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Time is money, but for whom? The role of social distance in spending time and money

Czas to pieniądz, tylko dla kogo? Rola dystansu społecznego w wyborze między czasem a pieniędzmi

Abstract

This research examined whether increasing social distance – shifting from decisions for oneself to those for a close other – affects preferences in time–money trade-offs. Across two experiments, participants evaluated service options differing in duration and cost. We hypothesized that decisions made on behalf of others would reflect a stronger preference for time-saving over cost-saving options. In Study 1 ($N = 133$), a binary choice task showed that decisions for others more often favoured time-saving but costlier options, and required longer deliberation. In Study 2 ($N = 131$), a matching procedure asked participants to state the monetary value of faster options; here, the social distance effect disappeared, suggesting that the more analytical task format attenuated group differences. The findings indicate that the impact of social distance on consumer decisions depends on task structure, with practical implications for how offer formats can influence whether customers prioritize time or money.

Keywords

social distance, time–money trade-offs, decision making, cognitive processing, consumer behaviour

Streszczenie

Celem badania było sprawdzenie, czy zwiększenie dystansu społecznego – przejście z perspektywy własnej do podejmowania decyzji w imieniu innej osoby – wpływa na preferencje w kompromisach między czasem a pieniędzmi. W dwóch eksperymentach uczestnicy wybierali między usługami różniącymi się kosztem i czasem realizacji. W badaniu 1 ($N = 133$) zadanie wyboru binarnego wykazało, że w decyzjach podejmowanych w imieniu innej osoby częściej preferowano opcje oszczędzające czas mimo ich wyższej ceny; dodatkowo decyzje te zajmowały więcej czasu, co sugeruje bardziej refleksyjne przetwarzanie. W badaniu 2 ($N = 131$) użyto procedury dopasowania wymagającej wyceny szybszej opcji. Przy takim warunku efekt dystansu społecznego nie wystąpił, co wskazuje, że bardziej analityczna forma zadania osłabiła różnice między decyzjami. Wyniki sugerują, że rola dystansu społecznego w decyzjach konsumenckich zależy od struktury zadania, a format prezentacji oferty może wpływać na sposób, w jaki konsumenci równoważą czas i pieniądze.

Słowa kluczowe

dystans społeczny, kompromisy czas–pieniądze, podejmowanie decyzji, przetwarzanie poznawcze, zachowania konsumenckie

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Introduction

Everyday economic decisions frequently involve trade-offs between two core resources: time and money. For example, one might consider whether to take a taxi which is more expensive but will arrive

faster or to use public transportation and accept longer commute. Similar decisions arise when choosing between preparing a home-cooked meal versus ordering a more costly food delivery, or deciding whether to hire a professional for a minor household repair rather than performing the task

on one's own. In all such cases, individuals assess relative values of time and money, choosing between spending more to save time or investing time to reduce financial expenses.

Time is a unique resource due to its limited amount and practical impossibility of making it more available (Chang et al., 2013). From an economic perspective, scarcity implies high value as a result of limited availability (Haghpour, Sahabeh, & Halvari, 2022). Following this reasoning, time – as a scarce, non-renewable resource – should have significant economic value. Despite cultural aphorisms, such as “time is money” or “if you don't value time, you don't value money”, which emphasize the importance of time, individuals often fail, in their everyday lives, to regard time as an asset equivalent in value to money. Empirical research confirms this discrepancy: people generally perceive time as less economically significant than money, and occur less consistent in its valuation (Soman, 2001; Zauberman & Lynch, 2005).

One possible explanation for the disparity in valuing time and money relates to the process of socialization, which is significantly more explicit in relation to money. From their early childhood, individuals are explicitly taught about functions and value of money. Children as young as two or three can distinguish coins and banknotes from other objects. Between the ages of four and five they start to perceive money as a medium of exchange, and by the age of five or six they understand the differing values of banknotes and coins, recognizing that not all items cost the same amount. By ages six to eight, children grasp the basic functions of money related to purchases (Strauss, 1952). Through economic socialization, young people also learn that every product has a price expressed in monetary terms and that financial resources may be insufficient to satisfy all desires. These early lessons foster a rational, market-based understanding of money (Berti & Bombi, 1981; Berti & Bombi, 1988).

