


Communicating Resource Scarcity and Interpersonal Connection

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Consumers often cite insufficient time or money as an excuse for rejecting social invitations. We explore the effectiveness of these excuses in preserving interpersonal relationships. Six studies – including perceptions of couples planning their wedding – demonstrate that using time scarcity as an excuse (e.g., “I don’t have time”) is less effective than using money scarcity as an excuse (e.g., “I don’t have money”). These effects are driven by the perceived controllability of these resources: Consumers accept that the availability of financial resources may be less subject to personal control than the availability of time. As a result, excuses citing time constraints are seen as less trustworthy and reduce feelings of interpersonal closeness and helping behavior. Despite the robustness of the effect, excuse-givers do not predict the relational disadvantages of citing time constraints. Communication that highlights the relative uncontrollability of time increases the effectiveness of these excuses. These findings advance our understanding of the role of references to time and money in consumer behavior, and provide practical insights to minimize social repercussions when rejecting social invitations.

Keywords Communication; Interpersonal relationships; Money; Time

Introduction

People often have the feeling that they lack enough time and enough money, and this problem is compounded by the frequency with which other people make demands on both resources. Imagine receiving an invitation to your friend’s wedding, a destination event in Hawaii. You want to celebrate with your friend, but traveling to Hawaii requires a great deal of time and money: You have limited remaining vacation days and money is tight. Given these constraints, you decide that you are not going to attend the wedding. You know that declining the invitation will hurt your friend’s feelings and may signal that you do not value the friendship, so your goal is to say “no” but to limit the negative impact on your friendship. While you could offer no explanation when declining an invitation people feel compelled to offer a rationale – for example, by

disclosing that they do not have enough vacation time or enough money.

While receiving a wedding invitation may not be an everyday occurrence, people are regularly invited to social engagements by friends, family, and co-workers. In fact, over 25,000 invitations are sent each hour on Evite, an online invitation service (Evite, 2018). Such social invitations often necessitate the investment of one’s time or money – or both. We propose that people often turn down social invitations by citing insufficient time (e.g., “I don’t have time to go out to dinner”) or money (e.g., “I don’t have money to go out to dinner”). Despite the commonness of such situations, little is known about the consequences of disclosing financial or temporal scarcity, particularly with regard to the downstream consequences of doing so for the relationship between the inviter and invitee.

Research suggests that consumers might react more favorably to communications about time (vs. money) scarcity. For example, Liu and Aaker (2008) show that people respond more generously to charitable requests for time versus money, because money activates a value-maximization mindset that

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is more closely linked to economic utility whereas time engenders an emotional mindset that is geared toward helping (Liu & Aaker, 2008).

Similarly, while consumers regularly assess the value of their money regarding services that they receive in transactional relationships (e.g., a consumer's relationship with a business; e.g., Fiske, 1992), such comparisons are less common and are often perceived as inappropriate in communal relationships (e.g., a consumer's relationship with family and friends; e.g., Fiske, 1992). Thus, citing insufficient money could make relationships feel transactional, undermining the communal nature of the relationship (Kim, Zhang, & Norton, 2019). As a result, when provided with a rejection to a social invitation, consumers might respond more favorably to excuses citing a scarcity of time (vs. money).

In contrast, we suggest that communicating temporal scarcity could lead to more negative reactions. We propose that time is perceived as more discretionary and under consumers' personal control than money, which often must be dedicated to non-discretionary expenses (Bureau of Labor Statistics, 2016a, 2016b). Moreover, consumers tend to see time, but not money, as more likely to be readily available in the future, regardless of current demands on either resource (Zauberman & Lynch, 2005). Building on the literature on "time slack," we suggest that consumers apply these assumptions when receiving social excuses such that declining an invitation using a time (vs. money) scarcity excuse will be viewed more negatively because time is seen as more accessible and the use of which is more discretionary. In other words, we propose that excuses citing insufficient time will be received as a more intentional social slight than citing insufficient money because time is viewed as a more personally controllable resource. Recipients of time excuses versus money excuses may therefore perceive their relationship partner as less invested in the relationship, resulting in lower feelings of interpersonal closeness and less positive interpersonal behaviors.

Below, we review prior research on communication and interpersonal relationships, focusing on literature related to excuse-making and research in consumer psychology on perceptions of time and money. We draw on these diverse literatures to develop our conceptual model and hypotheses. We then report six studies that demonstrate our proposed effects and assess our proposed underlying mechanism. We conclude with a discussion of theoretical and practical implications, and suggestions for future research.

Theoretical Development

Excuses and Interpersonal Relationships

Excuses play an important role in social life by smoothing over disruptions and embarrassing predicaments during social interactions. Excuses are explanations that aim to reduce personal responsibility for undesired or unfortunate social circumstances (Weiner, Figueroa-Munioz, & Kakihara, 1991) whereby an excuse-giver attempts to convince others that they are not at fault, or to the extent that they are at fault, that the circumstance was the result of a situational factor (such as an illness) rather than a deliberate decision (such as a lack of interest; Folkes, 1982). Therefore, excuses are most successful in maintaining positive relationships between excuse-givers and excuse-receivers when they shift responsibility away from excuse-givers' control and place it on other factors, such as extenuating circumstances (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994). Excuses can be beneficial; for example, employees who offer an excuse for their failures are deemed as less responsible and receive less severe punishment than employees who do not provide an excuse (e.g., Crant & Bateman, 1993), buyers who disclose financial insufficiencies are perceived as more trustworthy and receive more friendly counteroffers (Lee & Ames, 2017), and criminals who provide an excuse for their actions are apportioned less blame (Critchlow, 1985).

While most research documenting the interpersonal benefits of excuse-making has compared the effectiveness of providing versus not providing an excuse, we hold constant excuse provision and focus on the downstream interpersonal consequences of two commonly cited excuses: insufficient money and insufficient time. We focus on affiliative contexts (e.g., among friends and peers) in which consumers are motivated to maintain positive expectations of being a reliable relationship partner (Weiner, 1985), and compare the effectiveness of money and time excuses in meeting this interpersonal goal. In sum, we evaluate whether excuses about money more effectively shift causal attributions away from the self than excuses about time, and assess the downstream relational consequences.

Locus of Control and Perceived Personal Control

Locus of control refers to people's beliefs that they have control over outcomes (internal locus) or that outcomes are attributable to forces outside of their control (external locus; Rotter, 1966). Similarly,

controllability relates to an individuals' ability to influence outcomes (Weiner et al., 1991). Perceived agency is central to excuse-giving, influencing a wide variety of human evaluations and behaviors (e.g., Schlenker, Pontari, & Christopher, 2001). After breaking a social contract, excuses are designed to shift the locus of control away from personal responsibility to an external extenuating factor (Schlenker et al., 2001). Our model therefore includes the central properties of perceived agency: locus of control and controllability (Rotter, 1966; Weiner et al., 1991). We propose that, because people perceive time and money differently in terms of controllability, excuses citing these resources will affect perceptions of the excuse-givers' responsibility and interpersonal closeness.

Thus, we hypothesize that excuses about insufficient time will be less successful at shifting the perceived locus of causality to an external factor and will be seen as more controllable, leading time-based excuses to be perceived as more reflective of others' preferences than money-related excuses. Stated differently, saying, "I don't have time to go out to dinner" should be viewed as more internally motivated and controllable than saying, "I don't have money to go out to dinner" – leading to more negative inferences about the excuse-giver.

Trustworthiness

Forming and maintaining strong and stable interpersonal relationships is a fundamental human motivation (Baumeister & Leary, 1995) and trust is essential to the development of healthy, secure, and satisfying relationships (Simpson, 2007). Trust is developed over time as an individual gains confidence in their relationship partner's values, motives, goals, and intentions (Rempel, Holmes, & Zanna, 1985), and excuse-making can undermine trust when an excuse calls to question the excuse-maker's relationship commitment, intentions, and motivation (Schlenker et al., 2001).

Critically for our account, consumers are more likely to trust excuses when they believe that excuse-givers are not responsible for the cause of the excuse (e.g., Butler, 1991). Decreasing perceived personal responsibility therefore aids in maintaining excuse-recipients' belief that excuse-givers are reliable relationship partners (Weiner, 1985; Weiner et al., 1991). We propose that because financial (vs. time) constraints are perceived as less internal and controllable, financial excuses will more effectively shift causal attributions to external factors, be viewed as more

trustworthy, and mitigate the negative interpersonal consequences of excuse-giving.

