

# The relationship between regulatory focus and trust: The roles of regulatory closure and propensity to trust\*

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## Abstract

Drawing on regulatory focus theory and regulatory closure argument, this study argues that self-regulation mechanisms influence trust among people during anonymous interactions. Prevention focus is generally associated with risk aversion and quest for security and hence expected to induce less trust compared to promotion focus. We proposed and tested the hypothesis that the effect of regulatory focus on trust is moderated by regulatory closure (presence or absence of goal fulfillment). In support of this hypothesis, in the first experiment (N = 146), we found in a trust game that priming individuals with prevention focus led to less trust than priming individuals with promotion focus only when the regulatory goals remained unfulfilled. On the contrary, when regulatory goals are fulfilled, trust did not differ between promotion focus and prevention focus. A second experiment (N=123) showed that as individuals' propensity to trust decreased, regulatory closure of prevention goals increased trust more than did regulatory closure of promotion goals, suggesting that fulfilling security related goals help increase trust especially among people with low propensity to trust. These findings provide a greater understanding concerning how and when regulatory focus influences interpersonal trust among strangers.

*Key words:* Regulatory focus, regulatory closure, trust, propensity to trust.

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## 1. Introduction

Defined as “a psychological state comprising the intentions to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998; 395), trust is a prerequisite to induce cooperation in social relations to maximize collective interests (Balliet and Van Lange, 2013). Trust among strangers is especially vital for society because it enables efficient utilization of society level resources, increasing social and economic welfare of society (Welch et al., 2005; Yamagishi, 2001). Thus, it is crucial to understand factors that influence trust in social interactions among strangers.

Recent research proposes self-regulation as an important factor influencing trust in social interactions (Ainsworth et al., 2014). According to regulatory focus theory (Higgins, 1998; Higgins, 2012), prevention focus is associated with less willingness to take risks and greater sensitivity to losses than is promotion focus (Crowe and Higgins, 1997). Hence, self-regulation with prevention focus, relative to promotion focus, may be associated with less trust in social interactions among strangers.

Our study aims to enhance current understanding concerning the link between regulatory focus and trust in social interactions among strangers. In two studies, we compare the relative effects of promotion and prevention focus on trust and identify the moderating roles of *regulatory closure* and *individuals' trust propensity* in this relationship. By doing so, the present research makes significant contributions to the trust and regulatory focus literatures. First, we add to the scarce literature in situational antecedents of trust by investigating joint effects of regulatory focus and regulatory closure on trust. Second, because regulatory focus theory argues that momentarily people can be either in a promotion focus or a prevention focus (Higgins, 2012), we provide a more accurate examination of the effect of regulatory focus on trust by comparing promotion focus and prevention focus. Third, we also consider the roles of *regulatory closure* and *individuals' propensity to trust* to delineate the processes involved in the link between regulatory focus and trust. Thus, the present study goes beyond the previous research and attempts to explain the boundary conditions of the influence of regulatory focus on trust. Although the previous research by Baas and his colleagues (2011) suggests that the effects of regulatory focus on behavior depend on regulatory closure, research has paid little attention to the role of regulatory closure. Therefore, we also contribute to the regulatory focus theory by extending the role of regulatory closure in the effects of regulatory focus to the context of trust.

## 2. Interpersonal trust

Neoclassical Economic Theory assumes that people are selfish and pursue only their own self-interests. Thus, trusting strangers is considered irrational because of the possible risks and its costs to one's own material interests (Evans and Krueger, 2009). Contrary to this view, studies on trust have revealed that a considerable amount of people are willing to take risk and trust others, even complete strangers (see Camerer, 2003 for a review). Drawing on this understanding, prior research has attempted to examine why and how people trust in strangers (Delhey and Newton, 2003).

The recent research shows that interpersonal trust could be stimulated through altering situational factors, such as manipulating individuals' self-regulatory resources (Righetti and Finkenauer, 2011). For example, Ainsworth and her friends (2014) found that as individuals were made to consume their self-regulatory resources and experienced ego-depletion, they showed less trust in anonymous interactions with others. Drawing upon the evidence on the relationship of self-regulation with trust, we may expect the ways individuals regulate towards desired and undesired outcomes to influence their trust in others. Regulatory Focus Theory might be utilized to delineate how self-regulation influences trust among strangers.

## 3. Regulatory focus theory

Regulatory Focus Theory suggests two distinct orientations that individuals employ during goal pursuit: promotion focus regulated with ideals, growth and advancement; and prevention focus regulated with responsibilities, obligations, safety and security (Higgins, 2012).

Regulatory Focus Theory suggests that individuals differ in how they construe success and failure depending on their regulatory orientation. Promotion focused people are more sensitive to positive outcomes and have the tendency to maximize positive outcomes (approaching gains) by using eager strategies towards goals. Prevention focus, in contrast, is more sensitive to negative outcomes and has the tendency to minimize negative outcomes (avoiding losses) by using vigilant strategies (Crowe and Higgins, 1997; Higgins et al., 1994).

An important but very recent distinction between promotion and prevention focus is related to the motivational consequences of goal fulfillment, or in other words, regulatory closure.

