



ELSEVIER

Available online at www.sciencedirect.com



Personality and Individual Differences 43 (2007) 589–596

PERSONALITY AND
INDIVIDUAL DIFFERENCES

www.elsevier.com/locate/paid

Reciprocity and the belief in a just world

John E. Edlund ^{*}, Brad J. Sagarin, Brian S. Johnson

Northern Illinois University, Department of Psychology, Dekalb, IL 60115, United States

Received 24 August 2006; received in revised form 13 December 2006; accepted 5 January 2007

Available online 2 March 2007

Abstract

Reciprocity is an important social norm that regulates interpersonal interactions. This study investigated whether the belief in a just world moderates the responses to a reciprocal obligation. A confederate gave (or did not give) a gift to participants and later solicited the participants to purchase raffle tickets. Participants who were stronger in the belief in a just world purchased more tickets than participants who were weaker in the belief in a just world in the reciprocal gift condition. No difference was found in the no gift condition. Limitations and future directions are discussed.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Belief in a just world; Reciprocity

1. Resistance to the norm of reciprocity

The Hare Krishnas, a sect of Hinduism, flourished in the 1960s and 70s. They were commonly found in airports all across the country. They would give small gifts to travelers (often a flower), and then after giving the gift, they would solicit a donation for their temple. Most people did not want to give a donation to the Hare Krishnas, but they gave one anyway. Just paces away from the Krishnas, the travelers would sometimes be seen throwing the flowers away (Cialdini, 2001).

^{*} Corresponding author. Tel.: +1 815 752 7067; fax: +1 815 753 8088.
E-mail address: jedlund@niu.edu (J.E. Edlund).

Thus, the travelers received a gift they did not want and then gave money to an organization they did not support. Why did this occur?

This occurred because the Hare Krishnas had a firm grasp of the norm of reciprocity. The norm of reciprocity says, “we should try to repay, in kind, what another person has provided us” (Cialdini, 2001, p. 20). According to cultural anthropologists, the norm of reciprocity creates in societies a highly beneficial “web of indebtedness” (Ridley, 1997). Indeed, the norm of reciprocity exists in every known society that has been investigated (Gouldner, 1960). Although some societies have specific rules regarding reciprocity, all investigated societies have some form of the norm.

The norm of reciprocity does not specify the exact nature of the original gift. The norm only states that a debt must be repaid. In fact, the feeling of reciprocity is triggered even if the original debt was forced on the individual (Paese & Gilin, 2000). This is one of the ways the Hare Krishnas succeeded. The travelers did not want the original gift, but once they had it, they felt compelled to reciprocate.

Regan first demonstrated this effect in the laboratory in 1971. In Regan’s study, participants showed up for an experiment purportedly to evaluate paintings. The participants then interacted with a confederate. After rating a series of paintings, a pause was announced in the experiment. The confederate then left the room to get a drink. The confederate returned with two cans of Coke and gave one to the participant. The experiment continued with further ratings. After another pause in the experiment, the confederate solicited the participant to purchase raffle tickets. It was found that participants who were given the Coke purchased twice as many raffle tickets from the confederate compared to those who had not received the Coke.

As Regan (1971) demonstrated, reciprocity does not need to be returned in the same manner in which it was given. The Hare Krishnas gave a gift of flowers and received money in return. Car dealerships give donuts and coffee away to consumers. It is not expected that the consumers will return on a later date with coffee and donuts, but that the consumers will purchase a car from that particular dealership or salesperson. Indeed, perhaps the most effective use of reciprocity occurs when there is only one way to reciprocate – the way the persuader wants the target to behave.

Reciprocal obligations motivate people even if the reciprocation occurs privately (Whatley, Webster, Smith, & Rhodes, 1999). In this study, participants reciprocated the gift of plain M&M’s by making a donation to the “Run for the Kids Foundation”. The donation would be mailed in, either anonymously or with the participant’s name attached. The participants reciprocated the gift with a donation, regardless of whether or not the confederate would be able to learn of the reciprocation. However, donations were larger when the participant’s name was attached.

