentyfold on the first day. Researchers argue that unlike typical altruism, people's altruistic behavior is often driven by self-interested motives aimed at displaying the self in public contexts to gain social status, recognition, or emotional satisfaction (Savary et al., 2020). Therefore, understanding the timing and motivations behind individuals' participation in prosocial behavior is crucial for marketing managers. This study proposes that individuals' willingness to engage in conspicuous prosocial behavior depends on a contextual factor: temporal landmarks. For example, in early 2022, the "0 Decibel Livestream Room" focused on employment and entrepreneurship issues for the deaf, launching pub-

lic welfare communications that garnered over 80 million exposures. The Wanda Group has long advocated for "starting the year with good deeds," and in the 2023 Spring Festival, it collaborated with Tencent Charity and others to launch a customized "Show Your Little Red Flower" campaign, attracting widespread social attention. Although announcing charitable donations at these time points may appear coincidental, various signs suggest a potential connection between such "publicly visible" prosocial behavior and temporal landmarks.

Previous literature has primarily focused on how temporal landmarks affect individuals' internal psychology and decision-making behaviors (Koo et al., 2020; Chen & Wei, 2023), while rarely examining their connection to interpersonal relationships. Notably, the morning morality effect suggests that people have stronger self-control in the morning and are therefore more inclined to engage in moral behavior (Kouchaki & Smith, 2014). However, this effect does not hold for "night owls" (Gunia et al., 2014; Ingram et al., 2016). Synthesizing these studies reveals a potential association between temporal landmarks and moral behavior, though findings are inconsistent. Moreover, morality is more implicit (Beal et al., 2020), making it difficult to directly display self-image to others. Recent research indicates that individuals are more willing to help disadvantaged groups at new beginnings (Price et al., 2018), but this study did not explain the underlying mechanism. Additionally, previous research has primarily used signaling theory to explore how individual psychological characteristics affect conspicuous donation (e.g., Wallace & Buil, 2021), conspicuous green consumption (Wallace & Buil, 2023), or conspicuous prosocial behavior (Johnson et al., 2018; Yao et al., 2020). Except for Griskevicius et al. (2010), who examined the moderating role of public versus private settings, existing literature has paid insufficient attention to contextual factors, particularly the temporal factor, despite time's potential influence on people's cognition and behavior (Bi et al., 2021).

Therefore, this study draws on self-awareness theory and costly signaling theory to investigate the impact of temporal landmarks on the willingness to engage in conspicuous prosocial behavior and its psychological mechanisms. Specifically, at the beginning versus the end of a time period, individuals are more likely to experience heightened public self-awareness, exhibit non-pure altruistic motives, and engage in costly conspicuous prosocial behaviors that enhance their public image through self-sacrifice. Furthermore, the activation of social self-concept must consider individual characteristics, leading this study to introduce the boundary condition of self-monitoring levels, as self-monitoring is closely related to impression management (Wu et al., 2021). This provides a new perspective for expanding understanding of temporal landmark effects and antecedents of conspicuous prosocial behavior, offering significant theoretical value and practical implications.

1.1 Temporal Landmarks

Temporal landmarks are transition points that contrast sharply with ordinary time or events (Shum, 1998). These transition points can be either social calendar time or unique events, including public events (such as holidays, COVID-19) and personal experiences (such as birthdays, life transitions, or personally significant events) (Dai et al., 2015; Peetz & Wilson, 2013). Scholars have noted that examining the impact of calendar temporal landmarks on cognition, decision-making, and behavior is more robust and valuable (Bi et al., 2021); therefore, this study focuses on calendar time.

Existing research distinguishes between beginning and ending temporal landmarks. Beginning landmarks are considered the start of new mental accounting periods that separate the self into past, current, and future selves (Dai et al., 2015). People typically view their past self as imperfect, and beginning landmarks encourage them to abandon this imperfect past self and pursue more perfect, higher-level self-evaluation and goals to ensure the realization of a positive self (Peetz & Wilson, 2013). Simultaneously, beginning landmarks imply abundant time and greater self-regulatory resources (Hennecke & Converse, 2017). Ending landmarks, conversely, signify the conclusion of a period, making individuals feel that time is passing more quickly (Bi & Pang, 2016), weakening their self-control capacity (Kouchaki & Smith, 2014), and triggering preventive tendencies (Shang et al., 2021). Additionally, the end of a period triggers recall of past events or tasks (Alter & Hershfield, 2014), leading to mental resource depletion and reduced positive illusions (Pang et al., 2022).

1.2 Temporal Landmarks and Willingness to Engage in Conspicuous Prosocial Behavior

Conspicuous prosocial behavior refers to prosocial behavior that can be displayed to others and helps improve individuals' self-image in others' eyes (Johnson et al., 2018; Yao et al., 2020). Its main difference from general prosocial behavior lies in its public nature (Grace & Griffin, 2009). Conspicuous prosocial behavior typically involves obvious display intentions, through which donors can gain recognition and respect and enhance self-worth (Carlo & Randall, 2002). Thus, conspicuous prosocial behavior reflects not only altruistic psychology but also self-interested motives to obtain others' recognition and satisfy psychological benefits (Harbaugh, 1998). In contrast, general prosocial behavior may be more private, motivated by pure altruism without seeking external recognition or reward (Ferguson et al., 2012).

Costly signaling theory posits that people engage in costly behaviors to signal their valuable qualities to others (BliegeBird & Smith, 2005). From this perspective, conspicuous prosocial behavior can be viewed as the transmission of an expensive signal. First, conspicuous prosocial behavior is a publicly visible prosocial behavior (Grace & Griffin, 2009) that is easily observed by others. Second, it demonstrates personal self-sacrifice, such as monetary and time con-

tributions, which represent costly expenses for donors (Griskevicius et al., 2010). Finally, through generous donations, donors can signal their ability to bear costs (BliegeBird & Smith, 2005) and benefit from such prosocial behavior by shaping self-image and obtaining social benefits (Chell & Mortimer, 2014).

This study argues that when beginning temporal landmarks are activated, individuals have stronger competitive altruistic motivations to engage in conspicuous prosocial behavior that helps convey self-image and satisfy self-interest. Literature on the fresh start effect and self-awareness provides evidence for this inference. Research shows that people pay more attention to self-image and seek self-adjustment at new beginnings (Dai et al., 2015; Peetz & Wilson, 2014). At such times, individuals are often motivated to make good impressions on others, even when it requires bearing costly expenses (Griskevicius et al., 2007). Therefore, individuals at the beginning (vs. end) of a time period pursue greater self-satisfaction and social image transmission, even achieving self-interest by displaying altruism (Dai et al., 2015), which provides the possibility of inducing people to participate in costly conspicuous prosocial behavior. Unlike purely altruistic prosocial behavior, the public nature of conspicuous prosocial behavior makes it a means to gain public recognition and long-term benefits (Bereczkei et al., 2010). People may engage in greater self-sacrifice to increase the credibility of altruistic signals (Griskevicius et al., 2010). In summary, we speculate that engaging in prosocial behavior in publicly visible contexts can satisfy the self-signaling needs of individuals at beginning time points. Therefore, we propose the following hypothesis:

H1: The activation of beginning (vs. ending) temporal landmarks will increase individuals' willingness to engage in conspicuous prosocial behavior.