In contrast to money, time is rarely framed as a transactional resource during socialization. While money clearly serves as a medium of exchange and a carrier of value, time is far less frequently perceived as an economic resource. Assigning value to time largely depends on somebody's external reference points, which determine whether time is recognized as valuable (Leclerc, Schmitt, & Dube, 1995; DeVoe & Pfeffer, 2007). Time often simply passes by, beyond our control, sometimes dragging during tedious tasks, and at other times slipping away swiftly, e.g. during pleasant vacations (Nakamura & Csikszentmihalyi, 2002). In some contexts, such as professional work, time may be treated as a medium of economic exchange, valued through hourly wages (DeVoe & Pfeffer, 2007). But unlike money, it lacks consistent symbolic or exchange-based

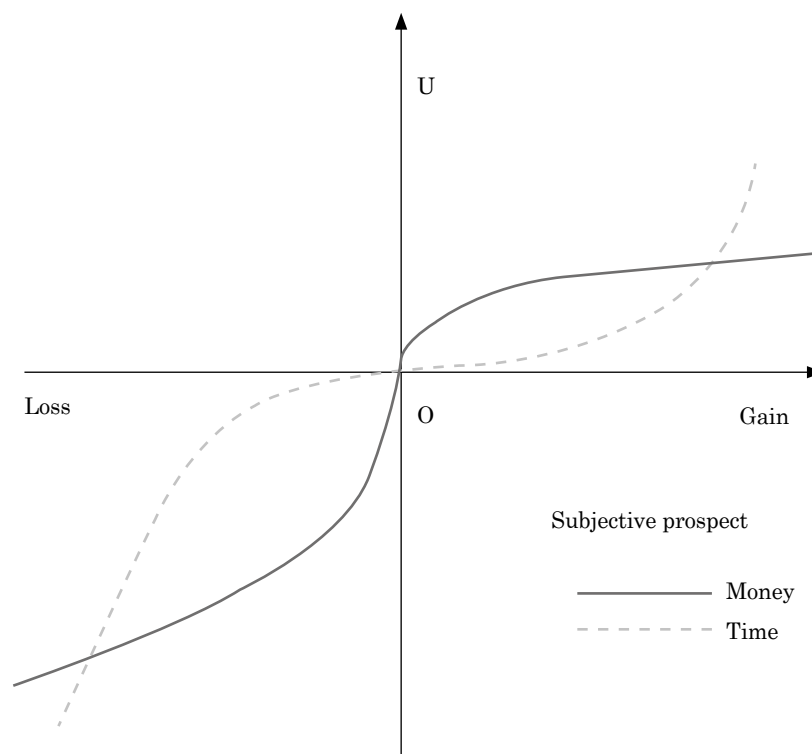
framing, especially in non-instrumental settings like leisure (Soman, 2001).

Valuing time is also cognitively more demanding than valuing money (Su & Gao, 2014). Individuals often rely on heuristics when evaluating time-related decisions, which can lead to inconsistencies and bias (Monga & Zor, 2019). Rather than investing cognitive resources in the complex process of valuing time, individuals frequently omit or evaluate it less consciously compared to money. For instance, Saini and Monga (2008) demonstrated that individuals facing time-related costs are more susceptible to compromise effects, choosing intermediate rather than extreme options, compared to those dealing with monetary costs. They also found that individuals are more strongly influenced by anchoring effects, initial reference points, when costs are expressed in terms of time rather than money (Saini & Monga, 2008).

Situations in which the value of time is overlooked may partly stem from its limited potential for accumulation. Unlike money, time cannot be stored for later use. Although we speak of “saving time,” this typically means reallocating it more efficiently rather than accumulating it like money (Chang et al., 2013). By contrast, financial resources can be set aside for future needs and even small regular savings can accumulate over time (Awdziej, 2016).

The differences in how time and money are socially internalized, cognitively evaluated, and accumulated, potentially influence the subjective valuation of time in terms of utility, in ways that differ from the valuation of money. Ten dollars saved need not be spent immediately, whereas ten minutes saved typically must be used right away (Chang et al., 2013). In contexts of time pressure, these minutes may hold high value; however, in other circumstances the same amount of time may seem insignificant due to difficulties in productive use and the impossibility of storing time for future needs. Therefore, saving a small amount of time may yield a smaller change in subjective utility compared to saving a small sum of money. Only when time savings are substantial does their utility become more noticeable, enabling immediate productive use. Given the cognitively demanding nature of valuing time, small time gains may go unnoticed altogether. It is often only larger amounts of saved time that trigger valuation processes and enhance subjective utility.

Research by Gao, Yang, and Qu (2021) supports these observations. The authors examined how decision-makers assess risks associated with time and money in commuting contexts. Participants evaluated scenarios that varied in commuting duration, cost, and the potential for minor delays or extra expenses. Based on their findings, the researchers developed utility functions for both monetary and temporal gains and losses (see Figure 1).

Figure 1. Example utility curves for time and money

Source: Gao, Yang, & Qu, 2021, adapted with modifications by the authors.

