Self-Regulation of Rejection Sensitivity by Mental Contrasting

Dissertation zur Erlangung des Doktorgrades

an der Universität Hamburg,

Fakultät für Psychologie und Bewegungswissenschaft,

Institut für Psychologie

vorgelegt von Jenny Voth

Hamburg, 2016

Tag der Disputation: 24.08.2016

Prüfungsausschuss

Vorsitz:	Prof. i.R. Dr. phil. Alexander R. Redlich
1. Dissertationsgutachten:	Prof. Dr. rer. nat. Gabriele Oettingen
2. Dissertationsgutachten:	Prof. a.D. Dr. rer. soc. Rosemarie Mielke
1. Disputationsgutachten:	Prof. Dr. rer. nat. Jan Wacker
2. Disputationsgutachten:	Prof. Dr. phil. Juliane Degner

Table of Contents

Figures and Tables

Acknowledgements

Die vorliegende Arbeit ist im Rahmen meiner vierjährigen Tätigkeit am Arbeitsbereich Pädagogische Psychologie und Motivation der Universität Hamburg entstanden. Daher möchte ich mich zuallererst bei Prof. Dr. Gabriele Oettingen bedanken. Sie hat mir, nach vorheriger wissenschaftlicher Tätigkeit in der Kommunikationswissenschaft, die Möglichkeit gegeben, meinen wissenschaftlichen Weg in der Psychologie fortzusetzen. Während des gesamten Forschungsprozesses hat sie mich durch ihr kompetentes und gewissenhaftes Feedback zu Studienplänen und -ergebnissen, Stipendiumsanträgen und Konferenzbeiträgen unterstützend begleitet. Ich danke ihr besonders für die Freiheit, die sie mir in der Phase der Themenfindung gelassen hat. Dadurch konnte ich dieses Forschungsprojekt mit vollster Überzeugung und Begeisterung durchführen. Durch ihr Engagement für den Graduiertenaustausch der Universität Hamburg mit der New York University und der Veranstaltung von Vorträgen international herausragenden Wissenschaftlern (insbesondere Prof. Roy Baumeister, Prof. John Cacioppo und Prof. Jean Decety) war es mir möglich ein breites Forschungsspektrum kennenzulernen und wertvolles Feedback zu meiner Arbeit zu bekommen.

Ich danke der Universität Hamburg, die mich durch ein Stipendium aus dem Gleichstellungsfonds bei der Finanzierung meines Promotionsabschlusses und durch ein Stipendium aus dem Körperschaftsvermögen bei der Finanzierung einer Forschungsreise an die New York University unterstützt hat.

Ich danke auch den Kolleginnen und Kollegen am Arbeitsbereich, deren viele kleine Anregungen und Hinweise meine Forschungsarbeit oft bereichert haben. Besonderer Dank gilt PD Dr. Timur Sevincer, der mich durch seine Seminare und Diskussionsbeiträge in unseren Kolloquien immer wieder für die Selbstregulationsforschung begeistert und mich im Verlauf meiner Promotion in meinen Vorhaben bestärkt hat. Ich danke Bettina Schwörer und Dr. Jana Schrage, die mir sehr geholfen haben, mich schnell in die Themen am Arbeitsbereich

einzuarbeiten und mich im Uni-Alltag zurechtzufinden. Meiner Freundin und Kollegin Naska Goagoses danke ich dafür, dass sie nicht müde wurde, sich meine theoretischen Überlegungen anzuhören und meine orthografischen und grammatikalischen Fehler im Englischen zu korrigieren. Ich danke Greta Wagner und Prof. Dr. Ulrich Steingen für den Austausch und Rat zu statistischen Fragen.

Die Arbeit an meinem Promotionsprojekt hätte ohne die studentischen Helfer nicht nur halb so viel Spaß gemacht, sondern wäre insbesondere bei den aufwendigen Schul- und Laborstudien gar nicht möglich gewesen. Ich bedanke mich herzlich bei Johanna Horn, René Uhlig, Zahra Khosrowtaj, Sinikka Heisler, Marcel Aygün und Olga Emling für ihren Einsatz.

Ich bin glücklich und dankbar, liebevolle Eltern, Großeltern und eine Schwester zu haben, die immer an mich geglaubt und mich bei allen meinen Zielen und Plänen unterstützt haben. Ich danke meinen Freunden Julia Klingsporn, Dörte Behrendt, Daniel Opper und Dr. Bettina Sielaff-Frimpong, die immer ein offenes Ohr für mich hatten und mich in den Lebensalltag zurückholten, wenn ich mich in den Tiefen der Forschungsarbeit verstrickt hatte.

Mein innigster Dank gilt Jens Klingsporn, der mir die Kraft und den Halt gab, meine akademischen Ziele zu verwirklichen und mich insbesondere nach Rückschlägen immer wieder aufgebaut hat.

Abstract

Previous research conceptualized high rejection sensitivity (RS) as a tendency to anxiously expect, readily perceive, and overreact to rejection, which provokes relationship problems (for a review, see Romero-Canyas & Downey, 2005). Adding to the current theory, we assume that low RS, the tendency to calmly expect acceptance and to downplay cues of rejection, might also lead to situationally inappropriate behavior and interpersonal problems. Until now experimental evidence how self-regulation strategies can change dispositional responses of RS is missing. In the present research we examined if the strategy of mental contrasting can regulate inappropriate responses to interpersonal rejection. In mental contrasting people juxtapose a positive future outcome with an obstacle in the present reality (for a review, see: Oettingen, 2012). We hypothesized that mental contrasting would enhance a balanced reaction to rejection that is independent of individual differences in RS by desensitizing people with high RS and sensitizing people with low RS. We conducted three studies with German adolescents (Study 1, $N = 58$), American adults (Study 2, $N = 183$) and German adults (Study 3, $N = 164$). After measuring RS, participants were randomly assigned to mentally contrast or use a control strategy to regulate an idiosyncratic help-seeking problem. As the dependent variable we measured the sensitive response to rejection (Study 1: disappointment, self-attribution/ resignation, anger/aggression; Study 2 and 3: feeling rejected). Results showed that mental contrasting weakened the link between RS and a sensitive response to rejection ($f^2 = .02$ - $.09$). Participants with high RS showed the tendency to react less sensitive in the mental contrasting compared to the control condition and participants with low RS showed the tendency to react more sensitive in the mental contrasting compared to the control conditions. This research implies that mental contrasting helps people to not readily translate their RS disposition into situational responses to rejection and to react thoughtfully instead.

Keywords: self-regulation, rejection sensitivity, mental contrasting

Self-Regulation of Rejection Sensitivity by Mental Contrasting

Imagine an ordinary business day at lunchtime. Anna, Catherine, Boris and Max are colleagues. Catherine, Boris, and Max successively approach Anna to ask her if she would go for lunch with them: “Would you like to have lunch with me?” Catherine asked Anna. “Sorry”, she said, “I´m too busy.” Catherine turns away with hanging shoulders, ruminating about whether she had done something wrong. Then Boris approached Anna:”Would you like to have lunch with me?” “No, I can`t. I´m too busy,” she said. “Come on, don`t be a grouch,” Boris replied, took Anna`s coat and said: “We will just go to the fast food restaurant around the corner.” Annoyed about Boris` pushy behavior, Anna took back her coat and firmly said: “No, I really can`t.” Then Max approached Anna: “Would you like to have lunch with me?” “Sorry, I`m too busy“, she said. “How about next week?” Max asked. “Okay” Anna said. (example adapted from: Downey, Lebolt, Rincón, & Freitas, 1998)

Presumably all of Anna`s colleagues are driven by the basic need to belong, i.e., to form and maintain enduring and caring relationships with other people (Baumeister & Leary, 1995). A thwarted need to belong, to be related (Ryan & Powelson, 1991), or to be connected (Cacioppo & Patrick, 2009) has been shown to damage our mental and physical health. For example, Repetti, Taylor, and Seeman (2002) have reviewed a vast amount of empirical evidence showing that children growing up in families characterized by conflict, aggression and cold, unsupportive, or neglectful relationships developed an increased risk for emotional and behavioral problems (e.g., aggressive behavior, anxiety, and depression) and for physical symptoms and diagnoses (e.g., infectious diseases, hypertension, heart diseases, or cancer). In older adult populations, perceived social isolation uniquely explained an increase in depressive symptomatology over a five-year period (Cacioppo, Hawkley, & Thisted, 2010). Furthermore, negative social exchanges including perceived unsympathetic, insensitive, rejecting or neglecting behavior were predictive of lower self-rated health, greater functional

limitations, and a higher number of reported health conditions over a two-year period (Newsom, Mahan, Rook, & Krause, 2008).

However, people (like Anna`s colleagues) use different strategies to secure their acceptance and avoid rejection from significant others. According to the rejection sensitivity (RS) model, people with high RS (like Catherine) anxiously expect, readily perceive, and overreact to rejection (Downey & Feldman, 1996). Past research has shown that oversensitivity to rejection is predictive of negative consequences like relationship dissatisfaction and break-up, and impaired psychological health (e.g., Ayduk, Downey, & Kim, 2001; Downey, Freitas, Michaelis, & Khouri, 1998; Downey, Lebolt, Rincón, & Freitas, 1998). Referring to other theories on interpersonal rejection (esp., Leary, Tambor, Terdal, & Downs, 1995; Leary & Guadagno, 2011), we extend the RS model and argue that people with low RS (like Boris) calmly expecting acceptance, downplaying cues of rejection also tend to show situationally inappropriate reactions to interpersonal rejection that provoke interpersonal difficulties. In our view, interpersonally successful people (like Max) are neither too sensitive nor too insensitive but instead show a balanced sensitivity to interpersonal rejection.

Self-regulatory competence has been shown to buffer negative consequences of RS (Ayduk et al., 2000) but experimental evidence how self-regulation strategies can change dispositional responses of RS is missing. In the present research we examined if the self-regulation strategy of mental contrasting (for a review, see: Oettingen, 2012) can help people to react more appropriately to interpersonal rejection. In mental contrasting people juxtapose a positive future outcome (e.g., successfully asking a colleague for having lunch together) with an obstacle in the present reality (e.g., fear of rejection). Previous research has shown that mental contrasting enhances strategic processing of information about the present reality (Kappes, Wendt, Reinelt, & Oettingen, 2013), and links the present reality and instrumental means to overcome the reality (Kappes, Singmann, & Oettingen, 2012). Therefore, we hypothesized that mental contrasting would enhance a thorough reflection about the rejection

situation, weaken the link between dispositional RS and the situational response to rejection and lead to more appropriate behavior instead. We assumed that mental contrasting would balance individual differences in RS by sensitizing people with low RS and by desensitizing people with high RS.

Rejection Sensitivity – A Cognitive-Affective Information Processing Dynamic

In contrast to other personality dispositions, which influence the response to interpersonal rejection like trait self-esteem, agreeableness (Smart Richman & Leary, 2009), or attachment style (Kelly, 2001), RS is conceptualized within the Cognitive-Affective Processing Systems or CAPS theory (Mischel, 2004; Mischel & Shoda, 1995). CAPS theory conceptualizes personality as an interaction of person and situation variables to account for the "personality paradox", which describes the unexpectedly low consistency of behavior across situations (Mischel, 2004). In contrast to classical conceptions of personality dispositions, CAPS theory does not focus on the average behavior of people across situations but furthermore emphasizes stable patterns of cross-situational variability as more important to describing individual differences.

> The proposed cognitive social learning approach to personality shifts the unit of study from global traits inferred from behavioral signs to the individual`s cognitive activities and behavior patterns, studied in relation to the specific conditions that evoke, maintain, and modify them and which they, in turn, change. (Mischel, 1973, p. 265)

Therefore, Mischel and Shoda (1995) analyzed cross-situational inconsistencies in the behavior of children and showed that these inconsistencies were not only attributable to a main effect of the situation, but that children showed individually different stable patterns of behavior across situations ("if…, then…" or "situation-behavior-profiles"). To illustrate this, while one child might be found to behave aggressively when criticized by a teacher but not when teased by a peer, another child might show the opposite pattern of becoming aggressive

when teased, but not when criticized by a teacher. CAPS theory further proposes that the situation-specific behavior is mediated by so called cognitive-affective units (CAUs), e.g. cognitive and behavioral competencies, encoding strategies, expectancies, values, self-regulatory strategies (e.g., goal setting and self-reinforcement), and plans (Mischel, 1973). Chronic patterns of activation between different CAUs are expressed in the "if…, then…" -profiles. According to CAPS theory, understanding how a person construes a specific situation, what their goals and motivations are, can best explain how this person will behave in this situation. Applying CAPS theory, the RS model aimed to consequently apply social-cognitive variables to illuminate the processes that mediate between early rejection experiences and later interpersonal relationships problems (Feldman & Downey, 1994). Accordingly, RS is defined as the cognitive-affective processing disposition to anxiously expect, readily perceive[1], and overreact to perceived rejection (Downey & Feldman, 1996; Feldman & Downey, 1994) (see Figure 1).

Referring to RS as a cognitive-affective processing disposition has two advantages for the study of individual differences in response to rejection: First, the situational approach is supposed to explain more variance in individually different responses to rejection than non-situation specific dispositions. Supporting this assumption, (Downey & Feldman, 1996) showed that RS correlated moderately with neuroticism (r = .36), introversion (r = .22), self-esteem (r = -.33), social avoidance (r = .26), social distress (r = .39), interpersonal sensitivity (r = .39) and a secure attachment (r = -.28), but only RS was predictive of rejection attributions following ambiguous partner behaviors. Second, the possibility of self-regulatory processes are already conceptualized as part of the personality dynamic, which allows for behavior and even personality change.

[1] - The word "perceive" is used following Downey`s terminology and the traditional use of the term "interpersonal perception" in social psychology Kenny (1994) and refers to the detection and interpretation of interpersonal cues. The term "perceived rejection" is mostly used to describe that a perceived behavior is interpreted as rejection.