#### 4. Regulatory closure

Regulatory closure refers to successful fulfillment of salient regulatory goals and needs. The opposite, the absence of regulatory closure, occurs when salient regulatory goals are actively pursued but remain unfulfilled. According to the regulatory closure argument (Baas et al., 2011), fulfilling (regulatory closure) and not fulfilling (absent regulatory closure) salient needs and relevant goals result in different activation levels for promotion and prevention focus.

In the case of absent regulatory closure, unfulfilled goals result in enhanced motivation and activation in subsequent goal pursuits so that individuals exert more effort to attain relevant goals and needs. In other words, in absent regulatory closure, promotion focused individuals continue to pursue ways to achieve growth and advancement; whereas prevention focused individuals continue to pursue ways to attain safety and security in subsequent domains (Förster et al., 2005).

Regulatory closure, on the other hand, influences activation states in promotion focus and prevention focus differently. Successful fulfillment of promotion goals encourages individuals to set new and higher promotion goals, which signals that more effort and energy are needed in subsequent domains. Hence, motivation and activation levels of promotion focused individuals would not decrease following regulatory closure. On the contrary, once prevention goals are attained, individuals would feel safe and secure, which signals that there is no need to maintain effort and energy in subsequent domains. Hence, motivation and activation levels of prevention focused individuals reduce and individuals become deactivated and detached following regulatory closure (Förster et al., 1998; Baas et al., 2011).

#### 5. The effects of regulatory focus and regulatory closure on trust

We expect regulatory focus to associate with trust for at least two reasons. The first reason concerns different risk orientations of two foci. Using eager strategies makes promotion focused people more tolerant against risk-taking while vigilance of prevention focused people makes them risk-avoidant during goal pursuit (Gino and Margolis, 2011; Hamstra et al., 2011; Molden and Higgins, 2004). Drawing on these different risk tendencies and attitudes, we expect individuals with prevention focus, relative to promotion focus, to trust others less, particularly when regulatory closure is absent. Unfulfilled prevention goals and needs emphasizing a lack of safety and security would invoke a vigilant state where individuals become sensitive to any possible loss by trusting others. Because trusting others entails a risk (Rousseau et al., 1998) and because prevention focused people are risk averse and conservative, they would prefer trusting others less to minimize the risk. On the other hand, unfulfilled promotion goals and needs

emphasizing growth and advancement would invoke an eager state where individuals become enthusiastic about possible gains they might obtain by trusting others. Because promotion focused people tend to take more risk, they would feel more comfortable when trusting others.

The second reason concerns how promotion focused and prevention focused individuals feel with regard to success and failure. Previous research suggests that promotion focused people feel more positive about anticipation of a successful outcome than do prevention focused people; while prevention focused people feel worse about an imagined failure than do promotion focused people (Idson et al., 2004). Hence, in absent regulatory closure, prevention focused individuals are expected to concentrate on what they might lose by trusting others, and this potential loss might bring about greater anticipation of pain for prevention focused individuals than it might for promotion focused individuals. On the contrary, in the same condition of absent regulatory closure, promotion focused individuals are expected to concentrate on what they might gain by trusting others, and this potential gain might induce greater anticipated pleasure for promotion focused individuals than it might for prevention focused individuals. Consequently, we expect prevention focused individuals to trust others less than promotion focused individuals, especially when regulatory closure is absent. We do expect less or no difference between promotion and prevention focus in terms of trust levels when there is regulatory closure, since regulatory closure in prevention focus mitigates safety and security concerns of prevention focused individuals and reduces the necessity of being cautious regarding possible risks and dangers.

**Hypothesis 1.** In case of absent regulatory closure, prevention focused individuals would trust in strangers significantly less than promotion focused individuals. In case of regulatory closure, there would be less/no difference between trust levels of promotion and prevention focused individuals.

We also expect, based on the above reasoning, that trust levels of prevention focused individuals would depend on regulatory closure; such that, among prevention focused individuals regulatory closure would lead to higher trust than absent closure, as regulatory closure should reduce the salience of safety and security needs. However, since motivation and activation levels of promotion focused individuals do not substantially change depending on regulatory closure, there would be less/no difference among promotion focused individuals in terms of trust levels.

**Hypothesis 2.** Among prevention focused individuals, regulatory closure would lead to higher trust to a stranger than absent regulatory closure.

## Study 1

Hypotheses 1 and 2 were tested through a 2 (Regulatory focus: Promotion - Prevention) x 2 (Regulatory closure: Present - Absent) between-subjects experimental design.

### Methodology

#### Participants

Participants were volunteers mainly from first year business students and received partial course credit for participation. A total of 156 students participated in the study. Six participants were excluded because instructions were in a language other than their native language. Four participants who did not complete the study were also excluded, leaving 146 participants (81 women,  $M_{age} = 20.74$  years,  $SD = 1.40$ ) to be used in testing our hypotheses.

#### Procedure

All participants were randomly assigned to the experimental conditions. They were told that they would take part in supposedly two unrelated studies. They were informed about the instructions of the first and the second study through a power-point presentation. Next, participants were delivered a file which involved a maze task used to manipulate regulatory focus and regulatory closure, ego depletion and mood scales. After performing the maze task, participants completed the ego depletion and mood scales. Subsequently, participants were given the materials of the trust game.