The results regarding the utility functions for money aligned with Kahneman and Tversky's (1992) prospect theory predictions. This model posits that individuals experience losses more intensely than equivalent gains, and that subjective sensitivity to value changes diminishes as the magnitude of gains or losses increases. Additionally, adaptation to losses occurs more slowly than adaptation to gains. An important implication of these relationships is that decision-makers are more likely to engage in actions aimed at avoiding losses rather than maximizing gains (Dacey & Zielonka, 2008). In contrast to the diminishing sensitivity observed for monetary gains and losses, Gao, Yang, and Qu (2021) demonstrated increasing sensitivity toward temporal gains and losses, contradicting principles typically associated with monetary decision-making. According to the graph presented in Figure 1, small temporal losses and gains provoke smaller changes in utility than equivalent monetary losses and gains. The loss of a certain amount of money is perceived more acutely than an equivalent temporal loss, while gaining a few minutes is experienced as less impactful than gaining a few dollars. Only a substantial gain or loss of time – which otherwise could be effectively utilized – leads to more significant subjective changes in utility (Gao, Yang, & Qu, 2021).

These findings can be interpreted in the context of opportunity costs. Trade-off decisions may involve emotional costs, such as discomfort, reduced satisfaction with the decision, or feelings of regret. Consequently, individuals often make their choices driven more by the desire to avoid negative emotions associated with losses than by an urge of maximizing objective gains (Dias, Sharma & Fitzsimons, 2022). People tend to prioritize emotional over material benefits. When choosing between saving time or money, individuals typically aim to avoid losing the resource whose loss causes greater discomfort. Such discomfort becomes more pronounced when the costs of lost opportunities are easier to recall. In trade-off decisions involving time versus money, it often appears easier to imagine potential uses for saved money than for saved time. When the values of time and money are similarly insignificant, individuals are more likely to sacrifice time in order to save money. However, as temporal losses increase, alternative uses of time become more salient, prompting individuals to recognize the loss and subjectively evaluate its utility (Gao, Yang, & Qu, 2021). In such situations, people may choose to incur higher financial costs in order to save some time.

The present research considers whether social distance, a key dimension of psychological distance, influences the subjective valuation of time.

According to psychological distance theory (Trope & Liberman, 2010, 2014), psychological distance refers to the subjective experience of separation between the “self here and now” and other people, places, events, or alternative realities. Although we cannot physically experience either past or future, our memories, plans, and anticipations influence our emotions, choices, and behaviours. Social distance, as a specific dimension of psychological distance, pertains to emotional engagement and perceived closeness in relationships with others. Low social distance characterizes relationships with family and close friends, whereas high social distance characterizes relationships with acquaintances or strangers (Trope & Liberman, 2010). Increased social distance may foster more abstract and analytical information processing – which is particularly relevant to our study.

As outlined above, time and money differ in their symbolic meaning, socialization, cognitive processing, and emotional weight. Although both resources are central to everyday economic decision-making, time – unlike money – is often evaluated less systematically and is more susceptible to heuristic processing. However, increasing social distance may shift attention toward time as a valued resource. Supporting this idea, Albrecht et al. (2011) found that greater social distance engages brain regions linked to abstract reasoning and associated with more rational and deeper information processing. Mata et al. (2013) showed that social distance can reduce susceptibility to heuristics and promote more systematic processing. Considering the significant cognitive effort required to evaluate time (Su & Gao, 2014), it can be hypothesized that greater social distance facilitates a more deliberate and conscious recognition of time’s value.

Moreover, increasing social distance also reduces the sunk-cost effect in the context of financial investments. Tait (2015) showed that individuals are less influenced by sunk costs when deciding for others. It appears that decision-makers do not anticipate potentially negative emotions associated with loss when deciding for others, thereby decreasing their aversion to financial losses. Sun, Polman, and Zhang (2021) confirmed that individuals making decisions on behalf of other people anticipate less intense negative emotions related to losses, compared to personal decisions. Similarly, Guo et al. (2019) demonstrated that in contexts involving decisions made for others, participants were more willing to take risks in terms of gains and more risk-averse in these of losses, thus indicating reduced sensitivity to financial losses.