Trust not only positively influences people's beliefs about their relationship partners, and it is also used as the basis for action (Lawler & Yoon, 1996). When people are trusting, they express greater prosocial behavior toward their partners (Reis et al., 2010). Therefore, we predict that the reduced feelings of trust engendered by time (vs. money) excuses will lead to lower feelings of interpersonal connection, which in turn will influence subsequent (prosocial) behavior toward excuse-givers. Formally stated, our hypotheses are as follows (for an illustration of the full theoretical model, see Figure 1):

- 1: An excuse citing limited time (vs. money) will result in decreased perceptions of interpersonal closeness to excuse-givers.
- 2: The effect of time (vs. money) excuses on interpersonal closeness will be serially mediated by increased perceptions of controllability of the resource, in turn leading to reduced trustworthiness of the excuse-giver.

Our theorizing does not suggest that excuses that cite limited time will always and inevitably result in reduced interpersonal closeness, compared to excuses citing limited money. We propose that people who feel they have less control over their availability of and use of time will view others as having less control over their time too, thereby mitigating the negative interpersonal effect of excuses of time scarcity. Put formally,

- 3: Perceptions of the controllability of time will be reduced by participant's greater personal experience of time scarcity.

Similarly, because we propose that the effect of money versus time excuses on interpersonal closeness is driven by the perceived personal control and trustworthiness of the excuse; the effect of excuse type should be moderated by the extent to which people believe that the allocation of time and money are within the control of the excuse-giver. When excuses citing insufficient time and money cite non-discretionary external demands on these resources, the effects of excuse type on feelings of interpersonal closeness should be attenuated.

- 4: The effect of time versus money excuses on interpersonal closeness will be attenuated when insufficient resources are attributed to non-discretionary uses.

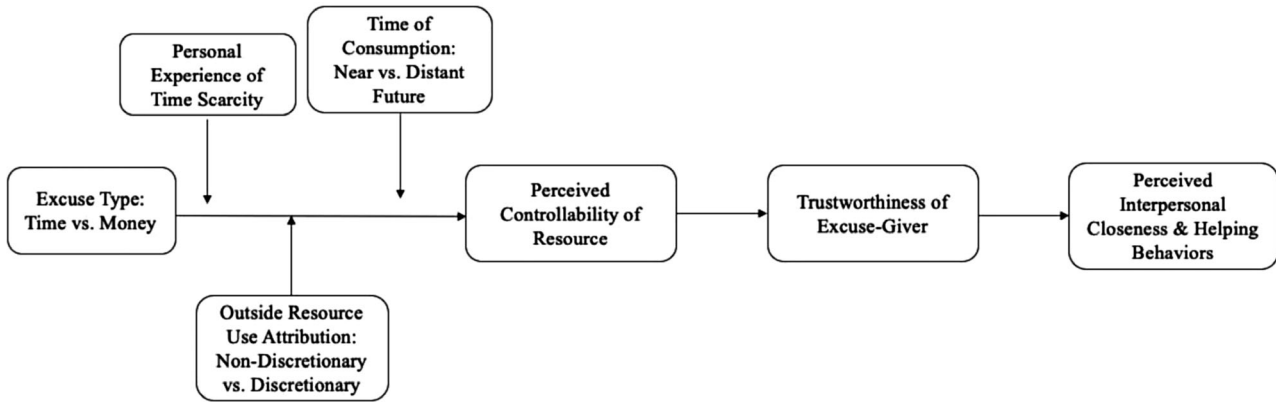


FIGURE 1. Theoretical model and overview of studies.

Finally, we explore moderation of our effects by varying the perceived controllability of resources. Previous research suggests that consumers believe they will have more time in the future than they do in the present, but believe that they will have similar amounts of money in the present and future (Monga, May, & Bagchi, 2017; Zauberma n & Lynch, 2005). Drawing on this research, we suggest that temporal constraints should be viewed as more controllable for distant versus near-future consumption; in contrast, financial constraints should be viewed as similarly outside of the excuse-givers' control for both near and distant consumption. As a result, citing limited time (vs. money) should have a stronger negative effect on interpersonal closeness when invitations are rejected for distant versus near-future consumption. Thus, we posit:

- 5: The effect of time versus money excuses on feelings of interpersonal closeness will be moderated by whether excuse-givers are rejecting invitations for consumption in the near or distant future.

Our research contributes to several streams of literature. First, we extend foundational research on excuse-giving and attribution theory by examining the interpersonal consequences of two different – and common – types of excuses in affiliative contexts. Second, time and money are two of the most scarce and valuable resources available to consumers, yet relatively little is known about how to discuss resource constraints to better facilitate social relationships. Thus, we advance existing research on the psychology of time and money by investigating how best to communicate when these resources are limited. Third, we contribute to work on interpersonal communication more generally by demonstrating how seemingly subtle variations of

the same strategy – offering an excuse citing time or money – can be relationally consequential.

Overview of Studies

Six studies assess the interpersonal consequences of deploying a money excuse (e.g., “I don’t have money”) versus a time excuse (e.g., “I don’t have time”). Studies 1A and 1B use a recall paradigm to show that reflecting on a recent experience about receiving a money or time excuse leads to changes in feelings of interpersonal closeness (H1). Study 2 explores our proposed mechanism: that time is perceived to be more personally controllable than money, which influences perceptions of trustworthiness and closeness (H2) and examines whether this effect is moderated by participant’s personal experience of time scarcity (H3). Next, Studies 3A and 3B further explore the moderating role of personal control. Specifically, we examine the effects of excuses claiming time (vs. money) scarcity when resources are presented as outside of one’s personal control (H4; Study 3A), and when an invitation is for an event in the distant versus near future (H5: Study 3B). Finally, Study 4 evaluates the downstream consequences of deploying financial versus temporal excuses, assessing prosocial behavior toward excuse-givers.

Study 1A: Recalled Excuses and Perceptions of Interpersonal Closeness

As an initial investigation of excuse-making in conversation, we solicited recollections of experiences of receiving an excuse citing money or time scarcity, and assessed how close people felt to their

relationship partner before and after receiving this communication. Also, because previous literature has associated time scarcity with increased status (Bellezza, Paharia, & Keinan, 2017) and money scarcity with reduced status (Lee-Yoon, Donnelly, & Whillans, 2020) we also explored potential mechanisms by evaluating whether people perceive money and time excuses as trustworthy, valid, and status-signaling.

Methods

Participants and design

Two hundred and seven adults (52.7% female; $M_{age} = 30.30$, $SD = 11.01$; 40.5% Caucasian) participated in a series of unrelated lab studies at a university in the northeastern United States in exchange for \$20. We randomly assigned participants to one of two conditions (excuse type: money or time).

Procedure

Participants reflected on a recent experience when someone told them they could not do something because they did not have the money [time] and wrote a few sentences about it.

After writing about this experience, participants completed measures assessing their impressions of this communication and of their relationship partner.

Perceived closeness

Participants indicated the extent to which they felt close to their relationship partner *prior* to hearing the excuse as well as *after* hearing the excuse. Responses were recorded on a seven-point Likert scale (ranging from 1, *not at all close*, to 7, *very close*) which was adapted from the single-item perceived interpersonal closeness scale (Popovic, Milne, & Barrett, 2003). Note that the closeness measure prior to the recall task allows us to ensure that people considered similarly close others across conditions.

Perceived trustworthiness

To measure perceived trustworthiness, participants indicated the extent to which they agreed that (a) they trusted the excuse-maker, and (b) the excuse-maker seemed they were being honest on seven-point Likert scales (ranging from 1, *strongly disagree* to 7, *strongly agree*; adapted from Pontari, Schlenker, & Christopher, 2002, $r = .78$, $p < .001$).

Perceived validity of excuse

Participants responded to the question, “*I thought that this person’s excuse was valid*” on a seven-point Likert scale (ranging from 1, *strongly disagree* to 7, *strongly agree*).

Perceived Social Status. Participants also responded to the question, “*To what extent do you think that this person probably has lower or higher status than you?*” on a 1, *lower status* to 9, *higher status* scale.

Results

Perceived closeness

A repeated-measures ANOVA using perceived closeness (before vs. after) as a within-subjects factor and excuse type (money vs. time) as a between-subjects factor revealed a significant main effect for perceived closeness, $F(1, 205) = 125.53$, $p < .001$, $\eta^2 = .38$; which was qualified by a significant interaction, $F(1, 205) = 27.65$, $p < .001$, $\eta^2 = .12$ (Figure 2). Planned contrast analyses indicated that prior to receiving an excuse, participants felt equally close to relationship partners who communicated money or time scarcity ($M_{money} = 5.47$, $SD = 1.37$; $M_{time} = 5.29$, $SD = 1.44$), $F(205) = .90$, $p = .35$, $\eta^2 = .00$. However, after an excuse was communicated, participants felt less close to relationship partners who communicated time scarcity as compared to those who communicated money scarcity ($M_{time} = 3.66$, $SD = 1.68$; $M_{money} = 4.88$, $SD = 1.74$), $F(205) = 26.62$, $p < .001$, $\eta^2 = .12$.

