The divergent effects of money priming on interpersonal trust

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Abstract

The effects of money priming on interpersonal trust were investigated in five experiments. Experiment 1 (N = 68) revealed that participants primed with money declared lower general social trust than participants in the neutral condition. In Experiment 2 (N = 73), participants who were given a task of counting money preferred larger social distance and expressed less trust towards their interaction partner than controls. In Experiments 3 and 4 (N = 72 & N = 131), we investigated whether money priming would affect participants' behavior in the Trust Game (Berg et al., 1995). Unlike in previous experiments, we found that participants in the money condition demonstrated greater trust than participants in the neutral condition, as they sent significantly more money to the second party. Finally, Experiment 5 (N = 251) aimed at explaining these divergent outcomes. Results suggest that money priming might increase business (transaction) oriented trust, as it is related to market-pricing mode and one's desire to maximize own outcomes (Fiske, 1992; Mead & Stuppy, 2014), but lower the communal trust, related to communal mode and thus conflicting with exchange relationships.

Keywords: money priming, trust, trust game, modes of relating, exchange relationships, communal relationships

Trust is essential for smooth functioning of most types of human relations (e.g., Akerlof, 1970; Reis, Clark, & Holmes, 2004), but requires interdependence, which people seem to resist after being reminded of money (Savani, Mead, Stillman, & Vohs, 2016). Previous research investigated the influence on money priming on prosociality or persistence (Gasiorowska, Chaplin, Zaleskiewicz, Wygrab, & Vohs, 2016; Vohs, Mead, & Goode, 2006), but have not yet - to our knowledge - addressed its effects on interpersonal trust.

We paid special interest to two models of social relationships – communal and exchange (market-pricing) (Clarks & Mills, 2011; Fiske, 1992). Market-pricing or exchange relationships involve constant cost-benefit analysis: while being in such relationships, people care about how much they get out of their investment and whether the repayment is of a comparable value to an input, with money as the main medium of this exchange. On the other hand, communal mode characterizes

relationships, where members of a group or dyad focus on commonalities, tend to cooperate, and disregard the economic value of each other's input (e.g. helping others without any consideration for payment; Heyman & Ariely, 2004). Although not an essential part of this relationship model, money is nevertheless often present (e.g. lending money to a friend, a couple discussing household spending).

Unfortunately, money may sometimes prove destructive to close, communal relationships. For instance, financial disagreements are the strongest predictor of divorce among other types of disagreements (Dew, Britt, & Huston, 2012) and most American respondents declared not discussing money with their partners; APA, 2015). A series of studies even showed that introducing financial payment into the communal relationship changes it into a market-pricing one, where people start to carefully measure their costs and benefits (Ariely, Bracha, & Meier, 2009; Gneezy & Rustichini, 2000; Heyman & Ariely, 2004). Conversely, for the exchange relationships, money might be associated with one's self interest, pleasure, and gaining something of value. This type of relationship also relies on trust (Akerlof, 1970, Yamagishi, 1998). Without trust most of the exchanges would never occur - a used car might have some hidden defects, an employer might fail to pay us at the end of the month. A burst of anonymous online transactions increases the need to trust even further.

Consequently, taking into account previous research results, we hypothesized that money, compared to neutral cues, would lower trust in communal relationships but enhance trust in market-pricing relationships, in which transaction context was made salient. This hypothesis was investigated in five experiments.

Experiments were preceded by a pilot study, which showed that for our participants, trust was conceptually related to communal sharing relationships. Fifty-one percent of free associations for a group of Business Management students were related to close, interpersonal relationships, while only 4% to business relationships (45% were categorized as not related to these two categories). For this reason, we expected that when answering commonly used trust items (e.g. "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?", ESS, 2012) participants would think of communal, rather than market-pricing relationships.

Experiment 1 (N=68) revealed that Business Management students who were reminded of money declared lower general social trust than participants in the neutral condition. In Experiment 2 (N=73), participants who were given a task of counting money preferred larger social distance (replication of Vohs et al., 2006) and expressed less trust towards their interaction partner. These results confirmed our expectations that reminders of money might hamper social trust in the context of communal relationships.

Next, two experiments were conducted to see if the same will be observed for participants' decisions in Trust Game (Berg et al., 1995). In Experiment 3 (*N*=72) participants took part in two one-shot, imaginary Trust Games (once as Allocators, once as Recipients) played for points. In order not to bias participants' behavior, the words "trust" or "game" were not used in task

description. Unlike in the previous experiments, reminders of money were related to increased trust: participants in the money condition sent significantly more money to the other party than participants in the neutral condition. Their trustworthiness (the amount of money returned in the Recipient condition) was not affected by money activation.