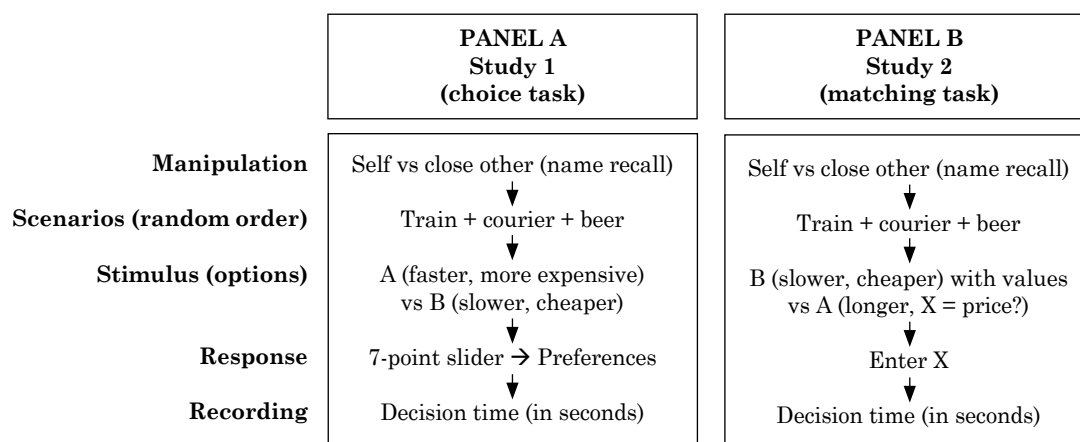
These findings suggest that people treat others’ money as less psychologically consequential than their own (Polman, Effron, & Thomas, 2018). An intriguing question is whether similar mechanisms

apply to valuation of time. Can greater social distance, which reduces aversion to financial losses, also influence how individuals perceive the value of time?

Summing up, our aim is to investigate how social distance influences decisions involving time and financial expenditures. Specifically, we examine whether increasing social distance enhances the salience of time in the evaluation of options – reducing its typical underrepresentation compared to monetary cost – and thereby shifts decision-makers’ preferences toward time-saving options, even at higher financial expense. Such findings could provide meaningful insights into how heuristic approaches to time management may be modified under different social conditions to better reflect the true value of time as a resource. Accordingly, we hypothesize that decisions made on behalf of others (i.e. under increased social distance) will lead to a greater preference for time-saving over money-saving options – reflecting a stronger consideration of time in the decision-making process – compared to decisions made for oneself (H1).

Moreover, assuming that increased social distance activates more rational cognitive processing, we predict that individuals making decisions for others will take longer to reach their decisions than those making decisions for themselves (H2). These predictions are grounded in dual-process theories of cognition (Kahneman, 2011), which propose that effortful, System 2 processing takes more time and is associated with deeper evaluation. Numerous studies have shown that decisions relying on System 2 take more time because they involve deliberate evaluation and integration of multiple pieces of information (Evans, 2008; Alter et al., 2007). Furthermore, decisions made on behalf of others often involve greater task complexity and ambiguity, increasing the cognitive load resting with the decision-maker. This heightened demand for mental effort has been empirically linked to longer decision-making times, as individuals must engage in more extensive analysis and uncertainty resolution (Hogarth, 1975; Hess, Queen, & Patterson, 2012).

To test these hypotheses, we conducted two experiments differing in task structure. In Study 1, participants were presented with a choice procedure in which they had to select between two service alternatives: one that was faster but more expensive, and another that required more time at a smaller cost. In Study 2, we employed a matching paradigm in which participants indicated the price at which a faster service alternative would be equally preferable to a slower but cheaper one. This design allowed us to compare both choice preferences and underlying valuation processes across levels of social distance. A schematic overview of the two studies is provided in Figure 2 to facilitate orientation in the research design.

Figure 2. Schematic overview of the research design

Note: Panel A: Study 1 (choice task) with a between-subjects manipulation of target (self vs close other) and within-subjects variation in three scenarios; DVs: preference (1–7) and decision time. Panel B: Study 2 (matching task) with identical manipulation and scenarios; DVs: WTP per minute and decision time.

Source: own elaboration.

Study 1 (choice task)

Method

Participants. A total of 152 individuals participated in the study. Participants were recruited through the Answeo online research panel. Their mean age was 37.81 years ($SD = 11.77$), and 41.4% identified as women. All participants provided informed consent and were informed that participation was voluntary and anonymous. As compensation, each participant received the equivalent of USD 0.50. Nineteen participants were excluded for too short completion times or failing attention checks, leaving a final sample of 133.

Materials and procedure. Participants were randomly assigned to one of two experimental conditions: making decisions for themselves or making decisions on behalf of other. In the “other” condition, participants were instructed to imagine a specific friend by silently recalling the person’s name. This technique was adapted from previous research to increase identification with the decision target (Liu & Baskin, 2021).

Participants completed three hypothetical decision-making scenarios, each involving a trade-off between a time-saving (but more expensive) option and a money-saving (but more time-consuming) option. The scenarios concerned: (1) purchasing a train ticket, (2) selecting a courier service, and (3) buying beer on a hot day. Scenario order was randomized across participants.

In the decision-for-self condition, the instructions for e.g. the train ticket scenario read:

Imagine you are planning a trip. You are about to purchase a train ticket. You have already prepared

the necessary amount of cash. You have two options to choose from...