Perceived trustworthiness

Participants thought the excuse-maker was less trustworthy when they provided a time versus a money excuse ($M_{time} = 4.42$, $SD = 1.83$; $M_{money} = 5.47$, $SD = 1.66$), $t(205) = 4.33$, $p < .001$, $d = .60$.

Perceived validity of excuse

Participants thought a time excuse was less valid ($M_{time} = 4.01$, $SD = 1.98$; $M_{money} = 5.09$, $SD = 2.03$), $t(205) = 3.87$, $p < .001$, $d = .54$.

Perceived social status

There were no differences in perceived social status by excuse type ($M_{time} = 5.29$, $SD = 1.56$; $M_{money} = 4.98$, $SD = 1.56$), $t(203) = 1.41$, $p = .16$, $d = .20$.

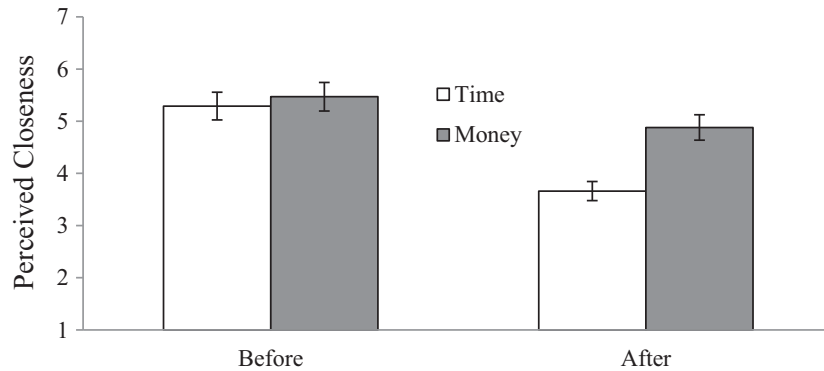


FIGURE 2. Perceived closeness before and after scarcity communication by excuse type ($N = 207$; Study 1A; error bars indicate ± 1 SE of mean).

Mediation

We examined whether reduced closeness in the time (vs. money) excuse condition was mediated by perceived trustworthiness, status, and validity. Results indicated that perceptions of trustworthiness partially mediated the relationship between excuse type and interpersonal closeness (95% CI, .27 to .94), but status (95% CI, $-.01$ to $.10$) and validity (95% CI, $-.12$ to $.32$) did not (see Appendix S1, Table S1).

Discussion

Participants felt equally close to relationship partners before they received a money or time excuse, suggesting that communication about money and time scarcity were not reserved for relationships that differed in intimacy. Nevertheless, participants felt less close to relationship partners after receiving excuses that cited time versus money scarcity. Consistent with our predictions, this effect was mediated by the perceived trustworthiness of excuse-givers.

Independent coding (see Appendix S1) of the open response data also confirmed differences in perceived trustworthiness and provided initial insight into why financial excuses were perceived as more trustworthy: They were seen as more outside of one's personal control, less of a choice, and more of a reflection of how much the excuse-provider valued the relationship with the excuse-receiver.

In our next study, we evaluated the role of perceived controllability of resources following the same procedure as Study 1A—asking participants to reflect how close they felt to their relationship partner before and after receiving an excuse. Yet, in

Study 1B we recruited a sample of people who were currently planning their wedding and asked them to reflect on how close they felt to invited guests before and after they declined their invitation. Wedding invitations are frequent, and attending such events can be costly in both money and time for guests.

Study 1B: Time and Money Excuses in Response to a Wedding Invitation

In this study, we recruited people who recently invited guests to their wedding and examined how perceptions of declinations shifted as a function of whether they provided a time or a money excuse.

Methods

Participants and design

One hundred thirty-two participants (75.8% female; $M_{age} = 30.28$, $SD = 6.24$; 84.0% Caucasian) were recruited through a Qualtrics panel and were paid \$6. All participants were engaged, were currently planning a wedding ($M_{number\ of\ wedding\ guests} = 125.75$, $SD = 90.21$), and reported receiving at least one decline to their wedding invitation ($M_{number\ of\ declines} = 4.48$, $SD = 2.81$).

Procedure

Participants first reported how many guests declined their wedding invitation, and were asked how many guests provided an excuse for why they could not attend their wedding that was related to reasons of (a) money or (b) time

(counterbalanced). If participants reported receiving a money excuse they were asked to write a few sentences about the most recent money excuse they received, how they perceived this communication, and how they felt about this guest. Participants who received a time excuse followed this same procedure.

Perceived closeness

Following the procedure of Study 1A, participants indicated the extent to which they felt close to the invitee prior to and after hearing the excuse.

Perceived controllability

Participants indicated the extent to which the excuse seemed outside of the excuse-giver's personal control on a 7-point scale (ranging from 1, *not at all* to 7, *a great deal*).

Perceived trustworthiness

Participants indicated the extent to which they felt the excuse-maker seemed trustworthy on a 7-point scale (ranging from 1, *not at all* to 7, *very*).

Results

Frequency of excuses

Our design allowed participants to reflect on *both* a money and time excuse ($N = 64$, 48.48% of the sample), *only* a money excuse ($N = 15$, 11.36% of the sample), or *only* a time excuse ($N = 30$, 22.74% of the sample). Overall, participants reported receiving a similar number of money and time excuses ($M_{money} = 2.87$, $SD = 2.16$; $M_{time} = 3.14$, $SD = 2.22$, $t(131) = 1.20$, $p = .23$, $d = .10$); attesting to the fact that these excuses may be similarly common.

Perceived closeness

To increase our statistical power, we focused our analysis on participants who reflected on *both* a money and a time excuse. We conducted a repeated-measures ANOVA using perceived closeness (before vs. after) as a within-subjects factor for both money and time excuses. There was a significant main effect for perceived closeness, $F(1, 63) = 18.65$, $p < .001$, $\eta^2 = .23$; which was qualified by a significant interaction, $F(1, 63) = 26.59$, $p < .001$, $\eta^2 = .30$ (see Figure 3). Planned contrasts indicated that prior to receiving an excuse,

participants felt equally close to their guests ($M_{money} = 4.56$, $SD = 1.61$; $M_{time} = 4.88$, $SD = 1.54$, $F(1, 63) = 2.08$, $p = .16$, $\eta^2 = .03$), but after the excuse was provided, participants felt significantly closer to guests who cited financial versus time scarcity ($M_{money} = 4.41$, $SD = 1.76$; $M_{time} = 3.62$, $SD = 1.69$, $F(1, 63) = 13.16$, $p = .001$, $\eta^2 = .17$).

Perceived controllability

Participants perceived a money excuse to be significantly more outside of the excuse-giver's personal control than a time excuse ($M_{money} = 4.98$, $SD = 1.75$; $M_{time} = 4.31$, $SD = 2.01$, $t(63) = 2.30$, $p = .02$, $d = .58$).

Perceived trustworthiness

Participants perceived greater trustworthiness from a money excuse than a time excuse ($M_{money} = 5.08$, $SD = 1.76$; $M_{time} = 4.50$, $SD = 1.84$, $t(63) = 2.49$, $p = .01$, $d = .62$).

Mediation

We examined whether higher relative levels of closeness from a money excuse (vs. a time excuse) was serially mediated by perceived controllability, resulting in increased perceptions of trustworthiness. To test for serial mediation, we used MEMORE (Montoya & Hayes, 2017), following model 2. The results demonstrate that perceptions of controllability and trustworthiness do serially mediate the relationship between communicating a financial excuse and higher relative levels of closeness (95% CI, .00 to .18; See Appendix S1, Table S2).

Discussion

Participants who received both a time and a money excuse felt equally close to their guests prior to receiving the excuse. However, compared to those who received a time excuse in response to their wedding invitation, participants felt significantly closer to their relationship partners after receiving a money excuse. The difference in perceived closeness occurred because money excuses were perceived as less controllable, and in turn, more trustworthy.

