You can't 'fake it till you make it': Cooperative motivation does not help proself trustees

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Acar-Burkay, S., Schei, V., Beersma, B. & Warlop, L. (2021). You can't 'fake it till you make it': Cooperative motivation does not help proself trustees. Journal of Experimental Social Psychology, 92, 104078. https://doi.org/https://doi.org/10.1016/j.jesp.2020.104078

This is the accepted version of an article appearing in:
Journal of Experimental Social Psychology

Publisher's version: DOI: https://doi.org/https://doi.org/10.1016/j.jesp.2020.104078

Abstract

Cooperative motivation can be rooted in individual differences as well as in external factors, such as instructions from superiors, incentive schemes, policy agendas, or social relationships. Whereas cooperative motivation has generally been found to increase trust, in five studies conducted across different contexts (scenario-based, online with monetary consequences that were contingent on participants' decisions, in-class and laboratory face-to face negotiations), convergent evidence was found showing that trustees were trusted more when they were externally motivated to act cooperatively (vs. individualistically), though only when they already had a prosocial (vs. proself) social value orientation – i.e., internally driven positive care for others' (vs. their own) well-being. This finding was observed even when trustors had no explicit information about whether or how trustees were motivated by internal or external factors. The mediation analyses indicate that this effect is driven by trustors' perceptions of trustees' authenticity. Taken together, insight into how trustees' personalities and situations interact in predicting the level of trust granted to them is provided.

Keywords: trust, social motives, social value orientation, motivational orientation

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Cooperative motivation does not help proself trustees

Trust, "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intensions or behavior of another" (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395), is key to joint decision making. Trust enables trustors to rely on trustees and to take a leap of faith when trustees' future behavior is somewhat uncertain. It enables cooperation, reduces transaction costs, facilitates information exchanges, and hence contributes to the effective functioning of social relationships (Zak, 2012); however, trust cannot always be easily granted. Although trusting others provides opportunities for positive outcomes when trust is honored, it also exposes the trustor to the risk of betrayal (Huang & Murnighan, 2010; Schilke & Huang, 2018). To avoid being betrayed, people have developed ways of deciding who and how much to trust (Shackelford & Buss, 1996). Accordingly, an important question in the study of trust is under which conditions and why some individuals are trusted more than others.

One important factor in this respect is the social motivation of trustees, i.e., the weight they attach to the welfare of others in relation to their own welfare (McClintock, 1972; Maccrimmon, & Messick, 1976). Trustees who are perceived to have a social motivation that reflects that they attach weight to others' outcomes beyond pure self-interest are typically trusted more than those whose social motivation reflects pure self-interest (Righetti & Finkenauer, 2011; Wieselquist, Rusbult, Foster, & Agnew, 1999). Social motivation can have its roots in both dispositional and situational factors (De Dreu, Nijstad, & Van Knippenberg, 2008). For instance, team members may prefer that their fellow team members perform well because they are evaluated as a group (a situational factor) or because they generally hope that others do well (a dispositional factor).

Essentially, this means that sometimes, trustees may find themselves in situations that do not "fit" their personal inclinations, or in other words, in which there is an incongruence between the situational and dispositional roots of their social motivation. For instance, individuals who generally care only about their own individual outcomes without much regard for others (i.e., proselfs) may find themselves participating in work teams that externally motivate them to act cooperatively. Likewise, individuals who genuinely care about others' well-being (i.e., prosocials) may be assigned to short-term profit-maximizing duties, which externally motivate them to act individualistically.

The question addressed concerns how trustors respond to such situations. That is, when making the decision to trust someone, does it matter whether cooperation is deemed to be internally driven or externally regulated? Building on previous research on the importance of authenticity and sincerity for trust building (DePaulo & Kashy, 1998), through five studies, we argue and show that situationally driven cooperation that is congruent with a trustee's prosocial disposition leads to a higher authenticity assessment, which in turn leads to higher trust, than situationally driven cooperation that is incongruent with a trustee's proself disposition. Thus, for prosocials, cooperative motivation reinforces how much they are trusted; however, for proselfs, cooperative motivation does not help.

Dispositional Social Motives, Situational Social Motives, and Trust

Like other dispositions, dispositional social motivation does not need to directly manifest itself on every occasion but rather may be conceptualized as the cumulative frequency of an individual's choices for specific distribution outcomes between oneself and others over time. In the literature, scholars have commonly used the term *Social Value Orientation* (SVO) when studying social motivation as dispositional (e.g., Van Lange, 1999).

However, as noted previously, social motivation may also be triggered extrinsically by situational factors, such as by managerial instructions (Deutsch, 1960), by providing group or

individual incentives for performance (De Dreu, Giebels, & Van de Vliet, 1998), by referring to others with which one interacts as partners versus opponents (Burnham, McCabe, & Smith, 2000), or by creating an expectation of future interactions (Ben-Yoav & Pruitt, 1984). Scholars have widely used the term *Motivational Orientation* (MO) when studying social motivation as externally, or situationally, driven (e.g., Deutsch, 1960; Olekalns & Smith, 2018; Weingart, Bennett, & Brett, 1993). Accordingly, MO refers to the transient preferences for a distribution of outcomes imposed by the situation and the individual experiencing the situation. Thus, MO can be conceptualized as a momentary, transient, instrumental concern for others' (vs. one's own) well-being, whereas SVO can be conceptualized as an inherent, stable, enduring, genuine concern for others' (vs. one's own) well-being.

In line with psychology researchers' tradition of focusing on either traits or states (Judge & Zapata, 2015), previous research on the effect of social motivation on trust has focused exclusively on examining the effects of either SVO or MO without assessing their combined effects on trust. Previous research suggests that SVO and MO generally have similar effects on behavior (De Dreu, Weingart, & Kwon, 2000; Druckman, 1994) and on trust in that trustees' prosocial SVO and cooperative MO both evoke higher trust than proself SVO and individualistic MO, respectively (De Dreu et al., 1998).

However, although this research has provided insights into how trustees' SVO and MO influence trust when assessed independently, to the best of our knowledge, no research thus far has examined the combined (i.e., interactive) effect of individuals' SVO and MO on the extent of the trust placed in them by others. As such, the way trustors react to incongruences between SVO and MO is unknown. This reflects an important gap in the understanding of the antecedents of trust as it is unknown whether trust can be fostered by providing trustees who have a proself SVO with a cooperative MO or whether cooperative MO will only foster trust when trustees already have a prosocial SVO. Clearly, a lack of prior

interest in this question also has important practical implications as it implies that the circumstances under which external factors that aim to increase trust will and will not be effective are not understood. Therefore, examining the combined effects of SVO and MO on trust is the aim of this paper.

It is posited that SVO and MO will jointly influence trust placed in trustees. As stated by Kurt Lewin back in 1935, social behavior is a function of the person and the environment; however, despite this nearly universally accepted premise both in psychology and in organizational behavior (Judge & Zapata, 2015), interactionalist studies of behavior are not common (Lucas & Donnellan, 2009). Nevertheless, it is worth noting that this interactionist view of personality and social behavior is gaining momentum in the literature (e.g., Van Knippenberg & Hirst, 2020).

In line with Lewin's proposition, Van Lange (2000) argued that behavioral outcomes in interpersonal relations are best predicted by a disposition × situation interaction, such that the influence of disposition should be more pronounced than the influence of the situation under uncertain or risky circumstances. Similarly, because trusting others inherently involves uncertainty and risk, we suggest that trustees' disposition towards a certain social motive (i.e., SVO) will be weighted more heavily in decisions regarding whether to trust them than situational factors influencing their social motivation (i.e., MO) by trustors making trust decisions.

This prediction is made because qualities such as honesty, genuineness, and authenticity have been found to be important preconditions for trust (DePaulo & Kashy, 1998; Krumhuber et al., 2007). What individuals value most in their relationships is the authenticity of someone who can be relied upon not to betray their trust. Kernis (2003, p. 14) stated that "behaving authentically means acting in accord with one's values, preferences, and needs as opposed to acting merely to please others or to attain rewards or avoid punishments through

acting 'falsely.'" Indeed, trustworthy partners are generally described as those who can be counted on to be honest, authentic, and benevolent (Rempel, Holmes, & Zanna, 1985). Similarly, perceived sincerity—that is, the extent to which someone is perceived to be honest and reliable—has been described as an important determinant of trust both in personal (e.g., Larzelere & Huston, 1980) and professional relationships (e.g., Gardner, Fischer, & Hunt, 2009) because trustors experience less uncertainty and vulnerability and thus can extend greater trust when they sense that trustees are sincere "truth tellers" (Moorman, Deshpandé, & Zaltman, 1993).