In the decision-for-friend condition, the scenario started as follows:

Think of a specific person who is very close to you and whom you personally consider a friend. Say their name silently in your mind. Imagine that your friend is planning a trip and has asked you to purchase a train ticket on their behalf. They are covering the cost. You have already received the necessary amount of cash. You are free to choose any ticket. You have two options to choose from...

The procedure for measuring the dependent variable (preferences) was adapted from research on trade-offs between product quality and quantity (Liu & Baskin, 2021). In each scenario, participants indicated their preference using a seven-point slider scale, ranging from 1 (strong preference for the time-saving option) to 7 (strong preference for the money-saving option). Participants were not shown numerical values on the scale. Higher slider values indicated stronger preferences for the cheaper, more time-consuming alternative.

An example scenario (train ticket) included the following options:

- Option A: Purchase a ticket for a train covering the planned route in 2 hours and 39 minutes, for PLN 161.
- Option B: Purchase a ticket for a train covering the planned route in 3 hours and 50 minutes, for PLN 83.

Participants were instructed as follows:

Please indicate which option you are more inclined to choose. Moving the slider to the left indicates a choice of option A. Moving it to the right indicates a choice of option B. The further the slider

is moved to the left/right, the stronger your preference for the given option.

The second scenario involved a trade-off between a time-consuming but inexpensive courier service and a faster but more expensive pickup option. The third scenario involved choosing between buying beer immediately on the beach at a higher price or walking to a cheaper off-site store (see the Table 1 below for precise time and price values for each scenario).

In addition to choice preferences, decision time was recorded for each scenario. Total time spent across all three scenarios served as an indirect index of cognitive effort, operationalized as the sum of decision times in seconds.

Table 1. Choice task stimuli for Study 1

Scenario		Time	Cost (PLN)
Train ticket	A	2 hours and 39 minutes	161
	B	3 hours and 50 minutes	83
Courier services	A	5 minutes	47
	B	50 minutes	15
Beer	A	immediately	28
	B	20 minutes	5

Note: A – time-saving option; B – money-saving option; Scenario details were designed to simulate realistic market conditions at the time of data collection.

Source: own elaboration.

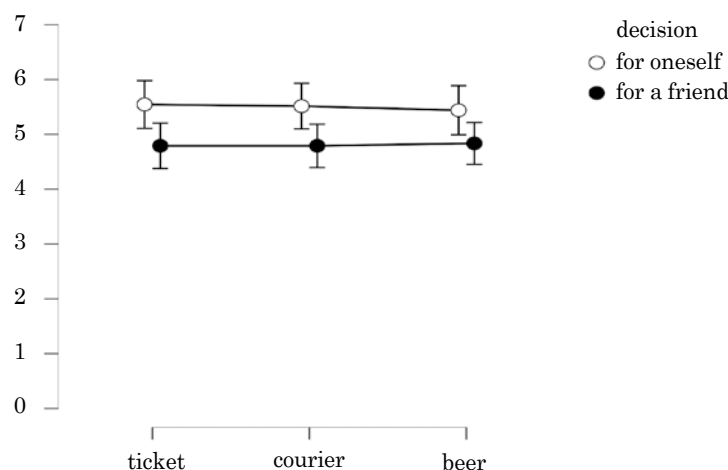
Results

Descriptive analysis of preferences across the three decision scenarios revealed that, on average, participants' responses were above the midpoint of the 7-point scale, regardless of condition (see Figure 3). This suggests a general tendency to prefer money-saving options (higher values on the scale) over time-saving ones. However, the overall preference pattern appeared to be moderated by decision context.

A mixed-design ANOVA was conducted with social distance (decisions “for myself” vs. “for a friend”) as a between-subjects factor and decision scenario (train ticket, courier service, beer purchase) as a within-subjects factor. The main effect of scenario was not statistically significant, $F(2, 262) = 0.011$, $p = 0.989$, $\eta^2 = 0.00004$, indicating no meaningful differences in ratings across the different scenarios. The scenario $\times$ social distance interaction also occurred non-significant, $F(2, 262) = 0.074$, $p = 0.929$, $\eta^2 = 0.00025$, suggesting that the effect of social distance was consistent across scenarios. However, statistically significant was the main effect of manipulation of social distance, $F(1, 131) = 7.03$, $p = 0.009$, $\eta^2 = 0.028$. Participants who made decisions on behalf of others showed a stronger preference for time-saving options than those deciding for themselves. This finding supports hypothesis H1, which posited that increased social distance would lead to greater emphasis on saving time, even at a higher financial cost.

We also examined response times (average per scenario). Because distributions deviated from normality (Shapiro–Wilk $ps < 0.001$), we used a Mann–Whitney U test, which showed longer decisions

Figure 3. Mean response on a 7-point preferences scale by social distance and scenario



Note: 1 = a strong preference for time-saving option; 7 = a strong preference for money-saving option.