One difference between the results of this study and that of Study 1A is that we did not observe a significant decrease in perceived closeness after receiving a money excuse. It could be that a money

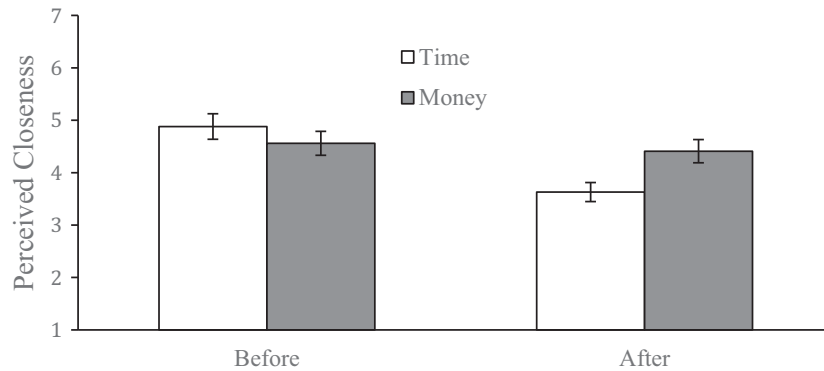


FIGURE 3. Perceived closeness before and after scarcity communication by excuse type ($N = 64$; Study 1B; error bars indicate ± 1 SE of mean).

excuse is particularly effective in response to a wedding invitation. While Studies 1A and 1B provide initial support for our theoretical model, the recall nature of these studies may have biased our results, such that participants may have recalled excuses that were particularly disappointing. Further, the pre/post measurement of our closeness measure may have created a demand effect. Therefore, in the studies that follow, we introduce greater experimental control by asking participants to evaluate vignettes where we manipulated only the resource referenced in the excuse and measured perceptions of controllability, trust, and closeness in response to this communication.

Study 2: The Moderating Role of Personal Resource Scarcity

In this study, we sought to replicate our underlying process and explored whether the negative effect of a time excuse could be attenuated by the excuse-receiver's personal experience of time scarcity. We predicted that greater personal experience of time scarcity may influence how controllable time is perceived to be, attenuating the negative impact of a time excuse on perceived closeness.

Methods

Participants and design

We recruited 245 adults (65.7% female; $M_{age} = 35.16$, $SD = 16.10$; 83.0% Caucasian) through Amazon's Mechanical Turk and paid participants a nominal fee. We randomly assigned participants to a 2 (excuse type: money vs. time) between-subjects design.

Procedure

Participants imagined a scenario in which they were inviting a friend to a social engagement. All participants read: "You are planning a night out with some people. You propose to go out for some drinks, a nice meal, and then go to a live comedy show this coming Saturday." In the money excuse condition, participants then read (word changes in the time excuse condition are shown in brackets): "When you mention this plan to one of your friends they say, 'That sounds like fun, but unfortunately, I can't go. I don't have money [time].'" Next, participants completed measures assessing their impressions of this communication.

Perceived closeness

Participants indicated the extent to which they felt close to the excuse-giver using the same scale from Studies 1A and 1B.

Perceived trustworthiness

Participants indicated the extent to which they felt the excuse-giver was trustworthy, cooperative, sincere, and principled ($\alpha = .94$; Pontari et al., 2002), on seven-point Likert scales (from 1, *not at all* to 7, *very*).

Perceived controllability

Participants responded to two questions measuring perceived controllability of the scarce resource: "In general, not having money [time] is a choice for my friend" and "In general, it is possible for my friend to find the money [time] to do the things in life that s/he really wants to do." Responses were measured on seven-point Likert scales (from 1, *strongly disagree* to

7, *strongly agree*) and were adapted from previous measures of perceived behavioral control (e.g., Conner, Sheeran, Norman, & Armitage, 2000; $r = .56$, $p < .001$).

Perceived intimacy

Participants indicated the extent to which they felt their friend's response was an intimate disclosure, measured on seven-point Likert scale (from 1, *strongly disagree* to 7, *strongly agree*).

Personal resource scarcity

Finally, participants indicated which resource was most scarce in their day-to-day life: money or time.

Results

Perceived closeness

Participants felt closer to their friend when receiving a money excuse than when receiving a time excuse ($M_{money} = 4.43$, $SD = 1.41$; $M_{time} = 3.93$, $SD = 1.57$; $t(243) = 2.63$, $p = .009$, $d = .34$).

Perceived controllability

Participants associated greater controllability with time versus money ($M_{time} = 4.42$, $SD = 1.55$; $M_{money} = 3.31$, $SD = 1.66$; $t(243) = 5.36$, $p < .001$, $d = .69$).

Perceived trustworthiness

Participants perceived their friend as less trustworthy when receiving a time excuse than when receiving a money excuse ($M_{time} = 4.84$, $SD = 1.43$; $M_{money} = 5.64$, $SD = 1.21$; $t(243) = 4.65$, $p < .001$, $d = .60$).

Perceived intimacy

Participants perceived their friend's response as equally intimate when receiving a time or money excuse ($M_{time} = 4.07$, $SD = 1.51$; $M_{money} = 3.94$, $SD = 1.58$; $t(243) = .66$, $p = .51$, $d = .08$). These findings replicate the insights we uncovered in our recall task from Study 1A.

Mediation

Using PROCESS model 6 (Hayes, 2015), we evaluated whether the higher relative levels of closeness

observed in the money excuse condition were serially mediated by perceptions that the scarcity of the resource was not controllable, and thus excuses citing those resources were less trustworthy. Results are shown in Table S3, and demonstrate that perceptions of controllability and trustworthiness mediate the relationship between giving a financial excuse and higher relative levels of closeness (95% CI, .00 to .11). We also tested the mediating effect of perceived intimacy, but this was not significant (95% CI, $-.20$, .10).

Moderated mediation

We then tested for moderated serial mediation following PROCESS (Hayes, 2015) model 85. In this model, we evaluated whether the serial mediation effect was moderated by the excuse-receivers personal experience of resource scarcity. The results of the analysis indicated that excuse-receivers personal experience of resource scarcity interacted with excuse type on perceptions of controllability and the serial mediation effects were significant for excuse-receivers who generally experienced money scarcity ($\beta = .07$, 95% CI: .00 to .15) but not for excuse-receivers who generally experienced time scarcity ($\beta = .02$, 95% CI: $-.01$ to .07). Participants who generally experienced money scarcity were especially likely to perceive time excuses as personally controllable, resulting in less trust and closeness. See Figure 4 and Table S4 for results of all paths of the model.

Discussion

Study 2 provided further evidence that people perceive greater closeness to a relationship partner after receiving a money (vs. time) excuse. We replicated our finding that money (vs. time) is perceived to be less controllable and more trustworthy, ultimately resulting in higher relative levels of closeness. Further, we ruled out the alternative explanation that our findings were driven by perceived intimacy of the excuse. Finally, we also found an important moderator that influenced perceived closeness by excuse type—the resource that is scarcer in the participant's daily life. This finding suggests that time excuses are more positively received by relationship partners who experience time scarcity in their own life, and provide practical suggestions for impression management: Disclosing and discussing limited time are most likely to be positively received by other people who can relate to this circumstance in their own life.



FIGURE 4. Excuse type x personal resource scarcity ($N = 245$; Study 2).

Study 3A: The Moderating Role of Controllability

In Study 3A, we both manipulate and measure the key construct underlying our account for the difference between time and money excuses: perceived controllability. We varied whether a claim of insufficient time or money was due to a discretionary (e.g., *I want to use the resource for something else*) or non-discretionary demand (e.g., *I need to use the resource for something else*). Because we suggest that perceived controllability is a critical determinant of trust, the differential effect of excuse type on feelings of closeness should be attenuated when both money and time scarcity are framed as non-discretionary (H5).

Methods

Participants and design

Four hundred seven adults (47.9% female; $M_{age} = 36.79$, $SD = 12.13$; 81.8% Caucasian) were recruited through MTurk and paid a nominal fee for participating. We randomly assigned participants to a 2 (excuse type: money vs. time) \times 2 (controllability: non-discretionary vs. discretionary reason) between-subjects design.

Procedure

Participants imagined a scenario in which they were inviting a friend to a social engagement. All participants read: *"You are planning a night out with some people. You propose to go out for some drinks, a nice meal, and then go to a live comedy show this coming Saturday"*.

In the money non-discretionary condition, participants then read (word changes in the money discretionary condition are shown in brackets): *"You ask your friend if they would like to join and they say,*

"That sounds like fun, but unfortunately I can't go because I really need [want] to save money to buy books for my classes [register for an upcoming marathon I want to run]".

In the time non-discretionary condition, participants then read (word changes in the time discretionary conditions are shown in brackets): *"You ask your friend if they would like to join and they say, "That sounds like fun, but unfortunately I can't go because I really need [want] to spend time studying for my classes [training for an upcoming marathon I want to run]"*.