The nature of the request appears to moderate the reciprocal response. Almost all of the experiments to date have had pro-social requests made of the participants. One exception, Boster, Fed-iuk, and Kotowski (2001), suggest that targets might be immune to reciprocity when faced with an anti-social request. In this study, the confederate was ostensibly in the room to make up a test from the previous semester, while the participant had signed up for an experiment. Before the beginning of the experiment (and test) the confederate left the room to get a drink. The confederate returned and gave a can of Coke to the participant (similar to the Regan, 1971, study). The confederate then cheated on his examination and asked the participant to abed the cheating by not telling the proctor. The gift did not increase the level of compliance with the cheating request.

Despite the fact that there have been numerous investigations into the situational constrains of reciprocity, there have been no reported investigations into individual differences in reciprocity.

The purpose of this paper is to investigate one potential moderator of the reciprocity relationship: a belief in a just world.

Belief in a just world indicates a belief that a person's fate is closely tied to his or her merit (Rubin & Peplau, 1975). This implies that those who have good things happen to them deserve their reward, while those who have bad things happen to them deserve their misfortune (Lerner, 1965). Hundreds of studies have been run using the belief in a just world (typically assessed via the Belief in a Just World Scale: Rubin & Peplau, 1975) as a predictor. Most have focused on aspects of victim blaming (for reviews see Furnham, 2003; Furnham & Proctor, 1989; Hafer & Begue, 2005; Lerner & Miller, 1978), whereas a smaller minority have investigated other areas affected by the belief in a just world (e.g., reactions to one's own outcomes: Hagedoorn, Buunk, & Van de Vliert, 2002; association between attractiveness and positive characteristics: Dion & Dion, 1987).

It appears that differing levels in the belief in a just world leads to different cognitive responses to the stimuli. Correia and Vala (2003) found that people who were stronger in a belief in a just world paid less attention to the causes of victimization and more attention to actual victimization whereas participants who were weaker in the belief in a just world seemed to assess both types of information equally. This suggests that information processing proceeds differently based on the individual's belief in the just world.

The belief in a just world also appears to be activated automatically. Murray, Spadafore, and McIntosh (2005) preconsciously primed individuals with neutral or rape associated terms and then had participants make judgments about the woman rape victim and perpetrator of the crime in an ambiguous story. Participants who were stronger in the belief in a just world who had been primed with the rape related terms derogated the victim more (relative to participants who were weaker in the belief in a just world), suggesting that the belief in a just world is automatically activated (similar to stereotypes).

Murray et al.'s (2005) findings about the automatic nature of the belief in the just world corresponds to Lerner's (1998) speculation that there could be two separate forms of the belief in a just world: a conscious-rational process where blame is assigned to individuals through a series of sensible, rational rules and second process that is pre-conscious where primitive rules of blame are assigned and automatic emotional responses occur.

It also appears that having a strong belief in a just world can have beneficial health effects. Otto, Boos, Dalbert, Schops, and Hoyer (2006) found that flood victims who had a stronger personal belief in a just world had less depression, anxiety, insecurity, hostility, and paranoid thinking following a major flood. The authors concluded that a strong belief in a just world acts as a buffer for mental health.

The majority of the research on the belief in a just world has dealt with negative events. However, Lerner (1974) speculated that those who are stronger in a belief in a just world would engage in good behavior in order to increase their own deservedness, although he never empirically tested this idea. Our research is compatible with this reasoning.

In the present study, we tested whether the belief in a just world would moderate the nature of a reciprocal response to an unsolicited gift. It was hypothesized that those participants who have a strong belief in a just world would be more likely to reciprocate an unsolicited gift compared to participants who have a weaker belief in a just world. At least two mechanisms might produce this predicted pattern. First, it might occur because participants with a strong belief in a just world feel

pressure to avoid the negative fate that might befall someone who refuses to reciprocate a gift. Second, it might occur because strong believers in a just world are more likely to believe that someone who does them a favor deserves to be helped (or else the world would be unfair).