Error bars represent standard errors of the mean.

Source: own elaboration.

for others ($Mdn = 32.67$ seconds) than for oneself ($Mdn = 28.17$ seconds), $W = 1729.50$, $p = 0.030$. The effect size, calculated using rank-biserial correlation, was small but significant, $r_{rb} = -0.218$, 95% CI $[-0.395, -0.024]$. These findings are consistent with hypothesis H2, which predicted longer decision times when choosing on behalf of others, presumably reflecting increased deliberation and cognitive effort.

To sum up, preferences did not significantly vary by scenario type, indicating that the decision domain (buying a train ticket, courier service, or buying a beer) did not meaningfully affect participants' trade-offs between time and money. However, the self-other distinction firmly influenced how participants weighed time versus money: participants making choices for others favoured time-saving options more than those deciding for themselves. Additionally, choosing on behalf of other people took longer to decide, suggesting that social distance may promote more deliberate processing in time/money trade-off situations.

Study 2 (matching task)

Study 2 was designed to examine whether the effects observed in Study 1 – in particular the influence of social distance on time/money trade-offs – would persist when the decision-making process was made more cognitively demanding. To achieve that, we employed a matching task, which required participants to assign a specific monetary value to time savings. Unlike binary choice tasks, matching procedures encourage more deliberate, reflective valuation by requiring numeric trade-offs. This approach was inspired by classic research demonstrating that preference patterns can shift depending on the format of measurement (Tversky, Satath, & Slovic, 1988).

Method

Participants. A total of 150 individuals were recruited through the Answeo online research panel. The mean age of the respondents was 38.94 years ($SD = 11.55$), with 44.2% of participants identified as women. All participants provided informed consent and were informed that participation was voluntary and anonymous. Each received the equivalent of USD 0.50 for completing the survey. 19 responses were excluded from analysis due to either excessively short completion times (less than 3 minutes) or more than one incorrect response on attention check items. The final sample included 131 participants.

Materials and procedure. Study 2 used the same three decision scenarios as Study 1: purchasing

a train ticket, selecting a courier service, and buying a beer on a hot day at the beach. The order of the scenarios was randomised for each participant. Participants were randomly assigned to one of two between-subjects conditions: making decisions for themselves or making decisions on behalf of a friend. In the “other” condition, participants were asked to silently recall the name of a close friend, following the same manipulation used in Study 1 (Liu & Baskin, 2021).

In each scenario, participants were presented with the less expensive but more time-consuming option (Option B) and asked to specify the monetary value at which they would consider the faster option (Option A) equally attractive. This approach allowed us to infer participants' willingness to pay (WTP) for time savings – either on their own behalf or on behalf of a friend.

In the condition of making decisions for oneself, an example scenario began as follows:

You can send a parcel at a courier drop-off location. The cost is 15 PLN, but you will need to spend 50 minutes going to the point, sending the parcel, and coming back home. There is another option: for a courier to pick up the parcel directly from your home, which would take 5 minutes. Name a price for the courier collection service at your location that you find equally attractive for both shipping options. In other words, you would be indifferent between the two shipping options. Enter the amount below, rounded to the nearest full PLN.

In the condition of making decisions for someone else, the scenario started as follows:

Think of a particular person who is very close to you and you personally consider to be a friend. Say their name in your mind. Imagine your friend needs to send a parcel. They have asked you to decide on their behalf how it should be sent. Your friend is

Table 2. Matching task stimuli in Study 2

Scenario		Time	Cost (PLN)
Train ticket	A	2 hours and 39 minutes	X
	B	3 hours and 50 minutes	83
Courier services	A	5 minutes	X
	B	50 minutes	15
Beer	A	immediately	X
	B	20	5

Note: X = participant's stated willingness to pay (in PLN) for the faster, time-saving option (Option A), such that both options would be equally acceptable.

Source: own elaboration.

paying for the service and has already given you the money. Your friend could send the parcel at a courier drop-off location for 15 PLN, but the process would take 50 minutes. Alternatively, a courier could collect the parcel directly from your friend's home, taking just 5 minutes. Please indicate the amount you consider to be a fair price for the courier collection service, such that both options would seem equally attractive to you on behalf of your friend. Enter the amount below, rounded to the nearest full PLN.

The other two scenarios (train ticket, beer purchase) were adapted analogously to this format.