Next, participants completed the same measures from study 1a assessing their impressions of this communication and their relationship partner, including perceived closeness and trustworthiness ($r = .62$, $p < .001$) of their friend.

Results

Perceived closeness

We conducted a 2×2 ANOVA to assess the impact of excuse type (money vs. time) and controllability (non-discretionary vs. discretionary) on perceived closeness. Participants felt less close to the excuse-giver after receiving a time (vs. money) excuse ($M_{time} = 3.65$, $SD = 1.48$; $M_{money} = 4.10$, $SD = 1.56$), $F(1, 403) = 9.17$, $p = .003$, $\eta^2 = .02$. While participants felt equally close to the excuse-giver after receiving an excuse for a discretionary and a non-discretionary reason ($M_{discretionary} = 3.90$, $SD = 1.61$; $M_{non-discretionary} = 3.86$, $SD = 1.46$), $F(1, 403) = .11$, $p = .74$, $\eta^2 = .00$, there was a significant interaction between excuse type and controllability, $F(1, 403) = 11.99$, $p = .001$, $\eta^2 = .03$. Planned comparisons showed that when the reasoning for the scarcity of the resource was non-discretionary, there was no difference in perceived closeness

($M_{money} = 3.83$, $SD = 1.49$; $M_{time} = 3.89$, $SD = 1.43$); $F(1, 403) = .09$, $p = .76$, $\eta^2 = .00$. However, when the excuse was due to discretionary reasons, excuses citing money (vs. time) scarcity resulted in greater feelings of closeness ($M_{money} = 4.39$, $SD = 1.59$; $M_{time} = 3.42$, $SD = 1.50$); $F(1, 403) = 21.11$, $p < .001$, $\eta^2 = .05$ (Figure 5).

Perceived trustworthiness

Participants perceived a time (vs. money) excuse to be less trustworthy ($M_{time} = 5.39$, $SD = 1.11$; $M_{money} = 5.61$, $SD = 1.12$), $F(1, 403) = 3.72$, $p = .055$, $\eta^2 = .01$. While participants felt an excuse for a discretionary and a non-discretionary reason were similarly trustworthy ($M_{discretionary} = 5.53$, $SD = 1.18$; $M_{non-discretionary} = 5.47$, $SD = 1.04$), $F(1, 403) = .44$, $p = .51$, $\eta^2 = .00$, there was a significant interaction between excuse type and controllability, $F(1, 403) = 4.03$, $p = .05$, $\eta^2 = .01$. As with perceptions of closeness, planned comparisons showed that when the reason for the scarcity of the resource was non-discretionary, there was no difference in perceived trustworthiness ($M_{money} = 5.46$, $SD = 1.05$; $M_{time} = 5.47$, $SD = 1.04$); $F(1, 403) = .00$, $p = .96$, $\eta^2 = .00$. However, when the excuse was due to discretionary reasons, excuses citing money (vs. time) scarcity resulted in greater trust ($M_{money} = 5.76$, $SD = 1.17$; $M_{time} = 5.32$, $SD = 1.17$); $F(1, 403) = 7.76$, $p = .006$, $\eta^2 = .02$.

Moderated mediation

Using PROCESS (Hayes, 2015) following model 8, we next examined whether the interaction observed between excuse type and reason on closeness was driven by perceptions of trustworthiness. Results are shown in Table S5, and demonstrate that perceptions of controllability are particularly

pronounced when an excuse cites a discretionary reason. The indirect effect of trustworthiness mediated the relationship between excuse type and feelings of closeness for a discretionary reason (95% CI, .06 to .47) not a non-discretionary reason (95% CI, $-.18$ to $.16$).

Discussion

Study 3A offers additional support for the proposed underlying process by showing that differences in perceived closeness that result from money and time excuses are attenuated when the scarcity of the resource is the result of an external constraint (e.g., a “needed” non-discretionary purchase). However, when excuses were accompanied by information regarding the internal controllability of the resource (e.g., a “wanted” discretionary purchase), time excuses led to decreased trustworthiness and closeness, compared to money excuses.

Study 3B: The Moderating Role of Consumption Timing

In Study 3B, we explored an additional moderator of perceived controllability, to offer further support via moderation for our account: the timing of the consumption experience. People generally believe they will have more free time in the future, but do not hold this belief for money (Monga et al., 2017; Zauberan & Lynch, 2005). We suggest that people apply this same logic to others, believing that other people will also have more control over their time in the distant versus near future. As a result, rejecting invitations based on financial constraints should be viewed as outside of the excuse-givers’ control, regardless of whether invitations are for near- or distant-future consumption. In contrast, rejecting

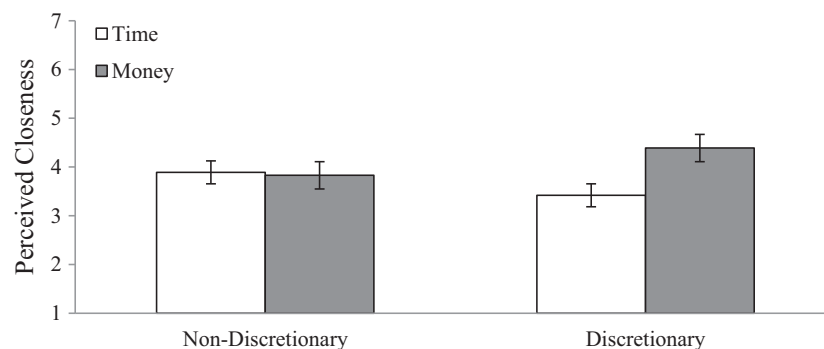


FIGURE 5. Perceived closeness by excuse type and controllability ($N = 407$; Study 3A; error bars indicate ± 1 SE of mean).

invitations based on temporal constraints should be viewed as more controllable for distant- versus near-future invitations. As a result, citing limited time (vs. money) when giving an excuse for rejecting a social invitation should have a stronger negative effect on feelings of interpersonal closeness when invitations are for distant- versus near-future consumption (H5).

Methods

Participants and design

Four hundred fifty-three adults (50.1% female; $M_{age} = 36.07$, $SD = 10.31$; 81.2% Caucasian) were recruited through MTurk and paid a nominal fee for participating. We randomly assigned participants to a 2 (excuse type: money vs. time) \times 2 (consumption timing: near future vs. distant future) between-subjects design.

Procedure

Participants imagined a scenario in which they invited a friend to dinner. All participants read: "A new restaurant has opened in your neighborhood that you are interested in trying out. You call the restaurant to see if you can make a reservation." In the near-future consumption condition participants then read (word changes in the distant-future condition are shown in brackets): "They have a table for 2 available this evening [one month from today]." In the money excuse condition, participants then read (word changes in the time excuse condition are shown in brackets): "You immediately call your friend and ask if they would like to go to the restaurant with you. Your friend says, 'That sounds like fun, but unfortunately I can't go. I don't have money [time].'"

Next, participants completed the same measures from study 2 assessing their perceived closeness with their relationship partner, controllability of the resource ($r = .61$, $p < .001$), and trustworthiness ($\alpha = .91$; Pontari et al., 2002).

Results

Perceived closeness

We conducted a 2 \times 2 ANOVA to assess the impact of excuse type (money vs. time) and consumption timing (near vs. distant future) on perceived closeness. Participants felt less close to the excuse-giver after receiving a time (vs. money) excuse ($M_{time} = 3.13$, $SD = 1.55$; $M_{money} = 4.01$,

$SD = 1.47$), $F(1, 449) = 42.00$, $p < .001$, $\eta^2 = .09$. Participants also felt significantly closer to the excuse-giver after receiving an excuse for a near (vs. distant future) invitation ($M_{near} = 3.79$, $SD = 1.49$; $M_{distant_future} = 3.34$, $SD = 1.63$), $F(1, 449) = 12.34$, $p < .001$, $\eta^2 = .03$. These main effects were qualified by a significant interaction between excuse type and consumption timing, $F(1, 449) = 4.12$, $p = .04$, $\eta^2 = .01$. Planned comparisons showed that when a money excuse was provided in response to an invitation for near and future consumption, there was no difference in perceived closeness ($M_{near} = 4.12$, $SD = 1.43$; $M_{distant_future} = 3.92$, $SD = 1.49$); $F(1, 449) = 1.09$, $p = .30$, $\eta^2 = .002$. However, a time excuse was especially detrimental to perceived closeness in response to an invitation for future (vs. near) consumption ($M_{near} = 3.50$, $SD = 1.48$; $M_{distant_future} = 2.72$, $SD = 1.54$); $F(1, 449) = 15.53$, $p < .001$, $\eta^2 = .03$; Figure 6.

