UC Berkeley

UC Berkeley Previously Published Works

Title

Gender differences in trust dynamics: Women trust more than men following a trust violation

Permalink

https://escholarship.org/uc/item/2x52g7mr

Authors

Haselhuhn, Michael P Kennedy, Jessica A Kray, Laura J et al.

Publication Date

2015

DOI

10.1016/j.jesp.2014.09.007

Peer reviewed

EISEVIED

Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp



Flash Report

Gender differences in trust dynamics: Women trust more than men following a trust violation



Michael P. Haselhuhn ^{a,1,*}, Jessica A. Kennedy ^{b,1}, Laura J. Kray ^c, Alex B. Van Zant ^c, Maurice E. Schweitzer ^d

- ^a University of California, Riverside, 900 University Avenue, 234 Anderson Hall, Riverside, CA 92521, USA
- ^b Vanderbilt University, 401 21st Avenue South, Nashville, TN 37203, USA
- ^c University of California, Berkeley, 2220 Piedmont Avenue, Berkeley, CA 94720, USA
- ^d University of Pennsylvania, 3730 Walnut Street, Philadelphia, PA 19104, USA

HIGHLIGHTS

- We examine gender differences in how trust changes after transgressions.
- We show that women trust more than men following a violation.
- · Women are less likely than men to lose trust in others following transgressions.
- Women are more likely than men to regain trust after repeated transgressions.
- · Women's greater relational investment underlies these gender differences.

ARTICLE INFO

Article history: Received 24 October 2013 Revised 16 September 2014 Available online 28 September 2014

Keywords: Trust Gender Trust dynamics Trust recovery

ABSTRACT

Despite the importance of trust for efficient social and organizational functioning, transgressions that betray trust are common. We know little about the personal characteristics that affect the extent to which transgressions actually harm trust. In this research, we examine how gender moderates responses to trust violations. Across three studies, we demonstrate that following a violation, women are both less likely to lose trust and more likely to restore trust in a transgressor than men. Women care more about maintaining relationships than men, and this greater relational investment mediates the relationship between gender and trust dynamics.

© 2014 Elsevier Inc. All rights reserved.

Despite the importance of trust for efficient social functioning (Balliet & Van Lange, 2013; Lewicki & Bunker, 1996), trust violations are common (Elangovan & Shapiro, 1998; Lount, Zhong, Sivanathan, & Murnighan, 2008). Trust is fragile (Kramer, 1999), but in some cases it can be restored (e.g., Ferrin, Kim, Cooper, & Dirks, 2007; Schweitzer, Hershey, & Bradlow, 2006). In spite of growing interest in how trust changes over time, we know little about how characteristics of the trusting party influence reactions to untrustworthy behavior. Both personal and situational factors are critical to predicting behavior (Epstein & O'Brien, 1985; Mischel & Shoda, 1995), but trust scholars have mostly focused on situational factors, such as emotion (Dunn & Schweitzer, 2005; Lount, 2010), social status (Lount & Pettit, 2011), and timing of

the trust breach (Lount et al., 2008). We extend knowledge by exploring whether gender is one important personal characteristic that influences trust following a violation.

Trust is a psychological state in which individuals are willing to accept vulnerability due to their positive expectations of the intentions or behavior of another (Rousseau, Sitkin, Burt, & Camerer, 1998). Trust violations occur when people's positive expectations of others are not met. For instance, a trust violation occurs when someone demonstrates a lack of skills required for a role (Butler & Cantrell, 1984) or fails to uphold important ethical principles (Mayer, Davis, & Schoorman, 1995).

Recent research has examined how trust changes and recovers following a violation. Researchers have identified responses that transgressors can use to rebuild trust after it is lost. For instance, scholars have examined whether trust recovers following financial compensation (Desmet, De Cremer, & van Dijk, 2011), substantive responses (e.g., penance and regulation; Dirks, Kim, Ferrin, & Cooper, 2011), and verbal responses such as denials and apologies (Ferrin et al., 2007; Kim, Ferrin, Cooper, & Dirks, 2004; Schweitzer, DeChurch, & Gibson, 2006).

^{*} Corresponding author.

E-mail addresses: michael.haselhuhn@ucr.edu (M.P. Haselhuhn), jessica.kennedy@ owen.vanderbilt.edu (J.A. Kennedy), kray@haas.berkeley.edu (L.J. Kray), vanzant@haas.berkeley.edu (A.B. Van Zant), schweitz@wharton.upenn.edu (M.E. Schweitzer).