1.3 The Mediating Role of Situational Public Self-Awareness

Public self-awareness refers to the state that occurs when individuals focus on their image in others' eyes (Fenigstein et al., 1975). Under certain circumstances, this situational public self-awareness can be activated (Gervais & Norenzayan, 2012), causing individuals to concentrate on the external image they present to others and others' evaluations and opinions of them (Solomon & Schopler, 1982). In this state of consciousness, individuals present themselves in more positive ways to make their behavior conform to social expectations (Froming et al., 1982).

Self-awareness theory suggests that individuals' public self-awareness state stems from their concerns about public self-impression (Pfattheicher & Keller, 2015; Van Bommel et al., 2012). The activation of beginning temporal landmarks triggers individuals' concerns about public self-image. Beginning landmarks prompt individuals to separate their imperfect past self from their future self, establish ideal self-goals, and pursue a perfect self-image (Peetz & Wilson, 2014). At the start of a new phase, people exhibit stronger self-

improvement motivation. For example, people set health goals such as losing weight, quitting drinking, or quitting smoking, and take more positive actions to improve and express themselves (Dai et al., 2015). In contrast, ending temporal landmarks trigger recall of past events (Alter & Hershfield, 2014), increase mental resource consumption, and reduce positive self-illusions (Pang et al., 2022). Therefore, the beginning (vs. end) of a time period is more likely to evoke people's situational public self-awareness, prompting individuals to bear high costs to maintain a prosocial reputation (Balabanis & Stathopoulou, 2021; Dang & Arndt, 2017).

Conspicuous prosocial behavior is an effective way to shape a positive self-image and manage impressions by paying a high cost to publicly demonstrate prosocial tendencies and social responsibility to others (Johnson et al., 2018). Bénabou and Tirole (2006) argue that public charitable behavior can generate social image benefits and increase the likelihood of donation. Additionally, conspicuous prosocial behavior can satisfy individuals' psychological needs by obtaining public recognition (Khodakarami & Petersen, 2015). Altruism, recognition, and psychological benefits are key driving factors of prosocial behavior (Bekkers & Wiepking, 2007). In public settings (Griskevicius et al., 2010; White et al., 2019) and when bystanders are present (You & Lee, 2019), people are more likely to choose "self-sacrifice," such as participating in charitable donations or other helping behaviors, to build a prosocial reputation. In contrast, prosocial behavior without conspicuous display attributes is a purely altruistic act that cannot showcase self-image and is difficult to obtain any direct returns or recognition from others (Ferguson et al., 2012). Therefore, non-conspicuous prosocial behavior cannot satisfy the psychological needs of individuals with high public self-awareness. Based on this, we propose the following hypothesis:

H2: Situational public self-awareness mediates the effect of temporal landmarks on the willingness to engage in conspicuous prosocial behavior.

1.4 The Moderating Role of Self-Monitoring

Self-monitoring refers to individual differences in observing and controlling self-expression, self-regulation, and self-presentation according to situational cues (Snyder, 1974), involving individuals' attention to, construction of, and projection of social image (Gangestad & Snyder, 2000). This study shows that temporal landmarks affect conspicuous prosocial behavior by activating situational public self-awareness, but individuals' self-monitoring levels may moderate this effect.

High self-monitoring individuals show high sensitivity to social situations and social adaptability, flexibly adjusting their behavior to make impressive impressions (Snyder, 1974). To express self-image, high self-monitors actively seek opportunities to construct a positive self-image and engage in prosocial behavior in public contexts (Wu et al., 2021). At the beginning (vs. end) of a time period, people exhibit higher situational public self-awareness and de-

sire to maintain self-impression, which aligns with high self-monitors' ideal self-motivation. Therefore, high self-monitors are more inclined to engage in conspicuous prosocial behavior at the beginning (vs. end) of a period. In contrast, low self-monitors are not enthusiastic about shaping images in public because they are insensitive to external evaluations and lack the ability or motivation for self-expression and self-presentation (Gangestad & Snyder, 2000). Since low self-monitors focus more on internal feelings, their self-presentation tendencies are not affected by specific situations (Snyder, 1974; Snyder & Gangestad, 1986). Therefore, regardless of whether they are at the beginning or end of a period, low self-monitors' public self-awareness state remains consistent, which weakens the impact of temporal landmarks on the willingness to engage in conspicuous prosocial behavior. We propose:

H3: Self-monitoring moderates the effect of temporal landmarks on individuals' willingness to engage in conspicuous prosocial behavior.

2 Research Overview

This study validates the research hypotheses through six experiments. Experiments 1a, 1b, and 1c demonstrate that the activation of beginning (vs. ending) temporal landmarks increases people's tendency toward conspicuous prosocial behavior. Experiment 2a verifies the mediating effect of situational public self-awareness in the relationship between temporal landmarks and conspicuous prosocial behavior willingness. Experiment 2b emphasizes that temporal landmarks only affect conspicuous prosocial behavior (not other conspicuous behaviors). Experiment 3 confirms the moderating role of self-monitoring in the above relationship.

3 Experiment 1a: The Effect of Temporal Landmarks on Conspicuous Prosocial Product Preference

3.1 Pretest

This pretest aimed to validate the effectiveness of the conspicuous (vs. non-conspicuous) prosocial product manipulation. Fifty participants (29 females) completed the experiment online. Following Yao et al. (2020), the prosocial product was an eco-friendly tote bag made from sustainable recycled materials, and the conspicuousness of the prosocial product was manipulated by whether the bag was printed with a recycling symbol (as shown in [Figure 1: see original paper]).

Subsequently, participants evaluated the conspicuousness of the eco-friendly tote bag (Grace & Griffin, 2009; $\alpha = 0.92$) and its prosocial nature (Griskevicius et al., 2010; $\alpha = 0.73$). Results showed that the eco-friendly tote bag with the recycling symbol scored significantly higher on conspicuousness than the bag without the symbol (Mno symbol = 3.97, SD = 1.66 vs. Mwith symbol = 5.99, SD = 0.50; t(48) = -5.79, $p < 0.001$, Cohen's d = 1.65), while the two groups

showed no significant difference in prosocial nature ratings (Mno symbol = 6.09, SD = 0.53 vs. Mwith symbol = 5.96, SD = 0.70; t(48) = 0.76, p = 0.45). Therefore, the manipulation of conspicuous prosocial products was effective.

3.2 Experimental Design and Procedure

Experiment 1a employed a 3 (temporal landmark: start vs. end vs. control, between-subjects) × 2 (recycling symbol: present vs. absent, within-subjects) mixed experimental design. Using G*Power 3.1, the planned sample size was calculated to be more than 42 participants (effect size f = 0.25, $\alpha = 0.05$, power = 0.80). Through the "Credamo" platform, 140 participants were recruited for this online experiment and paid upon completion. Among them, 84 were female (60%), with an average age of 30.06 years (SD = 9.50 years).