Perceived controllability

Participants felt the excuse-giver had greater control over a time (vs. money) excuse ($M_{time} = 4.82$, $SD = 1.40$; $M_{money} = 3.54$, $SD = 1.62$), $F(1, 449) = 82.67$, $p < .001$, $\eta^2 = .16$ and perceptions of controllability did not differ by consumption timing ($M_{near} = 4.11$, $SD = 1.61$; $M_{distant_future} = 4.27$, $SD = 1.68$), $F(1, 449) = 2.46$, $p = .12$, $\eta^2 = .01$. However, there was a significant interaction by excuse type and consumption timing, $F(1, 449) = 4.97$, $p = .03$, $\eta^2 = .01$. Planned comparisons showed that when a money excuse was provided in response to an invitation for near and future consumption, there was no difference in perceived controllability ($M_{near} = 3.59$, $SD = 1.62$; $M_{distant_future} = 3.50$, $SD = 1.63$); $F(1, 449) = .22$, $p = .64$, $\eta^2 = .00$. However, a time excuse was perceived as much more controllable in response to an invitation for future (vs. near) consumption ($M_{near} = 4.56$, $SD = 1.46$; $M_{distant_future} = 5.10$, $SD = 1.29$); $F(1, 449) = 7.30$, $p = .007$, $\eta^2 = .02$.

Perceived trustworthiness

Participants felt the excuse-giver was less trustworthy when they provided a time (vs. money) excuse ($M_{time} = 4.23$, $SD = 1.53$; $M_{money} = 5.35$, $SD = 1.24$), $F(1, 449) = 81.08$, $p < .001$, $\eta^2 = .15$. Participants also felt the excuse-giver was less trustworthy when they provided an excuse in response to consumption in the distant (vs. near) future ($M_{near} = 5.06$, $SD = 1.34$; $M_{distant_future} = 4.51$, $SD = 1.60$), $F(1, 449) = 21.92$, $p < .001$, $\eta^2 = .05$.

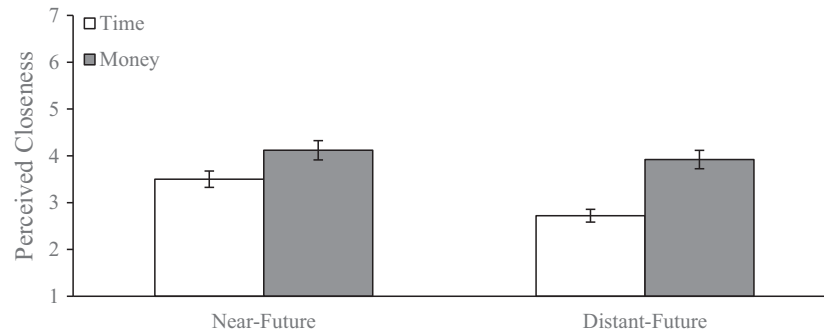


FIGURE 6. Perceived closeness by excuse type and consumption timing ($N = 453$; Study 3B; error bars indicate ± 1 SE of mean).

These main effects were qualified by a significant interaction, $F(1, 449) = 3.68$, $p = .05$, $\eta^2 = .01$. Planned comparisons showed that when a money excuse was provided in response to an invitation for near and future consumption, there was a significant difference in perceived trustworthiness ($M_{near} = 5.54$, $SD = 1.10$; $M_{distant_future} = 5.19$, $SD = 1.33$); $F(1, 449) = 3.78$, $p = .05$, $\eta^2 = .01$. However, a time excuse was perceived as much less trustworthy in response to an invitation for future (vs. near) consumption ($M_{near} = 4.63$, $SD = 1.40$; $M_{distant_future} = 3.79$, $SD = 1.56$); $F(1, 449) = 22.02$, $p < .001$, $\eta^2 = .05$.

Moderated mediation

We tested for moderated serial mediation following PROCESS (Hayes, 2015) model 85. In this model, we evaluated whether the effect of excuse type on feelings of interpersonal closeness was serially mediated by perceptions of controllability of the resource and the subsequent trustworthiness of the excuse. We also tested whether this serial mediation effect was moderated by whether the consumption was occurring in the near or distant future. The overall model was significant ($\beta = .09$, 95% CI: .01 to .19), which suggested moderated serial mediation. More specifically, the results of the analysis indicated that, while the serial mediation effects were significant for both near and distant-future consumption, the indirect effects were stronger for distant future ($\beta = .23$, 95% CI: .13 to .36) than for near-future consumption ($\beta = .14$, 95% CI: .07 to .23). See Table S6.

Discussion

Study 3B provided further evidence that people feel less close to a relationship partner after receiving a time (vs. money) excuse. We replicated our

primary result that time (vs. money) excuses were seen as more controllable and less trustworthy, resulting in decreased closeness. These effects were most pronounced when a time excuse was provided for consumption in the distant (vs. near) future, and were explained by discrepant perceptions of resource slack for time versus money in the distant and near future.

Study 4: Asymmetry in Perceptions of Excuse-Givers and Receivers

In our previous studies, we found evidence that consumers perceive communication about time scarcity to be less trustworthy than communication about money scarcity. This effect was driven by perceptions that time is a resource that consumers have more personal control over, leading to lower feelings of interpersonal connection. In our previous studies, we evaluated consumer impressions of communication regarding invitations for shared consumer experiences. In this study, we explore whether these effects persist when providing a rationale for non-shared consumer experiences, that is, giving to charitable causes. Consumers are regularly confronted with the request to give both money and time to charitable causes, and regularly provide a rationale as to why they cannot perform this behavior (Exley, 2016). Exploring the charitable giving context also allows us to move beyond evaluating how scarcity communication influences self-reported impressions of relationship closeness and evaluate a behavioral measure of prosociality toward excuse-givers. When people are trusting, they express greater prosocial behavior toward their partners (Reis et al., 2010), therefore, we predicted that receivers of a money (vs. time) excuse would be more likely to act prosocially toward the excuse-giver. In this study, we also expand our exploration

to evaluate how individuals who communicate resource scarcity perceive their own communication. Thus, we are able to test whether an asymmetry exists in perceptions of controllability, trustworthiness, and interpersonal outcomes.

Excuse-givers and receivers were assigned a shared task to rate 6 images: 3 images of puppies and 3 images of toilets. We selected this task because it was presumed that half the images would be perceived as unequivocally enjoyable (i.e., the puppy pictures), and half would be perceived as unenjoyable (i.e., the toilet pictures). Excuse-receivers decided how to split this task between themselves and the excuse-giver. The number of puppy pictures they assigned was our primary dependent measure.

Methods

Participants and design

Eight hundred eighteen adults (409 dyads; 49.6% female; $M_{age} = 35.96$, $SD = 11.10$) were recruited through MTurk and paid a nominal fee for participating. We randomly assigned participants to a 2 (role: give or receive) \times 2 (scarce resource: money or time) between-subjects design.

Procedure

Participants were informed that they would have an exchange with another participant and would complete a task together. We used a shared task with six images that needed to be assessed: three images of puppies and three of toilets. We selected this task because we presumed that half of the images would be perceived as enjoyable to rate (i.e., the puppy pictures) and half would be perceived as unenjoyable to rate (i.e., the toilet pictures). Consistent with this thinking, a pretest ($N = 200$, 52.5% female; $M_{age} = 37.01$, $SD = 11.42$) predicted that viewing and rating pictures of puppies would be more enjoyable ($t[198] = 28.33$, $p < .001$, $d = 4.01$), interesting ($t[198] = 16.04$, $p < .001$, $d = 2.27$), and fun ($t[198] = 23.16$, $p < .001$, $d = 3.27$) than rating pictures of toilets.

Excuse-givers

Participants assigned to the excuse-giver role responded to the prompt, "I would give more to charity if . . ." and were randomly assigned to write a few sentences about how they would give more to charity if they had more money or time. After

writing, participants were informed that their response would be shared with another MTurk worker. We asked participants to predict how the other MTurk worker would decide to split the shared picture-rating task and how that MTurk worker would evaluate the content of the participant's response. Our primary dependent measure was the number of puppy pictures that participants predicted the excuse-receiver would assign. We treated this decision as measuring excuse-receivers' prosocial orientation toward excuse-givers (Reis et al., 2010) and predicted a higher number of puppy pictures would be allocated to authors of money (vs. time) excuses.

Excuse-receivers

Participants randomly assigned to the role of excuse-receiver evaluated an excuse-giver's response to the prompt, "I would give more to charity if . . ." that included communication about insufficient money or time, depending on condition. After reading this response, excuse-receivers allocated the six images for the rating task between themselves and the excuse-giver.