#### Measures

**Manipulation of regulatory focus and closure.** Regulatory focus and regulatory closure of participants were manipulated through a maze task which was validated in previous research (Friedman and Förster, 2001; Gino and Margolis, 2011; Wan et al., 2009). In the original maze task there are two conditions: promotion focus and prevention focus (Friedman and Förster, 2001). Since we expected the impact of regulatory focus to vary depending on the presence and absence of regulatory closure, we employed the maze task that was adapted and validated by Baas and his colleagues (2011). Accordingly, four different conditions were used for manipulation: (1) regulatory closure in promotion focus, (2)

regulatory closure in prevention focus, (3) absent regulatory closure in promotion focus, (4) absent regulatory closure in prevention focus. In the promotion focus condition, a mouse is depicted in the middle of a maze and there is also a cheese at the exit of the maze in front of a mouse hole. This maze semantically activates nurturance and growth needs and represents the goal of making advancement and progress towards satisfaction of these needs. In the prevention focus condition, the same mouse in the middle of the maze with an exit and a mouse hole is depicted. However, this time, an owl is shown hovering over the maze to catch the mouse before it can reach the mouse hole at the exit. This manipulation semantically activates safety and security needs and represents the goal of avoiding from a negative outcome (danger) and being in a safe place (the hole). In the original maze task, participants are instructed to help the mouse find its way through the maze using a pen or pencil (Friedman and Förster, 2001). However, since we expected the impact of regulatory focus to vary depending on presence and absence of regulatory closure, we employed another version of the maze task, which was adapted and validated by Baas and his colleagues (2011). In the regulatory closure conditions, participants are instructed to solve the maze and help the mouse out of the maze; whereas in the absent regulatory closure conditions, participants are restrained from goal attainment by getting explicit instructions of not solving the maze.

Following Wan et al. (2009), participants were asked to imagine that they were the mouse depicted in the maze. All participants were asked to write down which emotions they would feel. In the regulatory closure condition, following the report of their feelings participants were also asked to help the mouse find its way out of the maze by using a pen or pencil. In the absent regulatory closure condition, participants were asked not to solve the maze but only to write down their feeling.

**Trust.** We measured participants' trust via the trust game developed by Berg, Dickhaut and McCabe (1995). Trust game is typically played with two anonymous strangers who are randomly assigned to either to the sender or the receiver role. Because our aim was to evaluate only the trust level of individuals but not trustworthiness, all participants were assigned only to the sender's role. Consistent with the previous research (Buchan and Croson, 2004; Evans and Revelle, 2008; Evans and Krueger, 2011), participants were asked to imagine that they were the sender and paired with a hypothetical anonymous partner. They were also informed that both pairs were randomly assigned and given 15 coins of which both parties would decide on whether and how much to transfer to the other party. The first move is of sender's and the amount of money, if any, the sender transfers to the receiver is tripled. Then the receiver decides on how much money to send back to the sender, which is not multiplied by any number. Participants (senders) decided

on a paper form how much money to transfer from alternatives ranging from 0 to 15, which was used as the measure of trust they had in an anonymous stranger.

**Control variables.** A recent experimental study suggests that depletion of self-regulatory resources decreases trust in strangers (Ainsworth et al., 2014). The manipulations we used for regulatory focus and closure might lead to different degrees of ego depletion in each condition, thus potentially influencing trust. Therefore, to control for this alternative explanation we followed prior research (Friedman and Förster, 2001) and measured ego depletion after regulatory focus and closure manipulations. Ego depletion was measured with 6 items on a 7-point Likert scale from the State Self-Control Capacity Scale (Twenge et al., 2004;  $\alpha = .84$ ). We also measured participants' mood states to control for its potential confounding effects (Friedman and Förster, 2001). Positive and negative moods were measured with 10 items (i.e. happy, cheerful, content, nervous, jittery, gloomy, irritated, fed up, sad, calm) on a 5-point Likert scale (1 = *definitely do not feel*, 5 = *definitely feel*) (Fairbairn and Sayette, 2013; Mayer and Gaschke, 1988). A factor analysis with oblique rotation and principle axis factoring produced three factors: "negative mood" (nervous, jittery, gloomy, irritated, fed up, sad), "positive mood" (happy, cheerful, content) and "calmness" which did not load on any factors and therefore, was treated as a separate factor (positive mood  $\alpha = .80$ , negative mood  $\alpha = .86$ ).

We measured participants' gender, age and subjective socioeconomic status (SES) several weeks before the experiment due to the previous findings on their association with trust (Buchan et al., 2008; Clark and Eisenstein, 2013; Delhey and Newton, 2003). SES data were collected through the ladder scale of Adler et al. (2000).

## 6. Results

The hypotheses were tested through a 2 (promotion focus – prevention focus) x 2 (regulatory closure – absent regulatory closure) between-subjects ANOVA design. Control variables (gender, age, SES, negative affect, calmness, ego depletion, and perceived difficulty of the maze task) did not have any significant effects on trust, and hence, were excluded from the final analyses.

