

Research on the Social Mindfulness Affected by Money Priming

Yu Tong

Zhejiang Normal University, Jinhua, Zhejiang, 321004, China
tongyu17@163.com

Abstract: Social mindfulness is a prosocial behaviour that respects the autonomy of others' choices, which requires individuals to sacrifice their own interests. Previous studies have found that money priming makes individuals pursue to maximize their own interests, meaning that it may have a potential negative effect on social mindfulness. However, the question has received unsatisfactory attention from the recent investigations. Thus, our study aims to investigate whether money priming has a negative effect on social mindfulness. A total of 59 college students were recruited. We used paradigms of money priming and social mindfulness, finding that money priming did have a negative effect on social mindfulness. In summary, this study help us understand the negative effect of money priming on social mindfulness.

Keywords: social mindfulness, money priming, prosocial behavior

1. Introduction

Social mindfulness, as a type of prosocial behavior, refers to the behavior that individuals pay attention to, respect, and protect other person's needs and rights of autonomy of choice with kindness in interpersonal interaction [1, 2]. It involves two processes: (a) One should consciously recognize the impact of their choice on the subsequent choices of others, and (b) be willing to decide not to limit other people's choices [1, 3]. Social mindfulness promotes others' trust and intimacy in social interaction and brings positive interpersonal communication results [3, 4, 5], which plays an influential role in effective social interactions. Conversely, unmindful choices can hinder trust and cooperation. For example, first-episode psychosis (FEP) patients tend to make unmindful choices, which harm their establishment of trust and cooperation [6]. In a word, social mindfulness plays an important role in people's life.

Under which circumstance will social mindfulness be damaged? In a social situation with limited resources, self-interest and others' interest conflict [7]. Social mindfulness can alleviate such conflict by sacrificing a little of individuals' own interest [8], which is conducive to the group's survival. However, social mindfulness will suffer when individuals are committed to pursuing the maximization of their own interests rather than sacrificing them. Previous studies have found that money priming would activate the individuals' utility-set encouraging such individuals to take utility maximization as the decision objective [9], and be unwilling to make self-sacrifice [10]. Therefore, it infers that money priming might have a negative effect on social mindfulness.

To answer the question above, the present study explore the effect of money priming on social mindfulness. We combined the money priming paradigm with the Social Mindfulness (SoMi) task. Participants were told to choose one of the presented objects first, and then the other person would choose after the choice. The proportion of the number of non-unique objects selected by the participants in the total number of times was compared. Based on previous studies, we proposed the following hypotheses: Money priming can have a negative effect on social mindfulness.

2. Method

2.1 Participants

We settled effect size Cohen's $d = 0.4$, $\alpha = 0.05$ (two-tailed), $power = 80\%$ in G*Power 3.1.9.2, indicating that we would need to recruit at least 52 participants. A total of 59 college students (21 males and 38 females; $M = 20.19$ years, $SD = 1.54$ years) were recruited from X Normal University in exchange

for a ¥10 show-up incentive. All participants had normal intelligence and vision, with out color blindness, history of medical, psychiatric, or neurological diagnoses. The participants were not taking any medication and had not participated in a similar experiment. Written informed consent was obtained according to procedures approved by the Ethics Committee of the Department of Psychology at X Normal University in three studies.

2.2 Materials and Task

Money Priming. Previous studies have shown that presenting money pictures has a good money priming effect [11, 12]. We presented money pictures to conduct the money priming in our studies. We recruited 25 students who majored in psychology to rate the familiarity, pleasure, and arousal (i.e., how excited you are when you see the picture) of the 34 pictures on a 9-point scale [13]. Finally, 24 priming pictures were selected, half of which were related to money and half of which were neutral. There were no differences between the money and neutral pictures in familiarity [$t(11) = 0.7, p = 0.45$], pleasure [$t(11) = 0.59, p = 0.56$] and arousal rating [$t(11) = 0.62, p = 0.54$]. The size of the pictures was $10 \times 8\text{cm}^2$ [14].

SoMi Task. We used the previous paradigm for reference [1, 15] and set up 24 trials, with half of the experimental and half control trials. In 12 experimental trials, all of the trials included 4 objects, which were presented in a ratio of 3:1. In 12 corresponding control trials, 4 objects in each trial were presented in a ratio of 2:2 (see Figure 1). The classic SoMi score only focuses on experimental trials and is calculated as the proportion of socially mindful choices in the experimental trials (0–1). While the preference-adjusted SoMi score focuses on experimental and control trials, the latter can help infer the participants' preferences and obtain pure social mindfulness. For example, only when the individual chose the red apple in the experimental trial and the green apple in the corresponding control trial can we infer that the individual had made a pure social mindfulness choice. In contrast, if participants consistently chose red apples (indicating a general preference for red apples), we would ignore the specific choice when calculating the preference-adjusted SoMi score. The 24 trials were presented in a random order, as were the objects within each trial.