¹ The first two authors contributed equally to the paper and are listed in alphabetical order.

Though most trust repair research has focused on actions the transgressor can take to recover trust, recent work has begun to consider how characteristics of the trustor influence trust dynamics. For example, Haselhuhn, Schweitzer, and Wood (2010) examined the role of implicit beliefs about moral character in trust recovery and found that targets who hold incremental beliefs (beliefs that moral character can change) restore their trust in others more than targets who hold entity beliefs (beliefs that moral character is fixed). This work highlights the importance of understanding the social–cognitive factors that shape trust dynamics.

In the current research, we examine how the gender of the trusting party affects responses to trust violations. We test the prediction that trust violations harm women's trust less than men's trust. We postulate that women's trust is relatively resistant to change in the face of untrustworthy behavior and also faster to return to its original, higher state following a transgression. We derive our predictions from socialization accounts of gender differences. According to these accounts, social role expectations for women prescribe that they should be agreeable and warm (Bowles, Babcock, & Lai, 2007; Cuddy, Fiske, & Glick, 2008; Eagly, 1997). These expectations may constrain their responses to trust violations. Women are more relational in their selfconstrual than are men (Cross & Madson, 1997). By conceptualizing themselves in terms of relationships, women are particularly motivated to maintain social connections (Amanatullah, Morris, & Curhan, 2008; Cross, Bacon, & Morris, 2000). Of particular relevance to the trust domain, women-more so than men-are characterized by a desire to form and maintain relationships even at the expense of their personal well-being (unmitigated communion; Amanatullah et al., 2008; Fritz & Helgeson, 1998). Given the well-documented benefits of trust, we refer to this tendency with the evaluation-neutral term relational investment. In this paper, we test the prediction that women's greater relational investment will mediate gender differences in trust dynamics following a transgression.

Our work complements previous research on gender differences in trust in economic games. Though the economic literature has generally documented null effects of gender (e.g., Ashraf, Bohnet, & Piankov, 2003; Croson & Buchan, 1999) or a tendency for men to exhibit more trust than women (e.g., Buchan, Croson, & Solnick, 2008; Chaudhuri & Gangadharan, 2003; Innocenti & Pazienza, 2006; Slonim, 2004), this research has primarily focused on one-shot interactions. We distinguish our research from prior work by measuring trust in the context of an exchange relationship with an established history of behavior. We expect that repeated interactions will activate relational investments (Gulati, 1995) and therefore lead women to maintain higher degrees of trust than men following a transgression.

Our research also speaks to work on gender differences in cooperation in groups. A recent meta-analysis on cooperation in social dilemmas indicates that men become more cooperative than women over the course of repeated interactions (Balliet, Li, Macfarlan, & Van Vugt, 2011). Although cooperation in these dilemmas may reflect trust, social dilemma paradigms confound trust with other preferences and motivations that can also account for cooperation, such as a general intolerance for group conflict (Balliet et. al, 2011). In our research, we focus specifically on trust following transgressions within dyadic relationships, where gender differences in relational construal are pronounced (e.g., Cross et al., 2000).

Finally, our work is also distinct from prior research investigating gender differences in forgiveness. Although a recent meta-analysis found no differences between men and women in the tendency to forgive (Fehr, Gelfand, & Nag, 2010), other scholars have argued that women are more forgiving than men (see Miller, Worthington, & McDaniel, 2008). Importantly, forgiveness and trust recovery are distinct constructs: Individuals may forgive a counterpart's prior transgressions but fail to develop positive expectations about their counterpart's future actions (Wade, Worthington, & Haake, 2009). That is, individuals may forgive others without restoring trust in them.

Forgiveness is retrospective, whereas trust is prospective. As a result, findings from prior forgiveness studies may offer limited insight into trust dynamics.

Across three studies, we tested our prediction that women's trust would be less harmed than men's following a transgression. Our studies examine gender differences in trust dynamics following unambiguous trust violations. In Study 1, we examined the extent to which trust endured following repeated violations. In Study 2, we explored the extent to which trust could be rebuilt once it had been extinguished. In Study 3, we explored the mediating role of relational investment in explaining how gender influences trust.