The temporal landmark manipulation followed Chen et al. (2023). Participants completed the experiment between 6:00-9:00 AM (start group), 7:00-10:00 PM (end group), or during the remaining daytime hours (control group). Participants then reported the time they participated, described their typical activities and feelings during that time period, and evaluated where they currently were in the day using a sliding scale (1 = beginning of the day, 100 = end of the day). Afterward, participants reported their current emotions (Watson et al., 1988).

Next, participants' preference for eco-friendly tote bags was measured. Participants learned that Company C was launching two eco-friendly tote bags, both made from sustainable recycled materials and priced identically. The difference was that one bag had no environmental recycling symbol (non-conspicuous prosocial tote bag A), while the other had the symbol (conspicuous prosocial tote bag B) (Yao et al., 2020), as shown in [Figure 1: see original paper]. Participants were then asked about their purchase intention ($\alpha = 0.97$; Peloza et al., 2013). Finally, demographic variables were collected.

3.3 Measures

All variable scales used in this study were existing validated measures, translated into Chinese using Brislin's (1986) back-translation method. Except for the temporal landmark manipulation check, all variables were measured using a 7-point Likert scale.

Conspicuousness. Experiments 1a, 1b, and 1c all used Grace and Griffin's (2009) conspicuousness scale, including 3 items such as "By using or wearing this product, I can show people my prosocial behavior (prosocial behavior is behavior that benefits others and society, such as environmental protection, donation)." Response options ranged from 1 = strongly disagree to 7 = strongly agree.

Prosocial nature. Griskevicius et al.'s (2010) prosocial evaluation scale was used, including items assessing whether purchasing the product was friendly, caring, and altruistic (1 = strongly disagree, 7 = strongly agree).

Purchase intention. Peloza et al.'s (2013) purchase intention scale was adopted, including 3 items measuring purchase intention, purchase tendency, and purchase likelihood (1 = tote bag A, 7 = tote bag B).

Emotion. Watson et al.'s (1988) emotion scale was used, including 4 negative emotion items (e.g., "depressed") and 4 positive emotion items (e.g., "happy") (1 = strongly disagree, 7 = strongly agree).

Control variables. Previous research has found that gender (Eagly & Crowley, 1986), age (Foulkes et al., 2018), income (Neumayr & Pennerstorfer, 2021), and education level (Piff et al., 2010) all affect people's prosocial intentions. Therefore, this study controlled for these variables.

3.4 Results and Discussion

Manipulation check. A general linear model showed that participants in the start group (M = 6.09, SD = 5.50) were more likely to perceive themselves as being at the beginning of the day than those in the control group (M = 54.09, SD = 11.91) and end group (M = 79.30, SD = 9.89; F(2, 137) = 725.30, p < 0.001, partial ^{2} = 0.91).

Descriptive statistics and correlation analysis results are shown in .

Emotion. One-way ANOVA results showed no significant differences among the start, end, and control groups in positive emotions (Mstart = 4.76, SD = 1.35; Mend = 5.21, SD = 1.16; Mcontrol = 4.91, SD = 1.09; F(2, 137) = 1.74, p = 0.18) or negative emotions (Mstart = 2.11, SD = 1.23; Mend = 2.30, SD = 1.12; Mcontrol = 2.23, SD = 1.07; F(2, 137) = 0.36, p = 0.70).

Eco-friendly tote bag purchase intention. ANOVA with temporal landmark as the independent variable, tote bag purchase intention as the dependent variable, and demographic characteristics as covariates showed that temporal landmark significantly affected purchase intention for eco-friendly tote bags (F(2, 133) = 9.01, p < 0.001, partial ^{2} = 0.119). Specifically, the start group (M = 6.01, SD = 1.19) was more willing to purchase conspicuous eco-friendly tote bag B than the control group (M = 5.26, SD = 2.14, p = 0.04) and the end group (M = 4.36, SD = 2.16, p < 0.001). The control group (M = 5.26, SD = 2.14) and end group (M = 4.36, SD = 2.16) also differed significantly (p = 0.04). These results support H1.

shows the descriptive statistics and correlation coefficients for Experiment 1a.

The results of Experiment 1a indicate that participants in the start group were more willing to purchase conspicuous prosocial products than those in the control and end groups. This provides preliminary support for H1: compared to ending temporal landmarks, individuals are more inclined to engage in conspicuous prosocial behavior when beginning temporal landmarks are activated. Next, to increase the generalizability of the results, Experiments 1b and 1c will verify the effect of temporal landmarks on other forms of conspicuous prosocial

behavior (such as donation).

4 Experiment 1b: The Effect of Temporal Landmarks on Conspicuous Donation Behavior

Experiment 1b uses a behavioral experiment to retest the main effect. It differs from Experiment 1a in three ways: first, the temporal landmark manipulation is changed to emphasize the beginning of the month (July 1) versus the end of the month (June 30); second, the conspicuousness manipulation is altered to whether the donor's name is publicly disclosed on the China Marrow Donor Program website; third, to enhance external validity, real behavior is used as the dependent variable—whether participants are willing to leave an email address.

4.1 Experimental Design and Procedure

Experiment 1b employed a 2 (temporal landmark: start vs. end) × 2 (conspicuousness: public vs. anonymous) between-subjects design. Using G*Power 3.1, the planned sample size was calculated to be more than 128 participants (effect size f = 0.25, $\alpha = 0.05$, power = 0.80). Through an online survey platform, 200 participants were recruited, yielding 198 valid samples (2 participants were excluded for failing attention checks), who were paid for their participation. Among them, 123 were female (62.1%), with an average age of 31.46 years (SD = 10.66 years).

Following Bi et al. (2021), participants in the end group completed the experiment on June 30, while those in the start group completed it on July 1. Participants were told to record the actual date they completed the questionnaire (June 30 or July 1), then wrote about their memories or plans for the month and indicated whether the day felt like the beginning or end of a month using a sliding scale (1 = beginning of a month, 100 = end of a month).

Next, following Yao et al. (2020), participants read information about hematopoietic stem cells and stem cell donation, learning that tens of thousands of patients urgently need stem cell transplants (materials from the China Marrow Donor Program website). Participants were then informed that if they became donors, their names would be publicly disclosed (conspicuous group) or not disclosed (anonymous group) on the website. Subsequently, participants were asked whether they had previously donated hematopoietic stem cells and whether they were willing to leave an email address for us to send relevant information and help schedule donation times and locations. Finally, participants completed the conspicuousness evaluation (3 items similar to Experiment 1a; $\alpha = 0.71$) and reported demographic variables.

4.2 Results and Discussion

Manipulation checks. First, the temporal landmark manipulation was checked. Independent samples t-test results showed that participants perceived

July 1 as more likely to be considered the beginning of a month than June 30 (MJuly 1 = 4.60, SD = 13.85; MJune 30 = 97.19, SD = 7.24; t(196) = 58.96, p < 0.001, Cohen's d = 8.38), confirming successful manipulation of beginning and ending temporal landmarks.