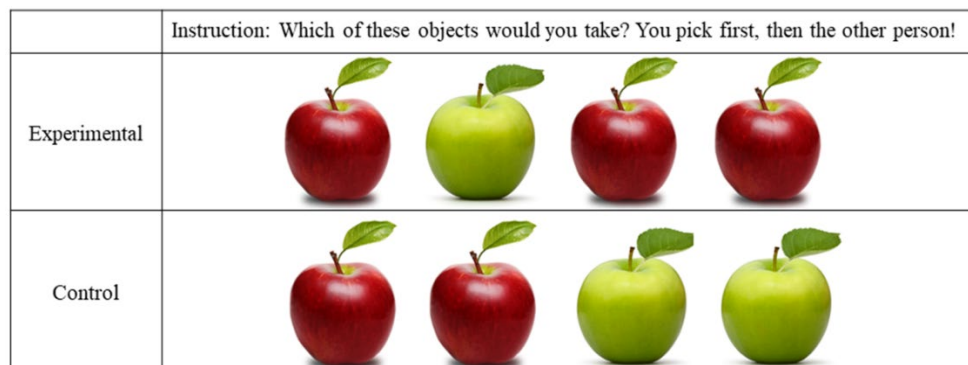


Figure 1: Example Trials of the Social Mindfulness Task

2.3 Procedure

Upon arrival, participants were guided into separate cubicles equipped with computers and provided with written informed consent and demographic information. Subsequently, they were told they would complete an online interactive game with another player in the next room (but participants actually finished the game alone). In the game, the participants were always the first to choose one of several objects presented; the selected object was not allowed to be selected by the other player anymore. After instructions, the SoMi task was presented on a laboratory computer with E-prime 3.0 software (Psychology Software Tools, Sharpsburg, USA). The experiment consisted of two blocks, each of which had 24 trials. One block presented the money priming pictures, the other presented the neutral priming pictures, and the priming pictures in each block were presented randomly. Before the formal experiment, there were four practice trials. If there was any doubt, participants could press the button to return to the follow-up exercise.

A trial unfolded as follows (see Figure 2). A fixation cross at the center of the screen appeared for 200 ms, then replaced by a 500 ms blank screen. Immediately the picture (money priming pictures in the money priming block or neutral priming pictures in the neutral priming block) was presented for 1000

ms, followed by a 300 ms blank screen. Next, a chosen screen with the pictures of 4 objects and an instruction sentence appeared (i.e., “which of these objects would you take? You pick first, then the other person!”); on the same screen, the participants should select one of the four objects by responding to the 1 to 4 keys without time limit. After an 800 ms blank screen, the next trial began.

There was a 3-5-minute break before the second block. To control the order effect, half of the participants completed the social mindfulness selection under the money priming condition firstly and the other half under the neutral priming condition firstly.

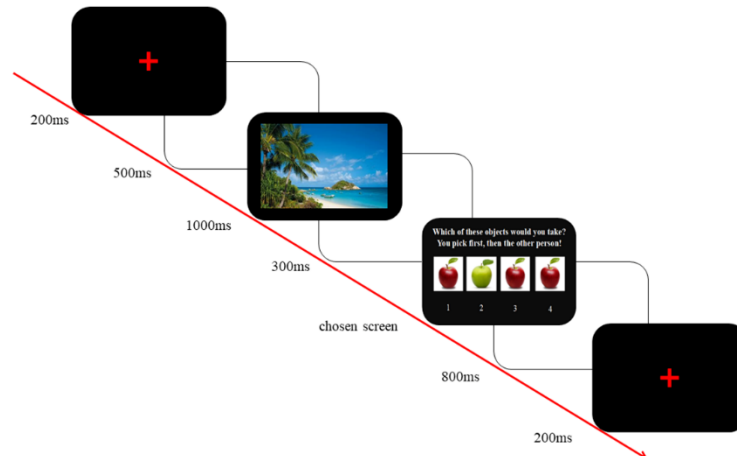


Figure 2: A Schematic Representation of the Procedure for Each SoMi Trial

3. Results

A paired-samples t-test on the classic SoMi score in two priming conditions revealed that participants got a significantly lower score in the money priming condition ($M = 0.46$, $SD = 0.22$) than in the neutral priming condition ($M = 0.54$, $SD = 0.20$), $t(58) = 4.59$, $p < 0.001$, $d = 0.60$.