Study 1

Method

Participants

Students (N = 196; 58% female) at a large East Coast university participated in exchange for \$10 and the chance to earn additional money based on their choices during the experiment.

Procedure

Participants played a repeated trust game designed to measure changes in trust over time (Berg, Dickhaut, & McCabe, 1995). Participants believed that they would be playing several rounds of a game with a randomly selected counterpart. In reality, all participants played the same role against a common, computer-simulated counterpart (see Haselhuhn et al., 2010; Schweitzer et al., 2006).

We informed participants that, in each round, they would receive \$6, which they could either pass to their counterpart or keep. If they chose to pass the \$6 to their counterpart, the money would be tripled (to \$18). The counterpart could then either keep the \$18 or pass half of the money (\$9) back. Consistent with prior work (Berg et al., 1995; Haselhuhn et al., 2010; Schweitzer et al., 2006), we operationalized trust as participants' decision to pass their endowment.

We explained to participants that both players in the game would make decisions simultaneously, and that players would learn about their counterpart's decision regardless of what their counterpart chose. For example, if participants chose not to pass their endowment, they would still learn whether their counterpart would have returned \$9.

Our experiment unfolded in three stages. First, in Rounds 1–4, we exposed participants to trustworthy behavior. To build initial trust, counterparts chose to return half of their endowment in each of these rounds.

Second, in Rounds 5–6, the counterpart demonstrated untrustworthy behavior by keeping the entire endowment. Following other scholars (e.g., Haselhuhn et al., 2010; Malhotra & Murnighan, 2002; Schweitzer et al., 2006), we used multiple rounds of untrustworthy actions to operationalize untrustworthy behavior.

Third, in Round 7, we measured trust by observing passing decisions. Before this round, we announced that this was the last round. The decision to pass in the final round, after the endgame has been announced, represents the best measure of trust (see Haselhuhn et al., 2010; Malhotra & Murnighan, 2002). Passing decisions in the final round unconfound trust from strategic reasons for passing, such as reputation-building to elicit future cooperation. These strategic reasons for passing could influence behavior in earlier rounds (Bohnet & Huck, 2004; Engle-Warnick & Slonim, 2004).

To gauge suspicion, we asked participants to state what they thought the study was about at its conclusion. Twelve participants (eight male) voiced suspicion regarding either the specific pattern of counterpart responses or about the existence of a human counterpart. The reported analyses exclude these twelve participants; results remain identical if these individuals are included.

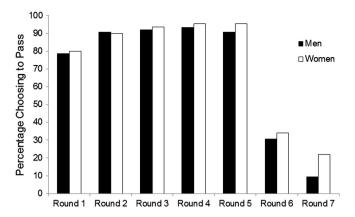


Fig. 1. Percentage of participants who passed their endowments in each round of the trust game in Study 1.

Results and discussion

Fig. 1 depicts passing decisions across all seven rounds. We found no significant differences in trust between men and women in Rounds 1–6, all $\chi^2(1,184)$'s < 1.65 and, p's > .20. After four trustworthy rounds, 93% of participants (90.7% of men; 95.4% of women) chose to pass their endowment in Round 5. Trust substantially declined following untrustworthy actions by the programmed counterpart in Rounds 5 and 6. In the final round, compared to passing decisions in Round 5, far fewer men (9%, $\chi^2[1,75] = 586.29$, p < .001) and women (22%, $\chi^2[1,109] = 1341.54$, p < .001) passed their endowment.

To test our hypothesis, we examined passing decisions in Round 7 as a function of participant gender. Supporting our prediction, women were more likely to display trust behavior after repeated and unambiguous untrustworthy actions than were men, $\chi^2(1,184) = 5.10$ and p = .02.

We then conducted a robustness check designed to rule out two alternative explanations. To ensure that behavioral differences in the final round were not driven by differences in initial levels of trust or trust prior to the violation, we ran a follow-up logistic regression that included Round 1 and Round 5 passing decisions as covariates. Gender remained a significant predictor of trust in the final round (b = 1.00, SE = .47, Wald $\chi^2[1, N = 184] = 4.59$, p = .03); the effects of Round 1 and Round 5 passing decision were not significant. These results suggest that though transgressions harmed trust for both men and women, they reduced trust significantly more for men than for women.