2. Method

2.1. Participants

Two hundred and five students participated in this experiment. There were 54 men and 151 women with a mean age of 18.64 years ($SD = 1.98$). There were 153 Caucasians, 25 African Americans, 15 Hispanics, 7 Asian Americans, and 6 self-identified others. These participants are representative of the participant pool.

Four participants were excluded from the experiment because the confederate overheard the participants talking about the nature of the experiment in a manner that clearly demonstrated that they had been told about the experiment. Four additional participants were excluded due to experimenter error. Twelve participants were excluded due to clear patterns in the data indicating invalid answers (e.g., a clear zig zag that ran through all pages of the survey). Fourteen participants were excluded due to suspicions about the experiment. This led to a final sample size of 171 participants.

2.2. Procedure

Participants were recruited to the experiment in groups of two and randomly assigned to either the control or gift condition. A confederate also arrived to “participate” in the experiment at the same time the other participants arrived. The participants were seated in the same room approximately two feet from one another; however, they were not able to look directly at one another during the course of the experiment.

All participants then completed a brief survey packet (which included the Belief in a Just World Scale; Rubin & Peplau, 1975). After completion of the survey, the experimenter announced that the next portion of the experiment was computerized. The experimenter then took the control participant into a side room where the computer was located. The computerized portion of the experiment consisted of a word-sorting task. The door to this room was then closed to isolate the participant in such a manner that they could not hear any interactions occurring in the main room. The confederate then asked to be excused for a minute and approximately two minutes later the confederate returned with three water bottles in hand (this portion of the procedure was based on Regan, 1971). The confederate gave one of the bottles to the participant saying, “I asked him if I could go and get myself a water, and he said it was OK, so I bought one for you too.” If money was offered, the confederate refused payment. Once the control participant finished the computer task the experimenter took the confederate into the side room. Once the confederate finished the computer task, the experimenter took the experimental participant into the side room. During this time, no interactions between the confederate and control participant occurred.

After completion of the computer task all participants were given a brief time filling survey (Satisfaction With Life Scale: Diener, Emmons, Larsen, & Griffin, 1985). After the brief survey,

the experimenter announced another computer task. Again, the control participant was shown to the computer in the side room – this time the computer task was solving easy anagrams. While the control participant was in the side room the confederate solicited a donation. The confederate indicated that he/she was selling raffle tickets for the Alumni Association. Each ticket cost two dollars to purchase. To avoid the need for cash to change hands, the confederate had sign up sheets on which the participant was able to place their student ID#, the number of tickets they wished to purchase, and their signature. The participant was told the sheet allows the Alumni Association to directly deduct the money from the student's bursar account. This sheet also contained the names of previous ticket purchasers and the number of tickets they purchased. The names and number of tickets that appeared on the sign up sheet were identical for each participant. After the completion of the computer survey, the control participant was shown back to the main room and the confederate completed the computer task. After completion of the computer task the confederate was again seated in the main room and the experimental participant was shown to the side room. While the experimental participant was in the side room the confederate made the same solicitation of the control participant using a fresh sign up sheet.

Next, participants underwent a suspicion probe and debriefing process. Finally, participants were thanked, given credit, and dismissed.

3. Results

The analysis strategy for this study was to first test whether the gift of water significantly increased the number of tickets purchased by participants by using a *t*-test. After establishing that the gift induced reciprocity, we turned to regression to test whether a belief in the just world interacted with the presence of a gift in predicting ticket purchases. Upon establishing that there was a significant interaction, we tested the simple slopes of the interaction.

The first analysis of interest was whether the gift of water was an effective method of inducing reciprocity. Participants who received the gift of a bottle of water purchased significantly more tickets ($M = 1.54$, $SD = 1.05$) than participants who did not receive a gift of a bottle of water ($M = 1.22$, $SD = 1.10$), $t(169) = 1.99$, $p < .05$ (two-tailed).

A preliminary step before conducting regression analyses was to explore whether the assumptions of regression were met. The number of tickets purchased was positively skewed (Skew = 1.52, $SE = .18$). This skew was expected and fits within the existing literature (Regan, 1971), and was not serious enough to warrant any transformations.