In order to check if the obtained results were not biased by imaginary conditions, Experiment 4 (N=131) was performed. Participants took part in two one-shot Trust Games with real payments, and two different, anonymous partners. A different manipulation of the salience of money was also used. As in Experiment 3, participants primed with money demonstrated greater trust and trustworthiness than participants in the neutral condition

Finally, Experiment 5 (*N*=251) was set up to explain these ostensibly conflicting outcomes. We based this study on the notion the design of the Trust Game is ambiguous enough that it allows for different interpretations. Previous research showed that Trust Game reliably measures trust (e.g. investor's given oxytocin transferred more money; Kosfeld, Heinrichs, Zak, Fischbacher, Fehr, 2005). However, as indicated by its other name - Investment Game - Trust Game is also reminiscent of market transactions, in which the level of investors' personal gain depends on their trust - the amount of money sent. In the two-factor experiment we manipulated both money reminders and the framing of the TG either as a *Task-Trust* or a *Task-Transaction*, and measured how much money participants sent to the other party. We found that money priming increased trust operationalized as amount of money allocated to the recipient, but only when the game was framed as a transaction task, it is—in relation with market-mode. However, when the description of the game referred to trust, a communal cue, reminders of money decreased the propensity to send money to the second party.

Results confirmed our expectations that money might increase business (transaction) oriented trust, associated with market-pricing model of relationships and one's desire to maximize own outcomes (Mead & Stuppy, 2014; Zaleskiewicz & Gasiorowska, 2017). On the other hand, reminders of money seem to negatively affect communal trust, experienced in the communal-sharing model of relationships. Further studies might address the deeper mechanism of the observed associations.

References

- Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, *84*, 488-500. doi:10.1007/978-1-349-24002-9_9
- American Psychological Association (2015). Stress in America. Paying with our health. Retrieved from https://www.apa.org/news/press/releases/stress/2014/stress-report.pdf
- Ariely, D., Bracha, A., & Meier, S. (2009). Doing good or doing well? Image motivation and monetary incentives in behaving prosocially. *American Economic Review*, 99, 544–555.
- Berg, J., Dickhaut, J. i McCabe, K. A. (1995). Trust, reciprocity, and social history. *Games and Economic Behaviour*, 10, 122-142. doi:10.1006/game.1995.1027

- Clark, M. S., & Mills, J. R. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin, 19*, 684-691. doi:10.1177/0146167293196003
- Dew, J. Britt, S., & Huston, S. J. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, *61*, 615-628.
- European Social Survey (2012). *ESS5-2010 Documentation report*. Edition 2.0. Bergen, European Social Survey Data Archive, Norwegian Social Science Data Services.
- Fiske, A. P. (1992). The four elementary forms of sociality: framework for a unified theory of social relations, *Psychological Review*, *99*, 689-723.
- Gneezy U, Rustichini A. (2000). Pay enough or don't pay at all. *Quarterly Journal of Economics*, 115, 791–810
- Gasiorowska, A., Chaplin, L. N., Zaleskiewicz, T., Wygrab, S., & Vohs, K. D. (2016). Money cues increase agency and decrease prosociality among children: Early signs of market-mode behaviors. *Psychological Science*, *27*, 331-344. doi:10.1177/0956797615620378
- Heyman, J. i Ariely, D. (2004). Effort for payment a tale of two markets. *Psychological Science*, 15, 787–793.
- Kosfeld, M., Heinrichs, M. Zak, P. Fischbacher, U., & Fehr, E. (2005). Oxytocin increases trust in humans. *Nature*, 435, 673–676.
- Mead, N. L., & Stuppy, A. (2014). Two sides of the same coin: Money can promote and hinder interpersonal processes. In E. Bijleveld & H. Aarts (Eds.), *The Psychological Science of Money* (pp. 243-262). New York: Springer.
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Savani, K., Mead, N. L., Stillman, T., & Vohs, K. D. (2016). No match for money: even in intimate relationships and collectivistic cultures reminders of money weaken sociomoral responses, *Self and Identity*, *15*, 342-355.
- Yamagishi, T. (1998). *The Structure of Trust: The Evolutionary Game of Mind and Society*. Tokyo: University of Tokyo Press.
- Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, 349, 1154-1156. doi:10.1126/science.1132491
- Zaleskiewicz, T., & Gasiorowska, A. (2017). The psychological consequences of money for economic and social relationships. In C. Jansson-Boyd & M. Zawisza (Eds.), *The International Handbook of Consumer Psychology* (pp. 590-619). Oxford: Taylor & Francis ROUTLEDGE.