Second, the conspicuousness manipulation was checked. Independent samples t-test results showed that the public name group scored higher on conspicuousness than the anonymous group (Mpublic = 5.68, SD = 0.77; Manonymous = 4.91, SD = 1.13; t(196) = -5.60, p < 0.001, Cohen's d = 0.80), indicating that manipulating conspicuousness through name disclosure was effective.

Descriptive statistics and correlation analysis results are shown in .

Email provision. Logistic regression analysis was conducted with temporal landmark, conspicuousness, and their interaction as independent variables, email provision as the dependent variable, and previous stem cell donation experience and demographic characteristics as covariates. Results showed that the interaction between temporal landmark and conspicuousness significantly affected email provision (Wald = 20.97, p < 0.001, Exp(B) = 38.67). Previous stem cell donation experience, gender, age, and education did not significantly affect email provision (ps > 0.1), while monthly income had a significant effect (p < 0.001) but did not influence the interaction effect between temporal landmark and conspicuousness. Further chi-square tests revealed that under the public name condition, the start group left emails at a higher rate than the end group (88% [44] vs. 49% [24]), Pearson $^2(1) = 17.52$, p < 0.001. Under the anonymous condition, the end group left emails at a marginally higher rate than the start group (68% [34] vs. 49% [24]), Pearson $^2(1) = 3.69$, p = 0.06. H1 was again supported, as shown in [Figure 2: see original paper].

presents the descriptive statistics and correlation coefficients for Experiment 1b.

Experiment 1b examined the effect of temporal landmarks on donation preferences through actual donation behavior. The results showed that when donor names were publicly disclosed, participants with beginning temporal landmarks were more willing to donate hematopoietic stem cells than those with ending landmarks; under anonymous conditions, participants with ending landmarks were more willing to donate than those with beginning landmarks. This again confirms H1: individuals with beginning temporal landmarks are more willing to engage in conspicuous prosocial behavior. Subsequent Experiment 1c will discuss the effect of temporal landmarks and conspicuousness on monetary donation behavior.

5 Experiment 1c: The Effect of Temporal Landmarks on Monetary Donation Behavior

The main purposes of Experiment 1c are: first, to retest the effect of temporal landmarks on conspicuous prosocial behavior willingness using conspicuous mon-

etary donation intention as the dependent variable; second, to change the temporal landmark manipulation to the beginning/end of a week (Monday/Friday).

5.1 Experimental Design and Procedure

Experiment 1c employed a 2 (temporal landmark: start vs. end) × 2 (conspicuousness: public vs. anonymous) between-subjects design. Using G*Power 3.1, the planned sample size was calculated to be more than 128 participants (effect size f = 0.25, α = 0.05, power = 0.80). The experiment recruited 195 participants online (117 females, 60.0%; average age = 32.57 years, SD = 9.58 years).

First, following Bi et al. (2021), participants were randomly assigned to the start or end group, with start group participants completing the experiment on Monday and end group participants on Friday. Participants reported which day of the week they completed the study, described their typical activities and feelings on that day, and evaluated whether today felt like the beginning or end of the time period using a sliding scale (1 = beginning of a week, 100 = end of a week).

Next, participants were randomly assigned to the conspicuous or non-conspicuous group. They viewed a charitable donation project and learned that donations would be made in real-name (anonymous) to pair with students in need, and donors' names would (would not) be displayed on Tencent Charity's official website. Participants then reported their donation intention, planned donation amount, and evaluated conspicuousness (similar to Experiments 1a and 1b; α = 0.90) and status motive (α = 0.79; Cassidy & Lynn, 1989). Finally, participants completed demographic variables.

5.2 Measures

Donation intention and amount. Donation intention was measured by "To what extent are you willing to donate?" (1 = very unwilling, 7 = very willing). Donation amount was measured by "Assuming you have 100 RMB to allocate freely, how much would you be willing to donate?"

Control variables. In addition to demographic variables, we measured status motive as a control variable (10 items such as "I want a job that people respect"; 1 = strongly disagree, 7 = strongly agree; Cassidy & Lynn, 1989).

5.3 Results and Discussion

Manipulation checks. Independent samples t-test results showed that participants perceived Monday more as the beginning of a week than Friday (MMonday = 5.21, SD = 7.14; MFriday = 78.61, SD = 20.66; t(193) = 33.09, p < 0.001, Cohen's d = 4.75), confirming successful manipulation of beginning and ending temporal landmarks. Second, the conspicuousness manipulation check showed

that the public name group scored higher on conspicuousness than the anonymous group (Mpublic = 5.52, SD = 0.97; Manonymous = 4.00, SD = 1.65; t(193) = -7.82, p < 0.001, Cohen's d = 1.12), indicating that manipulating conspicuousness through name disclosure was effective.

Descriptive statistics and correlation analysis results are shown in .

Donation intention. ANOVA with temporal landmark and conspicuousness as independent variables, donation intention as the dependent variable, and demographic characteristics and status motive as covariates showed no significant main effect of temporal landmark (F(1, 186) = 0.62, p = 0.43) or conspicuousness (F(1, 186) = 0.19, p = 0.67), but the interaction effect was significant (F(1, 186) = 11.26, p = 0.001, partial ^{2} = 0.057). Specifically, under the public name condition, the difference between Monday and Friday landmarks on donation intention was marginally significant (MMonday = 6.10, SD = 0.76; MFriday = 5.65, SD = 1.12; F(1, 186) = 3.07, p = 0.081, partial ^{2} = 0.016). Under the anonymous condition, Friday landmarks showed significantly higher donation intention than Monday (MFriday = 6.10, SD = 0.96; MMonday = 5.44, SD = 1.34; F(1, 186) = 8.53, p = 0.004, partial ^{2} = 0.044), as shown in [Figure 3: see original paper].

Donation amount. ANOVA with temporal landmark and conspicuousness as independent variables, donation amount as the dependent variable, and demographic characteristics and status motive as covariates showed no significant main effect of temporal landmark (F(1, 186) = 1.06, p = 0.31) or conspicuousness (F(1, 186) = 2.44, p = 0.12), but the interaction effect was significant (F(1, 186) = 21.80, p < 0.001, partial ^{2} = 0.105). Specifically, under the public name condition, Monday landmarks resulted in significantly higher donation amounts than Friday (MMonday = 70.92, SD = 22.78; MFriday = 46.56, SD = 24.61; F(1, 186) = 15.62, p < 0.001, partial ^{2} = 0.077). Under the anonymous condition, Friday landmarks resulted in significantly higher donation amounts than Monday (MFriday = 57.59, SD = 28.46; MMonday = 44.58, SD = 28.52; F(1, 186) = 6.38, p = 0.01, partial ^{2} = 0.033), as shown in [Figure 3: see original paper].