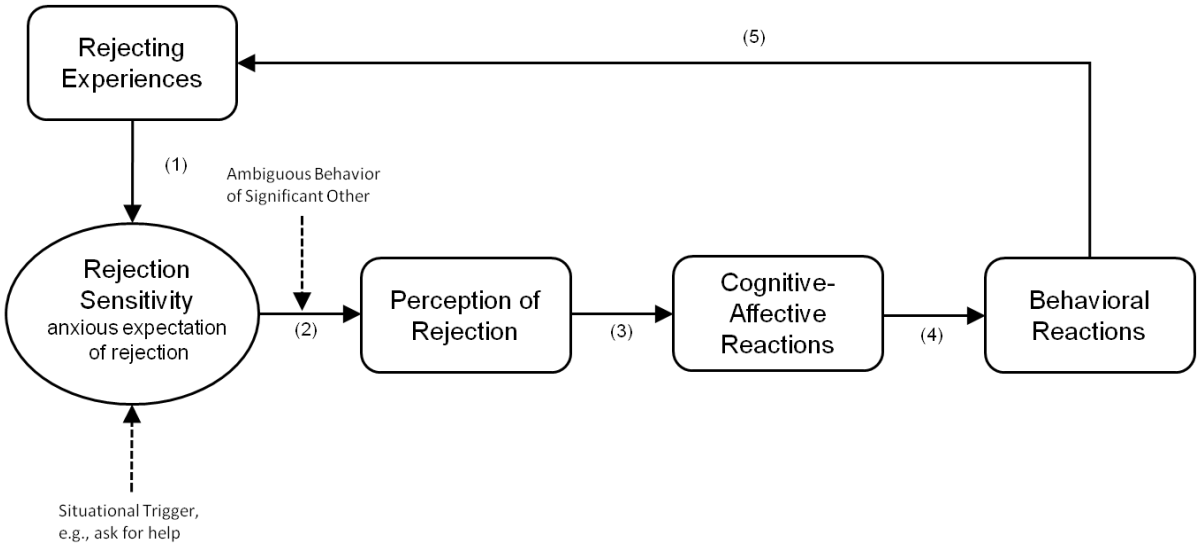


Figure 1. RS model, adapted from Levy et al. (2001).

Drawing on attachment theory (Bowlby, 1973), the RS model assumes that early experiences of rejection form rejection schemas, which influence later interpersonal behavior (see Figure 1). In support of the assumed influence of early relationships on RS Feldman and Downey (1994) have shown that the more participants experienced physical parent-child and parent-parent aggression (frequency and severity), the more anxiously they expected rejection as young adults. As an internalized legacy of rejection experiences, RS is conceptualized as a defensive motivation to avoid rejection (Feldman & Downey, 1994; Romero-Canyas & Downey, 2005). Due to this reasoning, Feldman and Downey (1994) assumed that the rejection sensitive motivation would encompass the anxious-avoidant as well as anxious ambivalent behavior patterns, since both are concerned with coping with an insecure attachment. Because the authors viewed the expectation of rejection, qualified by the value of rejection, as the core of the RS dynamic, they operationalized RS by measuring how concerned or anxious people would be in situations, in which they could potentially be rejected (anticipatory anxiety), and if they would expect acceptance or rejection. People with low RS more calmly expect acceptance, while people with high RS anxiously expect rejection (Downey, Freitas et al., 1998).

Applying the situational approach of the CAPS theory, the RS model assumes that anxious expectations of rejection are activated automatically, specifically without having an awareness about ones relationship schema and without using cognitive resources to control ones thoughts and behaviors (Bargh, 2014) (see Figure 1(1)). The RS model assumes that in situations entailing rejection (e.g., asking a friend for help), the more rejection sensitive people are, the more they are supposed to be in a negatively valenced, highly aroused state, vigilant for detecting potential threat (see Figure 1(2)). Providing evidence for this assumption, Downey, Mougios, Ayduk, London, and Shoda (2004) showed that heightened RS augments the startle response, when people viewed a painting depicting a rejection theme, but not when viewing a non-representational negatively valenced artwork. Above the attentional processes, RS influences the interpretation of rejection. In a laboratory experiment Downey and Feldman (1996, Study 2) found that the more rejection sensitive participants were, the more rejected they felt when an interaction partner left the experiment after a friendly conversation without giving an explanation. Downey, Lebolt et al. (1998) conceptually replicated this finding by showing that children with high RS (above the median) felt more distressed following an ambiguously intentioned rejection of a peer compared to children with low RS (below the median). Correlational data collected in the same population of students showed that RS was moderately correlated with feeling rejected following a hypothetical ambiguously intentioned rejection by a teacher or peer ($r = .29$, $p > .001$)[2]. Qualitative data from the study by Downey and Feldman (1996, Study 2, presented by Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010, p. 133) explicated that participants with higher RS tended to attribute the behavior of the interaction partner more to themselves (“I wondered what I had done wrong.”). Whereas participants with lower RS

[2] Teacher response to a child`s request for a video game: “No, you can`t take it home this weekend. I`m giving it to someone else.” Peer response to a request for help with spilled grocery: “just walk(ing) quickly by, as if they don`t see you.”

attributed the behavior more to non-personal causes (“I thought maybe she was in a rush.”). Perceived personal rejection might not only be attributed to oneself (self-blame), but can also be explained with the perceived hostile intent of the other one (other-blame). Downey and Feldman (1996, Study 3) showed that students attributed more hurtful intent to the insensitive behavior (e.g., being cold and distant) of their new romantic partners, the more rejection sensitive they were. In a study with dating couples, Downey and Feldman (1996, Study 4) assessed perceptions of both partners to show that the perceived rejection of high RS people is indeed amplified when compared with the perception of the partner: RS was positively correlated with heightened concern about rejection (statistically controlled for reported commitment of the partner) and magnified perceived relationship dissatisfaction of the partner (statistically controlled for partner`s reported satisfaction with the relationship). These findings show that RS is not only related to a ready perception and intensified interpretation of rejection, but that the perception is also inappropriate with regard to the perspective of the interaction partner.

The RS dynamic further proposes that the interpretation of rejection differentially influences behavioral responses in high RS and low RS people (see Figure 1 (3 and 4)). A number of studies provide evidence for a link between RS and hostility/aggression (for a review, see Romero-Canyas et al., 2010). Ayduk, Downey, Testa, and Yen (1999) showed that high RS women more automatically associated rejection with hostility, evaluated a potential interaction partner more negatively following an ambiguously intentioned rejection, and reported more conflict with their partner when they felt rejected the day before. In line with the situation-specific approach of CAPS, high RS women did not differ in average hostility from low RS, but only in situations, in which they perceived rejection. Therefore, hostility words were not generally more accessible in high RS women compared to low RS women and high RS women did not generally report more conflict than low RS women did.

In children RS predicted self- and teacher-reported aggression as well as reports of conflicts in school one year later (Downey, Lebolt et al., 1998, Study 3).

Negative Consequences of High and Low Rejection Sensitivity

Previous research focused on the negative consequences of anxious expectations (high RS) on a ready perception, overreaction to rejection and the resulting relationship problems. The RS model assumes that unreasonably hostile behavior following perceived rejection undermines relationships and provokes actual rejection of high RS people as a self-fulfilling prophecy (see Figure 1(5)). Indeed, (Downey & Feldman, 1996), Study 4) showed that the more rejection sensitive women were, the more their partners perceived their behavior as hostile and emotionally unsupportive, which has been shown to account for their partners` dissatisfaction with the relationship. In a similar study using a daily diary method Downey, Freitas et al. (1998, Study 1) replicated the finding that partners of high RS women (above the median) were more dissatisfied with the relationship and thought more about ending the relationship on days following a conflict than partners of low RS women (below the median). Downey, Freitas et al. (1998) furthermore showed that the relationships of couples with a high RS partner were three times more likely to have ended after one year compared to couples with a low RS partner. In a laboratory setting Downey, Freitas et al. (1998, Study 2) found that high RS women (above the median) behaved more negatively (e.g., negative voice tone, denying responsibility, putting down or turning off the partner coded by independent raters) than low RS women (below the median) during a conflict discussion. The negative conflict behavior of high RS women explained that their partners were angrier following the discussion than partners of low RS women were.

Adding to the current model, we argue that calm expectations of acceptance (low RS) might also be related to situationally inappropriate perceptions and reactions to rejection and relationship difficulties. The RS model assumes that the RS dynamic provokes interpersonal problems by being susceptible to “false alarms”, i.e., selectively attending to rejection cues

and wrongly interpreting other`s behavior as intentional rejection (Levy, Ayduk, & Downey, 2001). We propose that, in the same way that high RS people are predisposed to make false (positive) alarms, low RS people might more likely miss perceiving rejection cues or wrongly interpret ambiguously intentioned rejection as impersonal (false negative). First evidence supporting this assumption is reported by Romero-Canyas and Downey (2013). The authors showed that low RS people, but not high RS people, underestimated the negativity in facial expressions in a self-referent context compared to the same facial expressions presented in a non-self-referent context. They asked participants to evaluate the positivity and negativity shown in the faces of people looking at either the participant`s profile on a hypothetical online dating platform (self-referent condition) or someone else`s profile (not self-referent condition). The videos displaying the faces had been previously validated to include positive, neutral, and negative facial expressions.

Further evidence for our assumption, that both high and low RS might not be the most helpful strategies in forming and maintaining satisfying interpersonal relationships, comes from the consistent finding that RS is normally distributed with sample means usually varying around a value of 10 on a scale from 0 to 36 (e.g., Downey & Feldman, 1996). This finding might imply that rather a balance between being overly and insufficiently sensitive to interpersonal rejection is the most common and probably most successful interpersonal strategy.

This reasoning is theoretically supported by literature on interpersonal rejection that emphasizes that sensitively detecting and reacting to interpersonal rejection is helpful to prevent chronic rejection. According to Bourgeois and Leary (2001) and Williams, Cheung, and Choi (2000) reacting to relational devaluation via negative affect and lowered self-esteem (Leary & Guadagno, 2011; Leary, Tambor, Terdal, & Downs, 1995) is a functional response that signals interpersonal devaluation and motivates behavior to restore acceptance. Leary and Springer (2001) and Eisenberger, Lieberman, and Williams (2003) observed “hurt feelings” as

the specific negative affect related to interpersonal rejection. Proposing a social monitoring system Knowles (2014) and Pickett, Gardner, and Knowles (2004) reported heightened interpersonal attention and understanding in reaction to rejection. In an elaboration on the sociometer hypothesis (Leary et al., 1995), Leary and Guadagno (2011) also discuss the influence of individual differences on the sensitivity to interpersonal rejection. In contrast to the RS model by Downey and colleagues, Leary and Guadagno (2011) assume individual predispositions not only to hypersensitivity, but also to hyposensitivity. In line with the RS model, the authors hypothesized that anxiously attached individuals might have a hypersensitive sociometer, because they excessively monitor other`s reactions to them and are vigilant for detecting interpersonal rejection. Extending the RS model, Leary and Guadagno (2011) assumed other people`s sociometer might also not be sensitive enough to adequately assess their interpersonal acceptance. They assumed that hyposensitive people experience little or no anxiety, hurt feelings, or other self-relevant emotions in reaction to interpersonal rejection, which might be associated with antisocial (or sociopathic) traits (e.g., decreased empathy). Unfortunately, these assumptions have not been tested empirically. Nevertheless, our theoretical assumption has important implications for the discussion about the consequences of high and low RS. The perspective changes from asking, if higher levels in the anxious expectation of rejection (high RS) have negative interpersonal consequences, to asking, if imbalances between anxious expectations of rejection (high RS) and calm expectations of acceptance (low RS) negatively affect appropriate interpersonal reactions to rejection.

Self-Regulation of Rejection Sensitivity

Within the Cognitive-Affective Processing theory, self-regulatory processes are explicitly assumed to moderate the individual personality dynamics (Mischel, 1973; Mischel & Ayduk, 2002). Self-regulatory processes encompass “any efforts by the human self to alter any of its own inner states or responses” (Vohs & Baumeister, 2004, p. 2). In fact, previous

research has shown that not all people high in RS suffer from negatives outcomes. Specifically, the self-regulatory competence expressed in the ability to delay gratification has been shown to buffer high RS people against interpersonal and personal difficulties (Ayduk et al., 2000; Ayduk et al., 2008). Self-imposed delay of gratification is assessed behaviorally in a waiting paradigm in which children are given a choice between an immediate but smaller reward (e.g., one marshmallow) and a delayed but larger reward (e.g., two marshmallows) (Mischel, Shoda, & Rodriguez, 1989). Moderating situational variables are controlled by establishing a high level of incentive value of the rewards and a high expectancy to actually receive the rewards from the experimenter prior to all experiments (Mischel, 1974). The actual time children wait for the delayed reward is used as an indicator of their delay of gratification ability.

In Study 1, Ayduk et al. (2000) showed that RS, measured as anxious-ambivalent attachment style, only predicted lower levels of self-rated and parent-rated positive functioning (composite of self-esteem, self-worth and coping ability) in adults with lower delay of gratification ability as preschoolers. For adults who displayed longer waiting periods in the delay of gratification paradigm as preschoolers, positive functioning did not differ as a function of RS. A similar pattern of results was found for the effects of RS on the educational level and drug use: There was only a negative relationship between RS and educational level, and a positive relationship between RS and cocaine/crack drug use, for people with low delay gratification, but not for people with high delay of gratification.

In Study 2, Ayduk et al. (2000) replicated this finding in an economically disadvantaged sample of 5th to 8th graders. In this study RS was measured with the previously developed Children`s Rejection Sensitivity Questionnaire (Downey, Lebolt et al., 1998). Results showed that the ability to delay gratification moderated the effect of RS on children`s ratings of their self-worth and teacher`s ratings of children`s interpersonal functioning (peer aggression and peer acceptance). RS predicted lower self-worth and

interpersonal functioning in children with low delay of gratification ability but not for children with high delay of gratification ability. Importantly, Ayduk et al. (2000) additionally tested a mediational model, because RS and delay of gratification were weakly correlated in Study 1 (r = -.18, p < .03). They did not find evidence for the possibility that RS lead to negative outcomes by negatively influencing the delay of gratification ability, which speaks to the interpretation that self-regulatory processes and RS processes interact as distinct CAUs.

Further evidence supporting the assumption that self-regulation skills can interrupt the RS dynamic comes from a study linking RS to borderline personality. Ayduk et al. (2008) showed that RS predicted borderline features in people with low executive control but not in people with high executive control. Borderline features were measured with 24 items of the Personality Assessment Inventory – Borderline Features Scale (PAI-BOR; Morey, 1991) that assesses the four core components of borderline personality disorder: affective instability, negative interpersonal relationships, identity problems, and self-harm (impulsivity) (Ayduk et al., 2008). Executive control was measured as effortful/ attentional control using the Attentional Control Scale (Derryberry & Reed, 2002) containing 20 items assessing attention focusing (e.g., My concentration is good even if there is music in the room around me.), attention shifting (e.g., After being distracted or interrupted, I can easily shift my attention back to what I was doing.), and flexible control of thought (e.g., I can become very interested in a new topic very quickly if I need to.). Additionally, in a second study Ayduk et al. (2008) assessed attentional control with the delay of gratification paradigm (subset of data that have also been used in the previously reported Study 1 by Ayduk et al., 2000). Ayduk et al. (2008) confirmed the findings made with self-report measures of attentional control by showing that the relationship between RS and borderline personality features was attenuated if participants were waiting longer in the delay of gratification task as preschoolers.