The results of ANOVA indicated no main effect of regulatory focus,  $F(1,142) = .40$ ,  $p = .53$  (promotion focus:  $M = 6.22$ ,  $SD = .56$ ; prevention focus:  $M = 5.72$ ,  $SD = .58$ ). However, we found a main effect of regulatory closure,  $F(1,142) = 5.78$ ,  $p = .017$ , *Cohen's f* = .20). Accordingly, participants in the regulatory closure condition (in which activated promotion and prevention goals and needs were fulfilled) ( $M = 6.94$ ,  $SD = .60$ ) sent more money to an anonymous person than participants in the absent regulatory closure condition (in which activated

promotion and prevention goals and needs remained unfulfilled) ( $M = 5.00$ ,  $SD = .53$ ).

As expected, we observed a significant interaction between regulatory focus and regulatory closure,  $F(1,142) = 4.29$ ,  $p = .04$ , *Cohen's f* = .17. The nature of this interaction effect is shown in Figure 1. To test Hypothesis 1, we compared the effect of regulatory focus on trust within the closure condition and within the absent closure condition. There was a significant effect of regulatory focus within the absent regulatory closure condition,  $F(1,142) = 4.12$ ,  $p = .044$ . In line with the hypothesis, when regulatory closure was absent, prevention focused individuals ( $M = 3.92$ ,  $SD = 3.06$ ) trusted others less than promotion focused individuals ( $M = 6.09$ ,  $SD = 5.02$ ). However, we did not find any significant difference between promotion focus ( $M = 6.35$ ,  $SD = 5.26$ ) and prevention focus ( $M = 7.52$ ,  $SD = 5.55$ ) in the regulatory closure condition,  $F(1,142) = .93$ ,  $p = .34$ . These findings provide support for Hypothesis 1.

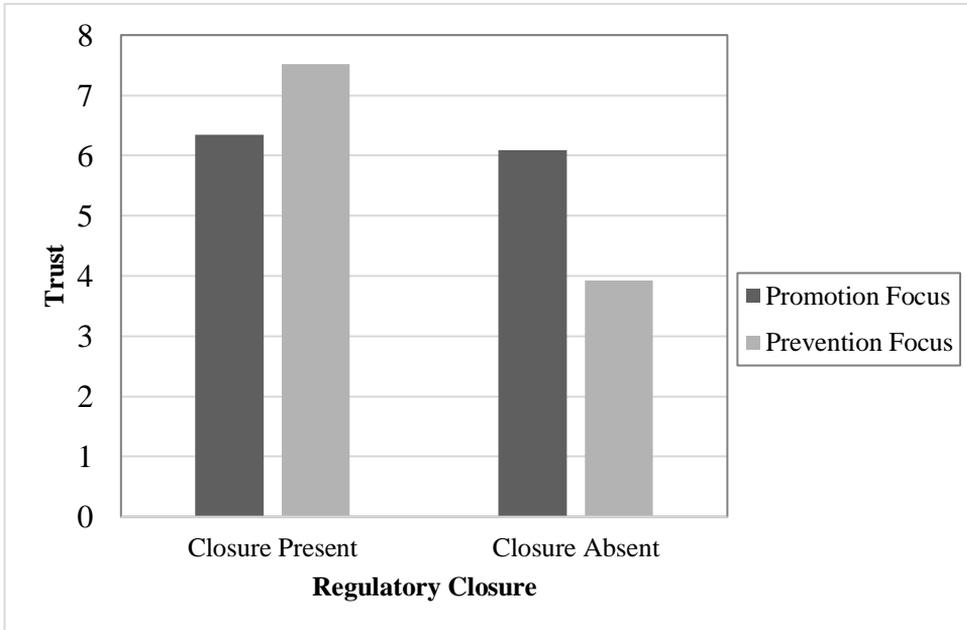
In order to test Hypothesis 2, we compared the effect of regulatory closure (presence vs. absence of regulatory closure) on trust within the promotion focus and prevention focus conditions separately. We found a significant effect for regulatory closure within the prevention condition,  $F(1,142) = 9.66$ ,  $p = .002$ . Consistent with our hypothesis, among prevention focused individuals, those in the regulatory closure condition (who fulfilled activated security and safety needs) ( $M = 7.52$ ,  $SD = 5.55$ ) showed significantly higher trust than those in the absent regulatory closure condition (who did not fulfill activated security and safety needs) ( $M = 3.92$ ,  $SD = 3.06$ ). However, no significant effect was found within the promotion focus condition,  $F(1,142) = .06$ ,  $p = .81$ . Promotion focused participants in the regulatory closure condition ( $M = 6.35$ ,  $SD = 5.26$ ) sent similar amounts of money to those of promotion focused participants in the absent regulatory closure condition ( $M = 6.09$ ,  $SD = 5.02$ ). These findings provide support for Hypothesis 2.

## Discussion and Introduction to Study 2

Consistent with our Hypothesis 1, we found that regulatory focus influenced trust only when regulatory closure was absent. Accordingly; in absent regulatory closure, prevention focus inducement reduced trust compared to promotion focus inducement. We could not find such an effect when both promotion and prevention goals were fulfilled. Furthermore, in line with Hypothesis 2, we found that successful fulfillment of previously activated goals and needs increased trust for prevention focus, but not for promotion focus. This finding suggests that fulfilling safety and security needs in domains independent of social relations contributes to trust behavior in social interactions.