We argue that due to their stable (vs. transient) nature, cooperative behaviors that result from trustees' dispositional social motives (i.e., prosocial SVO) will be evaluated as more honest, sincere, and authentic than cooperative behaviors that result from their situational social motives (MO). An incongruence between trustees' SVO and MO may give rise to suspicion regarding the authenticity of their cooperative behavior, especially when trustees have a proself SVO. That is, when proself trustees are motivated to behave cooperatively, their actions may be perceived as strategically preparing the ground for later personal gain. Hence, we expect that individuals with a cooperative MO will be trusted more than those with an individualistic MO but only when they have a prosocial (vs. proself) SVO. We do not expect an effect of congruence on individualistic motivation due to its redundancy for trust. Finally, we expect that the interactive effect between trustees' SVO and MO will be mediated by the trustors' assessment of trustees' authenticity. In the following, we present the results of five studies designed to test our research hypotheses. Throughout all studies, we conducted sensitivity power analyses after the studies were conducted. We report all measures, manipulations, and exclusions. All materials and datasets are available upon request.

Study 1a

Study 1a examines the interactive effect of trustees' SVO and MO on how much they are trusted in a context where trustors know trustees' SVO, e.g., through social history, personal experience, or reputation, but also know about trustees' MO because they have information about the trustees' external incentive structure. To illustrate, in public opinion polls and elections, voters act as trustors evaluating the trustworthiness of the candidates whose SVO (based on knowledge of the candidate provided via the media, for example) and MO (e.g., based on the party's agenda) are well-known.

Method

Participants and design. A total of 158 individuals (60.76 % female, M_{age} = 38, SD_{age} = 13.15) from the U.S. participated in Study 1a on MTurk for a fixed participation fee of USD $1.00. The study used a 2 (SVO: prosocial vs. proself) by 2 (MO: cooperative vs. individualistic) between-subjects factorial design[1]. The main dependent variable was trust. Similar to previous research on trust (e.g., Acar-Burkay, Fennis, & Warlop, 2014), we used an investment game (Berg, Dickhaut, & McCabe, 1995), a widely used paradigm specifically designed and validated to measure trust (Johnson & Mislin, 2011). In this game, the participants were asked to make a hypothetical, risky investment decision, whereby the level of their investment could vary depending on how much they trusted the trustee and the level of return on their investment could vary depending on how trustworthy the trustee was (see Appendix A for more information about the investment game.)

Procedure. First, we manipulated the SVO of the trustee through a brief description of him/her. All participants received descriptive information about a same-sex trustee (James/Mary)**,** describing him/her as either *proself* or *prosocial.* Next, the participants were

[1] All measures, manipulations, and exclusions in the current study and the following studies are disclosed. We did not use a power analysis to select the particular sample sizes; however, we conducted power sensitivity analyses using G*Power (Faul, Buchner, Erdfelder & Lang, 2017) for all the studies. With its given sample size of 158 randomly assigned to one of the four groups (assuming that alpha = .05, two-tailed; power = 80%), Study 1b had a minimum effect size of .22, which could be reached at a critical F value of 3.90.

given information about the trustee's *cooperative* versus *individualistic* MO through a message from the trustee about an investment project (for details of the manipulations, see Appendix B). After having read the message, the participants were asked to make their investment decisions. The relative amount participants chose to invest constituted our main dependent variable, namely trust.

Results

To check the effectiveness of our SVO and MO manipulations, we asked the participants questions about the trustee (see Appendix C for details). An overwhelming majority of the participants (95.6% for SVO and 82.3% for MO) answered the questions as intended, indicating that the manipulations were successful[2].

On average, the participants reported that they would transfer 56.1% of their initial hypothetical endowment to the trustee (SD = .43). Gender had no effect on the transfer ratio (p = .70) in this or the following studies; hence, it will not be discussed any further.

Main effects. Trustees' SVO had a significant main effect on trustors' trust, F (1, 154) = 10.23, p = .002, η^2 = .06. Prosocial SVO led to a higher transfer ratio (M = .67, SD = .40) than proself SVO (M = .46, SD = .43); however, trustees' cooperative (vs. individualistic) MO had no main effect on trust, F (1,154) = .01, p = .93, η^2 < .001. There was no significant difference between participants' transfer ratios when the trustees were externally motivated cooperatively (M = .55, SD = .43) and when they were externally motivated individualistically (M = .56, SD = .43). Thus, as expected, trustees' SVO appeared to be more important than their MO in influencing the extent to which they were trusted.

SVO × MO interaction. As expected, trustees' SVO (prosocial vs. proself) and MO (cooperative vs. individualistic) had an interactive effect on how much they were trusted, $F($1,

[2] In the current and the following studies, to avoid bias, we did not drop any participants who failed to answer the manipulation check as intended (for a discussion on this, see Aronow, Baron, & Pinson, 2019); however, excluding these participants did not change the reported results.

154) = 4.89, p = .028, η^2 = .03 (Figure 1a). Planned comparisons revealed that individualistic MO led to similar transfer ratios for both prosocial (M = .60, SD = .44) and proself trustees (M = .54, SD = .42), $F(1, 154)$ = .47, p = .50, η^2 = .003; however, cooperative MO led to a higher transfer ratio when the trustees were prosocial (M = .75, SD = .35) rather than proself (M = .40, SD = .42), $F(1, 154)$ = 15.32, p < .001, η^2 = .09. No other pairwise contrasts were significant. Overall, consistent with our theorizing, Study 1a showed that cooperative MO led to higher trust for prosocial trustees than for proself trustees when information about trustees' situational and dispositional social motives were both explicitly available.

Study 1b

Encouraged by the findings of Study 1a, we ran Study 1b to determine whether the same pattern of results would be observed when the participants received payments contingent on their decisions and their corresponding consequences. Furthermore, to exclude order effects as a potential explanation for the findings, we manipulated the order in which SVO and MO were presented to the participants.

Method

Participants and design. A total of 401 participants (44.9 % female, M_{age} = 37.68, SD_{age} = 10.98) from the U.S. participated in the study on MTurk for a fixed participation fee of USD $1.50 and a variable bonus payment of up to USD $3.00 depending on the outcome of the investment game. The study had a 2 (SVO: prosocial vs. proself) by 2 (MO: cooperative vs. individualistic) by 2 (order: SVO first vs. MO first) between-subjects factorial design[3].

Procedure. The participants were first provided with brief information about the aim of the study in which they would ostensibly interact with another MTurk participant.

[3] Assuming an alpha significance criterion of .05 (two-tailed) and a standard power criterion of 80%, with its given sample size of 401 participants and eight groups, Study 1b had a critical F-value of 1.18 with a minimum effect size of .53.

Specifically, they were told that they would be matched with another MTurker with whom they would make interdependent investment decisions and that their specific bonus payment would depend on their own decisions as well their partners' decisions; however, in reality, all participants were assigned to the role of the investor, and the rate of return on their investment was randomly determined (and varied between 0 and 3) by a computer algorithm.

Before they played the investment game, we asked the participants to list three characteristics that described them well. Perceptions of trustees' SVO were manipulated by presenting participants with three personal characteristics supposedly written by their partners. Prior to Study 1b, we ran a pretest (N = 50) to identify three similarly valanced prosocial and proself characteristics. The characteristics that described prosocial SVO were *team player*, *focused on others*, and *charitable*, whereas the characteristics that were used to manipulate proself SVO were *standing up for oneself*, *striving for success*, and *being interested in personal enhancement* (see Appendix D for details of the pretest).

Perceptions of trustees' MO were manipulated by a message sent to the participants ostensibly by their investment partner explaining the specific (individualistic vs. cooperative) motivations for the investment. Under the individualistic MO condition, the trustee's message conveyed that the trustee could use "a few extra bucks these days," and hence they were motivated to receive a good bonus for themselves, whereas under the cooperative MO condition, the trustee's message conveyed that both the trustor and the trustee could both "use a few extra bucks these days," and hence the trustee was motivated to ensure that both parties would receive a good bonus (see Appendix E for details of the manipulations).