However, what specific self-regulatory mechanisms at which stages in the RS process mediate the buffering effects of self-regulatory abilities on personal and interpersonal

outcomes of high RS? Indirect evidence shows that self-regulation influences the RS process at the early stage of physiological vigilance for the threat of interpersonal rejection. Specifically, Gyurak and Ayduk (2007) examined the moderating effects of attentional control measured with the Attentional Control Scale (ACS; Derryberry & Reed, 2002) on the relationship of self-esteem and the startle eye-blink response to paintings with rejection contents. The results showed that lower self-esteem was only related to stronger eye-blink responses in people who were low in attentional control. Self-esteem is shown to be negatively related to RS (e.g., Downey & Feldman, 1996, Study 3) and is furthermore conceptualized as a monitor of being included versus excluded (Leary, 2006). Therefore, these results suggest that the moderating effect of attentional control might also be found for the previously reported effect of RS on the eye-blink startle response (Downey et al., 2004). These findings imply that high RS people with higher attentional control skills could be able to regulate their affective reaction towards rejection stimuli at a very early, highly automated stage of the RS dynamic, which could attenuate the subsequent responses in the RS process.

Theoretically, it is furthermore reasonable that self-regulatory processes intervene at later stages in the RS dynamic, at the link between expectations and perception of rejection, and at the link between perception and reaction to rejection (see also Pietrzak, Downey, & Ayduk, 2005). The ability to postpone immediate gratification for more valued later gratification is shown to represent a general self-regulatory competence underlying a multitude of self-regulated behaviors like pursuing goals, planning, or persistence necessary for academic success and interpersonal functioning (Mischel, Shoda, & Peake, 1988). In the long term, children who waited longer for a preferred, but delayed reward, were rated by their parents to have better academic, social (maintaining friendships and getting along with peers), and problem coping skills in adolescence than children with shorter waiting periods (Mischel et al., 1988). Shoda, Mischel, and Peake (1990) additionally showed that children with higher delay of gratification abilities achieved higher SAT scores. Specifically, the ability to

successfully deal with stress and problems hints at an underlying competency, which is helpful for regulating the interpersonal stress of situations, in which rejection is possible. An experimental line of research has identified and analyzed attention deployment strategies underlying the ability to wait for a delayed gratification (Mischel, 1974). Children with longer delay periods were able to shift their attention from the "hot" arousing features of the reward, either by ignoring the tempting stimuli (e.g., looking away from the reward), distracting themselves (e.g., engaging in "fun thoughts"), or by cognitively transforming the "hot", arousing, consummatory features of the reward into "cool", abstract, informative features (e.g., instead of thinking about the sweet, fluffy taste of a marshmallow imagining the marshmallow as a cotton ball). Based on these empirical findings Metcalfe and Mischel (1999) developed a "hot-system/cool-system" framework as a heuristic tool to guide further research on self-regulation strategies. They identify the "cool system" as a "Know"-system, which is the seat of self-regulation and self-control and is associated to complex, reflective and comparatively slow cognitive processes. On the other hand the "hot-system" or the "go-system" is stimulus controlled and associated with simple, reflexive and comparatively fast emotional processes.

Transferred to the RS process, we assume that attentional control turns the reflexive, schema-based processing of a rejection situation into a reflective analysis of the situation. Contrary to previous conceptualizations (Ayduk et al., 2000; Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010) we do not only assume self-regulatory potential in people with high RS. Extending the current model, we assume that both ends of the continuum represent strong motivational forces that guide an automatic interpretation and reaction to situations entailing possible rejection, which are at risk for inappropriate interpretations and reactions to ambiguous rejection situations. The RS dynamic guides an automatic interpretation of a present rejection situation, mostly relying on generalized expectations and strategically ignoring relevant information about the present problem situation. Automated

interpersonal cognition and behavior is supposed to be necessary for an efficient management of everyday social life, in which we are not aware of and cannot pay attention to all social cues and maybe do not need to control (Bargh, 2014). However, in situations entailing possible rejection we propose, in accordance with the literature on interpersonal rejection (for a review, see Leary & Cottrell, 2013) that a thorough examination of the situation and a controlled response are most helpful to successfully manage interpersonal relationships.

We would assume that reactions guided by RS are generally "hot" and impulsive, in the sense that they are automatically processed based on relationship schemas. A controlled deployment of attention is considered to counteract the tendency of high RS individuals to focus only on the rejecting features of a situation and their internal aroused state (Ayduk et al., 2000) and on the other hand to counteract the tendency of low RS individuals to primarily pay attention to cues implying acceptance. A "cool", distanced perspective could help high RS as well as low RS individuals to encounter all context-relevant information and thereby balance their perception of the interpersonal situation.

Referring to research on romantic relationships, a central contextual variable in interpersonal situations would be the perspective of the partner (Arriaga & Rusbult, 1998). Adopting the partner`s point of view when he/she acts in a (potentially) rejecting manner, might specifically help high RS people to consider other reasons for the negative behavior than being intentionally hurtful (e.g., being tired after an exhausting day at work). Supporting this assumption, Arriaga and Rusbult (1998, Studies 2-4) showed that participants who were instructed to take the perspective of their partner reported reduced negative emotions, partner-blaming attributions, and destructive behavioral preferences in scenarios in which the partner engaged in ambiguous, potentially destructive acts.

According to Smart Richman and Leary (2009) information relevant to rejection contexts furthermore includes the perceived costs of rejection, the possibility of alternative relationships, the expectation of relational repair, the value of the relationship, the chronicity/

pervasiveness of the rejection and the perceived (un)fairness. Given the inhibition of schema-based reflexive processing due to attentional control, we would assume that people comprehensively construe the rejection situation based on this information and act accordingly. According to this reasoning, appropriate responses to incidences of (potential) rejection depend on the subjective construal of the overall situation. Therefore, it could be appropriate, if a partner reacts with immediate anger and long-term withdrawal to repeated instances of unfair partner behavior, especially if better alternatives are available and the costs of losing this relationship are not too high. On the other hand, being reasonably criticized by the partner in a highly valued, supportive relationship and good expectations to make up for one`s inconsiderate behavior, anger and withdrawal would not be assumed appropriate. The crucial point we make is, that chronic cognitive and behavioral tendencies, both in the positive or negative direction, hinder situational appraisals of rejection situations and are prone to lead to unduly benign or hostile responses to rejection. As a consequence, we propose that the central task of self-regulating RS is to help people to inhibit schematic processing based on one`s individually different RS and to instead encourage a situational perception and reaction to rejection.

The previously reported research findings and theoretical considerations imply that the prototypical RS dynamic only plays out in people with low self-regulatory abilities (Pietrzak et al., 2005). However, experimental evidence how self-regulation strategies can help to interrupt the RS dynamic is missing. Moreover, correlational research on interaction effects between RS and delay of gratification ability focused on the implementation of self-regulatory abilities in contexts relevant to RS. Intervention research that aims to enhance self-regulatory abilities related to RS-relevant contexts furthermore needs to establish a motivation to self-regulate before the implementation of self-regulation goals can be applied. A self-regulatory motivation requires that people feel the need to exert effort to alter their thoughts, emotions or behaviors in a given situation and set a self-regulation goal. To be motivated to self-regulate,

people need to gain insight into their RS dynamic, i.e., people need to identify their individual if…, then… -contingency and possible negative consequences thereof (Mischel, Ayduk, & Shoda, 2008, p. 234). Consequently, people are able to identify relevant situations and can intentionally exert effort to inhibit their schema-based responses, and instead reflectively analyze the interpersonal problem situation and generate alternative ways of perceiving and reacting to the situation. According to CAPS theory, it is possible that relatively stable if… -then… -contingencies can be weakened, if the individual actively regulates their responses in relevant situations. In the long run, new contingencies can be learned and automated, which would result in a changed individual RS dynamic.

Mental Contrasting

Fantasy Realization Theory (FRT, Oettingen, 2000; Oettingen, Pak, & Schnetter, 2001; for a review, see Oettingen, 2012) identifies mental contrasting as a self-regulation strategy that promotes behavior change via expectancy-dependent goal commitment. Goal commitment is defined as "a strong sense of determination, the willingness to invest effort, and impatient striving toward goal implementation" (Oettingen et al., 2001, p. 738). During mental contrasting, people first vividly imagine the fulfillment of a desired future (e.g., resolving a conflict with the partner) and then elaborate the critical obstacle in the present reality that stands in the way of attaining the desired future (e.g., feeling insulted). During mental contrasting, future and reality are simultaneously accessible, thereby making people aware of the discrepancy and relation between the future and reality. The future is recognized as something to be achieved and the reality as something that needs to be changed or that "stands in the way" of reaching the wished for future ("relational construct", Oettingen et al., 2001). By recognizing what has to be done to achieve the positive future and which obstacles need to be overcome, people who mentally contrast experience a "necessity to act". The question whether it is feasible to turn the present reality into the desired future is raised (Oettingen, 2000). The answer is provided by activating one`s expectations of achieving the

desired future. Expectations are judgments about the likelihood whether future events will come true or not (Oettingen, 2000; Oettingen & Stephens, 2009). Expectations are based on previous experiences, which are a good predictor of future outcomes (Bandura, 1977; Mischel, 1973; Oettingen & Stephens, 2009). As a result of mentally contrasting the future with the reality people use their expectations to actively decide whether to commit to their goal or to refrain from it (Oettingen et al., 2001). If expectations are high, people will strongly commit to their goal and will strive to achieve their goal. If expectations are low, people will not form a goal, but instead actively refrain from their wish (Oettingen, 2000; Oettingen et al., 2001). Importantly, mental contrasting does not change expectations of success, but rather makes them salient (Oettingen et al., 2001).

FRT identifies three other self-regulatory strategies: indulging, dwelling, and reverse contrasting. During indulging, people solely elaborate their future fantasies and already enjoy their desired future outcomes in the here and now (Oettingen, 2000). Because the present reality is not considered, people who indulge do not recognize that the future is not yet realized and do not take into account what it would take to reach the desired future (Oettingen, 2000). With indulging, people feel no necessity to act and therefore do not consult their expectations of success to actively decide whether to fully commit to a goal or to disengage from that goal (Oettingen, 2000). Consequently, commitment will not be high enough to strive for feasible goals, and conversely be too high if the desired future is unfeasible and people would do better to refrain from their wish and use the energy to set new goals. During dwelling, people solely elaborate on their present reality; because thoughts about the present reality are not preceded by imaginations of a possible future, people do not recognize the direction into were to act. Like in indulging, people do not use their expectations to align the commitment to their wish. People will invest too much if expectations are low and not enough if expectations are high (Oettingen, 2000). In reverse contrasting, people first reflect on the present reality and then imagine the desired future.

Although future as well as reality are elaborated, the relational construct of the present reality as "standing in the way" of the desired future is not activated (Oettingen et al., 2001). The desired future is not used as a reference point for the present reality (Oettingen, 2012). Therefore, reversely contrasting reality and future does not activate expectations of success and does not lead to expectancy-based goal commitment. Like indulging and dwelling, reverse contrasting does not provide people with the direction and energy to actively commit to a feasible goal or to let go of an unfeasible goal. People will either try too hard or not hard enough (Oettingen, 2012; Oettingen, Pak, & Schnetter, 2001).

To illustrate these different self-regulatory strategies, imagine a young man wishing to get to know an attractive woman at a party. Using mental contrasting, the young man would vividly imagine how much fun he would have together with this beautiful woman, mentally elaborating on laughing, dancing and flirting with her. Immediately afterwards he would look for the most critical obstacle that holds him back from getting to know this woman. He might come up with his awful shyness, which he successfully hides until he has to talk to women. The simultaneous elaboration of his wish and his obstacle activates his expectations to get to know the woman. Elaborating on his obstacle might reveal that his shyness is unfounded because other women have told him before he was attractive and they enjoyed his company, meaning his expectations of getting to know the woman are high. After completing the mental contrasting procedure, the young man would feel energized, would probably look for the next opportunity to approach the woman, and would overcome his momentary negative feelings. If this young man would have only indulged in his positive fantasies of being happily together with the woman, he would not have realized his shyness as holding him back and would not have been pushed to overcome it. He would have enjoyed his fantasies, but his experience at the party would not have changed. If this young man would have only dwelled in the negative reality or would have contrasted about his wish and obstacle in the reverse order, he would not have understood his wish as something "to be achieved" and the obstacle as "standing in

the way", the relational construct between future and reality would not have been activated. He would not have used his expectations of success to strongly commit to the goal of getting to know this attractive woman, would probably not have mobilized enough energy to overcome his shyness, and would not have approached the woman.

Effects of Mental Contrasting

Extensive experimental research replicated the effects of mental contrasting in interpersonal, academic/professional and health domains, in experimental and laboratory settings and in samples of different culture and age (for a review, see Oettingen, 2012). Goal commitment was measured directly after the manipulation and weeks or months later, using self- or other-reported cognitive (e.g., making plans), affective (e.g., anticipated disappointment), motivational (feeling energized) and behavioral (effort, performance) indicators (Oettingen, 2012).

In the interpersonal domain, mental contrasting has been applied to idiosyncratic wishes (e.g., to improve the relationship with the partner) of German and American university students (Oettingen et al., 2001, Study 1, 3; Oettingen et al., 2009, Study 1). Results showed that the link between expectations of success and goal commitment was stronger in the mental contrasting condition than in the other conditions. Compared to students in the other conditions, students in the mental contrasting condition felt more energized and responsible, and more specifically planned to solve their interpersonal problems immediately after the experiment when their expectations that their problem would have a happy ending were high (Oettingen et al., 2001, Study 1, 3). Furthermore in a two-week follow up, participants in the mental contrasting condition reported that they started earlier with implementing their goal than students in the other conditions (Oettingen et al., 2001, Study 3). Given low expectations, students in the mental contrasting condition felt less energized compared to students in the other conditions (Oettingen et al., 2001, Study 3). Oettingen et al. (2009) replicated these findings and showed that students who mentally contrasted about an interpersonal concern

were more committed compared to indulging students (composite of feeling disappointed and sad if the concern did not come to a happy ending) when their expectations of success were high. Mentally contrasting students were less committed compared to indulging students when their expectations were low. In another study, Oettingen (2000, Study 1) manipulated the self-regulation strategies of participants regarding the same interpersonal wish of getting to know an attractive stranger. One week after the experiment, participants in the mental contrasting condition tended to be more eager to get to know the attractive person and reported to be more disappointed if they would not get to know the attractive person than participants in the other conditions when their expectations of success were high. Given low expectations, participants in the mental contrasting condition tended to be less eager to get to know the attractive person and anticipated to be less disappointed if they did not get to know the attractive person, compared to participants in the other conditions.