Mediators

Excuse-givers predicted the extent to which they thought the excuse-receiver would believe they had personal control over the scarce resource ($r = .58$, $p < .001$) and that their response to the prompt was trustworthy ($\alpha = .92$). Excuse-receivers rated the response in terms of perceived trustworthiness ($\alpha = .91$) and resource controllability ($r = .59$, $p < .001$).

Results

Shared task

A repeated-measures ANOVA using the number of desirable (puppy) pictures (excuse-givers prediction vs. excuse-receivers actual allocation) as a within-subjects factor and excuse type (money vs. time) as a between-subjects factor showed a significant main effect for number of desirable pictures, $F(1, 407) = 27.61$, $p < .001$, $\eta^2 = .06$; which was qualified by a significant interaction, $F(1, 407) = 4.61$, $p = .03$, $\eta^2 = .01$ (see Figure 7). Planned contrast analyses indicated that excuse-givers predicted they would be assigned a similar number of puppy pictures regardless of whether they gave a money or time excuse ($M_{money} = .82$, $SD = .84$; $M_{time} = .83$, $SD = .90$), $F(1,$

407) = .03, $p = .85$, $\eta^2 = .00$. However, excuse-receivers assigned a greater number of puppy pictures to givers of money excuses than givers of time excuses ($M_{money} = 1.30$, $SD = 1.07$; $M_{time} = 1.04$, $SD = .98$), $F(1, 407) = 6.78$, $p = .01$, $\eta^2 = .02$), demonstrating that excuse-givers failed to predict the negative effects of making time-related excuses.

Perceived controllability

We conducted the same analysis predicting perceived controllability. There was no main effect of role, $F(1, 407) = .31$, $p = .58$, $\eta^2 = .00$; but there was a marginally significant interaction, $F(1, 407) = 2.99$, $p = .085$, $\eta^2 = .01$; such that, while, givers of money excuses predicted lower perceived controllability compared to givers of time excuses ($M_{money} = 3.45$, $SD = 1.49$; $M_{time} = 4.15$, $SD = 1.60$), $F(1, 407) = 21.29$, $p < .001$, $\eta^2 = .05$, actual discrepancies in perceptions were of a much greater magnitude ($M_{money} = 3.21$, $SD = 1.52$; $M_{time} = 4.28$, $SD = 1.58$), $F(1, 407) = 48.22$, $p < .001$, $\eta^2 = .11$.

Perceived trustworthiness

We conducted the same analysis predicting perceived trustworthiness. There was no main effect of role, $F(1, 407) = .36$, $p = .55$, $\eta^2 = .00$; but there was a significant interaction between role and excuse type, $F(1, 407) = 10.85$, $p = .001$, $\eta^2 = .03$. While excuse-givers predicted their time and money excuses would be perceived as similarly trustworthy ($M_{money} = 5.18$, $SD = 1.31$; $M_{time} = 5.11$, $SD = 1.31$; $F(1, 407) = .28$, $p = .60$, $\eta^2 = .00$), excuse-receivers perceived communication of money scarcity to be much more trustworthy than communication of time scarcity ($M_{money} = 5.42$, $SD = 1.18$; $M_{time} = 4.76$, $SD = 1.39$; $F(1, 407) = 26.82$, $p < .001$, $\eta^2 = .06$).

Mediation

We evaluated the mediating role of personal controllability and subsequent trustworthiness of excuses for the effect of excuse type on number of desirable images assigned by excuse-receivers using PROCESS (Hayes & Preacher, 2014), following model 6. Results are shown in Table S7. Perceptions of controllability and trustworthiness mediated the relationship between excuse type and assignment of more desirable tasks (95% CI, .01 to .06).

Discussion

Study 4 evaluated a behavioral measure of prosocial orientation—the number of desirable pictures allocated in a shared rating task—showing that providers of time scarcity-related excuses received fewer desirable pictures to rate than providers of money scarcity-related excuses. This difference was mediated by how the content was perceived—recipients perceived authors of time (vs. money) excuses to have more personal control over the resource, making the content of the excuse seem less trustworthy.

We also demonstrated an asymmetry in the perception of excuses. Excuse-givers did not predict differences in the number of desirable tasks that they would be allocated or differences in how trustworthy they would be perceived based on the type of excuse provided. Moreover, while communicators of scarce resources did predict that they would be perceived as having more personal control over time than money, this effect was significantly underestimated. While money excuses were perceived to be less within one's control and in turn more trustworthy, people who generated such content did not predict how their communication would be perceived, or the implications of these

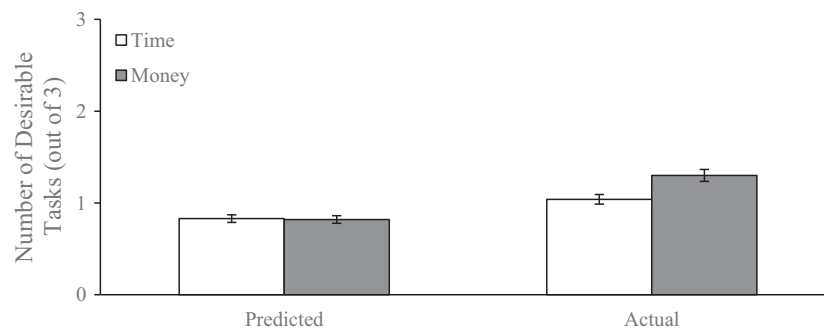


FIGURE 7. Desirable task allocation by scarcity communication type & perspective ($N = 818$; Study 4; error bars indicate ± 1 SE of mean).

perceptions on interpersonal closeness and prosocial behavior.

General Discussion

Across six studies conducted in the context of social requests, citing a scarcity of time (vs. money) undermined interpersonal closeness and prosociality (H1). This effect was driven by the perception that people have more personal control over their time (vs. money), leading people to perceive these excuses as less trustworthy (H2). Moreover, the effect of time versus money excuses on interpersonal closeness was attenuated when participants personally experienced time scarcity (H3), when the reasons for resource scarcity were non-discretionary (H4), and when an invitation was for the near versus distant future (H5).

Theoretical implications

First, our results contribute to attribution theory, which has primarily investigated how people perceive effort, ability, luck, and the help of others as the cause of life achievement and failure (e.g., Weiner, 1985) or how causal ascriptions of other's success and failures influence people's evaluations and behavior toward others (e.g., Laczniak, DeCarlo, & Ramaswami, 2001). We introduce time and money as important causal ascriptions that people often use as excuses for rejecting social requests, and demonstrate that time excuses are perceived as more controllable than financial excuses. In addition, we contribute to the growing literature evaluating the psychology of money versus time use (e.g., Liu & Aaker, 2008), and provide the first empirical evidence underlying the psychological consequences of interpersonal communication about money and time.

Third, we extend research on resource slack (Monga et al., 2017; Zauberan & Lynch, 2005), showing that people apply analogous beliefs about their own future time slack to other people as well, and judge them negatively when they behave as though their future time is limited. Finally, our finding that people fail to predict the different effect of time and money scarcity communication on trust and liking contributes to previous work on prediction and affective forecasting errors (e.g., Gilbert & Wilson, 2007), and specifically to forecasting errors in conversation and impression management (Lee-Yoon et al., 2020). While people did predict differences in perceived personal control over time and money, they failed to predict how perceived control

would influence perceptions of trust and subsequent behavior.

Being able to say "no" is a critical skill for managing individual resources in the pursuit of well-being. While previous work has demonstrated that language can influence people's thoughts and behaviors (Patrick & Hagtvedt, 2012), the current research demonstrates how people's language choices can influence the thoughts and behaviors of others and provides an evidence-based strategy to help people better communicate their resource limitations to close others.

Our investigation primarily focused on one of potentially many pathways that may explain why citing limited money is more effective at maintaining interpersonal relationships. While we find consistent evidence of a sequential pathway from increased controllability and reduced trust to interpersonal closeness, in many studies a change in perceived closeness arose independently of a judgment of being trustworthy. It is possible that relationship partners who received a time excuse may therefore still find the excuse-giver as trustworthy, but may feel disappointed that their decision may not reflect a similar level of commitment to invest resources into the relationship. We explored disappointment and perceived relationship valuation as other potential pathways (see Appendix S1, Study 2). While time excuses resulted in greater disappointment and stronger perceptions of the excuse-giver's valuation of the relationship, at least in this context—these variables did not predict closeness—suggesting that controllability is a critical mechanism underlying the observed results.