The order in which SVO and MO information was presented to the participants was manipulated such that half of the participants received SVO information first, whereas the other half received the MO information first. After making their investment decisions, the participants answered the manipulation checks, demographic questions, were debriefed in

detail about how the return decision was in fact made by a computer algorithm and were kindly asked to give us feedback on the study.

Results

To check the effectiveness of our SVO and MO manipulations, we asked the participants questions about the trustee at the end of the study, right before debriefing, using a 7-point scale (see Appendix F for details). All manipulation check questions revealed strong and significant main effects of the manipulations (all F's > 100, p's < .001), indicating that the manipulations were successful.

On average, the participants transferred 67.83% of their initial endowment (SD = .41), or USD $0.68 out of USD $1.00, that was given to them to invest to the trustee. As noted, if a participant sent money, the amount returned by the so-called broker was decided randomly by a computer algorithm and varied between 0 and 3. The average return amount was USD $1.01 ($SD$ = 1.07). The order in which SVO and MO information was presented to the participants did not have any significant main or interactive effects on the transfer ratio (all p's > .10), and thus it will not be discussed further.

Main effects. Trustees' SVO had a significant main effect on trustors' trust, F (1, 393) = 12.89, p < .001, η^2 = .029. Prosocial SVO led to a higher transfer ratio (M = .75, SD = .37) than proself SVO (M = .60, SD = .43); however, trustees' cooperative (vs. individualistic) MO had no significant main effect on trust, F (1,393) = 1.10, p = .30, η^2 = .003. There was no significant difference between participants' transfer ratios when the trustees were externally motivated cooperatively (M = .70, SD = .41) and when they were externally motivated individualistically (M = .65, SD = .41). Thus, once again, trustees' SVO appeared to be more important than their MO in influencing how much they were trusted.

SVO × MO interaction. As expected, trustees' SVO (prosocial vs. proself) and MO (cooperative vs. individualistic) had an interactive effect on how much they were trusted, F(1,

393) = 4.65, p = .032, η^2 = .012[4] (Figure 1b). Planned comparisons revealed that individualistic MO led to similar transfer ratios for both prosocial (M = .68, SD = .39) and proself trustees (M = .63, SD = .43), $F(1, 393) = 1.03$, p = .31, η^2 = .003; however, cooperative MO led to a higher transfer ratio when the trustees were prosocial (M = .81, SD = .34) rather than proself (M = .59, SD = .44), $F(1, 393) = 16.44$, $p < .001$, η^2 = .04.

Thus, Study 1b replicated the results of Study 1a and showed that cooperative (vs. individualistic) MO increases trust in prosocials but not in proselfs. Furthermore, the supplemental analyses revealed that in Study 1b, when trustees were proself, their MO had no significant effect on the transfer ratio, F (1, 393) = .43, p = 44, η^2 = .002, whereas when they were prosocial, their MO had a significant effect on the transfer ratio, F (1, 393) = 5.22, p = .023, η^2 = .01. Specifically, for trustees with a prosocial SVO, cooperative MO led to a higher transfer ratio (M = .81, SD = .34) than individualistic MO (M = .68, SD = .39).

Overall, consistent with our theorizing, Study 1b showed that cooperative MO led to higher trust for prosocial trustees than for proself trustees when information about trustees' situational and dispositional social motives were both explicitly available and when real monetary risks were present.

Study 2

We designed Study 2, which was run as a part of a larger set of studies on the consequences of negotiation (for details see Supplemental Material), to replicate and to extend the findings of Studies 1a and 1b by testing whether trustors were influenced by trustees' SVO and MO when they did not have explicitly available information about trustees'

[4] Due to the existence of a non-human trustee and real monetary consequences in Study 1b, we performed several robustness checks. Specifically, we carefully reviewed the participants' responses and identified 11 participants who openly stated their suspicion about the existence of a human partner; we explored the effects of several demographic variables; and we accounted for time spent in the study. Robustness checks only revealed significant main effects of socio-economic status (SES) of the participant and time spent in the study on the transfer ratio (both F's > 3, p's < .05). Controlling for the effects of these two variables in the ANOVA analysis, our focal SVO x MO interaction remained marginally significant at p = .06 (see Appendix G for detailed results of our robustness checks).

SVO or MO in a face-to-face negotiation context. Moreover, for the investment game in Study 2, we assigned one dyad member to the role of the trustor and the other one to the role of the broker. This yielded information on both trustors' trust and trustees' trustworthiness and hence gave us the opportunity to explore the effects of trustees' SVO and MO on how trustworthy they were.

Method

Participants and design. A total of 216 students (50% females, M_{age} = 24.44, SD_{age} = 4.75) at a European business school participated in the study in exchange for a monetary fee in the local currency, worth approximately USD $20. The negotiation context was a buyer–seller negotiation with integrative potential. The participants negotiated a pharmaceutical patent license agreement. The study had a 2 (SVO: prosocial vs. proself) by 2 (MO: cooperative vs. individualistic) between-subjects factorial design. The main dependent variable was trust, which was measured by the transfer ratio in the investment game, as in the previous studies.

Procedure. To disentangle participants' SVO from their MO, we measured the former by having participants complete the 9-Item Triple-Dominance Scale (Van Lange, Bekkers, Schuyt, & Vugt, 2007), which measures SVO, one week prior to their participation in Study 2. Each item contained three different distributions of outcomes between the participant themselves and an anonymous person, one prosocial distribution and two proself (one individualistic and one competitive) distributions, and participants were asked to select the distribution they preferred most. Depending on their dominant choice, we classified the participants as prosocials (N=129) and proselfs (N=87).

Two participants were scheduled per session on a random basis. Upon their arrival in the laboratory, we manipulated their MO through instructions from management (for details see Appendix H), following previous research (e.g. De Dreu, Beersma, Stroebe, & Euwema,

2006; Deutsch, 1960; Pruitt & Lewis, 1975; Weingart, Brett, Olekalns, & Smith, 2007). Next, participants spent 25 minutes negotiating a three-issue purchase agreement based on a widely used negotiation task (original version developed by Pruitt & Lewis, 1975). All negotiation sessions were audiotaped and transcribed afterwards.

After 25 minutes, participants answered a questionnaire about the negotiation. Next, they played a hypothetical investment game with the same counterpart. In this game, one participant from each dyad was randomly assigned to the role of the investor whereas the other participant was randomly assigned to the role of the broker, yielding a sample size of 105[5] for our analysis. As in the previous studies, investors' transfer ratio was computed to measure trust. For exploratory analyses, trustees' return ratio was computed to measure trustworthiness.

Results

To check the adequacy of our MO manipulation, we asked the participants what their primary goal in the negotiation was (see Appendix I for details). Of the 210 participants, 193 (92.3%) answered the question as intended indicating that the MO manipulation was successful.

On average, the participants reported that they would transfer 46% of their hypothetical endowment to the trustee (SD = .31). The profits achieved in the negotiation had no significant effects on the transfer ratio in this and the following studies (all p's > .2). Thus, they will not be discussed further.

Main effects. Trustees' SVO had a significant main effect on trust, i.e. more money was transferred to prosocial trustees (M = .53, SD = .30) than was transferred to proself trustees (M = .35, SD = .30), F (1,104) = 9.36, p = .003, η^2 = .07. Trustee's cooperative versus

[5] Assuming an alpha significance criterion of .05 (two-tailed), and a standard power criterion of 80%, with its given sample size of 105 participants and four groups, Study 2 had a critical F-value of 3.94, with a minimum effect size of .28.

individualistic MO, however, did not have a significant main effect on trust, i.e. the amount of money transferred to cooperative trustees (M = .47, SD = .31) did not differ from that was transferred to individualistic trustees (M = .45, SD = .32), F (1,104) = .636, p = .427, η^2 = .01.

SVO × MO interaction. As expected, ANOVA results revealed a significant interaction between trustees' SVO and MO, F(1,104) = 6.34, p = .013, η^2 = .06 (Figure 2). Planned comparisons showed that trustees' cooperative MO led to a higher transfer ratio when they had a prosocial (M = .57, SD = .28), rather than a proself SVO (M = .24, SD = .27), F(1, 104) = 14.80, p < .001, η^2 = .13. Individualistic MO, however, led to similar levels of transfer ratio for both prosocial (M = .47, SD = .33) and proself trustees (M = .44, SD = .30), F(1, 104) = .15 p = .696, η^2 = .001[6].