To further test whether this effect can be attributed to the inherent confusion between social mindfulness and object preference, we repeated our analysis with a preference-adjusted SoMi score. We also found the money priming effect, i.e., participants in the money group ($M = 0.18$, $SD = 0.16$) had a significantly lower score than in the neutral group ($M = 0.26$, $SD = 0.18$), $t(58) = 3.94$, $p < 0.001$, $d = 0.51$. Further analysis showed that the preference-adjusted SoMi score was significantly lower than the classic SoMi score [money priming condition: $t(58) = 11.07$, $p < 0.001$; neutral priming condition: $t(58) = 13.19$, $p < 0.001$], which implies that the classic SoMi score is indeed inflated by object preference.

4. Discussion

This study found that money priming had a negative effect on the prosocial behavior of social mindfulness, which is also consistent with previous studies [16]. There are two theories that may explain the negative effect that money priming causes on social mindfulness.

The self-sufficiency theory proposed by Vohs and his colleagues suggests that money priming can activate people's state of pursuing self-sufficiency, in which people prefer to stay alone, focus on their own achievement of goals, keep more distance from others and care less about others [16]. The first step of social mindfulness is to be aware of the need for choice autonomy of others [1, 3], however, the activation of a state of self-sufficiency can make people focus more on themselves. The contradiction between them reduces the possibility for individuals under the condition of money priming to take the perspective of others and be aware of their needs, finally inhibiting social mindfulness.

Liu and Aaker proposed the utility-set theory, which holds that money priming can activate one's utility-set, making one pursue the maximization of their interests [9]. However, the second step of social mindfulness requires one to be willing to make self-sacrifice to meet others' needs [1, 3], which also contradicts the effect of money priming.

5. Conclusion

In summary, our finding suggest that money priming damages social mindfulness.

References

- [1] Van Doesum N J, Van Lange D A W, Van Lange P A M. *Social mindfulness: skill and will to navigate the social world [J]. Journal of Personality and Social Psychology, 2013, 105(1): 86.*
- [2] Yang Y, Kou Y. *Individuals' well-being in prosocial interaction: The role of autonomy [J]. Advances in Psychological Science, 2015, 23(7): 1226.*
- [3] Dou K, Nie Y G, Wang Y J, et al. *Social mindfulness in the interpersonal interaction: Conceptualization, assessment and influenced mechanism [J]. Advances in Psychology, 2017, 7(9): 1101-1112.*
- [4] Dou K, Wang Y J, Li J B, et al. *Perceiving high social mindfulness during interpersonal interaction promotes cooperative behaviours [J]. Asian Journal of Social Psychology, 2018, 21(1-2): 97-106.*
- [5] Van Doesum N J, Van Lange P A M. *Individual differences in non-costly cooperation: Social mindfulness and social hostility [J]. Personality and Individual Differences, 2016, 100(101): 522.*
- [6] Lemmers-Jansen I L J, Fett A K J, Van Doesum N J, et al. *Social mindfulness and psychosis: neural response to socially mindful behavior in first-episode psychosis and patients at clinical high-risk [J]. Frontiers in human neuroscience, 2019, 13: 47.*
- [7] Liu C, Hao F. *Social dilemmas: Theoretical framework and experimental research [J]. Advances in Psychological Science, 2014, 22(9): 1475.*
- [8] Van Lange P A M, Van Doesum N J. *Social mindfulness and social hostility [J]. Current opinion in behavioral sciences, 2015, 3: 18-24.*
- [9] Liu W, Aaker J. *The happiness of giving: The time-ask effect [J]. Journal of consumer research, 2008, 35(3): 543-557.*
- [10] Kouchaki M, Smith-Crowe K, Brief A P, et al. *Seeing green: Mere exposure to money triggers a business decision frame and unethical outcomes [J]. Organizational Behavior and Human Decision Processes, 2013, 121(1): 53-61.*
- [11] Kushlev K, Dunn E W, Ashton-James C E. *Does affluence impoverish the experience of parenting? [J]. Journal of Experimental Social Psychology, 2012, 48(6): 1381-1384.*
- [12] Roberts J A, Roberts C R. *Money matters: does the symbolic presence of money affect charitable giving and attitudes among adolescents? [J]. Young Consumers, 2012, 13(4): 329-336.*
- [13] Chen C. *The impact of money on self-esteem: Evidence from ERP study [D]. Chongqing: Southwest University, 2011.*
- [14] Yang Z. *The psychological mechanism of helping behavior on money priming: The role of self-correlation and empathy [D]. Changsha: Hunan Normal University, 2017.*
- [15] Mischkowski D, Thielmann I, Glöckner A. *Think it through before making a choice? Processing mode does not influence social mindfulness [J]. Journal of Experimental Social Psychology, 2018, 74: 85-97.*
- [16] Vohs K D, Mead N L, Goode M R. *The psychological consequences of money [J]. Science, 2006, 314(5802): 1154-1156.*