**Figure 1**

Regulatory Focus x Regulatory Closure Interaction Effect on Trust



The results of Study 1 also indicated a main effect of regulatory closure. Accordingly, participants in the regulatory closure condition trusted more than participants in the absent regulatory closure condition. Additionally, within the regulatory closure condition both promotion focus and prevention focus inducements led to similar trust levels (see Figure 1). Together these findings indicate that not only fulfillment of prevention related safety and security needs, but also fulfillment of promotion related growth and advancement needs in independent domains might contribute positively to trust. This finding is consistent with previous correlational studies which suggested that individuals with greater socioeconomic resources and achievements (e.g., higher personal income, social status) had higher trust than those with less of these resources (Delhey and Newton, 2003; Zak, 2007). Similarly, Putnam's argument (2000: 138) that "haves" trust more than "have-nots" is also consistent with this finding.

According to our findings, overall regulatory closure might be the explanation of the positive association between having more resources and trust. At this point, a theoretically relevant inquiry is to examine the boundary conditions under which fulfilling one of the two types of regulatory goals (safety/security vs. growth/advancement) would lead to higher trust. Additionally, in practical terms,

showing the fulfillment of which regulatory goal would increase trust more under certain circumstances would help development of specific strategies and policies.

We propose *propensity to trust* as a factor that moderates the effect of fulfilling promotion and prevention goals and needs on trust. Propensity to trust is a personality trait that remains stable across situations and affects trust behavior of individuals (Colquitt et al., 2007). Previous research shows that propensity to trust influences trust behavior in the trust game, especially when individuals do not have relevant information on which to base their trust decisions (Evans and Revelle, 2008). Furthermore, Axelrod (2004) suggested that people with low propensity to trust have underlying safety and security concerns which should be addressed to elicit trust behavior. Therefore, we expect that for people with low propensity to trust, rather than fulfilling growth and advancement needs (regulatory closure in promotion focus), fulfilling safety and security needs (regulatory closure in prevention focus) in an independent domain would lead to higher trust in social interactions.

**Hypothesis 3.** As propensity to trust decreases, compared to regulatory closure in promotion focus, regulatory closure in prevention focus would lead to higher trust.

We conducted a second experiment to explore the role of individuals' propensity to trust on the differential effects of regulatory closure in promotion focus and prevention focus on trust behavior. We measured trust behavior via a trust game as in the first study. However, this time participants played the game for real monetary stakes with an ostensibly real receiver.

## Methodology

### Participants

Totally, 445 students of a university registered for the study and took the pretest. A total of 130 participants participated in the experiment. However, 5 participants expressed suspicion about the existence of a real receiver in another room, and 2 participants could not complete the experiment due to computer problems, thus leaving a final sample of 123 participants for statistical analyses (55 women,  $M_{age} = 21.60$  years,  $SD = 2.13$ ).

### Procedure

Sessions were held in groups of 4-10 participants in a computer laboratory which had a label of "senders' room" at the entry. Participants were welcomed by

the same experimenter and sat at computers. All participants were randomly assigned to the experimental conditions. Before the experiment, each participant was assigned a participant code so that their pretest data could be matched with the experiment data.

Participants were given information about ostensibly unrelated first and the second study through a power-point presentation with tape-recorded instructions. However, this time participants were told that there was another room named as the receivers' room and they would be matched randomly with someone from that room and play the game with that unfamiliar person for one round.

After the presentation of instructions ended, participants were handed a file labeled with the participant code. Inside the files were the maze task, and scales of ego depletion, difficulty of the maze task and mood state. Participants first completed the maze task and then answered the scales. Next, participants played one round trust game. At the last part, participants were asked two more questions for manipulation and deception check. Then they were thanked for their participation. A debriefing letter was sent to participants via e-mail after all experimental sessions were completed.

## Measures

**Propensity to trust.** Participants' propensity to trust was measured in a pretest conducted 3 weeks before the experiment. We used Yamagishi and Yamagishi's (1994) six-item 5-point Likert-type scale ranging from 1 (*completely disagree*) to 5 (*completely agree*) (e.g. Most people are basically honest;  $\alpha = .726$ ).

**Regulatory focus manipulation.** We used the same manipulation tool as in Study 1. This time, however, we had two conditions: regulatory closure in promotion focus and regulatory closure in prevention focus. Participants solved either promotion focus maze or prevention focus maze. All participants completed the maze task without any problem.

**Trust game.** As in the first study, all participants were assigned only to the sender's role. Participants played a real-time trust game on the computer. Participants were asked to enter their participant code to be randomly paired with an ostensible participant from the receivers' room. Participants were informed that people in both rooms received the same instructions about the game. Instructions participants received for the trust game was the same as those in Study 1 except that they would play the game with a real partner for real money. Accordingly, they were told that both the sender and the receiver were given 15 coins (local currency is omitted) and their decisions would determine the amount to be paid at the end of the experiment. After the participants made their decisions on how much to transfer

to the receiver, the amount they sent was multiplied by three and sent to the receiver. The money returned by the computer to the participant was determined randomly but, was never more than the twice of the amount initially sent by the participant. However, after all sessions ended, all participants were given a gross pay of 30 coins, the maximum possible amount a participant could make.