So far, Study 2 replicated previous results and showed that trustees' cooperative MO increased the level of trust placed in them, but only if they had a prosocial (vs. proself) SVO. Furthermore, our supplemental analyses in Study 2 revealed that significantly less money was transferred to proself trustees when they were motivated cooperatively (M = .24, SD = .27), compared to when they were motivated individualistically (M = .44, SD = .30), F(1, 104) = 4.35, p = .039, η^2 = .04. For prosocial trustees, however, cooperative (M = .57, SD = .28) versus individualistic (M = .47, SD = .33) MO did not lead to any significant differences in the amount transferred to them, F(1,104) = 2.01, p = .159, η^2 = .02. These results indicate that for proselfs, but not for prosocials, cooperative MO was detrimental to how much they were

[6] We coded the transcripts based on existing guidelines (e.g., Weingart et al., 2007) for the use of verbal negotiation behaviors, such as problem solving, contention, compromise, and relationship building. Our analyses revealed a significant difference in the trustees' relationship building behaviors as a function of their MO and SVO (p's < .001). No other effects were significant. Moreover, after including the coded negotiation behaviors in the HLM analyses, the focal interaction between SVO and MO remained highly significant F (1, 93.08) = 6.99, p = .010. Therefore, we reason that the mechanism, which explains the variation in trust, is not the trustees' verbal behavior, but presumably lies in trustees' non-verbal behavior.

We also checked if the trustors' own SVO and MO influenced their trust. When these two variables were included in the ANOVA, results revealed a main effect of trustors' SVO (p = .029), a non-significant effect of MO (p > .6), and a non-significant interaction term between the two (p > .3). Moreover, the focal interaction between trustees' SVO and MO remained significant (p = .05). Hence, we concluded that trustees' SVO and MO explain trust over and above trustors' SVO and MO.

trusted. This may be because conflicts of interest between individuals are particularly salient in negotiation, which may presumably increase trustors' suspicions of their counterparts' underlying motives. As a result, proselfs' cooperative motivation might have been perceived as even more suspicious in negotiation (as in this study) than in other interpersonal situations where conflict of interests is not as salient, such as the investment game in Studies 1a and 1b, which were not preceded by a negotiation.

Overall, the results of Study 2 indicate that trustors' trust judgments are influenced by an interaction between trustees' SVO and MO in a real social interaction involving negotiation, even when trustors do not have explicit knowledge about trustees' SVO or MO.

Trustworthiness. An intriguing question related to the results is whether trustors' trust decisions were justified. Since Study 2 also provided data on trustees' trustworthiness, as measured by their return ratio in the investment game, we conducted supplemental analyses to investigate whether trustees' SVO and MO indeed affected their trustworthiness.

On average, trustees indicated that they would return 46% (SD = .16) of the hypothetical money transferred to them (i.e., of the tripled amount that was transferred from the trustors). The correlation between trust (i.e., transfer ratio) and trustworthiness (i.e., ratio returned) was weak and not significant (r = .11, p = .26). This finding is in line with previous research findings suggesting that trustors' trust does not necessarily beget trustees' trustworthiness, because trustworthiness is a stable disposition (Kiyonari, Yamagishi, Cook, & Cheshire, 2006), whereas trust depends on the specifics of the situation as well as the properties of the trustee (Bicchieri, Xiao, & Muldoon, 2011).

Supporting these previous research findings on the stability of trustworthiness, ANOVA results revealed a significant main effect of trustees' SVO on their trustworthiness, $F(1, 104) = 8.14$, p = .005, η^2 = .073. Prosocial trustees reported that they would return a significantly higher ratio of the hypothetical money transferred to them (M = .50, SD = .16)

than did proself trustees (M = .39, SD = .16). Neither trustees' MO nor the interaction between their SVO and MO had any significant effects on their trustworthiness (all F's < 1)[7].

Therefore, these analyses indicate that trustors' tendency to place lower trust in proself than in prosocial trustees represents an accurate trust decision (as proselfs exhibited lower trustworthiness than prosocials). However, their tendency to place *even* lower trust in proself trustees when they are cooperatively motivated is not supported by trustees' trustworthiness data (as trustees' MO did not influence their trustworthiness).

Study 3a

Study 3a replicated and extended the findings of Study 2. So far, our studies did not allow tests regarding *why* interactive effects of SVO and MO would affect trust levels. In our conceptual development, we argued that an incongruence between trustees' SVO and MO might give rise to suspicion regarding trustees' authenticity, especially when trustees have a proself SVO, which in turn, would lead to a decrease in how much they are trusted. We tested our mediated moderation hypothesis in Study 3a

Method

Participants and Design. A total of 88 students[8] (63.64% female, M_{age}= 24.86, SD_{age} = 3.76) at a European business school participated in the study as an in-class exercise. We used a 2 (SVO: prosocial vs. proself) by 2 (MO: cooperative vs. individualistic) between-subjects factorial design. The main dependent variable was trust, measured by the transfer ratio in the investment game, as in previous studies.

Procedure. Two randomly matched participants, whose MO was manipulated through

[7] More recent research by Butler and colleagues (2016), however, indicate that there may be a nonlinear (in particular, quadratic) relationship between trust and trustworthiness and that this could potentially explain why a correlation (which only measures linear dependence) may not be able to capture this dependence. Therefore, we also estimated a linear regression model with a quadratic term on the relationship between transfer ratio and return ratio. In our dataset, however, we failed to find support for the quadratic relationship hypothesis. The resulting model was not significant, $F(2,102) = 1.64$, $p = 20$.

[8] The sample size was determined by number of students who were present in the classroom. With its given sample size of 88 and four groups (alpha = .05, two-tailed; power = 80%) Study 3a had a critical F-value of 3.96, with a minimum effect size of .30.

instructions, negotiated the same purchase agreement described in Study 2. Once the negotiation was over, the participants answered questions about a) how much profit they made in the negotiation, and b) how *authentic* they perceived their counterpart to be via two items ("I believe my counterpart was sincere in his or her cooperative actions during the negotiation", "I suspected my counterpart of dishonesty during the negotiation" (reverse scored) measured on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree; M = 4.52, SD = 1.37, α = .72).

Next, participants were asked to play a hypothetical investment game with the same counterpart. They were made to believe that one of them would be assigned to the role of the investor while the other would be assigned to the role of the broker. In reality, however, in order to account for the relatively small sample size, both participants in a given dyad were assigned to the role of the investor, as the main variable of interest in the study was trust, measured by the transfer ratio of the investor in the investment game. Finally, we measured participants' SVO via the 9-Item Triple-Dominance Scale (Van Lange et al., 2007).

Results

Eighty out of 88 (90.91%) participants answered the manipulation check as intended, indicating that our MO manipulation was successful. Moreover, the correlation between MO and SVO was weak and insignificant (r = .084, p = .436), so we concluded that our MO manipulation did not affect how the participants reported their SVO.

On average, participants transferred 50% of their hypothetical endowment to the trustee (SD = .30). Unlike in Study 2, where only one dyad member was assigned to the role of the investor, producing one trust score from each dyad to analyze, in Study 3a, both members of each dyad were assigned to the role of the investor, producing two interdependent data points to analyze. To account for within-dyad interdependence, we used hierarchical linear modeling (HLM) to analyze the data (Kenny, Kashy, & Cook, 2006).

Main effects. HLM results revealed a main effect of trustees' SVO on trust, i.e. higher amounts were transferred to prosocial trustees (M = .61, SD = .28) than to proself trustees (M = .42, SD = .29), b = -.35, p = .004. Trustee's cooperative versus individualistic state social motive, however, did not have a significant main effect on trust, i.e. the amount of money transferred to cooperative trustees (M = .52, SD = .29) did not differ from that was transferred to individualistic trustees (M = .49, SD = .29), b = -.14, p = .80.