Results

To compare participants' valuation of time savings across scenarios and conditions, we computed a per-minute time valuation (PLN/min). This index reflects the amount participants were willing to pay for each minute saved by choosing the faster (Option A) over the slower (Option B) alternative. Time valuation was calculated using the following formula:

$$\frac{(price_{fasteroption} - price_{sloweroption})}{(time_{sloweroption} - time_{fasteroption})}$$

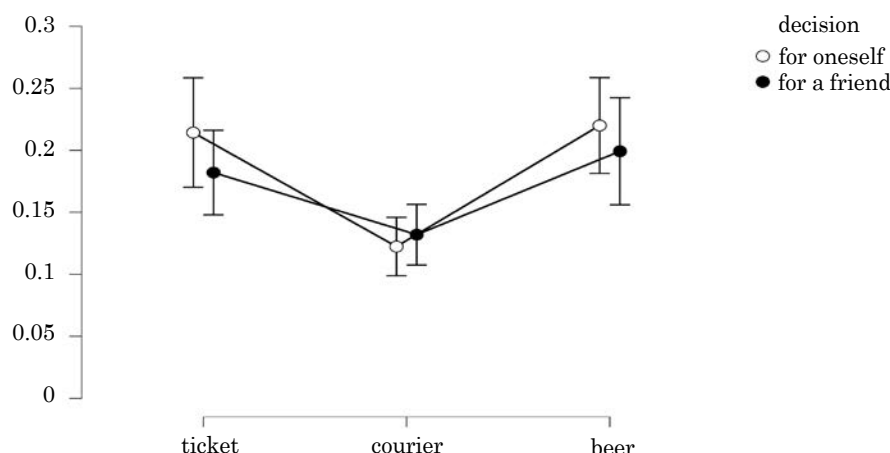
A mixed-design ANOVA was conducted with manipulation of social distance (deciding for oneself vs on behalf of a friend) as a between-subjects factor, and decision scenario (train ticket, courier service, beer purchase) as a within-subjects factor. Mauchly's test indicated a violation of the sphericity assumption. Therefore, Greenhouse–Geisser corrections were applied. The analysis revealed a significant main effect of scenario, $F(2, 258) = 12.54$,

$p < 0.001$, $\eta^2 = 0.040$, indicating that participants' valuation of time savings varied across the three decision scenario. As shown in Figure 4, the valuation was highest in the beer scenario, where the baseline cost of the good was lowest, suggesting greater willingness to pay for convenience when the financial stakes were modest. However, the main effect of social distance was not statistically significant, $F(1, 129) = 0.38$, $p = 0.541$, $\eta^2 = 0.002$, indicating that participants' valuation of time did not differ reliably when deciding for themselves versus for someone else. The interaction between scenario and social distance was not significant either, $F(2, 258) = 0.74$, $p = 0.480$, $\eta^2 = 0.002$, suggesting that the scenario-related differences in time valuation were similar across both decision-making conditions.

To assess whether response times differed by condition, we analysed the average time (in seconds) spent per scenario. Participants deciding for themselves took a median of 37.67 seconds per scenario, while those deciding for a friend took a median of 42.17 seconds. Due to strong violations of the assumption of normality, as indicated by the significant Shapiro-Wilk tests ($p < 0.001$) and extreme values of skewness (5.106 and 5.870) and kurtosis (30.943 and 40.657) in both groups, a nonparametric test was used. A Mann–Whitney U test revealed no statistically significant difference in time between the two groups, $W = 1784.50$, $p = 0.097$, with a small effect size as indicated by the rank-biserial correlation, $r_{rb} = -0.168$, 95% CI $[-0.352, 0.029]$.

Study 2 revealed a robust effect of scenario type: participants' willingness to pay for time savings varied significantly depending on the context. The highest time valuation emerged in the beer scenario, suggesting that when the overall stakes were

Figure 4. Mean per-minute time valuation (PLN/min) across decision scenarios by social distance condition



Note: error bars represent standard errors of the mean.

Source: own elaboration.

low, participants were more inclined to pay for convenience. However, unlike Study 1, there was no significant effect of social distance. Whether participants were making decisions for themselves or on behalf of someone else did not influence how much they were willing to pay for time savings. Furthermore, decision time did not differ significantly across conditions, indicating that the cognitively demanding nature of the matching task may have produced a uniformly high level of deliberation, regardless of social distance.

Discussion

There is a relatively limited body of empirical research describing the differences between time and money and the processes associated with their expenditure (Lee et al., 2015; Okada & Hoch, 2004; Su & Gao, 2014). The present study aimed to expand existing knowledge on choices involving trade-offs between these two resources. In the two experiments conducted, we examined the impact of shifting the decision-making perspective from “self” to “others” (increasing social distance) on preferences regarding the expenditure of time and money. In Study 1, decisions for others led to a stronger preference for time-saving options and took longer to make, consistent with accounts linking social distance to more deliberate, less heuristic processing (Liberman & Trope, 2014; Albrecht et al., 2011; Mata et al., 2013; Tait, 2015).