**Control variables.** After completing the maze task, participants answered the same 6-item ego depletion scale used in Study 1 ( $\alpha = .78$ ). Additionally, the difficulty of maze task was measured with the same two questions as in Study 1. Mood state of participants was measured as well. This time we used the 7 highest loading items in the Study 1. A factor analysis with oblique rotation and principle axis factoring was applied on these items and two factors were suggested: positive mood (cheerful, happy, content;  $\alpha = .78$ ) and negative mood (jittery, nervous, sad, gloomy;  $\alpha = .79$ ). Lastly, in the pretest we asked participants' gender, age, parents' level of education, area of study and SES (Adler et al., 2000) for control in statistical analyses.

**Manipulation and deception check.** Right after the trust game, we asked participants to briefly explain their goal in the maze task for manipulation check (Friedman and Förster, 2001). Additionally, we asked participants to report their thoughts on the experiment and if they have any comments on the experiment. Five participants who reported suspicion about a real receiver were dropped in further analysis.

## Results

### Manipulation Check

Two judges coded answers to the manipulation question according to four categories: a promotion goal, a prevention goal, a goal representing both regulatory foci, and a goal representing none of the regulatory foci. The total number of answers was 122 (one participant did not answer the manipulation check question) and two judges had a consensus on their classifications 90% of the time. Judges discussed and reached an agreement over the disagreed answers. Additionally, according to Cohen's kappa analysis there was a very high agreement between judges,  $\kappa = .810$ ,  $p < .001$ .

We also conducted two separate one-way ANOVAs with regulatory focus condition as independent variables to predict the answers to the manipulation check question (Gino and Margolis, 2011; Wan et al., 2009). Accordingly, participants in the promotion focus condition described goals that were more related to promotion focus ( $M = .89$ ,  $SD = .32$ ) than prevention focus ( $M = .03$ ,  $SD = .18$ ,  $F(1,120) = 327.5$ ,  $p < .0001$ ). In contrast, participants in the prevention focus condition described goals that were more related to prevention focus (Prevention focus:  $M$

= .95,  $SD = .22$ ) than promotion focus (Promotion focus:  $M = .15$ ,  $SD = .36$ ;  $F(1, 120) = 224.8$ ,  $p < .0001$ ). These results suggest that the regulatory focus manipulation was effective.

## Hypothesis Testing

Third hypothesis was tested with hierarchical linear regression analysis. Table 1 summarizes the results of the analysis. We only controlled for gender, as other demographic variables and ego depletion, mood and experienced difficulty in the maze task did not have any impact on trust. In the first stage, the main effects of gender, propensity to trust and regulatory focus in the existence of closure were entered into the model. In the second stage the interaction of propensity to trust x regulatory focus in the existence of closure was entered. Importantly, this interaction was significant,  $\beta = -2.65$ ,  $F(1,120) = 4.44$ ,  $p = .028$ ,  $\Delta R^2 = 0.04$ . As displayed in Figure 2, a simple slope analysis was conducted in order to interpret the nature of this interaction (Cohen et al., 2003). As expected, for individuals with lower propensity to trust, regulatory closure in prevention focus led to higher trust than regulatory closure in promotion focus,  $\beta = 2.80$ ,  $SE = 1.19$ ,  $p = .02$ . However, for individuals with high propensity to trust, no difference was found,  $\beta = -.93$ ,  $SE = 1.18$ ,  $p = .43$ . These findings provide support for Hypothesis 3.

**Table 1**

Regression Results for Regulatory Focus, Propensity to Trust Predicting Trust

	Step 1		Step 2	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Intercept	-1.11	2.51	-12.51***	5.69
Main Effects				
Gender <sup>a</sup>	2.41***	.085	2.31***	.084
Regulatory Focus <sup>b</sup>	.94	.085	8.67**	3.58
Propensity to Trust	1.0*	.061	4.98***	1.88
Interaction				
Regulatory Focus X Propensity to Trust			-2.65**	1.19
F	4.13**		4.44**	
R <sup>2</sup>	.09		.13	
$\Delta R^2$			.04**	