Study 2

Study 1's findings suggest that women's trust is more enduring than men's in the face of untrustworthy behavior. We extend our investigation in Study 2 by considering trust following a different untrustworthy experience. Prior work (e.g., Lount et al., 2008) has found that the timing of a relationship breaches matters. Whereas participants in Study 1 experienced a relationship that was initially trustworthy followed by an untrustworthy episode, in Study 2 participants are *initially* exposed to a counterpart's untrustworthy actions, followed by an attempt to rebuild trust. We expected women to restore trust more than men.

Method

Participants

Participants were 143 students (45% female) at a large East Coast university who participated in exchange for \$10 and the chance to earn additional money based on their choices during the experiment.

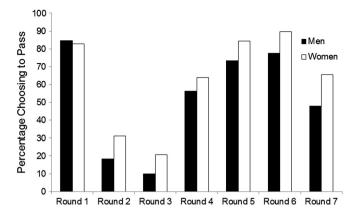


Fig. 2. Percentage of participants who passed their endowments in each round of the trust game in Study 2.

Procedure

We used a repeated trust game procedure similar to Study 1. As in Study 1, our experiment unfolded in three stages. In Rounds 1–3, we exposed participants to untrustworthy behavior. Counterparts returned no money in each of these first three rounds. Prior to Round 4, counterparts sent a message to participants apologizing for their violation ("Hey, sorry I gave you a bad deal. I can change and return \$9 from here on out") and acted in a trustworthy way by returning half of the endowment in Rounds 4–6. Finally, in Round 7 (the announced final round), we measured trust recovery by observing participants' passing decisions.

In our suspicion check, 14 participants (10%) expressed some degree of suspicion about their counterpart. We report analyses excluding these fourteen participants; the pattern of results remains the same when these individuals are included.

Results

Fig. 2 depicts passing decisions across all seven rounds. Replicating Study 1, we found no significant differences in initial trust between women (83%) and men (85%) in Round 1, $\chi^2(1,129)=.07$ and p=.79. However, consistent with Study 1, a marginally greater proportion of women than men passed the endowment after they experienced betrayal in Round 2 (31% vs. 18%, $\chi^2[1,129]=2.83$, p=.09) and Round 3 (21% vs. 10%, $\chi^2[1,129]=2.98$, p=.08). Compared to passing decisions in Round 1, we observed a significant trust reduction for both men ($\chi^2[1,71]=302.18$, p<.001) and women ($\chi^2[1,58]=156.60$, p<.001) in Round 3.

The counterpart's apology and trustworthy actions repaired trust. In Round 7 (the final round), compared to passing decisions in Round 3, a greater proportion of men ($\chi^2[1,71] = 115.53$, p < .001) and women ($\chi^2[1,58] = 71.03$, p < .001) passed their endowment.

To test our trust recovery hypothesis, we examined passing decisions in Round 7 as a function of participant gender. As predicted, women were more likely to trust their counterpart following repeated transgressions than were men, $\chi^2(1,129)=4.02$ and p=.045. In Round 7, 66% of women passed their endowment, compared to 48% of men.² We once again tested whether the effect of gender holds when controlling for initial levels of trust. Passing decisions in Round 1 again emerged as a significant predictor of decisions in the final round (b=2.09, SE=.61, Wald $\chi^2[1, N=129]=11.88$, p=.001), and the effect of gender remained significant, b=0.86, SE=.39, Wald $\chi^2(1, N=129)$

² Although behavior in the final round represents the best measure of genuine trust, we also examined gender differences in trusting behavior in Rounds 5 and 6 following the counterpart's trust recovery efforts. A greater percentage of women than men passed the endowment in Round 5 (84% vs. 73%), although the difference was not significant, $\chi^2(1129) = 2.38$ and p = .12. In Round 6, a marginally greater proportion of women than men passed their endowment (90% vs. 77%), $\chi^2(1129) = 3.35$ and p = .067.

129) = 4.80, and p = .03. These results illustrate a greater willingness for women to restore trust following a violation than men.