The results of Experiment 1c indicate that when donor names are publicly disclosed, participants with beginning temporal landmarks are more willing to donate and give higher amounts than those with ending landmarks; under anonymous conditions, participants with ending landmarks are more willing to donate and give higher amounts than those with beginning landmarks. H1 is again supported in the monetary donation context. Across Experiments 1a, 1b, and 1c, by varying the activation methods of temporal landmarks and the manifestations of conspicuous prosocial behavior, we repeatedly validated the relationship between temporal landmarks and conspicuous prosocial behavior willingness. In the following Experiments 2a and 2b, we will explore the underlying mechanism of how temporal landmarks affect conspicuous prosocial behavior willingness.

6 Experiment 2a: The Mediating Role of Situational Public Self-Awareness

The purposes of Experiment 2a are: first, to extend the manifestation of conspicuous prosocial behavior to broader conspicuous kindness to validate the effect of temporal landmarks on conspicuous prosocial behavior willingness, given that people differ in donation appeals (MacDonnell & White, 2015), thereby increasing the robustness and practical significance of the results; second, to verify the mediating role of situational public self-awareness in the effect of temporal landmarks on conspicuous prosocial behavior willingness; third, to rule out the alternative explanation of private self-awareness, as research shows that people at the beginning of a time period tend to have superior internal self-thoughts (Dai et al., 2015), which may motivate them to engage in conspicuous prosocial behavior (Griskevicius et al., 2010); finally, to explore the role of self-improvement motivation in the relationship between temporal landmarks and situational public self-awareness. As previously discussed, at the beginning of a time period, people exhibit stronger self-improvement motivation (Peetz & Wilson, 2014), and to satisfy this psychological need, they are more likely to activate situational public self-awareness and consequently engage in conspicuous prosocial behavior (Johnson et al., 2018).

6.1 Experimental Design and Procedure

Experiment 2a employed a single-factor (temporal landmark: start vs. end) between-subjects design. Using G*Power 3.1, the planned sample size was calculated to be more than 128 participants (effect size f = 0.25, $\alpha = 0.05$, power = 0.80). Researchers recruited 160 participants online, with 141 valid samples (19 participants were excluded for failing attention checks), who were paid upon completion. Among them, 103 were female (73%), with an average age of 33.21 years (SD = 9.00 years).

The temporal landmark manipulation followed the same procedure as Experiment 1a, with participants completing the experiment in the morning or evening. Participants then reported their willingness to participate in conspicuous kindness activities ($\alpha = 0.92$; Yao et al., 2020; Griskevicius et al., 2007), self-improvement motivation ($\alpha = 0.85$; Breines & Chen, 2012), situational public self-awareness ($\alpha = 0.87$; Gervais & Norenzayan, 2012), and situational private self-awareness ($\alpha = 0.74$; Gervais & Norenzayan, 2012). As control variables, we measured participants' prosocial appeal intention (Shelton & Rogers, 1981), role model motivation (Ogunfowora, 2013), and social desirability ($\alpha = 0.72$; Vésteinsdóttir et al., 2017). Finally, participants completed demographic variables.

6.2 Measures

Conspicuous kindness. Yao et al.'s (2020) adaptation of Griskevicius et al.'s (2007) conspicuous kindness scale was used, consisting of 3 items. A representa-

tive item was "To what extent are you willing to volunteer at a nursing home?" (1 = very unwilling, 7 = very willing).

Situational public and private self-awareness. Gervais and Norenzayan's (2012) scales were used. The situational public self-awareness scale included 3 items, with a representative item being "Right now, I care about how I present myself to others." The situational private self-awareness scale included 3 items, with a representative item being "Right now, I am focused on my inner feelings." Response options ranged from 1 = strongly disagree to 7 = strongly agree.

Self-improvement motivation. Breines and Chen's (2012) self-improvement motivation scale was used, including 2 items. A representative item was "Right now, I want to improve myself" (1 = strongly disagree, 7 = strongly agree).

Control variables. To avoid interference, in addition to demographic variables, we measured participants' prosocial appeal intention ("Right now, to what extent are you willing to call on people to engage in prosocial behavior? (Prosocial behavior is behavior that benefits others and society, such as environmental protection, donation)"; 1 = very unwilling, 7 = very willing; Shelton & Rogers, 1981), role model motivation ("Right now, to what extent do you want to be a role model for others?"; 1 = very unwilling, 7 = very willing; Ogunfowora, 2013), and social desirability (10 items such as "Right now, I don't hate anyone"; 1 = very uncharacteristic, 7 = very characteristic; Vésteinsdóttir et al., 2017).

6.3 Results and Discussion

Manipulation check. Independent samples t-test results showed that participants in the beginning temporal landmark group (M = 9.67, SD = 8.38) were more likely to perceive themselves as being at the beginning of the day than those in the ending group (M = 75.62, SD = 13.64; t(139) = 34.64, $p < 0.001$, Cohen's d = 5.83).

Descriptive statistics and correlation analysis results are shown in .

Willingness to participate in conspicuous kindness. ANOVA with temporal landmark as the independent variable, willingness to participate in conspicuous kindness as the dependent variable, and prosocial appeal intention, role model motivation, social desirability, and demographic characteristics as covariates showed that the start group (M = 5.71, SD = 0.84) had significantly higher willingness than the end group (M = 4.09, SD = 1.74; F(1, 132) = 21.96, $p < 0.001$, partial $^2 = 0.143$).

Mediation analysis. First, using the PROCESS macro (Model 4; 5000 bootstrapping iterations; Hayes, 2014), with temporal landmark as the independent variable, willingness to participate in conspicuous kindness as the dependent variable, situational public self-awareness as the mediator, and prosocial appeal intention, role model motivation, social desirability, and demographic characteristics as covariates, the mediating role of situational public self-awareness

was tested. Results showed that situational public self-awareness significantly affected willingness to participate in conspicuous kindness (B = 0.17, SE = 0.07, p = 0.02). The direct effect of temporal landmark on willingness was significant (B = 0.52, 95% CI: [0.124, 0.908]), and the indirect effect was also significant (B = 0.27, 95% CI: [0.053, 0.515]). Therefore, situational public self-awareness mediated the effect of temporal landmarks on conspicuous prosocial behavior, as shown in [Figure 4: see original paper].

Second, with temporal landmark as the independent variable, self-improvement motivation as the mediator, and situational public self-awareness as the dependent variable (with other variables as covariates), results showed that the indirect effect of self-improvement motivation was not significant (B = 0.10, 95% CI: [-0.011, 0.297]).

Alternative explanations. With temporal landmark as the independent variable, willingness to participate in conspicuous kindness as the dependent variable, and situational private self-awareness as the mediator (with other variables as covariates), the PROCESS macro (Model 4; 5000 bootstrapping iterations) showed that the indirect effect of situational private self-awareness was -0.01 (95% CI: [–0.070, 0.049]), indicating no mediating role. Subsequently, with temporal landmark as the independent variable and willingness as the dependent variable, using prosocial appeal intention, role model motivation, and social desirability as mediators separately (with other variables as covariates), results showed that none of these indirect effects were significant: prosocial appeal intention (B = 0.11, 95% CI: [-0.013, 0.289]), role model motivation (B = 0.12, 95% CI: [-0.006, 0.269]), and social desirability (B = -0.01, 95% CI: [-0.071, 0.043]).