Furthermore, Oettingen, Stephens, Mayer, and Brinkmann (2010, Study 1) have shown that mental contrasting helps people to efficiently draw on social support to solve personal problems. In this study, participants identified an important academic problem that they would like to solve or improve within the next two weeks (e.g., pass an exam) and named a person who could provide effective help. Subsequently, participants indicated their expectations that the person will help them. Then participants were asked to list four positive aspects of successfully seeking help from this person (e.g., feeling relieved) and four negative aspects of the reality standing in the way of successfully seeking help from this person (e.g., being rejected). Three self-regulatory strategies were manipulated: In the mental contrasting condition participants elaborated on the second most important aspect of the positive future, then on the second most important aspect of the present reality. This procedure was repeated for the most important aspect of the positive future and the most important aspect of the negative reality. In the indulging condition, participants mentally elaborated and wrote about all four aspects of the positive future in ascending order. In the dwelling condition,

participants elaborated and wrote about their four negative reality aspects in ascending order. Two weeks after the manipulation participants reported how much their problem had been solved through the help of the person they named. Results indicated a stronger relationship between expectation and attainment of help in the mental contrasting condition, compared to the indulging and dwelling conditions. When expectations to attain help were high, participants in the mental contrasting condition were more successful in realizing their expectations and actually attained more help than participants in the indulging and dwelling conditions. When expectations were low, participants in the mental contrasting condition reported to have attained less help from the person they named, compared to the indulging condition.

Until now only a few studies have examined interpersonal effects of mental contrasting in dyadic settings by manipulating both interaction partners and measuring relationship outcomes. One study has been conducted by (Kirk, Oettingen, & Gollwitzer, 2011). Participants worked in dyads on an integrative bargaining task "New Car", in which they had to negotiate on different issues (e.g., price, color, extras) as the seller and buyer of the car. The different issues were of different importance (points) for both interaction partners. Therefore, effective negotiation with mutually beneficial, integrative agreements included to pursue important and feasible demands and to concede on those less important and feasible. Dyads were randomly assigned to mentally contrast, indulge or dwell about the goal to "earn as many points as possible" or to directly start bargaining after been provided with the goal. Results showed that mentally contrasting dyads earned more total points than dyads in any of the other conditions. Furthermore, the agreements in mentally contrasting dyads were more equitable, which was indicated by point differential between partners, than agreements in any of the other conditions. This study implies that mentally contrasting about a personal goal helps people to navigate through a subsequent interpersonal problem solving process, by mastering a number of distinct subgoals (negotiation issues) on which ones own

interests and the interest of the partner have to be considered. Although the processes that mediate the mental contrasting effects on the bargaining task have not been directly studied, the results of this study and of the other studies on interpersonal problems imply that mental contrasting might sensitize people to interpersonal obstacles, i.e., to the perspective and goals of the interaction partner.

In the academic domain, vocational school students, who mentally contrasted about excelling in mathematics, showed expectancy-dependent goal commitment (Oettingen et al., 2001, Study 4). Directly after the experiment, students who mentally contrasted reported feeling more energized than students in the other conditions did when their expectations to improve in mathematics were high. When their expectations of success were low, students in the mental contrasting condition reported feeling less energized compared to students in the other conditions. Two weeks after the experiment, teacher ratings of students` effort and achievement represented students` expectations in the mental contrasting condition, but not in the other conditions. Students in the mental contrasting condition performed better compared to students in the other conditions when their expectations of success were high. When their expectations were low students in the mental contrasting condition invested less effort and tended to perform worse than participants in the other conditions. A similar pattern resulting from mental contrasting has been shown in university students who wanted to be successful in solving creativity tasks (Oettingen, Marquardt, & Gollwitzer, 2012). Oettingen, Hönig, and Gollwitzer (2000, Study 1) applied mental contrasting in a sample of fifth-graders starting to learn English as their first foreign language. Their results showed that expectations of being successful in learning English predicted effort (reported by themselves and their teachers two weeks later) and performance (hypothetical oral grade three month later) in the mental contrasting condition but not in the other conditions.

Furthermore, Oettingen et al., (2009, Study 2) and Kappes and Oettingen (2014, Study 2) showed that mental contrasting effects also hold in highly stressful achievement situations.

Specifically, university students had to give a five-minute presentation on what qualified them as a professional candidate in front of a camera. Participants were informed that experts would analyze the video to assess the presenter`s professional skills. Results showed that participants in the mental contrasting condition performed better (self- and other-rated) than participants in the indulging condition when expectations were high, but showed a weaker performance than participants in the indulging condition when expectations were low (Oettingen et al., 2009, Study 2).

In the context of professional health care, mental contrasting supported critical care nurses in effectively allocating their resources to improve communication with parents: Nurses invested more effort compared to control groups, when they were able to help parents. When their expectations were low, the nurses who mentally contrasted invested less effort and saved their resources compared to nurses in the control conditions (Oettingen, Stephens et al., 2010, Study 2). In another study, mental contrasting was applied to effectively self-regulate the goal to reduce cigarette consumption (Oettingen, Mayer, & Thorpe, 2010). The results paralleled previous studies in showing that participants in the mental contrasting condition (in contrast to the other conditions) reported to have started to reduce or stop smoking earlier, when expectations were high, but to have delayed the implementation of their goal, when expectations were low.

Processes of Mental Contrasting

Recent research has gathered evidence for the assumed processes underlying mental contrasting effects and emphasizes specific motivational and cognitive mechanisms that explain how expectations are transferred into expectancy-dependent goal commitment (Oettingen, 2012; Oettingen & Stephens, 2009). Mental contrasting has been shown to be an effortful process (Sevincer, Schlier, & Oettingen, 2015), which is cognitively demanding and involves complex information processing, specifically working memory, intention formation and episodic memory processing (Achtziger, Fehr, Oettingen, Gollwitzer, & Rockstroh,

2009). Mental associations between the future and the reality and the reality and instrumental means to overcome obstacles in the present reality, as well as the identification of obstacles have been identified as important cognitive processes, while energization has been identified as a central motivational process.

Energization. Previous studies documented the effects of mental contrasting on feelings of energization as well as on other indicators of goal commitment like anticipated disappointment or planning and implementing goals. Oettingen et al. (2009) refined the hierarchy between different indicators of goal commitment by hypothesizing that energization is a more proximal effect of mental contrasting, which mediates more distal expectancy-dependent effects on other indicators of goal commitment. The authors demonstrated expectancy-dependent effects of mental contrasting on energization as well as on affective and behavioral indicators of goal commitment. Furthermore, they showed that in the mental contrasting condition the relationship between expectations and goal commitment was mediated by energization. Specifically, given high expectations to solve an interpersonal concern, participants in the mental contrasting condition felt more energized (measured physiologically as change in systolic blood pressure) than participants in the indulging condition. Given low expectations of success, participants in the mental contrasting condition felt less energized compared to participants in the indulging condition. In the mental contrasting condition, the relationship between expectations and self-reported affective goal commitment was mediated by energization (Oettingen et al., 2009, Study 1). Oettingen et al. (2009, Study 2) replicated these findings using a self-report measure of energization and self- and other-rated performance as measures of goal commitment. Students who mentally contrasted reported feeling more energized to give a five-minute presentation compared to indulging students, when their expectations of success were high. Feeling more energized statistically explained better performance of students with high expectations in the mental contrasting condition.

Mental Associations. Kappes and Oettingen (2014) suggested that mentally contrasting a desired future with a present reality forms expectancy-dependent mental associations of the future and the reality, which emerge even before changes in levels of energization arise. As explicated before, during mental contrasting information about the reality is elaborated in the context of the desired future, thereby activating relevant expectations to evaluate whether the desired future can be attained or not. Kappes and Oettingen (2014) proposed that given high expectations of success the link between the future and the reality is strengthened, while given low expectations of success the link is weakened. Because of the strong mental associations between the future and the reality "the desired future cannot be thought of anymore without the reality" (Kappes & Oettingen, 2014, p. 26). Thereby people are automatically reminded of what needs to be done to achieve the desired future and are stimulated to invest effort. To measure the strength of mental association between the future and the reality the authors used a lexical decision task. Faster reaction times to idiosyncratic reality words following primed idiosyncratic future words indicated a stronger association of the future and the reality. In two studies Kappes and Oettingen (2014) showed that expectations predicted the future-reality-association in the mental contrasting, but not in the control conditions. Furthermore, in the mental contrasting condition the strength of mental association between the future and the reality mediated the link between expectations and self-reported (energization, feelings of responsibility) as well as other-reported goal pursuit (performance in a seven-minute speech). An additional study showed that the mental associations are maintained until the desired goal is achieved. Goal achievement was manipulated by giving participants bogus feedback on their performance in a creativity task: Positive feedback (creativity score was above average) indicated that a goal has been achieved and negative feedback (creativity score was below average) indicated that a goal has not yet been achieved. Analyses of mental associations that have been assessed after the feedback showed that expectancy-dependent mental associations in the mental contrasting condition are

maintained if a goal is not yet reached (negative feedback) and dissolve when a goal is reached (positive feedback) (Kappes & Oettingen, 2014, Study 3).

Mentally contrasting does not only strengthen associations between the desired future and the present reality, but also between the present reality and instrumental means to overcome the present reality and achieve the desired future (Kappes, Singmann et al., 2012). As described before, mentally contrasting about the present reality in the context of the desired future highlights the discrepancy between the reality and the future and raises the question, whether the future can be achieved or not, how the present reality can be changed into the desired future, which obstacles need to be overcome, and how one can possibly do that. Referring back to the example of the young man wishing to get to know the attractive woman: He would recognize that his shyness is the central obstacle which he needs to overcome. He might appraise his shyness as irrational in relation to his expectations. He may mentally repeat this insight and other self-affirmative words to himself. He might plan an introductory sentence, which he can use to start a conversation with the woman. In sum, given a surmountable obstacle, the young man will create strategies that might help him to overcome his negative thoughts and emotions related to his shyness and consequently encourage him to approach the woman. (Kappes, Singmann et al., 2012) tested the hypothesis that mentally contrasting creates a strong link between present reality and instrumental behavior when expectations are high and a weak link when expectations are low in two studies. To measure the mental association of the obstacles and instrumental behavior, following the mental contrasting procedure on an idiosyncratic interpersonal concern, participants reported one instrumental behavior that would help them to overcome their obstacle. Single words representing the obstacle and the instrumental behavior were used in a lexical decision task, in which the obstacle was primed and the instrumental behavior was the target. The time to react to the instrumental behavior was used as an indicator of the mental association between the obstacle and instrumental behavior. (Kappes, Singmann et al., 2012),

Study 1) showed that the mental association between obstacle and instrumental behavior was stronger (indicated by faster reaction times) in the mental contrasting condition compared to the control conditions, when expectations of success were high. When expectations of success were low, the mental association between the obstacle and instrumental behavior was weakened in the mental contrasting condition compared to the other conditions. In Study 2, Kappes, Singmann et al. (2012) replicated the findings and additionally showed that the mental link between the obstacle and instrumental means was translated into goal-directed behavior.

Obstacle Identification. Mentally contrasting a desired future with a present reality can be understood as a problem solving strategy, in which a problem situation is analyzed, appropriate means to solve the problem are developed and applied until the problem is solved (Oettingen, Pak, & Schnetter, 2001; Oettingen & Stephens, 2009). Indeed, the "essence of mental contrasting (…) rests on calling to mind obstacles that impede the realization of a desired future" (Oettingen & Stephens, 2009, p. 163). Kappes et al. (2013) have shown that mentally contrasting a desired future with a present reality redefines the present reality as an obstacle, i.e. as a problem. The authors assessed the interpretation of reality using an explicit evaluation of the reality (Study 1), an implicit categorization of reality (Study 2), and a detection of an obstacle (Study 3). Results showed that mental contrasting (compared to the other conditions) strengthened the meaning of the reality as an obstacle when expectations of success were high, but weakened the meaning of reality as an obstacle when expectations of success were low. Furthermore, interpretations of the reality mediated mental contrasting effects on goal pursuit.

Dealing with Negative Feedback. Negative feedback provides valuable information that a goal has not been reached and requires to constructively use this information to carry on pursuing the goal, when expectations of success are high. Kappes, Oettingen, & Pak (2012) showed that mental contrasting promotes the processing of negative feedback as a mean to

successful goal pursuit. The authors found that participants in the mental contrasting condition (compared to indulging and dwelling condition) remembered more negative feedback words in a cued recall test (Study 1), made more plans to solve their interpersonal problems (Study 2), protected their self-views of competence against negative feedback, and attributed the negative feedback more optimistically (Study 4), when their expectations of success were high. This research shows that mental contrasting helps people to take uncomfortable and even threatening information into account and evaluate the information on the basis of relevant expectations to selectively strive for goals in the face of setbacks. At the same time, though acknowledging the negative information, participants in the mental contrasting condition did not interpret this information pessimistically, harming their self-concepts and hindering their goal pursuit.

Summary

Mental contrasting has been shown to be an effective strategy to foster motivation as well as volition necessary for behavior change. By mentally contrasting a desired future with obstacles in the present reality, people use their expectations for success to apply their resources efficiently by committing to feasible goals and by disengaging from unfeasible goals. Mental contrasting specifically unfolds its power by a thorough consideration of individual obstacles as standing in the way to the fulfillment of the desired future. This mental elaboration provides a person with insight into a problem situation and reveals necessary steps to change the present reality. Furthermore, mental contrasting subjectively and physiologically energizes people to strive for goals and helps them to respond constructively to negative feedback and strive for their goal until it is reached. Finally, mental contrasting is easily learned and can be applied time and cost-efficiently, which makes it attractive as an intervention tool. The broad applicability of mental contrasting suggests its use in a variety of domains to promote smart goal setting and striving. In this article, we suggest that mental

contrasting can also be an effective strategy to regulate individually different cognitive-affective processing dynamics, specifically the RS dynamic.