Study 3

The results of Studies 1 and 2 demonstrate that women's trust is more enduring than men's in the face of untrustworthy behavior. In Study 3, we extend our investigation in four ways. First, we test relational investment as a mediating mechanism of the gender difference in trust recovery. Second, we measure trust in the context of a typical business transaction rather than in the abstract setting of the trust game. Third, we measure attitudinal trust, rather than behavioral trust as we did in Studies 1 and 2. This enables us to distinguish trust more clearly from other possible motives for behavior, such as gender differences in the desire to avenge past transgressions (see Cota-McKinley, Woody, & Bell, 2001). Finally, we include a control condition in order to address the possibility that gender differences naturally emerge over time, regardless of whether or not trust is violated. We expect women to invest more in relationships than men, and we expect this difference in relational investment to influence trust following a violation. Specifically, compared to men, we expect women to maintain greater trust in others following a violation. We do not expect differences in relational investment to influence trust when no violation has occurred.

Method

Participants

Amazon MTurk workers (N=532) completed the study in exchange for \$1.00. Seven questions checked for participants' attention. Participants (11.7%) who failed to answer correctly were excluded from further analysis, resulting in a sample of 470 participants (47% female).

Materials and procedure

Participants first completed a measure of relational investment, described below. Next, participants read a scenario asking them to imagine that they were in charge of purchasing office equipment for their company (see supplementary materials). Participants were randomly assigned to either a trust violation experimental condition or a control (no violation) condition.³

All participants read that, due to budget constraints, their company was interested in purchasing a number of refurbished computers as opposed to new machines. Participants were told that they had recently signed a contract with a supplier to purchase a number of machines in "as-is" condition; the computers would be delivered to the company in separate batches over the next few weeks.

In the trust violation condition, participants read that the first batch of computers looked to be in good shape, and the supplier stated that they were in good working order. After receiving this information, participants reported their initial trust in the supplier. Next, participants read that the first batch of computers quickly began to fail, and a worker at a local repair shop stated that the computers were recently serviced for the same issue. Following this apparent trust violation, participants were told that the supplier apologized and that no problems arose with the computers received in the next delivery. They once again reported their trust in the supplier following this final shipment.

The control condition followed a very similar procedure. However, in this condition, no trust violation occurred. The computers worked after both shipments. As in the experimental condition, we measured

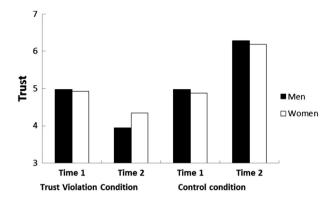


Fig. 3. Trust across time by gender in Study 3.

trust at two points in time: immediately preceding the initial shipment and following the final shipment.

Relational investment

To capture the extent to which individuals were concerned about and invested in their relationships with others, we measured unmitigated communion, a personality dimension characterized by a high concern for others and a desire to avoid straining relationships (Amanatullah et al., 2008; Fritz & Helgeson, 1998). Specifically, we used the 9-item unmitigated communion scale developed by Fritz and Helgeson (1998). The scale includes statements such as "For me to be happy, I need others to be happy," and "I often worry about others' problems." Agreement with each statement was indicated on 5-point scales with higher numbers indicating a stronger relational focus ($\alpha=.83$).

Trust

We measured trust by asking participants the extent to which they agreed with the following statements: "The seller is trustworthy;" "I would be willing to rely on the seller to do the right thing;" and "I would never trust the seller again" (reverse-scored). Responses were made on 7-point scales with higher scores indicating greater trust. Reliability was adequate for both the initial $(\alpha=.78)$ and final $(\alpha=.93)$ trust measures.

Results

Trust

Fig. 3 depicts trust by gender and experimental condition; Table 1 provides descriptive statistics. We expected women's trust to be greater than men's following a trust violation, but not when a counterpart consistently behaved in a trustworthy manner. To test this prediction, we conducted a mixed-model ANOVA with time as a within-subject variable, and gender and experimental condition as between-subjects variables. As predicted, we found a significant three-way interaction, F(1,466) = 5.15, p = .02, and $\eta_p^2 = .01$. To understand the source of this interaction, we examined the trust violation and control conditions separately.

We first observed a significant trust X gender interaction in the violation condition, F(1,153) = 5.59, p = .02, and $\eta_p^2 = .04$. Men and women did not differ in their initial level of trust (time 1) [t(153) = -0.36, p = .72, d = 0.06] but women were significantly more trusting following the seller's untrustworthy behavior and recovery attempts (time 2), t(153) = 2.17, p = .03, and d = 0.35.