Experiment 2a reveals the link between temporal landmarks and conspicuous kindness. Results show that participants with beginning temporal landmarks are more willing to engage in conspicuous kindness than those with ending landmarks. Moreover, Experiment 2a confirms that beginning temporal landmarks more easily activate situational public self-awareness, which in turn increases willingness to participate in conspicuous kindness to maintain public self-image. Therefore, H1 and H2 are supported. Additionally, Experiment 2a rules out alternative explanations based on situational private self-awareness, prosocial appeal intention, role model motivation, and social desirability, and finds that the effect of temporal landmarks on situational public self-awareness is unrelated to self-improvement motivation.

However, it remains uncertain whether other conspicuous behaviors (such as luxury consumption) are also affected by the beginning temporal effect.

7 Experiment 2b: Conspicuous Product Preference

Previous research indicates that luxury consumption obtains social status and prestige by wasting money on non-essential purchases, often interpreted by others as a selfish and narcissistic image. In contrast, conspicuous prosocial be-

havior not only brings greater social image benefits to individuals (Bénabou & Tirole, 2006) but also conveys prosocial altruistic signals, revealing kind and helpful characteristics (Miller, 2007) and gaining social recognition (Grace & Griffin, 2009). Therefore, we speculate that at the beginning of a time period, people are more willing to engage in conspicuous prosocial behavior than other conspicuous behaviors (such as luxury consumption) because it better helps display their public self-image. Thus, Experiment 2b aims to examine whether temporal landmarks only affect conspicuous prosocial behavior rather than other conspicuous behaviors.

Additionally, unlike the previous four experiments, Experiment 2b investigates whether consistent results can be obtained without activating objective temporal landmarks.

7.1 Pretest

This pretest aimed to validate the effectiveness of the conspicuous product manipulation (prosocial product vs. luxury goods vs. control). Sixty-one participants (41 females) were recruited online. The conspicuous product type manipulation was as follows: the prosocial product group read "PORAO is launching a new eco-friendly sunglasses with frames made from recycled renewable resources"; the luxury goods group read "PRADA is launching a new sunglasses with frames designed by internationally renowned designers"; the control group read "PORAO is launching a new sunglasses," as shown in [Figure 5: see original paper]. Participants then evaluated product conspicuousness ($\alpha = 0.72$; Yu et al., 2018), prosocial nature (similar to Experiment 1a; $\alpha = 0.76$), and luxury brand perception ("To what extent do you consider Porao/Prada a luxury brand?" 1 = strongly disagree, 7 = strongly agree; Moon & Sprott, 2016).

Results showed that on prosocial nature ratings, the prosocial product group (M = 5.86, SD = 0.73) scored significantly higher than the luxury group (M = 4.73, SD = 0.78, $p < 0.001$) and control group (M = 4.77, SD = 1.01, $p < 0.001$), with no significant difference between luxury and control groups ($p = 0.90$); $F(2, 58) = 11.90$, $p < 0.001$, partial $^2 = 0.291$. On luxury brand perception, the luxury group (M = 5.95, SD = 0.89) was perceived as more luxurious than the prosocial product group (M = 4.76, SD = 1.26, $p = 0.002$) and control group (M = 5.00, SD = 1.26, $p = 0.01$), with no significant difference between prosocial and control groups ($p = 0.51$); $F(2, 58) = 6.06$, $p = 0.004$, partial $^2 = 0.173$. On conspicuousness ratings, there were no significant differences among prosocial (M = 5.67, SD = 0.90), luxury (M = 5.70, SD = 0.90, $p = 0.89$), and control groups (M = 5.50, SD = 0.79, $p = 0.50$), with no significant difference between luxury and control groups ($p = 0.43$); $F(2, 58) = 0.37$, $p = 0.69$, partial $^2 = 0.013$. Therefore, the manipulation of conspicuous product types was successful.

7.2 Experimental Design and Procedure

Experiment 2b employed a 2 (temporal landmark: start vs. end) × 3 (conspicuous product: prosocial product vs. luxury goods vs. control) between-subjects design. Using G*Power 3.1, the planned sample size was calculated to be more than 158 participants (effect size f = 0.25, α = 0.05, power = 0.80). Two hundred seventy-three participants were recruited online, yielding 249 valid samples (24 participants were excluded for failing attention checks), who were paid for their participation. Among them, 172 were female (69.1%), with an average age of 31.27 years (SD = 8.69 years).

The temporal landmark manipulation was similar to Experiment 1a, except that Experiment 2b did not require participants to report their feelings or complete the temporal landmark manipulation check. Participants then learned they were purchasing a pair of sunglasses and were randomly assigned to the prosocial product, luxury goods, or control group. The conspicuous product manipulation was consistent with the pretest (as shown in [Figure 5: see original paper]). Participants then reported their purchase intention (similar to Experiment 1a; α = 0.91) and situational public self-awareness (similar to Experiment 2a; α = 0.74). As control variables, social desirability (consistent with Experiment 2a; α = 0.77) and product value perception (Yu et al., 2018) were measured. Finally, demographic variables were collected.

7.3 Measures

Conspicuousness. Yu et al.'s (2018) conspicuousness scale was used, including 2 items such as "If I use PORAO/PRADA sunglasses, people will notice that I am using this brand's product" (1 = strongly disagree, 7 = strongly agree).

Control variables. In addition to demographic variables, we measured social desirability (consistent with Experiment 2a) and product value perception ("To what extent do you think the value of this product is high?" 1 = very low, 7 = very high; Yu et al., 2018).

7.4 Results and Discussion

Descriptive statistics and correlation analysis results are shown in .

Purchase intention. ANOVA with temporal landmark and product type as independent variables, purchase intention as the dependent variable, and demographic characteristics, social desirability, and value perception as covariates showed a significant interaction effect on consumer purchase intention (F(2, 237) = 3.69, p = 0.03, partial ^{2} = 0.030). Specifically, under the beginning temporal landmark condition, the prosocial product group (M = 5.85, SD = 0.67) showed significantly higher purchase intention than the luxury group (M = 5.10, SD = 0.77) and control group (M = 4.72, SD = 1.33); F(2, 237) = 12.77, p < 0.001, partial ^{2} = 0.097. Under the ending temporal landmark condition, there were no significant differences among prosocial (M = 5.26, SD = 0.95),

luxury (M = 5.30, SD = 1.36), and control groups (M = 4.86, SD = 1.45); F(2, 237) = 1.09, p = 0.34, as shown in [Figure 6: see original paper].

Mediation analysis. Using PROCESS Model 7 (5000 bootstrapping iterations) with temporal landmark as the independent variable, situational public self-awareness as the mediator, purchase intention as the dependent variable, conspicuous product as the moderator, and demographic characteristics, social desirability, and value perception as covariates, results showed that in the prosocial product group, temporal landmark significantly affected purchase intention through situational public self-awareness (B = 0.17, 95% CI: [0.020, 0.339]). In the luxury group (B = -0.16, 95% CI: [-0.353, 0.010]) and control group (B = 0.03, 95% CI: [-0.184, 0.207]), the indirect effects were not significant.