Self-Regulation of Rejection Sensitivity by Mental Contrasting

Based on the research on the effects and processes of mental contrasting, this strategy reveals the potential to be an effective tool to self-regulate RS. The strategy seems to be particularly appropriate because it encompasses self-regulatory motivation (goal setting) and volition (goal striving). In other words, mental contrasting reveals its potential as a self-regulation strategy designed to identify and transform a problem situation (Oettingen et al., 2001). Specifically, we assume that mental contrasting can help people to identify their individual processing dynamic as problematic (i.e., high or low RS) and to commit themselves to overcome this problematic disposition. This motivational component adds to previous research on the self-regulation of RS, which solely addresses the implementation of self-regulation competencies (attentional control, delay of gratification) in RS-relevant situations. Furthermore, mental contrasting is assumed to transform subsequent goal-relevant behavior by inhibiting reflexive thoughts, emotions, and behavior and instead instigating a reflective analysis of the problem situation.

Identifying Rejection Sensitivity

Our first theoretical assumption is that mental contrasting furthers insight into RS as an idiosyncratic obstacle in a RS-relevant situation and thereby creates a motivation to change. This assumption is supported by research on mental contrasting processes, which has shown that mental contrasting helps people to identify obstacles when expectations of success are high (Kappes et al., 2013, Study 3). Research on mental contrasting effects on interpersonal problem solving has demonstrated that obstacle identification also applies to interpersonal obstacles (Kirk et al., 2011). According to Mischel and Shoda (1995), processing dynamics like RS can be activated in the imagination. Consequently, during mentally contrasting about a RS-relevant problem, people should consciously reflect on the

problem situation and identify their individually different RS dynamics as an obstacle to solving the interpersonal problem.

A prototypical situation, in which RS is activated is a situation, in which people need to ask significant others for help (Downey & Feldman, 1996). A help-seeking situation represents a prototypical interpersonal problem solving task, in which people need "to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations" (Rubin & Rose-Krasnor, 1992, p. 285). Situations in which people have to make a request from significant others are used as diagnostic situations in the Rejection Sensitivity Questionnaire (Downey & Feldman, 1996). Moreover, mental contrasting has been successfully applied to help-seeking behavior (Oettingen, Stephens et al., 2010): People with high expectations to attain help overcame their reluctance to ask for help and successfully attained help. Therefore, we decided to apply mental contrasting to a help-seeking situation to regulate RS.

When mentally contrasting about asking a significant other for help, people would first name and elaborate on their best outcome of successfully asking for help (e.g., solving the problem or intensify the relationship with the helping person) and then reflect on the obstacle that holds them back from successfully asking their significant other for help (e.g., fear of rejection). Thereby, we assume that people consciously reflect on their thoughts and feelings in situations in which rejection is possible, identify their individually different RS dynamics, develop alternative ways of construing the situation, and make plans on how to react more constructively in RS-relevant situations. In a help-seeking situation, people with high and low RS feel the need to belong and are motivated to maintain the relationships to their significant others (Baumeister & Leary, 1995). However, high and low RS people differ in the strategies they apply to secure acceptance and avoid rejection. We assume that low RS people would be predisposed to solely indulge in the positive future of successfully attaining help and would not consider possible rejection. We assume that through mental contrasting low RS people

would recognize their blind spot, i.e. their low sensitivity to rejection, as an obstacle to successfully solve the interpersonal problem of help-seeking, which represents the general problem of achieving personal goals while maintaining a positive relationship with a significant other. Consequently, we assume low RS people to become more sensitive to the possibility of being rejected. On the other hand, we assume that high RS people would be predisposed to solely dwell in the negative reality of their fear of being rejected. This assumption is supported by research that showed that rejected people tend to focus on the present rather than the future (Twenge, Catanese, & Baumeister, 2003). We assume that through mental contrasting high RS people would realize the positive future of successfully asking for help as their reference point and would recognize their oversensitivity to rejection as an obstacle to achieving personal goals while maintaining positive relationships. Consequently, we assume that high RS people should become less sensitive to the possibility of being rejected.

As a result of mentally contrasting about asking for help, people with low RS as well as high RS should be committed to ask for help, when their expectations to attain help are high (Oettingen, Stephens et al., 2010). At the same time we assume that mentally contrasting about a help-seeking wish commits people with low RS and high RS to the goal of successfully solving the interpersonal problem of achieving personal goals while maintaining the important relationship. Consequently, low RS and high RS people should identify their low RS and high RS dynamic as an obstacle to a successful relationship management and prepare themselves to overcome their problematic information processing dynamics.

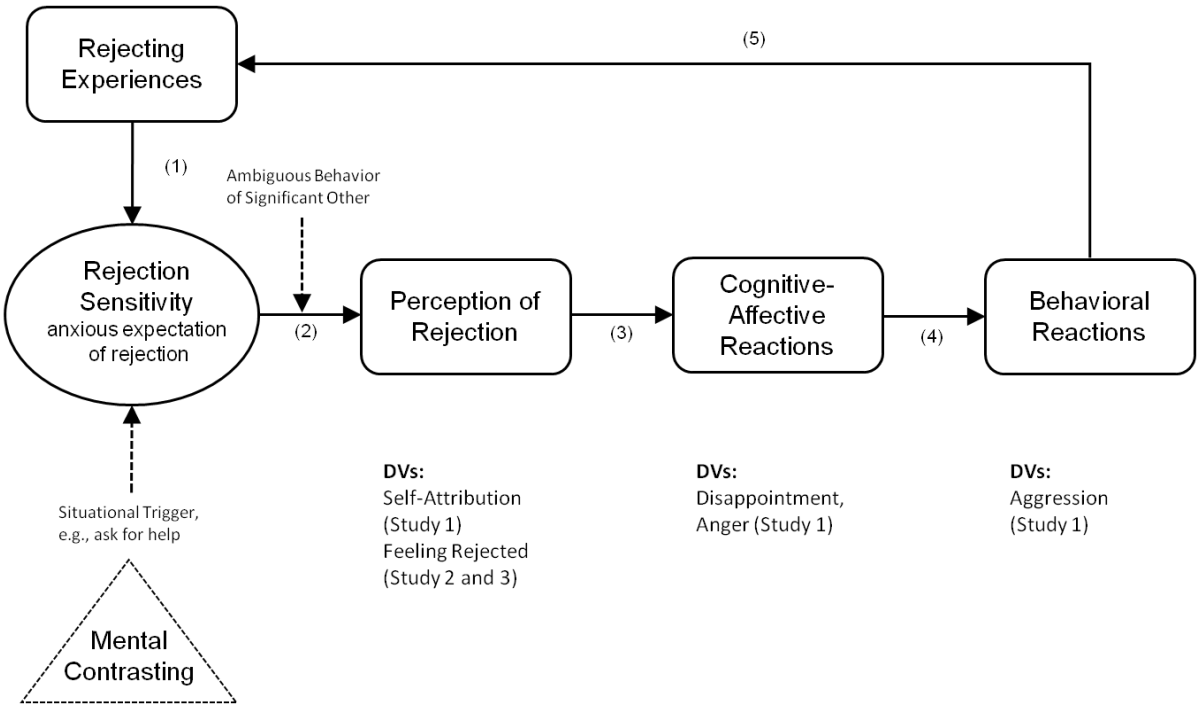


Figure 2. The self-regulation strategy of Mental Contrasting is applied to RS-relevant situations and outcomes on later stages in the RS process are measured.

Transforming Rejection Sensitivity

Through mental contrasting, we do not attempt to directly change the relatively stable calm/anxious expectations before a rejection occurs, which are measured with the Rejection Sensitivity Questionnaire[3]. We rather attempt to influence the information processing following an ambiguously intentioned rejection (see Figure 2). Mental contrasting has been identified as a conscious strategy that triggers unconscious processes that further expectancy-dependent goal pursuit (Oettingen, 2012). Furthermore, Kappes and Oettingen (2014, Study 3) showed that mental contrasting effects hold until a goal is completed. As a result of mentally contrasting about a RS-relevant interpersonal problem with a significant other, people should be exerting effort to pursue their goal of successfully solve the interpersonal problem by overcoming their disposition of high or low RS. An instance of an ambiguously intentioned rejection should not only activate the individually different RS dynamic, but also

[3] Test-retest reliability was .83 over a 2-3-week period and .78 over a 4-month period Downey, Freitas et al. (1998).

reactivate the goal to overcome problematic dispositional responses. Consequently, mental contrasting should inhibit hasty judgments and instead promote a thorough analysis of the problem situation. This assumption is strongly supported by research that shows that mental contrasting promotes a constructive response to negative feedback (Kappes, Oettingen et al., 2012). Transferred to the negative interpersonal feedback communicated via an ambiguously intentioned rejection, we assume that mental contrasting should sensitize people to the negative information, but at the same time not let them interpret this information one-sidedly and pessimistically, when expectations and goal commitment toward a RS-relevant goal (i.e., asking for help) are high. In other words, we assume that mental contrasting helps people to thoroughly deal with a stressful situation, in which rejection is possible, by considering all relevant information, which are helpful to interpret the situation (e.g., possible reasons for the rejection).

When rejection situations are ambiguous, responses should be more strongly influenced by individual differences than by situational demands. Consequently, we expect that mental contrasting differentially affects people with high and low RS. Since people with low RS are disposed to interpret an ambiguously intentioned rejection more benignly and impersonal, we assume that mental contrasting should sensitize them to consider personal reasons for the rejection additionally. On the contrary, people with high RS are disposed to interpret the ambiguously intentioned rejection more mistrustful and personal. We assume that mental contrasting should sensitize high RS people to impersonal explanations of the interpersonal rejection additionally. For both, people with high and low RS, mental contrasting should lead to a balanced and more constructive response to an ambiguously intentioned interpersonal rejection, which is independent of personality dispositions. A balanced and constructive response to ambiguously intentioned rejection is supposed to serve the long-term goal of managing relationships, which requires being sensitive to relational

devaluation, but at the same time preventing interpersonal overreactions, which both might impair future interactions.

In sum, we hypothesized that mental contrasting would weaken the link between RS and a sensitive response to an ambiguously intentioned rejection compared to control conditions. Specifically, we assumed that (1) RS would predict a sensitive response in the control conditions, but not in the mental contrasting condition. Furthermore, we assumed that (2) mental contrasting would sensitize people with low RS, but desensitize people with high RS compared to control conditions.

Overview of Studies

To test the hypotheses, we conducted three studies. In all studies, we first measured RS as calm/anxious expectations of acceptance/rejection before a perceived rejection. Then we established a RS-relevant situation by asking participants to name an idiosyncratic help-seeking problem. We randomly assigned participants to a mental contrasting or an indulging condition. We chose indulging as the primary control condition, because "thinking positively" about challenging situations is a naïve strategy suggested to cope with difficult situations, but previous research has shown, that solely indulging does not lead to behavior change (for an overview see:(Oettingen, 2012). In Study 3, we added a no self-regulation control condition, in which we asked participants to think freely about the situation. As the dependent variable, we assessed the sensitive reaction to a hypothetical ambiguously intentioned rejection (Study 1: "disappointment", "self-attribution/resignation", and "anger/aggression"; Study 2 and 3: "feeling rejected").

Study 1: Regulating Rejection Sensitivity – Adolescent High School Students

In this study, we examined if mental contrasting (compared to indulging) would weaken the link between RS and sensitive response to a hypothetical ambiguously intentioned rejection. We assumed that RS would predict a sensitive reaction in the indulging condition, but not in the mental contrasting condition. Furthermore, we hypothesized that mental

contrasting (compared to indulging) would sensitize people with low RS, but desensitize people with high RS.

Participants and Design

Fifty-eight German high school students (47 female, M_{age} = 17.33 years, age range: 14-20 years) filled out paper-pencil questionnaires as part of a Psychology Information Day at the University of Hamburg. For underage participants we obtained informed consents from the parents beforehand. Students were randomly assigned to a mental contrasting (N = 34) or indulging condition (N = 24).

Procedure and Materials

Students filled out paper-pencil questionnaires in groups of up to 20. In a cover story, we explained that the study was about thoughts and images of students in everyday life. We assured students that taking part in the study is voluntary and that their answers will be kept confidential. The questionnaire consisted of four parts.

In the first part of the study, RS was measured with the Children's Rejection Sensitivity Questionnaire (FZE-K, part I, Rosenbach et al., submitted for publication) as anxious expectations of rejection, which are the core component of RS dynamic. The questionnaire consists of nine hypothetical situations with possible rejection. For example one situation reads:

> Imagine you had a really bad fight the other day with a friend. Now you have a serious problem and you wish you had your friend to talk to. You decide to wait for your friend after class and talk with him/her. You wonder if your friend will want to talk to you.

Eight presented situations incorporate classmates and one situation incorporates a teacher as the potential rejector. Following each situation participants had to answer how concerned or anxious (1 = very unconcerned, 6 = very concerned) they would be and whether they expected that their request will be honored (1 = YES! 6 = NO!). Anxiety of rejection

correlated positively with a low expectation that the request is honored for all situations involving peers (*r*s = .29 – .55, *p*s < .001 – .029), but not for the teacher situation (*r* = .02, *p* = .866). We computed RS scores by taking the product of level of anxiety and the expectation of a rejecting outcome for each situation and then taking the mean of all eight situations involving peers (α = .69). The teacher situation was not included in the RS score because of unclear validity and because our self-regulation manipulation was directed at peers.

In the second part of the study, we activated a RS-relevant situation by asking students to name a pressing problem, for which they would need to ask a classmate for help. To ensure that the help-seeking problem would be challenging, but feasible, we further instructed students to choose a classmate, who could provide this help, but asking him/her would not be very easy. The majority of students named school-related problems, e.g. "help with math homework". To control for relationship closeness we asked students to rate on a 9-point scale, ranging from 1 (not at all close) to 9 (very close), how close they felt to the classmate, who could provide the help. We furthermore measured students` incentives and expectations to solve the problem, to ask their classmate for help, and that their classmate will help when asked for. Answers were made on 7-point scales from 1 (not at all) to 7 (very).

In the third part of the study, we manipulated the self-regulation strategies. We asked students to name the best outcome of successfully asking their classmate for help. Furthermore, we instructed them to elaborate on that best outcome. Students read:

> Now take a moment and imagine as vividly as possible all of the events and scenarios associated with this best outcome. Let your mind and feelings go and imagine things fully.

One student wrote for example “help, success” as the best outcome and elaborated: “If he would help me with my math problems, then I could understand the subject. That would be very good, because I could participate in the next lesson. That would bring me success and respect from the others. “

Students in the mental contrasting condition were then asked to name and elaborate on their main obstacle of successfully asking their classmate for help. Students read:

> Sometimes things don't work out, as we would like them to. What holds you back from successfully asking your classmate for help? What is it within you (thoughts, feelings, behavior) that stands in the way of you successfully asking your classmate for help? What is your main obstacle?