We next examined trust over time in the control condition to determine the extent to which women's trust generally increases more than men's trust. We found no interaction between gender and trust, F(1,313) = .04, p = .84, and $\eta_p^2 < .001$. Men and women did not differ in their trust at either time 1 [t(313) = -1.06, p = .29, d = 0.12] or time 2, t(313) = -1.20, t(313) = -1.2

³ The sample sizes in the violation (n=155) and control (n=315) conditions were unequal due to a study administration error. To ensure that the difference in sample sizes did not affect our results, we conducted analyses with a randomly-selected subsample of those in the control condition (n=163). The pattern and significance of the three-way interaction were unchanged, F(1,314)=4.80, p=.03, and $\eta_p^2=.02$.

Table 1Means and standard deviations (in parentheses) by experimental condition and gender in Study 3.

	Condition			
	Trust violation		Control	
Trust Initial trust Final trust	Male 4.97 (1.00) 3.95 (1.15)	Female 4.92 (0.89) 4.34 (1.12)	Male 4.98 (0.94) 6.28 (0.69)	Female 4.88 (0.88) 6.19 (0.63)

that gender differences in trust emerge following trust violations; we did not find that trust simply develops over time more strongly for women than it does for men.

Relational investment

We expect relational investment to be greater for women than it is for men following a violation. As a result, following a trust violation, we expect trust levels to be greater for women than they are for men. To test this hypothesis, we began by examining the links between gender, relational investment and trust in the trust violation condition. Within the trust violation condition, women (M = 3.37, SD = 0.75) reported greater unmitigated communion than did men (M = 3.10, SD = 0.71), F(1,153) = 5.54, p = .02, and $\eta_p^2 = .04$. We next tested whether unmitigated communion could explain gender differences in trust at time 2, which we depict in Fig. 4. Controlling for initial levels of trust, bias-corrected bootstrapping analyses with 10,000 resamples (Preacher & Hayes, 2008) revealed a significant indirect effect of gender, Mediated effect = .08, SE = .06, and 95% CI = .01–.23. As the confidence interval does not include zero, this analysis supports our conclusion that relational investment mediated the relationship between gender and trust following a violation.

We followed similar procedures to test for the potential mediating role of relational investment in the control condition. Once again, women (M=3.45, SD=0.70) reported greater unmitigated communion than did men (M=3.03, SD=0.78), F(1,313)=25.73, p<.001, and $\eta_p^2=.08$. However, controlling for initial levels of trust, bias-corrected bootstrapping analyses with 10,000 resamples (Preacher & Hayes, 2008) revealed no indirect effect of gender, Mediated effect =.007, SE=.007, and 95% CI=-.04-.06. Together, these analyses suggest that gender's effect on relational investment is only relevant in predicting trust over time when a trust violation has occurred.

General discussion

Across three studies, we examined the relationship between gender and trust dynamics. We drew from socialization theories of gender (Bowles et al., 2007; Cuddy et al., 2008; Eagly, 1997) to predict that concern for relationships would lead women, more so than men, to maintain trust following a counterpart's transgressions. Consistent with this explanation, women were more likely than men to maintain trust in the face of repeated untrustworthy actions (Study 1), and were more likely to regain trust in a previously untrustworthy counterpart (Study 2). These effects were mediated by women's greater relational investment (Study 3). Taken together, these results demonstrate that compared to men, women's heightened concern about relationships facilitates the maintenance and restoration of trust in others following a violation.

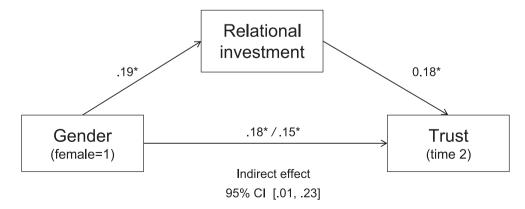
Although scholars have long known that both personal and situational factors are critical to predicting behavior (Epstein & O'Brien, 1985; Mischel & Shoda, 1995), little research has examined personal factors that affect trust. Past research has largely focused on the role of situational factors, such as emotion (Dunn & Schweitzer, 2005; Lount, 2010), social status (Lount & Pettit, 2011), and timing of the trust breach (Lount et al., 2008) to predict trust restoration. Our research shows that gender is one important personal characteristic that influences trust recovery.

Our findings deepen our understanding of gender differences in competitive settings, such as distributive negotiation (see Haselhuhn & Kray, 2012 and Kray & Thompson, 2005 for reviews). Competitive contexts promote deception (Schweitzer, De Church & Gibson, 2006), and recent research suggests that negotiators deceive women more than men (Kray, Kennedy, & Van Zant, in press). Because women maintain trust following trust violations to a greater extent than do men, women may be perceived as more gullible by others and they may be at greater risk of exploitation than men.