SVO × MO Interaction. As expected, HLM results revealed a significant interaction between trustees' SVO and MO, $F(1, 81.82) = 6.21$, p = .015 (Figure 3a). Planned comparisons showed that cooperative MO led to a higher transfer ratio when the trustees had prosocial (M = .65, SD = .29) rather than proself SVO (M = .33, SD = .23), $F(1, 76.89)$ = 16.81, $p < .001$. Individualistic MO, however, led to similar levels of transfer ratio for both prosocial (M = .53, SD = .24) and proself trustees (M = .48, SD = .31), $F(1, 81.02) = .12$, p = .736. This result further supports the hypothesis that trustees are trusted more when they have a cooperative (vs. individualistic) MO, but only when they initially have prosocial (vs. proself) SVO.

As in Study 2, supplemental analyses revealed that significantly fewer amounts were transferred to proself trustees when they were motivated cooperatively (M = .33, SD = .23) than when they were motivated individualistically (M = .47, SD = .31), $F(1, 73.63) = 5.06$, p = .027. For prosocial trustees, however, cooperative (M = .65, SD = .29) versus individualistic MO (M = .53, SD = .24) did not lead to a difference in the amount transferred to them, $F(1, 65.43) = 1.88$, p = .175. Therefore, once again, being motivated cooperatively was detrimental to how trustworthy proselfs were perceived to be. This provides additional evidence that in negotiation, where the conflict of interests between individuals is particularly salient, individuals' suspicions of their counterparts' underlying motives increase, leading to a decrease in trust.

Meditation Analysis. We tested our mediated moderation hypothesis using HLM. We first regressed participants' trust scores (i.e., transfer ratio) onto their perceived authenticity scores. HLM results showed that perceived authenticity significantly predicted transfer ratio, $F(1, 71.27) = 39.3$, $p < .001$. Next, we regressed perceived authenticity onto trustees' SVO and MO. Results revealed a significant interactive effect of the trustees' SVO and MO on authenticity, $F(1, 76.71) = 6.27$, $p = .014$. Planned comparisons showed that cooperatively motivated trustees were perceived to be more authentic when trustees had a prosocial SVO ($M = 5.15$, $SD = 1.22$) rather than a proself SVO ($M = 3.67$, $SD = 1.25$), $F(1, 76.16) = 12.81$, $p = .001$. However, when trustees were motivated individualistically, a prosocial ($M = 4.54$, $SD = 1.23$) versus a proself SVO ($M = 4.47$, $SD = 1.40$) did not produce a significant difference in the degree to which trustees were perceived to be authentic, $F(1, 71.80) = .006$, $p = .94$.

Moreover, cooperatively motivated proselfs were perceived as less authentic ($M = 3.67$, SD = 1.25) than individualistically motivated proselfs ($M = 4.47$, $SD = 1.40$), $F(1, 83.61) = 4.58$, $p = .035$. For prosocials, however, cooperative ($M = 5.15$, SD = 1.22) versus individualistic ($M = 4.54$, $SD = 1.23$) MO did not create a significant difference in the degree to which they were perceived to be authentic, $F(1, 55.85) = 2.07$, $p = .156$. When we included perceived authenticity in the HLM, it had a significant effect on trust, $F(1, 76.63) = 25.09$, $p < .001$, whereas the effect of the interaction between SVO and MO on trust became marginally significant, $F(1, 74.14) = 3.28$, $p = .074$. A Sobel test showed that the decrease of significance in the interaction term was significant ($t = 2.23$, $p = .025$). Overall, the mediation analysis in Study 3a supported our argument that cooperatively motivated proself trustees were trusted less than cooperatively motivated prosocial trustees because the former were perceived to be less authentic than the latter[9].

[9] Nevertheless, the mediation analysis results should be approached with caution. We acknowledge that there might be alternative mediators –other than, or in addition to, authenticity –that might also underlie the relationship between MO, SVO, and trust. However, building on the importance of authenticity for trust (e.g., DePaulo & Kashy, 1998), we argue that authenticity is one plausible mediator explaining the relationship

Study 3b

In Study 3b, we replicated Study 3a but this time we focused solely on the case of cooperative MO, as cooperative MO (e.g., cooperative rewards systems, third party instructions to cooperate, anticipated future interactions, democrat social policy agendas) is commonly used in organizational settings to facilitate cooperation and build trust (Zak, 2018). We also adopted an established measure of authenticity to strengthen our analyses.

Method

Participants and Design. Thirty-eight students[10] (65.79% female, M_{age} = 23.53, SD_{age} = 2.77) at a European Business School participated in the study as a part of an in-class exercise. The study used a between-subjects factorial design (SVO: prosocial vs. proself). As in previous studies, the main dependent variable was trust, measured by the transfer ratio in the investment game.

Procedure. Study 3b used the same procedure used in Study 3a, except for two differences: 1) all participants were given a cooperative MO, and 2) we used a previously established scale to measure perceived authenticity of their counterpart. Specifically, the authenticity of counterpart's cooperation was measured by the five-item measure of *authenticity in various social roles* (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). We slightly rephrased the items (see Appendix J) such that they referred to the perceived authenticity of the negotiation counterpart in their cooperative role. An example item is "My counterpart experiences cooperation as an authentic part of whom he/she is". The five items were measured on a 9-point scale (1= Strongly Disagree; 9 = Strongly Agree) and were averaged to a perceived counterpart authenticity score (α = .82; M = 6.64, SD = 1.29).

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between person-situation interaction and trust.

[10] The sample size was determined by number of students who were present in the classroom. With its given sample size of 38 and two groups (alpha = .05, two-tailed; power = 80%) Study 3b had a critical F-value of 4.12, with a minimum effect size of .47.

Results

Thirty-seven out of 38 (97%) participants answered the MO manipulation check correctly. Since all participants were given a cooperative MO, the main difference between them was their SVO. As expected, HLM results revealed that higher amounts were transferred to prosocial counterparts (M = .61, SD = .24) than to proself counterparts (M = .45, SD = .16), $F(1, 31.30) = 5.73$, p = .023 (Figure 3b).

Mediation Analysis. As in Study 3a, we used a Sobel test to examine mediation. HLM results showed that prosocial counterparts were perceived to be more authentic in their cooperative behavior (M = 7.06, SD = 1.05) than were proself counterparts (M = 6.07, SD = 1.39), $F(1, 35.64) = 8.80$, p = .005. When both perceived authenticity and counterpart's SVO were included in the regression, HLM revealed only a significant effect of authenticity, $F(1, 32) = 7.09$, p = .012, whereas counterpart's SVO became insignificant, $F(1, 27.71) = 1.39$, p = .295. A Sobel test indicated that the indirect effect of counterpart's SVO on trust via perceived authenticity was significantly different from zero (t = 2.74, p = .01). Therefore, the results further supported our hypothesis that cooperatively motivated prosocials (vs. proselfs) are perceived as more authentic, which in turn, leads to higher trust.

Discussion

People are often motivated cooperatively due to external demands. Team members may be motivated cooperatively when their performance is measured collectively. For example, salespeople may be motivated cooperatively by the existence of customer satisfaction ratings, and democrats maybe motivated cooperatively by their party's social policy agenda. Across these settings, critical to success is the ability to evoke others' trust. But, is being motivated cooperatively sufficient for building trust?

The present research is based on the premise that trust is a function of the characteristics of the person and the environment (Lewin, 1935; Van Lange, 2000), and the

interaction effect between trustees' dispositional social motives (SVO: prosocial or proself) and situational social motives (MO: cooperative or individualistic) on how much they are trusted has been examined.

Prior research suggests that trustees' SVO and MO values may each contribute to trust; however, we argued that SVO and MO would also interact to influence trust. Specifically, we argued that cooperatively motivated prosocials (vs. proselfs) would be perceived as more authentic, which in turn would lead to higher trust placed in them. The results of the five studies provided converging support for our hypothesis. The findings are remarkable in that they held even when the trustors were not informed about either the MO or the SVO of the trustees but rather implicitly inferred them based on the trustees' behaviors in a face-to-face negotiation context.

Moreover, the results revealed additional interesting findings that we did not a priori hypothesize. Specifically, in Studies 1a and 1b, it was found that in a short-lived context in which people do not actually interact, cooperative MO did not help or hurt trust in proselfs; however, in Studies 2-3b, which were run in negotiation contexts in which trustors and trustees did interact face-to-face while their self-interests were somewhat conflicting, having a cooperative MO not only failed to help trust but also hurt trust in proselfs. For prosocials, it was the other way around; when there was no interaction, cooperative MO fostered trust in prosocials, but when there was an actual negotiation interaction, it did not.