Belief in a Just World. Entering the gift of water ($b = .34$, $SE_b = .17$, $p < .05$) and belief in a just world ($b = .01$, $SE_b = .01$, $p > .10$) in the first step of the regression produced a significant effect of gift of water but no significant effect for belief in a just world. The significant effect for the gift of water mirrors the results of the *t*-test above. The non-significant effect for the belief in a just world suggests that belief in a just world does not account for a significant amount of variance in number of tickets purchased across conditions. Entering the belief in a just world by gift of water interaction in the second step of the equation revealed a significant increase in the variance accounted for, $\Delta R^2 = .03$, $F(1,167) = 4.50$, $p < .05$. Examination of the simple effects revealed that when a gift of water is given, those who are stronger in a belief in a just world purchased more tickets than participants who were weaker in a belief in a just world (simple effect: $b = .03$, $SE_b = .01$,

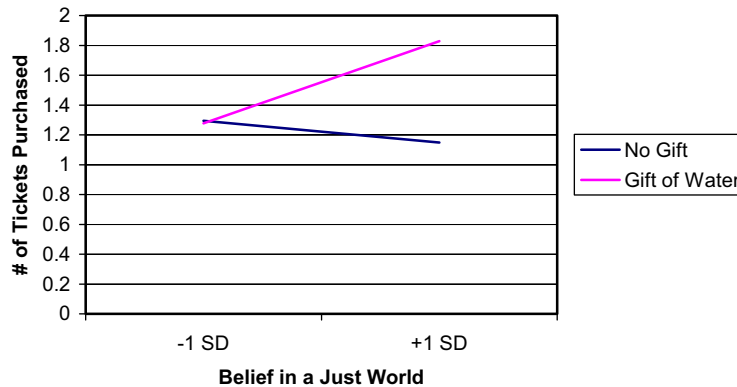


Fig. 1. Mean number of tickets purchased as a function of gift of water and level of a belief in a just world.

$p < .05$). When no gift was given, there was no difference in the number of tickets purchased (simple effect: $b = -.01$, $SE_b = .01$, $p > .10$). See Fig. 1 for a graphical depiction of this interaction.

4. Discussion

This experiment demonstrates that a belief in a just world moderates reciprocal responses to an unsolicited gift. When a gift was given, participants who were stronger in a belief in a just world purchased more tickets than participants who were weaker in a belief in a just world. When no gift was given, belief in a just world had no impact on the number of tickets purchased.

We believe that this occurred because participants who have a strong belief in a just world felt pressure to avoid the negative fate that might befall someone who refuses to reciprocate a gift. This finding could help to explain (a) why reciprocity seems to work regardless of whether the reciprocal action is public or anonymous (Whatley et al., 1999) and (b) why reciprocity does not work when the target is asked to abet cheating (Boster et al., 2001). When the reciprocal action is anonymous, those who are stronger in a belief in a just world will still feel the pressure to avoid the negative fate that might befall someone who refuses to reciprocate a gift. However, in the cheating situation, participants who are stronger in a belief in a just world would be inhibited from abetting the cheating out of concern for the ramifications of their negative behavior. Alternatively, the participants who are higher in the belief in a just world could feel that the cheater does not deserve any help despite the favor because of the larger unjust activity they did (cheating on a test).

Future research should investigate the mediators to the relationship between reciprocal actions and the belief in the just world. Research could assess participants' expectations of negative consequences for failing to reciprocate as well as participants' perceptions of the confederate's deservingness. Another option would be to manipulate the deservingness of the confederate. If the confederate is shown to be undeserving, reciprocity would still occur if the concern is for the self (to avoid the negative fate that might befall someone who did not reciprocate), whereas reciprocity would not occur if it was being done to ensure that the world remains fair. Alternatively,

thought-listing tasks could be used to assess the nature of the participant's cognitions during the reciprocal experience, and whether those cognitions were based on the belief in a just world.

Future research could also examine other individual difference variables to see how they affect reciprocal responses. Some promising possibilities include Social Desirability (Crowne & Marlowe, 1960) and Social Value Orientation (Van Lange, Otten, De Bruin, & Joireman, 1997). Reciprocation is considered a human universal (Gouldner, 1960). Nevertheless, the results of the present study suggest that humans systematically differ in their responses to reciprocal obligations.