Conversely, in integrative negotiation contexts in which negotiators must work together to reach mutually-beneficial outcomes, women's trust may be an asset. Integrative contexts require sharing information to reach optimal agreements (Lewicki, 2006; Murnighan, Babcock, Thompson, & Pillutla, 1999). Women's relatively persistent trust may enable them to overlook minor misunderstandings or initial competitive posturing and collaborate with the other party to reach a creative solution, whereas men may lose trust quickly and be less willing to collaborate with a counterpart after a minor violation. Future research should examine how greater trust affects performance across different organizational contexts. Given the myriad benefits of high trust, perhaps the best solution for women and men alike to build trust, draw careful inferences from violations, and stand ready to restore trust.

Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jesp.2014.09.007.



* p < .05. Note. Diagram shows standardized regression coefficients. Analysis controls for trust at time 1.

Fig. 4. Mediation of gender differences following a trust violation and recovery attempt in Study 3.

References

- Amanatullah, E. T., Morris, M. W., & Curhan, J. R. (2008). Negotiators who give too much: Unmitigated communion, relational anxieties, and economic costs in distributive and integrative bargaining. *Journal of Personality and Social Psychology*, 95, 723–738.
- Ashraf, N., Bohnet, I., & Piankov, N. (2003). Decomposing trust and trustworthiness. Experimental Economics, 9, 193–208.
- Balliet, D., Li, N.P., Macfarlan, S. J., & Van Vugt, M. (2011). Sex differences in cooperation: A meta-analytic review of social dilemmas. Psychological Bulletin, 137, 881–909.
- Balliet, D., & Van Lange, P. A.M. (2013). Trust, punishment, and cooperation across 18 societies: A meta-analysis. Perspectives on Psychological Science, 8, 363–379.
- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. Games and Economic Relayior. 10, 122–142.
- Bohnet, I., & Huck, S. (2004). Repetition and reputation: Implications for trust and trustworthiness when institutions change, *American Economic Review*, 94, 362–366.
- Bowles, H. R., Babcock, L., & Lai, L. (2007). Social incentives for gender differences in the propensity to initiate negotiations: Sometimes it does hurt to ask. *Organizational Behavior and Human Decision Processes*. 103, 84–103.
- Buchan, N., Croson, R. T. A., & Solnick, S. (2008). Trust and gender: An examination of behavior and beliefs in the Investment Game. *Journal of Economic Behavior and Organization*, 68, 466–476.
- Butler, J. K., Jr., & Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports*, 55, 19–28.
- Chaudhuri, A., & Gangadharan, L. (2003). Gender differences in trust and reciprocity. Unpublished manuscript.
- Cota-McKinley, A. L., Woody, W. D., & Bell, P. A. (2001). Vengeance: Effects of gender, age, and religious background. Aggressive Behavior, 27, 343–350.
- Croson, R., & Buchan, N. (1999). Gender and culture: International experimental evidence from trust games. American Economic Review, 89, 386–391.
- Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*, 78, 791–808.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. Psychological Bulletin, 122, 5–37.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. Advances in Experimental Social Psychology, 40, 61–149.
- Desmet, P. T., De Cremer, D., & van Dijk, E. (2011). In money we trust? The use of financial compensations to repair trust in the aftermath of distributive harm. *Organizational Behavior and Human Decision Processes*, 114, 75–86.
- Dirks, K. T., Kim, P. H., Ferrin, D. L., & Cooper, C. D. (2011). Understanding the effects of substantive responses on trust following a transgression. *Organizational Behavior* and Human Decision Processes, 114, 87–103.
- Dunn, J., & Schweitzer, M. (2005). Feeling and believing: The influence of emotion on trust. *Journal of Personality and Social Psychology*, 88, 736–748.
- Eagly, A. H. (1997). Sex differences in social behavior: Comparing social role theory and evolutionary psychology. *American Psychologist*, 52, 1380–1383.
- Elangovan, A.R., & Shapiro, D. L. (1998). Betrayal of trust in organizations. Academy of Management Review, 23, 547–566.
- Engle-Warnick, J., & Slonim, R. L. (2004). The evolution of strategies in a repeated trust game. *Journal of Economic Behavior & Organization*, 55, 553–573.
- Epstein, S., & O'Brien, E. J. (1985). The person-situation debate in historical and current perspective. Psychological Bulletin, 98, 513–537.
- Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. Psychological Bulletin, 136, 894–914.
- Ferrin, D. L., Kim, P. H., Cooper, C. D., & Dirks, K. T. (2007). Silence speaks volumes: The effectiveness of reticence in comparison to apology and denial for responding to integrity-and competence-based trust violations. *Journal of Applied Psychology*, 92, 893–908.
- Fritz, H. L., & Helgeson, V. S. (1998). Distinctions of unmitigated communion from communion: Self-neglect and overinvolvement with others. *Journal of Personality and Social Psychology*, 75, 121–140.
- Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. Academy of Management Journal, 38(1), 85–112.