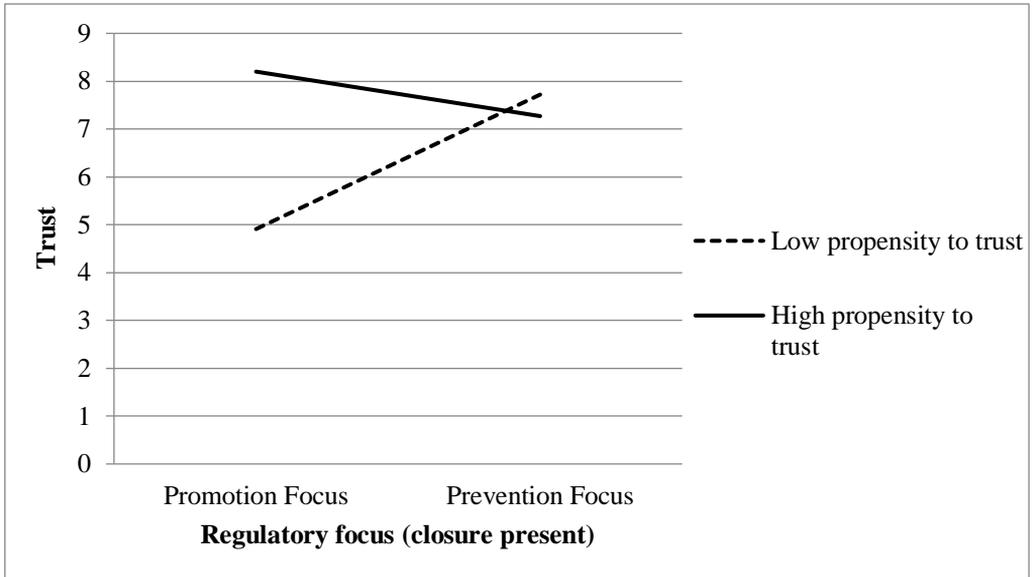
Note: N = 123. Unstandardized coefficients are reported.

<sup>a</sup>Gender 1 = Female, 2 = Male. <sup>b</sup>Regulatory Focus 1 = Promotion, 2 = Prevention

\*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

**Figure 2**

Type of Regulatory Closure and Trust Propensity Interaction Effect on Trust



## General Discussion

The present studies investigated the interactive role of regulatory focus and regulatory closure in explaining trust among strangers. Our findings suggest that manipulation of regulatory focus and regulatory closure together influence individuals' interpersonal trust in subsequent domains. In the first study, we found that individuals situationally primed with prevention focus trusted others less than individuals primed with promotion focus when the regulatory closure was absent (Hypothesis 1). Conversely, promotion and prevention focused individuals placed similar levels of trust in others when regulatory closure was present. Additionally, individuals induced with prevention focus trusted others more when regulatory closure was present, as compared to when regulatory closure was absent (Hypothesis 2). That is, the fulfillment of salient safety and security needs in an independent domain increased trust of prevention focused individuals in social interactions. In contrast, promotion focused individuals' trust did not differ with respect to the presence and absence of regulatory closure. In the second study, we found that the effect of regulatory closure of promotion and prevention goals on trust behavior was moderated by individuals' propensity to trust. Accordingly, fulfilling prevention goals, compared to promotion goals, led to greater trust among

individuals with low propensity to trust, but not among individuals with high propensity to trust (Hypothesis 3).

### **Theoretical and Practical Implications**

Our study makes significant contributions to both trust and regulatory focus literatures. Majority of previous research on trust has largely investigated macro factors or individual level factors as determinants, though these factors offer little flexibility and opportunity to influence trust in the short term. However, our findings suggest that manipulating regulatory focus and regulatory closure momentarily in an unrelated domain might influence trust in subsequent social interactions. Furthermore, our second study supports the previous research that suggests that influence of situational factors on trust is moderated by dispositional or attitudinal factors (Goto, 1996; Kramer, 1999; Scott, 1980). The present research, thus, not only improves our understanding concerning the situational determinants of trust but also presents a more integrated model of trust by considering joint effects of situational and dispositional determinants.

Our studies also contribute to the research on the influence of self-regulation on interpersonal trust. Contrary to the study of Keller, Mayo, Greifenede, and Pfattheicher (2015), which reported that prevention focused individuals trust less compared to those in a control condition, our findings suggest that prevention focus leads to less trust than promotion focus only when regulatory goals are unfulfilled. When regulatory goals are fulfilled, however, trust does not appear to depend on regulatory focus.

In study 1, the main effect for regulatory focus was not significant although there was a trend suggesting that prevention focus led to lower trust than did promotion focus. The lack of this main effect along with a significant regulatory focus x regulatory closure interaction suggests that prevention-oriented concerns (i.e. vigilance against insecurity and sensitivity to potential losses) are activated and experienced only when regulatory closure was absent, hence influencing trust only when these concerns are salient. By contrast, in the presence of regulatory closure, prevention-focused concerns leading to sensitivity to threats and loss become less relevant, reducing their effect on trust. This is consistent with the finding that the trust of prevention focused people depends on their level of sensitivity to negative information (Keller et al., 2015). Accordingly, people differ in their cognitive tendency to attend to negative information (Noguchi et al., 2006). Keller et al. (2015) found that inducement of prevention focus reduces trust only when people have high sensitivity to negative information. In a similar vein, we argue that the absence of regulatory closure might function the same way by bringing salient negative information to one's attention. Hence, further studies might test this

argument by measuring whether the absence of regulatory closure actually increases saliency of negative information and, in turn, decreases trust in prevention focus relative to promotion focus.