Acknowledgements

The study reported in this paper was part of a larger master's thesis investigating reciprocal relationships. We wish to thank Cari Butler, Michael Key, Adam Maldonado, Deanna Phalen, Vickie Rimmelzwaal, and Brooke Walker for their invaluable assistance in data collection. We also wish to thank John Skowronski and Mary Lynn Henningsen for their advice and guidance on this project.

References

- Boster, F. J., Fediuk, T. A., & Kotowski, M. J. (2001). The effectiveness of an altruistic appeal in the presence and absence of favors. *Communication Monographs*, *68*, 340–346.
- Cialdini, R. (2001). *Influence: Science and practice*. Boston: Allyn and Bacon.
- Correia, I., & Vala, J. (2003). When will a victim be secondarily victimized? The effect of observer's belief in a just world, victim's innocence and persistence of suffering. *Social Justice Research*, *16*, 379–400.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349–354.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71–75.
- Dion, K. L., & Dion, K. K. (1987). Belief in the just world and physical attractiveness stereotyping. *Journal of Personality and Social Psychology*, *52*, 775–780.
- Furnham, A. (2003). Belief in a just world: research progress over the past decade. *Personality and Individual Differences*, *34*, 795–817.
- Furnham, A., & Proctor, E. (1989). Belief in the just world: review and critique of the individual differences literature. *British Journal of Social Psychology*, *28*, 365–384.
- Gouldner, A. W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review*, *25*, 161–178.
- Hafer, C. L., & Begue, L. (2005). Experimental research on just-world theory: problems, developments, and future challenges. *Psychological Bulletin*, *131*, 128–167.
- Hagedoorn, M., Buunk, B. P., & Van de Vliert, E. (2002). Do just world believers process unfair authoritative decisions differently? *Applied Psychology: An International Review*, *51*, 126–145.
- Lerner, M. J. (1965). Evaluation of performance as a function of performer's reward and attractiveness. *Journal of Personality and Social Psychology*, *1*, 355–360.
- Lerner, M. J. (1974). Social psychology of justice and interpersonal attraction. In T. Hudson (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press.
- Lerner, M. J. (1998). The two forms of the belief in a just world. In L. Montada & M. J. Lerner (Eds.), *Responses to victimizations and belief in a just world* (pp. 247–269). New York: Plenum Press.

- Lerner, M. J., & Miller, D. T. (1978). Just world research and the attribution process: looking back and ahead. *Psychological Bulletin*, *85*, 1030–1051.
- Murray, J. D., Spadafore, J. A., & McIntosh, W. D. (2005). Belief in a just world and social perception: evidence for automatic activation. *Journal of Social Psychology*, *145*, 35–47.
- Otto, K., Boos, A., Dalbert, C., Schops, D., & Hoyer, J. (2006). Posttraumatic symptoms, depression, and anxiety of flood victims: the impact of the belief in a just world. *Personality and Individual Differences*, *40*, 1075–1084.
- Paese, P. W., & Gilin, D. A. (2000). When an adversary is caught telling the truth. *Personality and Social Psychology Bulletin*, *26*, 75–90.
- Regan, D. (1971). Effects of a favor and liking on compliance. *Journal of Experimental Social Psychology*, *7*, 627–639.
- Ridley, M. (1997). *The origin of virtue: Human instincts and the evolution of cooperation*. London: Penguin Books.
- Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues*, *31*, 65–89.
- Van Lange, P. A. M., Otten, W., De Bruin, E. M. N., & Joireman, J. A. (1997). Development of prosocial, individualistic, and competitive orientations: theory and preliminary evidence. *Journal of Personality and Social Psychology*, *73*, 733–746.
- Whatley, M. A., Webster, J. M., Smith, R. H., & Rhodes, A. (1999). The effect of a favor on public and private compliance: how internalized is the norm of reciprocity. *Basic and Applied Social Psychology*, *21*, 251–259.