- Haselhuhn, M. P., & Kray, L. J. (2012). Gender and negotiation. In B. Goldman, & D. Shapiro (Eds.), The psychology of negotiations in the 21st century workplace. Society of industrial/organizational psychology organizational frontiers series. United Kingdom: Routledge.
- Haselhuhn, M. P., Schweitzer, M. E., & Wood, A.M. (2010). How implicit beliefs influence trust recovery. *Psychological Science*, 21, 645–648.
- Innocenti, A., & Pazienza, M. G. (2006). Altruism and gender in the Trust Game. *Unpublished manuscript*.
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: The effects of apology versus denial for repairing competence-versus integrity-based trust violations. *Journal of Applied Psychology*, 89, 104–118.
- Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569–598.
- Kray, L. J., Kennedy, J. A., & Van Zant, A. B. (2014s). Not competent enough to know the difference? Gender stereotypes about women's ease of being misled predict negotiator deception. Organizational Behavior and Human Decision Processes (in press).
- Kray, L. J., & Thompson, L. (2005). Gender stereotypes and negotiation performance: A review of theory and research. In B. Staw, & R. Kramer (Eds.), Research in organizational behavior series, 26. (pp. 103–182).
- Lewicki, R. J. (2006). Trust, trust development, and trust repair. In M. Deutsch, P. T. Coleman, & E. C. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice*. San Francisco, CA: Jossey-Bass.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. M. Kramer, & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*. Thousand Oaks, CA: Sage.
- Lount, R. B., Jr. (2010). The impact of positive mood on trust in interpersonal and intergroup interactions. *Journal of Personality and Social Psychology*, 98, 420–433.
- Lount, R. B., Jr., & Pettit, N. C. (2011). The social context of trust: The role of status. Organizational Behavior and Human Decision Processes, 117, 15–23.
- Lount, R. B., Jr., Zhong, C. B., Sivanathan, N., & Murnighan, J. K. (2008). Getting off on the wrong foot: The timing of a breach and the restoration of trust. *Personality and Social Psychology Bulletin*, 34, 1601–1612.
- Malhotra, D., & Murnighan, J. K. (2002). The effects of contracts on interpersonal trust. *Administrative Science Quarterly*, 47, 534–559.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20, 709–734.
- Miller, A. J., Worthington, E. L., & McDaniel, M.A. (2008). Gender and forgiveness: A metaanalytic review and research agenda. *Journal of Social and Clinical Psychology*, 27, 843–876.
- Mischel, W., & Shoda, Y. (1995). A cognitive–affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.
- Murnighan, J. K., Babcock, L., Thompson, L., & Pillutla, M. (1999). The information dilemma in negotiations: Effects of experience, incentives, and integrative potential. *International Journal of Conflict Management*, 10, 313–339.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393–404.
- Schweitzer, M., DeChurch, L., & Gibson, D. (2006). Conflict frames and the use of deception:

 Are competitive negotiators less ethical? *Journal of Applied Social Psychology*, 10,
- Schweitzer, M., Hershey, J., & Bradlow, E. (2006). Promises and lies: Restoring violated trust. Organizational Behavior and Human Decision Processes, 101, 1–19.
- Slonim, R. (2004). Gender selection discrimination: Evidence from a Trust Game. Unpublished manuscript.
- Wade, N. G., Worthington, E. L., & Haake, S. (2009). Comparison of explicit forgiveness interventions with an alternative treatment: A randomized clinical trial. *Journal of Counseling and Development*, 87, 143–151.