One student wrote: "Rejection, he could think I am stupid" and elaborated: "He could laugh at me, when I tell him that I don't understand the task. Then he could tell his friends how stupid I am."

Students in the indulging condition were asked to name and elaborate on a second best outcome of successfully asking their classmate for help.

In the fourth and final part of the questionnaire, we assessed the sensitive reaction to an ambiguously intentioned hypothetical rejection as the dependent variable (see below). In the end, we collected socio-demographic information, thanked students for their participation and debriefed them fully. Further variables were assessed, which are not reported here (see Appendix 2).

Dependent variable: Sensitive cognitive-affective reactions and behavior tendencies. We measured sensitive cognitive-affective reactions and behavior tendencies after an ambiguously intentioned rejection with the second part of the German version of the Children's Rejection Sensitivity Questionnaire (FZE-K, part II, Rosenbach et al., submitted for publication). Contrary to the original scale we did not induce the ambiguously intentioned rejection by referring to the last situation of the FZE-K, part I, which read: "Now imagine the last situation again. Some of your classmates got birthday invitations from this person but you haven´t been invited." Instead, we referred the participants to their idiosyncratic help-seeking problem and manipulated a hypothetical ambiguously intentioned rejection: "Now imagine you ask your classmate for help with your problem or concern and he/she denies your

request." The rejection is ambiguously intentioned, because it could be caused by personal (e.g., dislike) or impersonal reasons (e.g., lack of time). The FZE-K, part II-scale consisted of 17 items. Four items measured "disappointment" (e.g., "I would be very disappointed by the person."). Seven items measured "self-attribution/resignation" (e.g., "I would think that it was because of me, that the person did not help me." "In the future I would not believe that any of my classmates would help me."), and six items measured "anger/aggression" (e.g., "I would be mad at the person, because he/she didn't help me." "I would like to hit the person."). All items were answered on a 5-point scale from 1 (not at all true) to 5 (completely true). We computed the mean of all 17 items as an overall score for a sensitive reaction and the means for the three subscales. Reliability for the overall scale and all subscales was acceptable to good (overall scale: $\alpha = .87$; disappointment: $\alpha = .83$; self-attribution/resignation: $\alpha = .75$; anger/aggression: $\alpha = .79$).

Results

Descriptive analyses. Relationship closeness to classmates who could provide help ranged from "not at all close" to "very close" classmates ($M = 4.84$, $SD = 2.33$). Students' incentives to solve the problem ($M = 5.43$, $SD = 1.35$), to ask their classmates for help ($M = 5.35$, $SD = 1.66$), and that their classmate will help when asked for ($M = 5.42$, $SD = 1.21$) were well above the midpoint of the 7-point scale, indicating that students chose important problems. Mean expectations to solve the problem ($M = 4.97$, $SD = 1.46$), to ask their classmate for help ($M = 5.35$, $SD = 1.66$), and that their classmate will help when asked for ($M = 5.42$, $SD = 1.21$) were also above the midpoint of the 7-point scale, indicating that students chose feasible wishes.

Students had a mean RS of 8.43 ($SD = 3.60$, $Min = 2.13$, $Max = 17.00$), which is comparable to the larger norm sample by (Rosenbach et al., submitted for publication) ($N = 130$, $M_{age} = 13.06$, $SD_{age} = .80$, $M_{rs} = 8.70$, $SD_{rs} = 3.79$). RS did not differ between men and women, $t(56) = -1.23$, $p = .223$.

The mean sensitive reaction to the ambiguously intentioned rejection measured on a 5-point scale was 2.58 (*SD* = 0.66). The sensitive reaction to an ambiguously intentioned rejection differed for men and women, $t(56) = -2.04$, $p = .047$; $M_{women} = 2.66$, $SD_{women} = 0.59$; $M_{men} = 2.22$, $SD_{men} = 0.82$). Specifically, responses on the subscale "self-attribution/ resignation" differed for men and women, $t(56) = -2.28$, $p = .026$; $M_{women} = 2.50$, $SD_{women} = 0.73$; $M_{men} = 1.95$, $SD_{men} = 0.69$). Further correlations can be found in Table 1.

Rationale for data analysis. To test the directed moderation hypothesis that mental contrasting (compared to indulging) weakens the link between RS and a sensitive reaction to rejection, we computed a moderation analysis using the PROCESS Tool for SPSS, developed by A. F. Hayes (www.processmacro.org; for a documentation of the program see Appendix A in Hayes, 2013). We used Model 1 and entered the sensitive reaction as the dependent variable, RS as the focal predictor and self-regulation strategy as the moderator into the model. The interaction term was computed with means centered for the product, which facilitated the interpretation of the results. Furthermore, the program generated data for plotting. With mental contrasting coded as 1 and indulging coded as 0, we expected a negative interaction effect, $\beta < 0$.

We tested the specific hypotheses about the interaction effect between RS and self-regulation strategy by analyzing simple slopes computed by the Hayes Tool. We hypothesized that (1) RS would predict a sensitive reaction in the indulging condition ($\beta > 0$), but not in the mental contrasting condition ($\beta = 0$). To test specific hypotheses on the effects of the self-regulation strategy for people with high (+1 *SD*) and low RS (-1 *SD*) we computed an additional moderation model, in which we used RS as the moderator and self-regulation strategy as a dichotomous predictor. We hypothesized that (2) people with high RS would react less sensitively after mental contrasting compared to the indulging ($\beta < 0$), but that people with low RS would react more sensitively after mental contrasting compared to indulging ($\beta > 0$).

Table 1

Correlations of All Metric Variables Reported for Study 1 (N = 58)

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Rejection sensitivity (CRSQ-G)	–											
2. Sensitive reaction	**.44****	–										
3. Disappointment	.25	**.80****	–									
4. Self-Attribution/ Resignation	**.42****	**.89****	**.59****	–								
5. Anger/ Aggression	**.41****	**.79****	**.44****	**.54****	–							
6. Relationship Closeness	**-.33***	-.05	.16	-.18	-.05	–						
7. Incentive to solve the problem	-.18	.06	.18	-.06	.06	.15	–					
8. Incentive to ask for help	-.12	.07	.13	-.06	.13	**.31***	**.42****	–				
9. Incentive that classmate will help	-.08	.12	**.27***	.04	.01	**.29***	**.36****	**.54****	–			
10. Expectancy to solve the problem	-.23	-.18	-.18	-.19	-.07	.10	.11	.14	.01	–		
11. Expectancy to ask for help	**-.28***	.00	.11	-.17	.10	**.45****	**.28***	**.60****	**.41****	**.49****	–	
12. Expectancy that classmate will help	-.18	-.12	-.03	-.14	-.13	.08	.02	.20	.14	**.44****	**.45****	–
13. Age	-.06	-.11	-.01	-.09	-.17	.05	.13	.03	.13	-.11	-.02	**-.34****

Note. $^{*}p < .05$. $^{**}p < .01$.

Dependent variable: Sensitive reaction to rejection. As we hypothesized the moderation analysis yielded a negative interaction effect of RS and self-regulation strategy on sensitive cognitive-affective reactions and behavior tendencies, b = -0.12, 95% CI [-0.22, -0.02], t = -2.34, p = .023. This finding implies that mental contrasting weakens the link between RS and a sensitive reaction to rejection. The model, which included the interaction effect, explained significantly more variance than the model without the interaction, ΔR^2 = .08, $F(1, 54) = 5.49$, p = .023. Transforming R^2 into Cohen`s f^2 effect size for multiple partial correlations resulted in the value of f^2 = 0.09, which can be interpreted as a small to medium effect (Cohen, 1992). The interaction effect is illustrated in Figure 3.

The analysis of simple slopes showed that RS predicted a sensitive reaction in the indulging condition, b = 0.17, 95% CI [0.08, 0.25], t = 3.88, p < .001. In the mental contrasting condition, the link between RS and a sensitive reaction was significantly lower, b = 0.05, 95% CI [0.00, 0.10], t = 2.05 p = .045. We further hypothesized that high RS people would react less sensitively and low RS people would react more sensitively in the mental contrasting compared to the indulging condition. Analysis of simple slopes produced close to significant results: high RS people (+ 1*SD*) reacted less sensitively in the mental contrasting compared to the indulging condition, b = -0.45, 95% CI [-0.95, 0.06], t = -1.79, p = .080. Low RS people (-1*SD*) reacted more sensitively in the mental contrasting compared to the indulging condition, b = 0.39, 95% CI [-0.06, 0.85], t = 1.74, p = .087.

Including variables, that were confounded with the independent or dependent variable (the expectancy to ask for help, relationship closeness) as covariates in the model did not change the pattern of the results (p < .05). To rule out an alternative explanation that relationship closeness influenced the found interaction effect between RS and condition, we added a three-way-interaction between relationship closeness, RS, and condition into the model. There was no evidence for a three-way interaction, $F(2, 52) = 0.62$, p = .540.

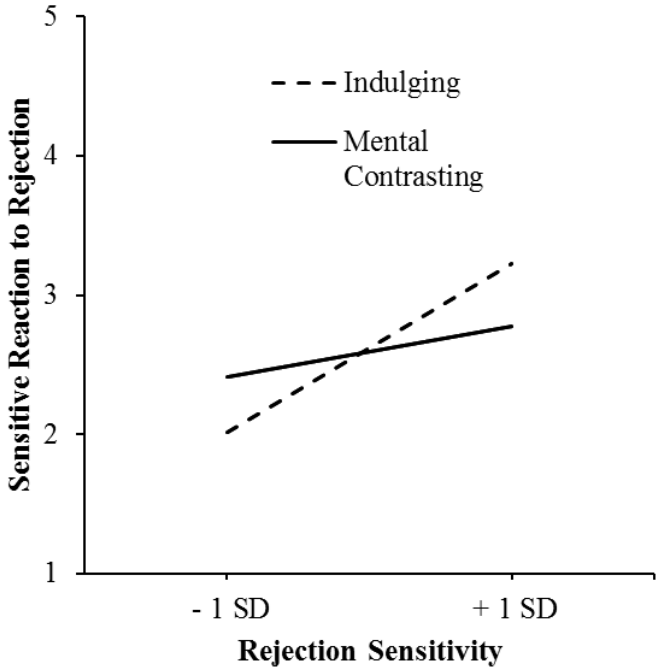


Figure 3. Sensitive cognitive-affective reaction to rejection as a function of RS and self-regulation strategy in Study 1.

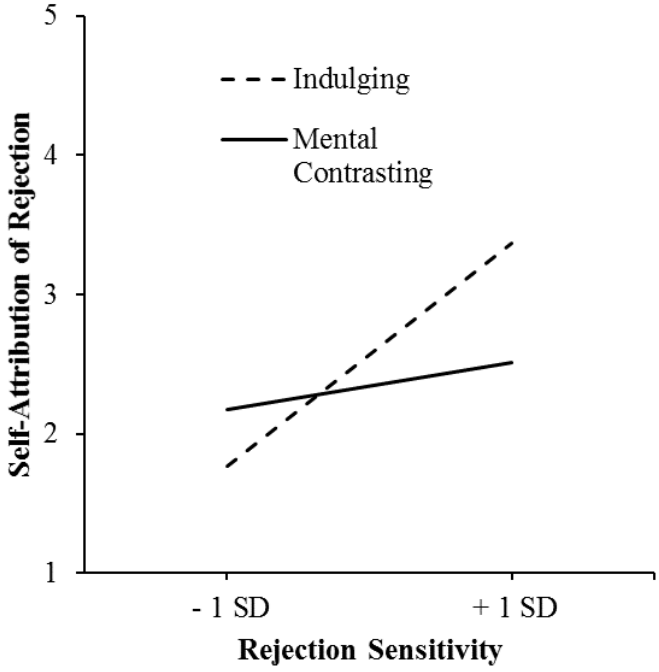


Figure 4. Self-attribution of rejection as a function of RS and self-regulation strategy in Study 1.

We repeated the analyses for all three subscales and found evidence for the hypothesized interaction effect for the subscale measuring self-attribution/resignation, ΔR^2 = .13, $F(1, 54) = 10.36$, $p = .002$. The interaction effect is illustrated in Figure 4. The analysis of simple slopes showed that RS predicted self-attribution of rejection in the indulging condition, $b = 0.22$, 95% CI [0.13, 0.32], $t = 4.68$, $p < .001$, but not in the mental contrasting condition, $b = 0.05$, 95% CI [-0.01, 0.10], $t = 1.67$ $p = .100$. These results showed that mental contrasting considerably weakened the link between RS and self-attribution of rejection in a way that RS did not predict a sensitive reaction to rejection in the mental contrasting but in the indulging condition. Comparison of effects for people with high and low RS showed that, high RS people attributed the rejection less to themselves in the mental contrasting condition compared to the indulging condition, $b = -0.86$, 95% CI [-1.41, -0.31], $t = -3.13$, $p = .003$. In contrast, low RS people tended to attribute the rejection more to themselves in the mental contrasting compared to the indulging condition, $b = 0.41$, 95% CI [-0.09, 0.91], $t = 1.65$, $p = .105$. Controlling for gender, which was confounded with the self-attribution/resignation, did not change the pattern of results ($p = .005$).

For disappointment, the interaction between mental contrasting and RS did not significantly increase the explained model variance, $\Delta R^2 = .01$, $F(1, 54) = 0.78$, $p = .382$. But the pattern of simple slopes for mental contrasting and indulging were in the hypothesized direction: Indulging condition: $b = 0.12$, 95% CI [-0.02, 0.27], $t = 1.70$, $p = .096$, mental contrasting condition, $b = 0.05$, 95% CI [-0.03, 0.13], $t = 1.18$, $p = .244$.

For anger/aggression, the interaction between RS and mental contrasting did not significantly increase the explained variance of rejection model, $\Delta R^2 = .03$, $F(1, 54) = 1.83$, $p = .182$. But the pattern of simple slopes for mental contrasting and indulging were in the hypothesized direction: indulging condition: $b = 0.13$, 95% CI [0.04, 0.23], $t = 2.77$, $p = .008$, mental contrasting condition: $b = 0.06$, 95% CI [0.002, 0.11], $t = 2.09$, $p = .041$.

Discussion

The results of this study provide first evidence supporting our hypothesis that mental contrasting (compared to indulging) weakens the link between RS and a sensitive reaction to an ambiguously intentioned rejection by sensitizing people with low RS and desensitizing people with high RS.