Implications

Cooperative MO is often situationally evoked; however, our findings indicate that situationally deemed cooperation does not automatically translate into trust. Rather, it interacts with SVO in affecting trust, and hence both MO and SVO should be considered together when the aim is to build trust. The practical implications of the findings highlight that those who might seek to build trust through cooperative MO without the appropriate

supporting prosocial SVO might potentially fail. In the absence of prosocial SVO, trust suffers, even when the environment enforces cooperative MO in the trustee. Therefore, those interested in building trust should be cautious when assigning cooperative roles to people with a proself SVO. From a practical point of view, this also suggests that assigning people to cooperative roles may be a matter of selection.

Future Research

Our findings indicate that trustors can distinguish between "real" cooperators (i.e., cooperatively motivated prosocials) and "fake" cooperators (i.e., cooperatively motivated proselfs); they perceive the former as more authentic and trust them more than the latter, even when they have no explicit knowledge about trustees' SVO or MO; however, what these trustees do differently and how exactly trustors distinguish between trustees' SVO and MO remains unknown.

Previous research have consistently revealed that people can evaluate human faces rather automatically and rapidly and that this helps them to assess several underlying personality trait dimensions, including trustworthiness, and to make decisions based on these assessments (Todorov, Pakrashi, & Oosterhof, 2009; Sutherland, et al., 2020). Similarly, research in evolutionary psychology suggests that specific non-verbal behaviors, such as properties of smiles, are important for being evaluated as trustworthy, regardless of what the trustee says verbally (Centorrino, Hopfensitz, Milinski, & Seabright, 2015). These findings are consistent with findings from studies using the so-called "thin slices method" (Ambady & Rosenthal, 1993; Curhan & Pentland, 2007; Fowler, Lilienfels, & Patrick, 2009), demonstrating that people need only observe small episodes of behavior to evaluate underlying attributes relatively accurately, presumably because people communicate their interpersonal expectancies via subtle nonverbal cues. Future work is called upon to explicate whether and how prosocial trustees' non-verbal behaviors, such as facial expressions, differ

from those of proself trustees when they are assigned to cooperative roles so that trustors form differentiated perceptions of their authenticity and trustworthiness. An open following question—which has important practical implications—remains whether training (on what makes prosocial cooperators be perceived as more authentic than proself cooperators) would help make inherent proselfs achieve believable authenticity and trustworthiness perceptions.

Similarly, the differences found between how trust in prosocials and proselfs was affected by MO in our studies with and without social interaction is also worth exploring in future research. Our results seem to indicate that cooperative MO helps prosocials in short-lived contexts, whereas it hurts proselfs in contexts in which actual interaction takes place. Perhaps the difference could lie in the presence versus absence of nonverbal or paralinguistic behavior reinforcing an additional idea. Given that people make their judgments about others quite rapidly, as the studies we referred have demonstrated, it could be argued that negotiators conclude quite quickly that their counterpart is a proself or a prosocial person. In addition to these trait perceptions, if their counterpart communicates having a cooperative MO to them, they note convergence for prosocials and divergence for proselfs. Perhaps observing convergence is interpreted as a reassuring signal that leads negotiators to stop actively seeking additional information. Therefore, additional information that the counterpart is indeed prosocial may no longer weigh into the decision to trust them.

This is arguably quite different when negotiators observe divergence between MO and SVO, which is anything but reassuring, but rather might have the effect of an “alarm bell.” Based on research on negativity bias (i.e., the phenomenon that things of a more negative nature have a greater effect on one’s psychological state and processes than neutral or positive things; Baumeister et al., 2001), it could be argued that perceiving divergence between a counterpart’s proself SVO and prosocial MO opens the mind for processing additional information. As such, when negotiating for a prolonged time (25 minutes in Studies 2-3b), the

divergence between proselfs' SVO and cooperative MO might be reinforced over time, leading to increased suspicion and decreased trust by the end of the negotiation. Overall, although these are effects with no predictions, they are interesting, and we encourage exploring them in future studies.

In conclusion, across five studies that for the first time examined the combined effects of SVO and MO, we found that "faking it till you make it" is not a good option for those who aim for others to trust them as conveying cooperative motivation was found to fail to help proself trustees. Our studies attest to the importance of authentic cooperation in interactions that require trust.

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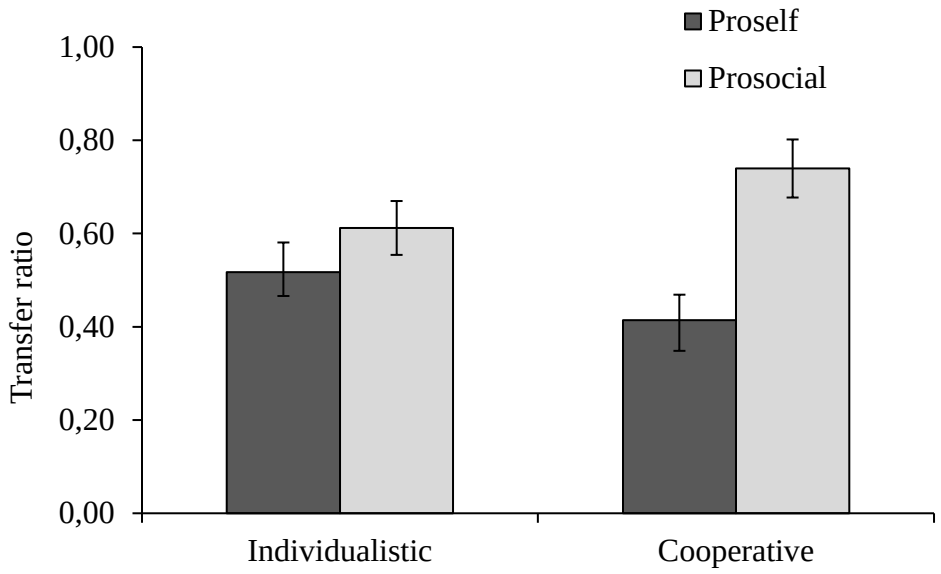

Figure 1a. Trustors' transfer ratio as a function of trustees' SVO (i.e., prosocial vs. proself) and MO (i.e., cooperative vs. individualistic) in Study 1a. Note (bars represent standard errors). Higher transfer ratio indicates higher trust.

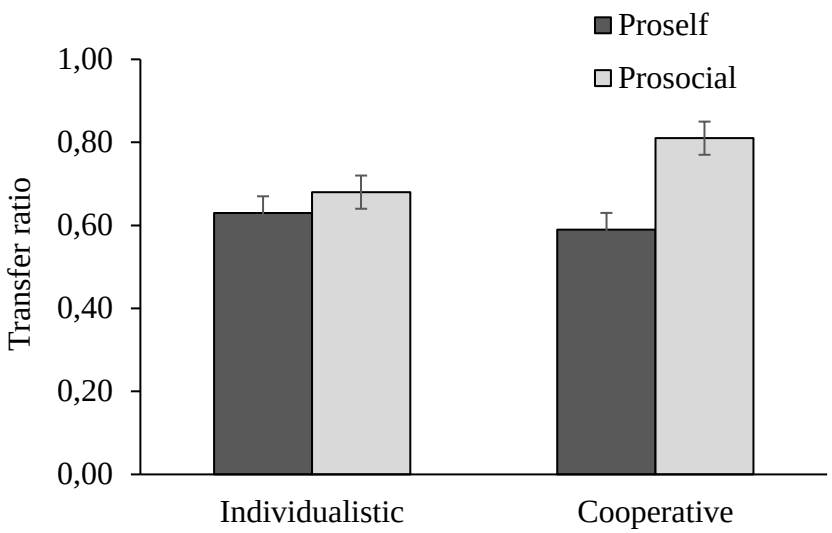

Figure 1b. Trustors' transfer ratio as a function of trustees' SVO (i.e., prosocial vs. proself) and MO (i.e., cooperative vs. individualistic) in Study 1b. Note (bars represent standard errors). Higher transfer ratio indicates higher trust.