In the second study, changing the decision-making procedure to a more demanding matching task eliminated the previously observed effect. The difference between the amount proposed by participants and the value specified in the cheaper alternative can be treated as a subjective valuation of the time saved by choosing the faster option. The amounts proposed by participants in both experimental conditions did not differ significantly. Additionally, the time required to make decisions also did not differ between individuals making decisions on their own behalf and those making decisions on behalf of others.

One explanation for the divergence across studies is response format. The choice task invites more intuitive, feature-dominant responding (Tversky et al., 1988), whereas the matching task requires assigning a value to an attribute, reducing reliance on a single dominant feature and encouraging more reflective, multidimensional evaluation (Fischer et al., 1999). This effect aligns with the longer decision times observed overall in Study 2 and may have attenuated self–other differences by pushing both groups toward analytical processing.

Another explanation for the difference between the two studies may concern how participants

perceived gains and losses. According to Kahneman and Tversky (1992), an expenditure is not treated as a loss unless it is seen as exceeding a fair market value. In Study 1, prices were externally imposed, so the higher cost could be interpreted as an overpayment and thus as a loss. This effect may have been amplified by the timing of data collection, which coincided with a period of high inflation and sharp increases in train ticket prices, potentially heightening participants’ sensitivity to financial costs. In Study 2, however, participants set the value of the faster option themselves, making the additional expense feel like a fair price rather than a loss, which reduced potential negative emotions and encouraged more rational assessment.

The present research offers a preliminary test of how social distance influences time–money trade-offs across choice versus matching formats. Future studies could adopt within-subject designs and refine scenarios to increase realism and generalizability.

It should also be acknowledged that the present operationalization captures only the narrowest contrast: decisions for oneself versus for a close friend. While this approach reliably manipulates social distance, it does not allow for conclusions about intermediate or higher levels of distance, such as acquaintances or complete strangers. Consequently, the generalizability of the current findings to more distant social relationships remains limited. Future studies should therefore examine a broader range of targets to capture the full continuum of social distance and to clarify whether the observed effects are driven primarily by interpersonal closeness, familiarity, or more general distance dynamics.

In this study, we focused on a cognitive explanation of the observed phenomena. Beyond cognitive accounts, motivational factors such as impression management may also play a role. As mentioned at the beginning of this paper, money has many functions, ranging from economic to social. Researchers of attitudes toward money have shown that it can also serve a representational role for individuals, acting as a tool through which social status is manifested (Wąsowicz-Kiryło, 2013). When making decisions for others, participants may use spending behaviour to signal generosity or competence. Prior research suggests that people choose higher-quality products when shopping for others than for themselves, possibly to avoid appearing frugal (Liu & Baskin, 2021). Such reputational motives could explain increased willingness to spend on others’ behalf, especially in scenarios involving visible or evaluative outcomes. It seems worthwhile to examine in future research the extent to which the desire for self-presentation can influence choices concerning time and money.

Finally, future work could explore the relationship between social distance and risk preferences in time-related decisions. Previous research suggests that people perceive time losses differently from monetary losses (Ellingsen & Johannesson, 2009), and that social distance can influence loss aversion and risk-taking in monetary domains (Polman & Wu, 2019). Whether similar effects apply when the primary stake is time, an intangible, non-renewable, and often undervalued resource, remains an open question.

From a practical perspective, the findings also point to important implications for marketing and consumer communication. The contrast between the choice and matching tasks suggests that the format in which offers are presented can substantially shape customer decisions. When products or services are framed as direct choices between options (e.g., a faster but more expensive vs. a slower but cheaper delivery), customers may rely more on intuitive, socially influenced heuristics, potentially placing greater emphasis on time-saving under certain conditions. In contrast, when consumers are required to explicitly assign a monetary value to time, as in pricing or valuation tasks, the decision process becomes

more analytical, which may attenuate such social distance effects. For marketers, this implies that the design of pricing interfaces, promotion formats, or comparison tools could systematically influence whether customers prioritize time or money in their decisions.

In sum, the findings presented here suggest that decisions involving time/money trade-offs are shaped by both the social context and the cognitive demands of the task. Increasing social distance may shift preferences toward greater time valuation, but only under conditions that allow intuitive, affect-based processing. When decision-making becomes more structured and calculative, such differences may vanish. Understanding when and how people prioritize time versus money has practical implications for domains ranging from personal productivity to organizational management. In recent years, the prevailing view in management is that one of the key resources of an organization is its people (Fulmer & Ployhart, 2014). Optimal management of their time is extremely important. As time becomes an increasingly scarce resource in modern life, identifying strategies that encourage its more deliberate valuation may be of both theoretical and societal importance.

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