Experiment 2b clarifies the unique effect of beginning temporal landmarks on conspicuous prosocial behavior willingness by manipulating conspicuous product types. Because conspicuous prosocial behavior can convey positive altruistic signals and reveal kind and helpful characteristics, while luxury consumption is often viewed as self-interested behavior (Miller, 2007). Moreover, Experiment 2b reconfirms the mediating role of situational public self-awareness in the effect of temporal landmarks on conspicuous prosocial behavior willingness. The next experiment will investigate the moderating role of individual self-monitoring levels in the relationship between temporal landmarks and conspicuous prosocial behavior willingness.

8 Experiment 3: The Moderating Role of Self-Monitoring

Experiment 3 aims to explore the moderating effect of self-monitoring levels on the relationship between temporal landmarks and conspicuous prosocial behavior willingness, thereby testing H3.

8.1 Experimental Design and Procedure

Using G*Power 3.1, the planned sample size was calculated to be more than 128 participants (effect size f = 0.25, $\alpha = 0.05$, power = 0.80). Researchers recruited 198 participants online, yielding 194 valid samples (4 participants were excluded for failing attention checks or not following instructions), who were paid upon completion. Among them, 127 were female (65.5%), with an average age of 31.27 years (SD = 10.97 years).

First, participants completed the 13-item self-monitoring scale ($\alpha = 0.92$; Lennox & Wolfe, 1984). Following Bi et al.'s (2021) temporal landmark manipulation method, participants were randomly assigned to the beginning or ending temporal landmark group, with both groups completing the experiment on July 1. The difference was that the start group emphasized the beginning of the month, while the end group emphasized Saturday. Participants then described their typical activities and feelings on that day and indicated whether they perceived the day as the beginning or end of a time period using a sliding scale (1 = beginning of a month/week, 100 = end of a month/week).

Then, consistent with Experiment 2a, participants reported their conspicuous kindness tendency ($\alpha = 0.87$) and situational public self-awareness ($\alpha = 0.80$). Finally, participants completed demographic variables.

8.2 Measures

Self-monitoring level. Lennox and Wolfe's (1984) self-monitoring scale was used, consisting of 13 items. A representative item was "In social situations, I have the ability to change my behavior if needed" (1 = strongly disagree, 7 = strongly agree).

8.3 Results and Discussion

Manipulation check. Independent samples t-test results showed that when July 1 was described as the beginning of the month, participants were more likely to perceive it as the start of a time period (M = 5.12, SD = 14.62), whereas when described as Saturday, participants were more likely to perceive it as the end (M = 83.08, SD = 18.75; t(192) = 32.25, p < 0.001, Cohen's d = 4.64).

Descriptive statistics and correlation analysis results are shown in .

Situational public self-awareness. ANOVA with temporal landmark as the independent variable, situational public self-awareness as the dependent variable, self-monitoring level as the moderator, and demographic characteristics as covariates showed a significant interaction effect (F(1, 186) = 4.28, p = 0.02). Simple slope analysis indicated that at low self-monitoring levels (M - SD), temporal landmark had no significant effect on situational public self-awareness (B = 0.05, 95% CI: [-0.352, 0.455]). However, at high self-monitoring levels (M + SD), temporal landmark significantly affected situational public self-awareness (B = 0.70, 95% CI: [0.307, 1.096]), as shown in [Figure 7: see original paper].

Conspicuous kindness tendency. ANOVA with temporal landmark as the independent variable, conspicuous kindness as the dependent variable, self-monitoring level as the moderator, and demographic characteristics as covariates showed a significant interaction effect (F(1, 186) = 6.75, p < 0.001). Simple slope analysis indicated that at low self-monitoring levels, temporal landmark had no significant effect on conspicuous kindness tendency (B = -0.137, 95% CI: [-0.618, 0.345]). However, at high self-monitoring levels, temporal landmark significantly affected conspicuous kindness (B = 1.023, 95% CI: [0.552, 1.493]), as shown in [Figure 7: see original paper]. Further Johnson-Neyman analysis revealed that when individuals' self-monitoring level was above 5.37, temporal landmark had a significant effect on conspicuous kindness, whereas when below 5.37, there was no significant difference between beginning and ending landmarks.

Moderated mediation analysis. Using Bootstrapping (PROCESS Model 8) with temporal landmark as the independent variable, situational public self-

awareness as the mediator, conspicuous kindness as the dependent variable, self-monitoring level as the moderator, and demographic characteristics as covariates (Hayes, 2014), results showed that the interaction between temporal landmark and self-monitoring level significantly affected situational public self-awareness (B = 0.41, 95% CI: [0.056, 0.766]). Specifically, when self-monitoring level was low, the indirect effect of temporal landmark on conspicuous kindness was not significant (B = 0.02, 95% CI: [–0.122, 0.156]); when self-monitoring level was high, the effect was significant (B = 0.21, 95% CI: [0.042, 0.470]). Overall, self-monitoring level effectively moderated the relationship between temporal landmark and conspicuous kindness through situational public self-awareness (Index = 0.12, 95% CI: [0.002, 0.315]), as shown in [Figure 8: see original paper].

Experiment 3 confirms the moderating role of self-monitoring level in the effect of temporal landmarks on conspicuous prosocial behavior willingness. For high self-monitors, beginning (vs. ending) temporal landmarks better motivate them to engage in conspicuous prosocial behavior, whereas for low self-monitors, the beginning temporal effect disappears. Therefore, H3 is supported. Moreover, by describing the same day as either the beginning of the month (start) or Saturday (end), the experiment enhances practical operability for marketing managers.

9 General Discussion

9.1 Research Conclusions

Through six experiments, this study systematically examined how the contextual factor of time affects the willingness to engage in conspicuous prosocial behavior. Across these six experiments, we tested the effect of temporal landmarks on conspicuous prosocial behavior willingness and its mechanisms from three behavioral manifestations: conspicuous prosocial product preference (Experiments 1a and 2b), conspicuous donation behavior (Experiments 1b and 1c), and conspicuous kindness (Experiments 2a and 3). Compared to ending temporal landmarks, individuals at the beginning of a time period hope to shape a positive image or pursue social recognition through public prosocial behavior, manifested as greater preference for conspicuous prosocial products (Experiments 1a and 2b), higher willingness to donate hematopoietic stem cells in public contexts (Experiment 1b), higher donation intention and amounts (Experiment 1c), and more active participation in conspicuous kindness (Experiments 2a and 3). Notably, Experiments 1b and 1c found that at the end of a time period, people are more willing to engage in general, non-conspicuous prosocial behavior, possibly because mental resource depletion at period endings weakens self-presentation motivation (Pang et al., 2022). This indicates that the effect of beginning temporal landmarks on prosocial behavior is not universal but depends on the nature of the prosocial behavior—whether it is conspicuous. Meanwhile, Experiment 2a examined the mediating role of situational public self-awareness between temporal landmarks and conspicuous prosocial behavior willingness. At the beginning (vs. end) of a period, individuals' situational

public self-awareness is more easily activated, making them more actively participate in conspicuous kindness. Experiment 2b investigated the relationship between temporal landmarks and other conspicuous behavior willingness, finding that beginning temporal landmarks only significantly increased purchase intention for conspicuous prosocial products, not luxury or other conspicuous products. Experiment 3 explored the moderating role of self-monitoring levels. Results showed that self-monitoring level not only moderates the effect of temporal landmarks on situational public self-awareness but also moderates their effect on conspicuous prosocial behavior willingness. High self-monitors at the beginning (vs. end) of a period are more likely to activate situational public self-awareness and thus more willing to engage in conspicuous prosocial behavior; for low self-monitors, situational public self-awareness is difficult to evoke regardless of temporal landmarks, weakening the effect on conspicuous prosocial behavior willingness.