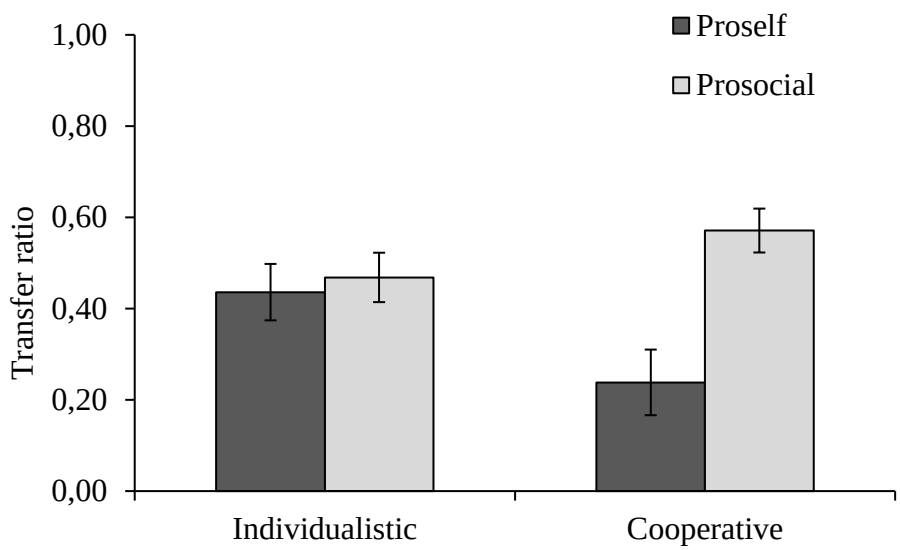

Figure 2. Trustors' transfer ratio as a function of trustees' SVO (i.e., prosocial vs. proself) and MO (i.e., cooperative vs. individualistic) in Study 2 (bars represent standard errors). Note. Higher transfer ratio indicates higher trust.

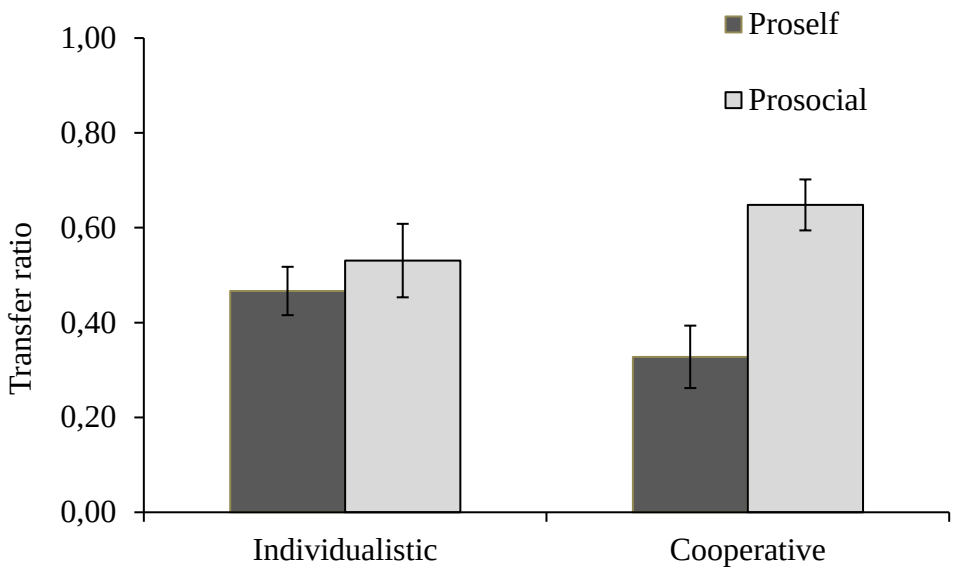

Figure 3a. Trustors' transfer ratio as a function of trustees' SVO (i.e., prosocial vs. proself) and MO (i.e., cooperative vs. individualistic) in Study 3a (bars represent standard errors).

Note. Higher transfer ratio indicates higher trust.

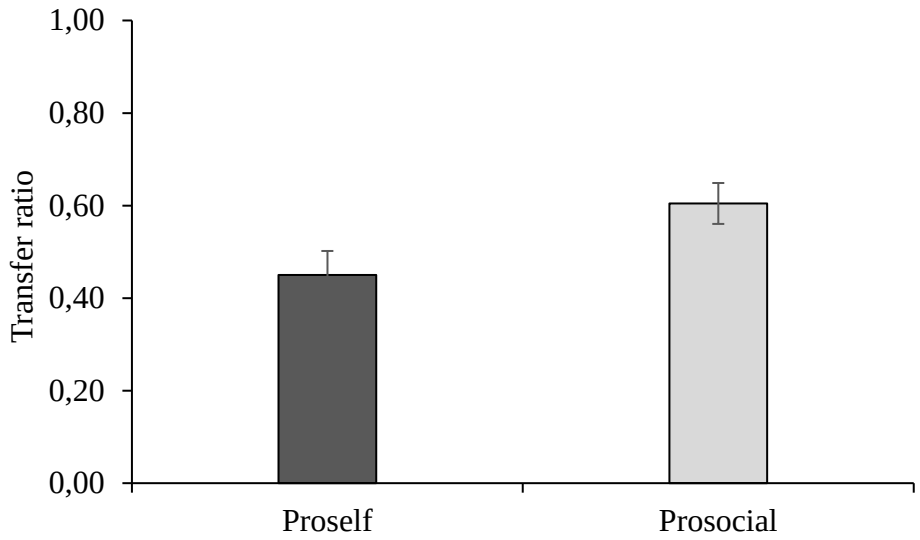

Figure 3b. Trustors' transfer ratio as a function of trustees' SVO (i.e., prosocial vs. proself) in cooperative roles in Study 3b (bars represent standard errors). Note. Higher transfer ratio indicates higher trust.

Appendices

Appendix A

The Investment Game (Berg, Dickhaut, & McCabe, 1995)

Two players—an investor and a broker—start with an initial endowment. The investor (i.e., trustor) can invest any portion of the money that he or she chooses to the broker, knowing that the broker will receive three times the amount invested. Next, the broker (i.e., trustee) can reciprocate by returning as much money as he or she chooses. Investing money with no guarantee of return is an act of trust, because it involves an acceptance of vulnerability based on positive expectations of being returned a higher amount than was invested. Lower trust manifests as a lower acceptance of vulnerability (i.e., investing lower amounts), whereas higher trust manifests as a higher acceptance of vulnerability (i.e., investing higher amounts). Therefore, the relative amount the participant chooses to invest can be seen as a measure of trust (i.e., the *ratio* of the observed *transfer* to the maximum amount available to transfer) whereas the relative amount returned by the broker is a measure of trustworthiness (i.e., the *ratio* of the observed *return* to the maximum amount available to return).

Appendix B

SVO and MO Manipulations Used in Study 1a

In a few minutes, you will make a decision about a person named James/Mary. Before you make your decision, please read the following description of him/her. This description has been written by someone who knows him/her well.

Participants in the prosocial SVO (of the trustee) condition read the following: *James/Mary is a very successful person because he/she always strives to achieve what is best for himself/herself and for other people.*

Participants in the proself SVO (of the trustee) condition read the following: *James/Mary is a very successful person because he/she always strives to achieve what is best for himself/herself.*

Next, participants were given information about the trustee's cooperative versus individualistic MO through a message from trustee himself/herself about an investment project.

In the cooperative MO condition, participants read the following: *"I have this great project. As the company that I work for requests, I want to make it profitable for both of us. I would like to make you an investment offer. If you invest in my project, your money will be tripled in a year. If you invest $1000, for example, it will become $3000 in a year. At the end of the year, I will share the profits with you."*

In the individualistic MO condition, participants read the following: *"I have this great project. As the company that I work for requests, I want to make it profitable for myself. I would like to make you an investment offer. If you invest in my project, your money will be tripled in a year. If you invest $1000, for example, it will become $3000 in a year. At the end of the year, I will share the profits with you."*

Appendix C

Manipulation Checks Used in Study 1a

SVO manipulation check: "Which of the following is most correct about James/Mary?

a) he/she cares about himself/herself;

b) he/she cares about both himself/herself and others around him/her;

c) other;

d) I don't know.