Ancillary analyses showed that the interaction effect especially holds for the items assessing self-attribution/resignation. A possible explanation is that the self-attribution/ resignation items most closely assessed the interpretation of personal devaluation in the rejecting behavior of the other person, which is a proximate effect of RS compared to distal effects on emotional and behavioral reactions like sadness, rumination, anger or aggression, which are assessed by the items of the other two subscales. Consequently, in the following studies we focused on a distinct measure of a proximate sensitive reaction.

In this study, we attempted to look at the self-regulation of RS in peer relationships as an example of close relationships, in which RS is activated. Although all classmates can be assumed to be significant others, it is reasonable that there are differences in relationship closeness. Supporting this assumption, we found a meaningful variability in relationship closeness. Furthermore, RS and relationship closeness were negatively correlated (r = -.33, p < .05). The negative correlation between RS and relationship closeness suggests that the more rejection sensitive participants were, the less close peers they chose, the less they reported to be close with peers or both. To control for relationship closeness and because RS is most relevant in close relationships, we decided to address close relationships in the next studies more directly.

This study was limited in its validity/generalizability because of the convenient sample and small sample size with unequal group sizes. Given the effect size of f^2 = .08, significance level α = .05, and a sample size of N = 58, the estimated test power was low, 1-β = .57, which means that in 43 times out of 100 we do not detect the effect although there is one. Therefore,

we aimed to assess a larger and more heterogeneous random sample with more equal group sizes in the subsequent study.

Study 2: Regulating Rejection Sensitivity – An Online Study

Being and feeling rejected are not necessarily the same. For example, the denial of a help-seeking wish might imply relational devaluation, reflected in feeling hurt, disliked or unaccepted, but the denial might also have impersonal reasons, which should not result in feelings of rejection. Therefore, feelings of rejection reflect how people interpret a situation in which rejection is possible. We focused on the interpretation of rejection as a more proximate outcome of RS. The aim of this study is to conceptually replicate the results of the first study in a larger adult population for more test power. According to Study 1, we hypothesized that mental contrasting would weaken the link between RS and feeling rejected following a hypothetical ambiguously intentioned rejection. We assumed that RS would predict feeling rejected in the indulging but not in the mental contrasting condition. Furthermore, we hypothesized that mental contrasting (compared to indulging) would sensitize people with low RS, but desensitize people with high RS.

In this study we additionally aimed to gain more insight into the processes that mediate the interaction effect between RS and self-regulation strategy. We applied a computerized tool to analyze the written elaborations of participants (LIWC; Pennebaker, Booth, & Francis, 2007; Tausczik & Pennebaker, 2010). We assumed that participants in the mental contrasting condition more thoroughly reflect on a possible rejection of their help-seeking wish. Therefore, we hypothesized that participants in the mental contrasting condition would write more about rejection, related negative emotions, and less positive emotions than participants in the indulging condition. Furthermore, we assumed that mental contrasting fosters insight into problem situations (Oettingen, Pak, & Schnetter, 2001). Therefore, participants in the mental contrasting condition should use more insight-words than participants in the indulging condition.

Participants and Design

We recruited participants over Amazon's Mechanical Turk, an online-platform for requesting and taking work (www.mturk.com). Participants were informed that taking part in the online-study on "Thoughts and images in everyday life" will take approximately 20 minutes and they will receive 1 USD for their participation. Participants had to be 18 years or older, currently live in the USA, and have a HIT approval rate[4] of at least 97%.

The final sample consisted of 183 American adults (110 male, M_{age} = 34.32 years, age range: 18-79 years). The majority of participants had a higher education (at least some college or higher = 83.6%), was engaged in a regular job (full-time: 49.7%, self-employed: 16.9%, part-time: 9.3%), and was of caucasian descent (72.7%). Of 243 participants that started with the study, 51 participants were excluded because they did not complete the study (attrition = 21%), two participants were excluded because their first language was not English, one participant was excluded because he did not answer the attention check item correctly, six participants were excluded because they stated that it was not at all likely that Person X will help them. Attrition did not differ between conditions. Participants were randomly assigned to a mental contrasting (N = 95) or indulging condition (N = 88).

Procedure and Materials

Participants individually answered the whole questionnaire online. Before starting with the study, we explained in the cover story that the aim of the study was to learn more about what thoughts and images people have in everyday life and how they are expressed in writing. Participants were assured that participation is voluntary and that their answers will be kept confidential. Only after participants gave consent, they started with the study. The study consisted of four parts.

[4] HITs are Human Intelligence Tasks, that a mturk worker can work on and collect a reward for completing the task. The *HIT Approval Rate* represents the relative number of accepted HITs of the worker and thus is an indicator of the quality of the work of this mturk worker.

In the first part of the study, we measured RS with the Adult-Rejection Sensitivity Questionnaire (A-RSQ, Berenson et al., 2009, Study 2) as anxious expectations of rejection. In the questionnaire nine hypothetical situations, in which persons have to make a request (e.g. "You call a friend when there is something on your mind that you feel you really need to talk about.") were presented. All presented situations incorporated significant others (parents, friends, partner, supervisor). Following each situation participants had to answer how concerned or anxious (on a 6-point-scale) they would be and whether they expected (on a 6-point-scale) that their request will be honored. Anxiety of rejection correlated negatively with the expectation that the request is honored (rs = -.13 – -.44, ps < .001 – .092). We computed RS scores by taking the product of level of anxiety and the expectation of a rejecting outcome for each situation and then taking the mean of all nine situations (α = .71).

In the second part of the study participants were asked to name a pressing problem, for which they would need to ask a close other for help. We instructed participants to choose a close other, because RS is especially relevant for relationships with significant others (Downey & Feldman, 1996) and we wanted to avoid variability in relationship closeness, which might be confounded with RS. We did not use the term "significant other" in the instruction, because the term is used differently in scientific and colloquial language and would have referred to romantic partners only. To ensure that the help-seeking problem would be challenging but feasible, we further instructed participants to choose a close other, who could provide this help, but asking him/her is not very easy. Participants noted the problem in keywords and specified the relationship with the close other they needed to ask for help. For example, one participant wrote: "I need more overtime at work to complete a project" and referred to the person to ask for as the "boss". Participants were informed that we would refer to the person they named as *Person X*. In the following we assessed *relationship closeness* using the Subjective Closeness Index (Berscheid, Snyder, & Omoto, 1989) consisting of two items answered on 7-point scales from 1 (not at all close) to 7 (extremely close): "Relative to

all your relationships (both same and opposite-sex), how would you characterize your relationship with *Person X*?"; "Relative to what you know about other people's relationships, how would you characterize your relationship with *Person X*?" (α = .94). We furthermore measured *expectancies* and *incentives* to solve the problem, to ask Person X for help, that Person X will help when asked for, and the *difficulty* of asking Person X for help. Answers were made on 7-point rating scales from 1 (not at all) to 7 (very).

In the third part of the study, we manipulated the self-regulation strategies mental contrasting or indulging in the same way as in Study 1. Participants were asked to name the best outcome about successfully asking Person X for help and to elaborate on that best outcome. Participants in the mental contrasting condition were then asked to name and elaborate on their main obstacle of successfully asking Person X for help. Participants in the indulging condition were asked to name and elaborate on a second best outcome of successfully asking Person X for help.

In the fourth and final part of the questionnaire, we measured feelings of rejection following an ambiguously intentioned hypothetical rejection as the dependent variable (see below). In the end, we collected socio-demographic information and debriefed participants fully. Further variables were assessed, which are not reported here (see Appendix 3).

Dependent variable: Feeling rejected. According to Study 1, we induced an ambiguously intentioned rejection by stating: "Now imagine you ask *Person X* for help and he/she denies your request." We measured feelings of rejection with five items adapted from Downey and Feldman (1996): I would feel … "unaccepted", "rejected", "hurt", "disliked", "discouraged" on a 5-point-scale from 1 (not at all) to 5 (extremely). We calculated the mean of all five items and used it as the dependent variable (α. = .92).

Attention item. We added one item to the feeling rejected-scale to check, if participants were reading the instructions carefully. Participants were instructed to answer on

a 5-point scale from 1 (not at all) to 5 (extremely): “This is not a question. Please check not at all.”

Results

Descriptive analyses. Significant others whom participants needed to ask for help were mainly a spouse/partner (27.9%), a friend (24%), or a parent (21.9%). The mean relationship closeness to significant others, who could provide help (*M* = 5.39, *SD* = 1.57), was well-above the midpoint of the 7-point scale and indicated that participants felt close to the person they needed to ask for help. Participants’ incentives to solve the problem (*M* = 6.11, *SD* = 1.23), to ask Person X for help (*M* = 5.60, *SD* = 1.33), and that Person X will help when asked for (*M* = 5.58, *SD* = 1.07) were at the upper end of the 7-point scale, indicating that participants chose important problems. Mean expectations to solve the problem (*M* = 5.28, *SD* = 1.37), to ask Person X for help (*M* = 5.34, *SD* = 1.63), and that Person X will help when asked for (*M* = 5.81, *SD* = 1.28) were also above the midpoint of the 7-point scale, indicating that students chose feasible wishes. Furthermore, the mean difficulty (*M* = 4.81, *SD* = 1.96) indicated that asking for help was challenging for participants.

Participants had a mean RS of *M* = 9.77 (*SD* = 3.74, Min = 3, Max = 24). RS did not differ between men and women, $t(181) = 0.97$, p = .334.

The mean feelings of rejection measured on a 5-point scale were *M* = 3.56 (*SD* = 1.14). Feeling rejected did not differ for men and women, $t(181) = -0.88$, $p = .379$. Further correlations can be found in Table 2.

Dependent variable: feeling rejected. We used the same rationale for data analysis as in Study 1. As we hypothesized the moderation analysis yielded a negative interaction effect of RS and self-regulation strategy on feeling rejected, $b = -0.09$, 95% CI [-0.18, -0.01], $t = -2.12$, $p = .035$. This finding implies that mental contrasting weakens the link between RS and the interpretation of an ambiguous stimulus as rejection. The model, which includes the interaction effect, explained significantly more variance than the model without the

interaction, $\Delta R^2 = .02$, $F(1, 179) = 4.49$, $p = .035$. Transforming R^2 into Cohen`s f^2 effect size for multiple partial correlations resulted in the value of $f^2 = 0.02$, which can be interpreted as a small effect. The interaction effect is illustrated in Figure 5.

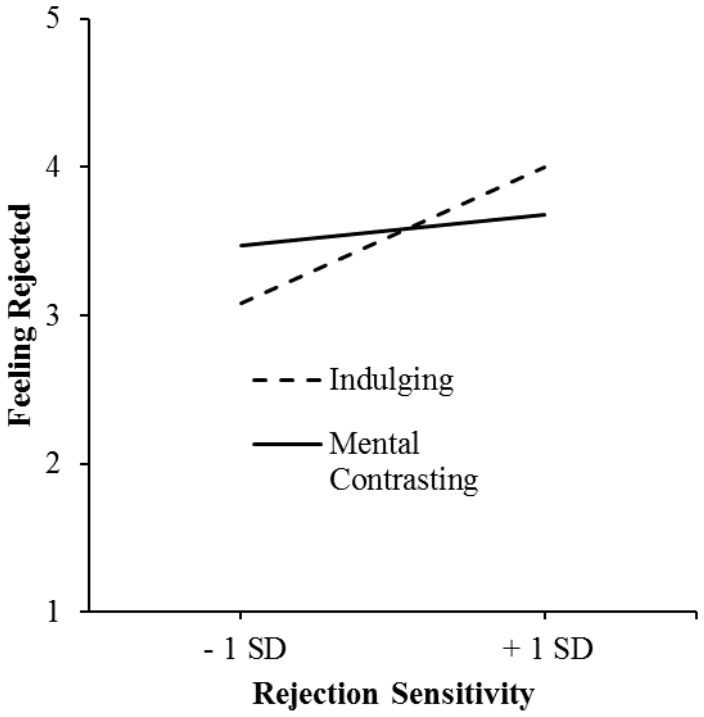


Figure 5. Feeling rejected as a function of RS and self-regulation strategy in Study 2.

Table 2

Correlations of All Metric Variables Reported for Study 2 (N = 183)

Variables	1	2	3	4	5	6	7	8	9	10
1. Rejection Sensitivity (A-RSQ)	–									
2. Feeling rejected	**.23****	–								
3. Relationship closeness	**-.15***	.02	–							
4. Expectancy to solve the problem	**-.29****	**-.19****	-.07	–						
5. Expectancy to ask for help	**-.17***	.06	.01	**.51****	–					
6. Expectancy that Person X will help	-.11	-.04	.02	**.55****	**.54****	–				
7. Incentive to solve the problem	-.02	.14	-.01	**.35****	**.37****	**.18***	–			
8. Incentive to ask for help	**-.16***	**.15***	.04	**.44****	**.61****	**.39****	**.49****	–		
9. Incentive that Person X will help	-.09	**.36****	**.16***	**.37****	**.43****	**.41****	**.42****	**.62****	–	
10. Difficulty to ask for help	**.25****	**.23****	-.01	**-.18***	**-.35****	**-.25****	**.18***	-.06	.05	–
11. Age	**-.17***	-.07	.04	.03	.06	-.10	.08	.12	-.02	.13

Note. $^{*}p < .05$. $^{**}p < .01$.

The analysis of simple slopes showed that RS predicted feeling rejected in the indulging condition, b = 0.12, 95% CI [0.06, 0.19], t = 3.69, p < .001, but not in the mental contrasting condition, b = 0.03, 95% CI [-0.03, 0.09], t =0.98 p = .330. We further hypothesized that mental contrasting (compared to indulging) would desensitize high RS people and sensitize low RS people. Analysis of simple slopes produced tendentially significant results in the hypothesized direction: high RS people (+ 1*SD*) felt less rejected in the mental contrasting compared to the indulging condition, b = -0.31, 95% CI [-0.77, 0.15], t = -1.79, p = .181. Low RS people (-1*SD*) felt more rejected in the mental contrasting compared to indulging condition, b = 0.23, 95% CI [-0.07, 0.85], t = 1.67, p = .097.

Including variables, that were confounded with the independent or dependent variable (the expectancy to solve the problem, incentive to ask for help, relationship closeness, expectancy to ask for help, age) as covariates in the model did not change the pattern of the results (p < .05). Only when we added the incentive that Person X will help or the difficulty to ask for help into the model, the interaction was only close to significant (p < .065).