9.2 Theoretical Contributions

First, this study expands the research perspective on conspicuous prosocial behavior from the individual level to the contextual level, advancing antecedent research in this domain. Previous studies have focused more on how individual psychological traits affect conspicuous prosocial behavior (e.g., self-esteem, materialism, and power; Johnson et al., 2018; Wallace et al., 2017; Yao et al., 2020), with only a few examining contextual boundary conditions (Griskevicius et al., 2010). Particularly, prior literature has rarely addressed the relationship between temporal factors and conspicuous prosocial behavior. As a major resource that people frequently encounter in daily life, time can guide people to consider how to use it to reflect self-concept (Gino & Mogilner, 2014). By segmenting social calendar time, this study constructs people's perceptions of beginning and ending times, revealing that beginning temporal landmarks may motivate people to transmit costly altruistic signals to demonstrate their prosocial abilities and satisfy public self-awareness needs. Therefore, this study broadens the consideration of temporal factors in conspicuous prosocial activity participation, deepens understanding of how temporal landmarks affect donation effectiveness, and provides a new research perspective on time as an important antecedent of prosocial behavior from the costly signaling theory perspective.

Second, this study advances temporal landmark research. Existing studies have primarily focused on how beginning or ending temporal landmarks affect individuals' psychology, behavior, or decision preferences, such as goal pursuit (Dai et al., 2015), self-evaluation (Peetz & Wilson, 2013), nostalgic consumption (Bi & Pang, 2016), and risk preference (Pang et al., 2022). However, research on how temporal landmarks affect interpersonal behavior is relatively scarce. This study extends the downstream consequences of temporal cues from personal behavior preferences to interpersonal relationships, specifically manifested as conspicuous prosocial behavior. Conspicuous prosocial behavior reflects donors' transmission of prosocial signals to bystanders while helping recipients (Grace &

Griffin, 2006), which is closely connected to interpersonal relationships. Therefore, this research is important for deepening exploration of the consequences triggered by temporal landmarks and further supplementing and perfecting the temporal theoretical system. Additionally, existing research on the morning (i.e., the beginning of a day) effect on moral behavior has shown inconsistent conclusions. The morning morality effect suggests that people have stronger self-control in the morning and are thus more inclined toward moral behavior (Kouchaki & Smith, 2014), but this effect does not hold for "night owls" (Gunia et al., 2014; Ingram et al al., 2016), with insufficient explanation for the underlying reasons. Addressing these inconsistent findings, this study argues that differences between morning and evening in prosocial behavior are due to the presence or absence of conspicuous attributes, thus providing insights for interpreting contradictory views on the morning morality effect.

Third, based on self-awareness theory, this study explains the internal mechanism of how temporal landmarks affect conspicuous prosocial behavior willingness, broadening the potential mechanisms and theoretical perspectives on how temporal landmarks influence interpersonal relationships. Previous research has focused on the concept and characteristics of public self-awareness (Froming et al., 1982; Goukens et al., 2009) and its consequences, such as interpersonal or intergroup norms (Carver & Humphries, 1981; You & Lee, 2019) and prosocial behavior (Pfattheicher & Keller, 2015). Although scholars have examined the effect of public self-awareness on moral behavior or prosocial behavior with purely altruistic characteristics, this study focuses on conspicuous prosocial behavior as the outcome variable, which contains self-interested attributes (Harbaugh, 1998). Meanwhile, while previous research has focused on the connection between time and personal self, this study extends it to the relationship with social self, verifying the potential link between temporal landmarks and conspicuous prosocial behavior that helps satisfy social self-needs. Therefore, this study reveals and connects the relationship between temporal landmarks and conspicuous prosocial behavior willingness by activating situational public self-awareness from the physical cue of time, forming a useful supplement to existing literature.

Finally, from the perspective of self-monitoring level, this study reveals the boundary condition of the effect of temporal landmarks on conspicuous prosocial behavior willingness. Previous research has found that self-monitoring affects individuals' self-presentation (Tyler et al., 2016; Wu et al., 2021) and consumption preferences (Feng et al., 2022), but few studies have explored the interactive effect of temporal factors and self-monitoring on public self-awareness and conspicuous prosocial behavior willingness. This study incorporates self-monitoring level into the temporal landmark research framework, confirming its moderating role, particularly showing that the beginning temporal effect is weakened for low self-monitors. Therefore, this research enriches the relevant literature on self-monitoring and temporal landmarks.

9.3 Managerial Implications

The conclusions of this study provide practical references for charitable organizations on when and how to implement effective solicitation strategies. First, at beginning times such as mornings, early weeks, or early months, managers can use various approaches to highlight the conspicuous features of prosocial products (e.g., eco-friendly bags with environmental logos, public acknowledgment of donor names) as means for providers or donors to obtain value and returns. In contrast, during ending times such as evenings, weekends, or late months, managers should avoid overemphasizing the conspicuous features of prosocial products. Second, enterprises or charitable organizations offering prosocial products can select appropriate time points or adjust advertising expressions to enhance marketing effectiveness. If organizations need to promote prosocial products with environmental logos, they can choose times such as mornings or early weeks, or highlight the beginning-of-month time node in advertisements (even if the day is a weekend), thereby activating people's public self-awareness and stimulating their purchase intentions.

9.4 Research Limitations and Future Directions

This study has certain limitations that warrant further research. First, it mainly focuses on ordinary calendar time that enterprises can easily control, without considering whether other important temporal landmarks (such as major public events or birthdays and other personally significant times) affect conspicuous prosocial behavior. Second, the study defines the beginning of a day as the physical morning, which may not apply to all individuals; for example, "night owls" may experience their day's beginning in the afternoon or evening, which may affect the observed effects. Future research could explore the influence of special populations or subjective factors on the beginning temporal effect. Third, this study only discussed the moderating role of self-monitoring level; future research could explore additional boundaries of other personality traits or environmental factors in the relationship between temporal landmarks and conspicuous prosocial behavior willingness. Finally, although Experiment 1b used the behavior of donating hematopoietic stem cells to examine the effect of temporal landmarks on conspicuous prosocial behavior, future research could conduct broader field or behavioral experiments to further validate these findings.

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