The justifiability of the excuse also significantly predicted its perceived controllability. In Study 3A, when people attributed a time constraint to a non-discretionary reason, time excuses no longer differed from financial excuses in their closeness consequences. The temporal distance between the invitation and the consumption event also impacted perceived closeness. Namely, time excuses were particularly detrimental for future (vs. immediate) consumption because people perceived others as having more control of their future time. Practically speaking, if a money excuse is not feasible, offering a time excuse right before the event and attributing the time crunch to an uncontrollable circumstance may result in more positive evaluations. Specifically, if a person is invited to dinner but explains that they will be out-of-town during the proposed dinner, this should presumably lower the perceived controllability of the excuse by providing an external (non-discretionary) reason for why they cannot attend.

Related to this example, in an additional study (see Appendix S1, Study 1), we evaluated whether perceptions of trust and closeness differed for a money (“I don’t have money”), time (“I don’t have time”), or an out-of-town (“I will be out of town”) excuse. An out-of-town excuse was perceived as more trustworthy and resulted in greater interpersonal closeness than a time excuse. Consistent with Study 4, this difference suggests that communicating constraints of time may require additional information that explains the external and uncontrollable of the time commitment factors (e.g., “I will be out of town *because I have to go to my sister’s wedding*”). This information might reassure the excuse-receiver that the excuse-giver is not simply choosing to do something else with their time because they are not interested in the relationship.

Another feature that might influence our results is the fact that money is more fungible than time (Leclerc, Schmitt, & Dube, 1995). As a result, excuse-receivers may attempt to solve the excuse-givers shortage by offering to pay for them to participate in the invited activity. Time is less fungible and likely more difficult for the excuse-receiver to alleviate. Related to this idea, in an additional study (see Appendix S1, Study 2), money excuses resulted in greater perceptions of closeness because the shortage was perceived as more easily addressable by the excuse-receiver.

Time might also be perceived as more or less fungible depending on the consumption horizon (Zauberman & Lynch, 2005). For example, an invitation for shared consumption may occur on a specific date (i.e., a wedding or a dinner reservation) or may be less bounded (i.e., an invitation to have dinner sometime next week). Thus, we also tested whether the bounded nature of the consumption event moderated our effects (see Appendix S1, Study 2), but it did not.

While our investigation revealed that disclosing financial scarcity may have interpersonal benefits, in an additional study (see Appendix S1, Study 2), we investigated other possible consequences of money scarcity communication. Communicating money (vs. time) scarcity resulted in greater perceptions that the excuse-giver was incompetent and as mentioned previously, a greater belief that the excuse-giver was asking for help addressing their limited resources. Therefore, in social contexts in which it is important for the excuse-giver to demonstrate competence and independence, it may not be beneficial to disclose limited financial resources. For example, such communication may be less successful in the workplace (e.g., among co-

workers). In contrast, communicating time scarcity could confer status benefits in workplace contexts in the United States where busyness is seen as a status symbol (Bellezza et al., 2017). Although we found no evidence that inferred relative status between communication partners explained our effects, given that consumers experiencing money scarcity are generally perceived to lack status (Lee-Yoon et al., 2020) it is possible that these effects might exist in contexts outside of the close interpersonal interactions that we observed here.

While our research investigated the impact of communicating resource scarcity on interpersonal relationships and prosocial behavior, we believe that better communication of limited resources may also impact how consumers manage their time and money. This is important because people report being increasingly concerned with having enough time (Giurge, Whillans, & West, 2020) and money (Rheault 2011) to meet their needs, yet feel uncomfortable communicating their limited resources to others. For example, a recent survey of over 1,000 consumers found that 27% felt uncomfortable saying “no” when a friend suggested a social activity they could not afford, and 39% went into debt to keep up with their friends (Devaney, 2018). It is possible that with greater communication of financial and temporal constraints relationship partners can suggest free or less expensive social activities as replacements for higher priced activities. Resultingly, consumer spending may decrease, allowing consumers to manage their money more efficiently by saving more or repaying their debt balances, both financial behaviors that have been linked to greater well-being (Donnelly, Iyer, & Howell, 2012). Consumers experiencing time scarcity may also be able to allocate a larger proportion of their spending toward time-saving services that may alleviate their time poverty and allow them to spend a greater proportion of time doing enjoyable activities, like socializing and relaxing (Whillans, Dunn, Smeets, Bekkers, & Norton, 2017). With greater communication of resource scarcity, consumers may be more inclined to give gifts to address the expressed scarcity of others. Recent work has demonstrated that gifts intending to address scarcity are positively received and improve interpersonal relationships (Lee-Yoon et al., 2020).

Limitations and Future Directions

One question that arises from these studies is whether these effects would be observed in verbal conversation, as the studies here involved written

communication. Future research could explicitly examine whether the medium in which the excuse is communicated—written or verbal communication—influences perceptions of the excuse-giver. Another question that arises is whether it matters whether these excuses are made in private or in public settings. In an additional study (see Appendix S1, Study 3) we investigated more than 2,000 direct-message tweets from Twitter and find tweets containing money scarcity content (“@[<user name>] I legit don’t have money for breakfast”) were more frequently “liked” than tweets containing time scarcity content (“@[<user name>] I have a paper to write, I don’t have time to leave the house”). These findings provide additional evidence that communication about money and time scarcity is common and that these effects can generalize to communications made in public on social media platforms.

In addition, our studies evaluated one-time (versus repeated) communications, and communicating resource scarcity might produce different effects over repeated interactions. Given that the stable availability of a resource contributes to impressions of personal control over a resource (Weiner et al., 1991), the frequency with which a relationship partner uses an excuse might influence perceptions of trust and interpersonal connection. For example, if a relationship partner consistently claims not to have enough time, the availability of this resource might be perceived less within the excuse-maker’s control, attenuating the effects observed in this work.

While our research suggests that communication partners will more positively receive excuses about limited money, we did not explore how people feel about *themselves* when they communicate limited money or limited time. In fact, previous research shows that financially constrained consumers engage in less purchase-related word-of-mouth because they believe that rehearsing their monetary expenditures will reinforce negative feelings about their limited financial situation (Paley, Tully, & Sharma, 2019). It is possible that giving a financial excuse damages self-esteem and results in a negative emotional experience for the excuse-giver.

Future research could also investigate the effectiveness of financial and temporal constraints for other communications such as complaints and negotiations. For example, are customer reviews more influential when the reviewer expresses displeasure because a consumption experience was a “waste of time” or a “waste of money”? Further, while expressing a financial constraint in negotiations between buyers and sellers has been found to result in greater trust and lower counter offers (Lee & Ames, 2017), it is unclear whether similar

benefits would be experienced by communicating temporal scarcity such as expressing that one does not have much time to negotiate.

There may be important downstream consequences of citing insufficient resources on how the decisions and behaviors of the excuse-giver are perceived in the future. For example, do recipients of excuses more closely observe how the excuse-giver manages their scarce resource in the future and become more critical of decisions that they perceive to be discretionary? Finally, while our research focused on interpersonal communication between relationship partners, research could evaluate communication between consumers and firms. While our research documents that consumers perceive money to be a less controllable resource for other consumers, they may believe that firms have greater control over money, especially firms that are highly profitable (as these firms might be perceived as having greater discretion over how money is used), therefore consumers may perceive communication of time constraints more acceptable from firms than other consumers. Future research could explore these possibilities.

Concluding Remarks

This research expands what we know about two of life’s most valuable resources. While previous research has shown that time is perceived as more central to the self with more positive implications for well-being (Liu & Aaker, 2008), we extend this research by showing that communications about limited time can lead to more negative interpersonal judgments than communications about limited money, which communicators fail to predict. In addition to interpersonal judgments, we demonstrate that communicating scarce resources can influence relationship partner’s prosocial actions toward the communicator. Therefore, the words consumers use to communicate with each other can have substantial implications for interpersonal relationships and prosocial actions.

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. Mediation tables (studies reported in manuscript).

Table S1. Trustworthiness mediation (Study 1A).

Table S2. Controllability and trustworthiness mediation (Study 1B).

Table S3. Controllability and trustworthiness mediation (Study 2).

Table S4. Moderated-mediation by resource scarcity (Study 2).

Table S5. Moderated-mediation by discretionary reason (Study 3A).

Table S6. Moderated-mediation by consumption timing (Study 3B).

Table S7. Controllability and trustworthy mediation (Study 4).

Appendix S2. Supplemental studies.

Figure S1. Perceived closeness by excuse and cost of event.

Table S8. Validity and trustworthiness mediation.

Figure S2. Perceived closeness by excuse and boundedness.

Table S9. Controllability and trustworthiness mediation.

Figure S3. Example of tweets communicating resource scarcity.