We argue that the present findings represent a more complete picture of the role of regulatory focus in trust for two reasons: First, Regulatory Focus Theory assumes that at a given moment, individuals could be either in a promotion focus or a prevention focus but it is not theoretically possible to have a control condition. Further, having participants in the treatment condition perform a task but not providing any equivalent task to participants in the control condition might have influenced ego depletion of participants differently and thus potentially led to decreased trust beyond the effect of regulatory focus (Ainsworth et al., 2014). Our studies, hence, enhance the previous research by comparing the relative influences of both types of regulatory orientations on trust while controlling for differences across conditions and potential alternative explanations. Secondly, and consistent with the findings of Baas and colleagues (Baas et al., 2011), our findings suggest that one needs to take into account regulatory closure to understand the link between regulatory focus and trust. Specifically, we found that the influence of prevention focus on trust varies depending on goal fulfillment; such that, prevention focused individuals trust more when prevention goals are fulfilled than when goals remain unfulfilled. This finding might have important implications for interpersonal trust particularly for collectivist cultures, considering that in collectivist cultures people tend to have prevention focus; whereas in individualist cultures advancement and growth needs become more relevant and people tend to employ promotion focus (Kurman and Hui, 2011). Accordingly, helping individuals situationally satisfy prevention goals and needs, and bringing them into a state of psychological safety and security in domains independent of social interactions may have positive carry-over effects on their trust in others. Feeling safe and secure in one domain might increase confidence and decrease the perceived risks of relying on others in social life. One way to achieve this is the presence of support mechanisms and bodies promoting aids such as housing development funding, pension funding, healthcare subsidies through which individuals fulfill prevention needs of safety and security so that they have increased confidence and tolerance to take risk in their social interactions (Levi, 1998). As for organizations, human resource policies that employ internal recruitment processes, provide employees with long-term career development plans and higher levels of job security (Sassenberg and Scholl, 2013) might help employees to feel psychologically safe and secure (Ryan and Deci, 2000), which in turn attenuates their concerns regarding trusting others.

## Limitations and Future Research

Some limitations of the present research should be acknowledged. First, we chose to use the maze task which is a valid tool commonly used in the previous studies for manipulating regulatory focus (Baas et al., 2011; Friedman and Förster, 2001; Wan et al., 2009). We used the maze task because it allowed us to prime regulatory focus and regulatory closure simultaneously, also subtly and independently of the measurement of trust (Baas et al., 2011). However, it would be beneficial to replicate our study by using other manipulation tools (Higgins, 1998) in future research to increase strength of our arguments. Second, we measured trust by using trust game in both studies. Although trust game is a valid and popular tool for measuring trust behavior (Camerer, 2003), future research might investigate whether our results generalize using other measurements of trust. Additionally, in both studies trust game was played only one round because we wanted to measure trust among strangers with no history, and thus rule out any other explanations such as the reputation effect (Berg et al., 1995; Johnson and Mislin, 2011). However, it remains to be seen whether our hypotheses are supported in multiple round trust game (Boero et al., 2009). Additionally, our findings on the influence of regulatory focus and regulatory closure on trust may not extend to trust among people who know each other; because specific trust in close relationships involves evaluating the very characteristics of the trustee based on previous interactions (Mayer et al., 1995) and may be influenced less by situational and momentary cues.

## 7. Conclusion

In the trust literature, there are very few studies examining how interpersonal trust among strangers could be influenced through situational factors. The present research demonstrated that momentary priming of regulatory focus moderated by regulatory closure could influence trust in a stranger. Promotion focus induced individuals trusted in a stranger more than prevention focus induced individuals, only when relevant regulatory goals were not attained. When regulatory goals were successfully attained, regulatory focus did not impact on trusting of individuals. The present research also revealed that prevention focus induced individuals showed increased trust when relevant regulatory goals were fulfilled than when these goals were unfulfilled. Lastly, the current research showed that successful regulation of prevention goals, relative to promotion goals, increased trust levels of those with low dispositional trust, but not those with high dispositional trust.

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## Özet

### Düzenleyici odak ve kişilerarası güven: Düzenleyici kapama ve güven eğiliminin rolü

Bu çalışma, düzenleyici odağı yabancılar arasındaki güvenin öncülü olarak inceleyen iki deneyden oluşmaktadır. Düzenleyici kapama argümanından yola çıkan birinci deneyde (N = 146), düzenleyici hedeflerin gerçekleştirilmediği durumda yükselme odağı aktifleştirilen bireylerin önleme odağı aktifleştirilen bireylere kıyasla güven oyununda daha fazla güven ortaya koydukları görülmüştür. Düzenleyici hedeflerin gerçekleştirildiği durumda ise yükselme odaklı ve önleme odaklı bireylerin tanımadıkları kişilere gösterdikleri güven açısından farklılaşmadıkları görülmüştür. İkinci deneyde (N = 123) ise bireylerin güven eğilimleri azaldıkça önleme odaklı hedeflere ulaşılmasının yükselme odaklı hedeflere ulaşılmasına kıyasla güveni daha fazla arttırdığı bulunmuştur. Diğer bir deyişle, önleme odağının temelinde yer alan emniyet ihtiyaçlarının tatmin edilmesi, güven eğilimi düşük bireylerin tanımadıkları kişilere duydukları güveni arttırmıştır. Bu bulgular, düzenleyici odağın yabancılar arasındaki güveni nasıl ve ne zaman etkilediği konusunda yazına katkı sağlamaktadır.

*Anahtar kelimeler:* Düzenleyici odak, düzenleyici kapama, güveni güven eğilimi.