MO manipulation check: "Which of the following is true about what James/Mary has told you he/she wants to do about the project as his/her company requests?

a) that he/she wants it to be profitable for him/her;

b) that he/she wants it to be profitable for both of us;

c) other;

d) I don't know.

Appendix D

Pretest to obtain Prosocial and Proself SVO manipulations used in Study 1b

A total of 50 participants (40% females; M_{age} = 38.38, SD_{age} = 11.45) were recruited through MTurk for a participation fee of USD $0.50. We first introduced the participants to the concepts of prosocial and proself SVO in detail with written descriptions and pictorial depictions of how prosocial and proself individuals typically allocate resources between themselves and others. They were then asked to group the following 20 personal characteristics (presented in randomized order) as either *prosocial*, *proself,* or *other*: achievement-oriented, charitable, cooperative, fair, focused on others, forceful, generous, giving, helping those who need it, independent, individualistic, interested in personal enhancement, personal accountability, powerful, sharing and caring, sociable, standing up for oneself and for one's beliefs, strong, team-oriented, and striving for success.

Next, the valence of each feature was measured by asking the participants to indicate how positively or negatively they evaluated each of these characteristics (on a slider measure ranging from -10 to +10). The highest-ranking characteristics in the prosocial and proself SVO categories and their respective evaluations are as shown in Tables D1 and D2.

Table D.1.

Characteristics most frequently chosen as Prosocial

Characteristic	Frequency	Ranking	Valence	
			M	*SD*
Charitable	98	1	5.95	4.72
Focused on others	98	1	4.16	4.25
Caring and sharing	98	1	6.80	3.55
Giving	96	2	6.05	4.37
Generous	94	3	6.20	4.69
Team player	94	3	5.53	4.02

Table D.2.

Characteristics most frequently chosen as Prosocial

Proself Characteristics	Frequency	Ranking	Valence	
			M	*SD*
Striving for success	92	1	4.89	4.33
Interested in personal enhancement	92	1	4.62	4.50
Individualistic	92	1	3.39	4.16
Standing up for oneself and one's beliefs	90	2	5.80	3.79
Independent	88	3	5.39	4.02

To maintain similarity in the valence, we chose *charitable, focused on others*, and *team player* to manipulate prosocial SVO. To manipulate proself SVO, we chose *striving for success, interested in personal enhancement*, and *standing up for oneself and one's beliefs*. We then calculated an average evaluation for these three prosocial ($M_{\text{evaluation}}$ = 15.64, $SD_{evaluation}$ = 11.15) and three proself characteristics ($M_{evaluation}$ = 15.31, $SD_{evaluation}$ = 10.94). A paired-sampled t-test revealed that the prosocial and proself characteristics did not differ significantly in how they were evaluated by the participants, t (49) = 1.61, p = .87, giving us assurance that the characteristics could be used in the main study (Study 1b) to manipulate participants' SVO perceptions of trustees.

Appendix E

SVO and MO manipulations used in Study 1b

The SVO of the trustees was manipulated via three personality characteristics presumably written by the trustees themselves.

Participants in the proself SVO (of the trustee) condition read the following: *In Part 1, the broker listed the following 3 personality characteristics to describe themself:*

Standing up for myself and my beliefs

Striving for success

Interested in personal enhancement

Participants in the prosocial SVO (of the trustee) condition read the following: *In Part 1, the broker listed the following 3 personality characteristics to describe themself:*

Team player

Focused on others

Charitable

The MO of the trustees was manipulated via a message presumably written by the trustees themselves. In the individualistic MO manipulation, the participants read the following: *"This is a great investment opportunity, and I am really motivated to get a good bonus. I want to get as much I can out of this. I could use a few extra bucks these days. If you send me your money, it will be tripled. I'll share it with you."*

In the cooperative MO manipulation, the participants read the following*: "This is a great investment opportunity. I am really motivated to make sure that we both get a good bonus payment. I want to get as much as we can out of this together. We could both use a few extra bucks these days. If you send me your money, it will be tripled. I'll share it with you."*

Appendix F

SVO and MO manipulation checks used in Study 1b

The *SVO manipulation check* was comprised of two items measured on a 7-point scale (1= strongly disagree; 7 strongly agree): Based on the 3 personality characteristics they wrote, I thought my investment partner was someone who...

1. Cares about their own well-being (reverse-scored).
2. Cares about other people's well-being.

The MO manipulation check was comprised of two items measured on a 7-point scale (1= strongly disagree; 7 strongly agree): In the investment game, you received a message from your partner. What did it convey?

1. They were motivated to get a good bonus payment mainly for themselves (reverse-scored).
2. They were motivated to get a good bonus payment for both of us.

Appendix G

Robustness checks for Study 1b

We conducted several robustness checks on the results of Study 1b. First, our exploratory analyses revealed significant effects of two additional variables on how much of their USD $1.00 the participants transferred in Study 1b. These were *time spent on the study* (measured in seconds) and self-reported *socio-economic status* of the participant (measured on a 10-point scale on a pictorial measure depicting society on a ladder and asking the participants to indicate their socio-economic status on the ladder). Both of these variables were negatively related to the transfer ratio. These correlations are presented in Table F.1.

Table F.1.

Correlations between Time spent, Socio-Economic Status (SES), and Transfer ratio

Variable	*M*	*SD*	1	2
1. Time (sec)	756.71	541.53		
2. SES	4.97	1.89	0.093	
3. Transfer ratio	0.68	0.41	-.112*	-.162**

Note. $N = 401$. * indicates $p < .05$.

Second, we carefully reviewed the participants' comments on the study and on the investment game. By doing so, we identified 11 participants who expressed their suspicion regarding the existence of a real human partner. On average, these suspicious participants sent lower amounts in the investment game ($M = .40$, $SD = .49$) compared to the rest of the participants ($M = .69$, $SD = 41$). Therefore, we created an additional variable called "suspicion" (1= suspicion, 0 = no suspicion) and included it in our two-way ANOVA together with time spent in the study, socio-economic status, SVO, MO, and the interaction term (SVO x MO). The results are presented in Table F.2.

Table F.2.

Two-way ANOVA results with additional variables of time, SES, and suspicion as robustness checks

Predictor	**Sum of Squares**	***df***	**Mean Square**	***F***	***p***	**Partial η2**
Intercept	35.42	1	35.42	233.94	0.00	0.37
SES	1.76	1	1.76	11.60	0.00	0.03
Time	0.52	1	0.52	3.42	0.07	0.01
Suspicion	1.10	1	1.10	7.26	0.01	0.02
SVO	2.24	1	2.24	14.78	0.00	0.04
SM	0.35	1	0.35	2.33	0.13	0.01
SVO * SM	0.54	1	0.54	3.60	0.06	0.01
Error	59.65	394	0.15			

Note. N =401. Dependent variable: Transfer ratio. *R-Squared* = .097.

1

2

Appendix H

MO Manipulation in Studies 2 - 3b

The instructions used to induce individualistic MO stated the following:

The agreement you reach today will have a major impact on your salary and on the profitability of your company. Therefore, you should only be concerned with how much profit you make. In today's negotiation you should act purely out of self-interest. Your primary objective should be to maximize the profits you make. You are to reach the best agreement you can.

The instructions used to induce cooperative MO stated the following:

The agreement you reach today will have a major impact on your salary and on the profitability of your company. However, you should be concerned with how much profit your counterpart makes as well as how much profit you make. In today's negotiation you should not act purely out of self-interest. Your primary objective should be to maximize the joint profits you and your counterpart make. You are to reach the best agreement you can (adapted from Weingart et al., 2007).

Appendix I

MO Manipulation Check in Studies 2-3b

What was your primary goal in the negotiation?

a) to maximize my own profits

b) to maximize my own and my counterpart's joint profits

c) other

Appendix J

How much do you agree with the following statements about your negotiation counterpart's cooperation in today's negotiation? (1= Strongly Disagree; 9 = Strongly Agree)

1. My counterpart experience cooperation as an authentic part of whom he/she is.
2. Cooperation is meaningful and valuable to my counterpart.
3. My counterpart has freely chosen to behave cooperatively.
4. My counterpart behaved cooperatively only because he/she had to (reverse scored).
5. My counterpart felt tense and pressure while behaving cooperatively (reverse scored).

Note: Items were adapted from Sheldon, Ryan, Rawsthorne, & Ilardi, 1997.