Additionally excluding 32 participants (17.49 %) who reported a relationship closeness, expectations, incentives or difficulty of 1 (not at all), emphasized the hypothesized effects. The model, which included the interaction effect, explained significantly more variance than the model without the interaction, ΔR^2 = .09, F(1, 147) = 15.16, p < .001. Transforming R^2 into Cohen`s f^2 effect size for multiple partial correlations resulted in the value of f^2 = 0.10, which can be interpreted as a small to medium effect. The analysis of simple slopes showed that RS predicted feeling rejected in the indulging condition, b = 0.16, 95% CI [0.09, 0.23], t = 4.53, p < .001, but not in the mental contrasting condition, b = -0.30, 95% CI [-0.10, 0.04], t =-0.89 p = .374. Furthermore, results showed high RS people (+ 1*SD*) felt less rejected in the mental contrasting compared to the indulging condition, b = -0.66, 95% CI [-1.12, -0.20], t = -2.84, p = .005, while low RS people (-1*SD*) felt more rejected in

the mental contrasting compared to indulging condition, $b = 0.63$, 95% CI [0.17, 1.09], $t = 2.68$, $p = .008$.

Text analysis of written elaborations. The LIWC dictionary (Pennebaker et al., 2007) captured more than 95% of the words used in the elaborations in both conditions, indicating a valid analysis. Participants in the mental contrasting condition wrote more words than participants in the indulging condition (see Table 3). To test hypotheses about the differences in the written elaborations between participants in the indulging and mental contrasting condition, we compared the mean frequencies of word use in the written elaborations of the second aspect in both conditions. In the indulging condition participants elaborated on a second best outcome of successfully asking Person X for help, whereas in the mental contrasting condition we instructed participants to elaborate on an obstacle that might hold them back from successfully asking Person X for help. We hypothesized that participants in the mental contrasting condition would specifically think and write about possible rejection of their help-seeking wish and associated negative emotions. A standard category in LIWC including words related to rejection is the inhibition category containing words like deny, ignore, discourage, or refuse. Therefore, we hypothesized that participants in the mental contrasting condition should use more words related to the inhibition category. Additionally, we built a specific rejection category for the LIWC dictionary based on the dictionary words. Two raters independently nominated words in the LIWC dictionary that were related to "rejection" and discussed discrepant decisions. If agreement could not be reached, the word was not included in the category. For the final category word list containing 53 words see Appendix 1.

As we hypothesized, participants in the mental contrasting condition used significantly more words related to inhibition and rejection than participants in the indulging condition (see Table 3).

Table 3

Mean Differences of Word Use (percent of text) between Mental Contrasting (N = 95) and Indulging (N = 88) in Study 2

Variable	Mental Contrasting *M (SD)*	Indulging *M (SD)*	*t*(181)	*p*
Word count	53.95 (32.46)	43.43 (23.63)	-2.49	.014
Positive Emotion	2.44 (2.46)	5.39 (3.72)	6.26	< .001
Negative Emotion	5.61 (5.14)	1.75 (2.39)	-6.60	< .001
Inhibition	1.15 (2.21)	0.49 (1.01)	-2.64	.009
Rejection	1.13 (2.32)	0.10 (0.48)	-4.23	< .001
Insight	3.68 (3.68)	2.75 (3.06)	-1.86	.065

Note. Although the variables were not normally distributed within conditions, we used the parametric t-Test, which has been shown to provide reliable information even when the assumptions are violated, if the samples are not too small (n > 30) and do not greatly differ between conditions (Rasch, Friese, Hofmann, & Naumann, 2010, p. 59) For the analyses of the variables Positive Emotion, Negative Emotion, Inhibition and Rejection we reported the results of Welch`s t-Test, because the assumption of homogeneity of variances was violated.

As hypothesized, participants in the mental contrasting condition used more negative emotion words (e.g., embarrass, guilt, hurt) and less positive emotion words (e.g., helps, support, success) than participants in the indulging condition (see Table 3.)

We found some evidence for the assumption that mental contrasting fosters insight. Participants in the mental contrasting condition tended to use more insight words (e.g., think, realize, feel) than participants in the indulging condition (see Table 3.).

To test, if RS moderated the influence of the condition on word use, we computed moderation analyses with the PROCESS-Tool developed by A. Hayes (www.processmacro.org). We used condition as a dichotomous predictor variable and RS as a continuous moderator variable to predict use of rejection, inhibition, or insight words. Results showed that RS did not moderate the influence of the condition on word use, $\Delta R_s^2 < .01$, $p_s > .32$. Participants in the mental contrasting condition used more rejection and inhibition words as well as more negative emotion words and less positive emotion words whether they were low or high in RS (see Table 4).

Table 4

Regression of Word Use on Condition (Indulging = 0, MC = 1) for Participants with Low and High RS in Study 2

Variable	-1 *SD*					+1 *SD*				
	b	LL	UL	*t*(181)	*p*	*b*	LL	UL	*t*(181)	*p*
Positive emotion	-3.34	-4.65	-2.04	-5.06	<.001	-2.54	-3.84	-1.24	-3.85	<.001
Negative emotion	4.14	2.46	5.82	4.86	<.001	3.61	1.94	5.29	4.25	<.001
Inhibition	0.63	-0.09	1.36	1.72	.087	0.69	-0.03	1.42	1.88	.060
Rejection	1.28	0.57	1.99	3.56	.001	0.77	0.07	1.48	2.16	.032
Insight	1.66	0.25	3.06	2.33	.021	0.23	-1.17	1.63	0.33	.743

The interaction effect between RS and condition also did not significantly improve the regression model with insight words used as the dependent variable, $\Delta R^2 = .01$, $p = .16$, but mental contrasting predicted the use of insight words for participants with low but not high RS (see Table 4).

Exploratory analysis of written elaborations. In an exploratory analysis, we found that the condition moderated the relationship between RS and the use of first person singular pronouns (e.g., I, me, myself, mine), $b = -0.54$ 95% CI [0.01; -0.96] $t = -2.56$, $p = .011$. In indulging, the more rejection sensitive the participants were, the more self-related words they used, $b = 0.28$ 95% CI [-0.04; 0.59] $t = 1.75$, $p = .082$. In mental contrasting, the more rejection sensitive participants were, the less self-related words they used, $b = -0.26$ 95% CI [-0.54; 0.01] $t = -2.56$, $p = .062$. Participants with low RS tended to use more self-related words, $b = 2.02$ 95% CI [-0.18; 4.22] $t = 1.81$, $p = .071$, and participants with high RS tended to use less self-related words, $b = -2.02$ 95% CI [-4.22; 0.17] $t = -1.82$, $p = .071$, in the mental contrasting compared to the indulging condition. The interaction effect is illustrated in Figure 6.

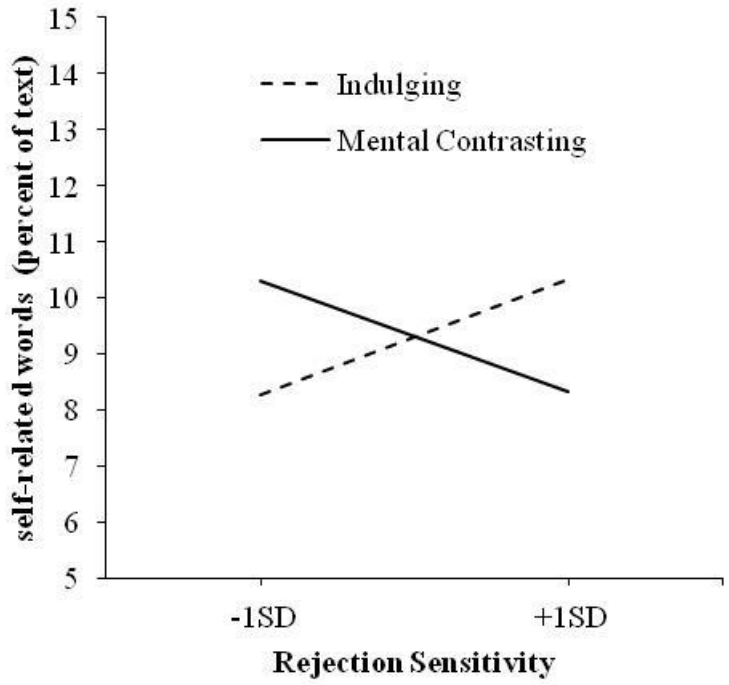


Figure 6. Use of self-related words (in percent of the text) as a function of RS and self-regulation strategy in Study 2.

Discussion

In this study we conceptually replicated the findings of Study 1 in a larger and more heterogeneous sample regarding a variety of close interpersonal relationships and using the interpretation of an ambiguously intentioned rejection (feeling rejected) as a proximate measure of a sensitive reaction. We showed that mental contrasting about a situation, which is relevant to RS, weakened the link between RS and the interpretation of an ambiguously intentioned rejection. While people in the indulging condition interpreted the ambiguously intentioned rejection in line with their disposition (the more rejection sensitive the more feeling rejected), mentally contrasting participants` interpretation of the situation did not depend on their disposition. Furthermore, we showed (for a relevant subsample) that mental contrasting sensitized people with low RS and desensitized people with high RS: Participants with low RS felt more rejected in the mental contrasting condition than in the indulging

condition. Participants with high RS felt less rejected in the mental contrasting condition compared to the indulging condition.

In this study we furthermore found some evidence for the mental contrasting processes that are assumed to mediate the effect. Computerized text analysis showed that participants in the mental contrasting condition used more words related to rejection than participants in the indulging condition. Although we did not find differences in the use of rejection-related words in people with high and low RS, we assume that these people differ in how they think about rejection. While a possible rejection is spelled out for people with low RS that would have otherwise not spent any thoughts on rejection, people with high RS are guided to rationally think about and reconsider a possible rejection. We assume that by reflecting about possible rejection both people with low and high RS gain insight into their individual cognitive-affective processing dynamics. This assumption is supported by the finding that participants in the mental contrasting condition used more insight-related words than participants in the indulging condition. The use of insight-related words furthermore suggest cognitive reappraisal processes (Tausczik & Pennebaker, 2010) that could be a central mediator of the moderating effect of mental contrasting on RS outcomes. In an exploratory analysis of the LIWC-results we found that the self-regulation strategy moderated the association of RS and use of self-related words like me, myself, or I. While participants with low RS tended to use more self-related words, participants with high RS tended to use less self-related words in the mental contrasting compared to the indulging condition. While content words tell us something about what people attend to, function words tell us something about how people attend to specific contents (Tausczik & Pennebaker, 2010). Specifically, personal pronouns tell us from which perspective something is dealt with. For example, (Kowalski, 2000) investigated how students wrote about teasing when they have been the perpetrator compared to the victim. Although, in both writings students focused on the victim, they used more first-person pronouns when describing an event in which they have been

teased compared to events in which they have been the perpetrator. Referring to the hot/cool systems model of self-regulation (Metcalfe & Mischel, 1999). Kross, Ayduk, and Mischel (2005) showed that a self-distanced or ego-decentered perspective allowed people to process negative emotions more abstractly and reflectively without increasing negative arousal compared to a self-immersed or egocentric perspective. Transferred to our results, these findings provide some evidence for the assumption that mental contrasting affects the way how people construe interpersonal rejection. We assume that in high RS people mental contrasting encourages a decentered perspective, which presumingly helps them to reflectively analyze their thoughts and feelings from a distanced perspective. In low RS people, we would assume that mental contrasting enhances a reflective confrontation with interpersonal rejection from a less distanced perspective. Furthermore, the results allow the interpretation that mental contrasting helps high RS people to attribute the rejection less to themselves, while mental contrasting helps low RS people to consider themselves as the cause of rejection. This interpretation is based on the assumption that a perspective of balanced distance ("cool", but not "cold"), which is neither too egocentric nor too decentered, is the most helpful way to cope with negative emotions. Kross et al. (2005) supported this view by arguing that the distanced perspective helps people to neither ruminate on negative emotions nor to avoid the confrontation with negative emotions. Accordingly, the authors support the view that the most beneficial way of dealing with negative emotions is a balance between emotional approach strategies that help individuals "to focus on and work through negative feelings", and avoidance strategies that help individuals to "down-regulate emotional reactivity" (Kross et al., 2005, p. 714).

In the indulging condition, we found that higher RS is associated with a more sensitive reaction to ambiguously intentioned rejection, while we did not find this relationship in the mental contrasting condition. The findings in the indulging condition parallel the typical pattern of RS and therefore suggest that mental contrasting led to changes in the information

processing patterns. However, the experimental evidence does not exclude an alternative interpretation of the results. It is possible that indulging in successfully asking someone for help differentially influences people with high and low RS and specifically leads high RS people to react more strongly than low RS people. Sokolowski and Schmalt (1996) reported empirical evidence for this alternative interpretation. In their experiment, they examined the effect of the affiliation motive (hope for affiliation or fear of rejection) and induced mood (happy or sad) on emotional reactions to an unexpected rejection in an interpersonal scenario. They found that a happy mood differentially affected people motivated by hope for affiliation or fear of rejection. If people who were motivated by fear of rejection were induced into a happy mood, they felt more desperate, tired, helpless, and less confident following the unexpected rejection, than people who were motivated by hope of affiliation in a happy mood. The authors interpreted this finding as "Icarus-effect", which describes that the happy mood led people with fear of rejection to experience a deeper fall of emotions than people with hope of affiliation. To exclude the possibility that the results of our first two studies were driven by a similar effect in the indulging condition, the next study included another control condition.

Study 3: Regulating Rejection Sensitivity – Direction of Effects

In this study, we aimed to conceptually replicate the results of Study 2 with two changes, which we made to enhance the validity of results. First, the dependent variable of feeling rejected was mixed within other positive and negative affect items to reduce subject-expectancy effects. Second, another control condition, in which the self-regulation strategy was not manipulated, was added to support the assumption that the differences between the mental contrasting and indulging condition are due to changes in the mental contrasting condition. We hypothesized that mental contrasting would weaken the link between RS and feeling rejected following an ambiguously intentioned rejection. We assumed that RS would predict feeling rejected in the indulging and no-self-regulation control condition but not in the mental contrasting condition. Furthermore, we hypothesized that mental contrasting

(compared to the other conditions) would sensitize people with low RS but desensitize people with high RS.

Participants and Design

Participants were recruited via facebook, psychology forums and personal approach of students at the university campus. The final study sample included 164 German adults between 18 and 58 years (female = 137, M_{age} = 25.26). The majority of participants were students (62.2%). Others were working full-time (25%), part-time (4.9%), were seeking work (4.9%) or other (3%). Forty-three participants (26.2%) had some migration background (participant themselves or at least one of their parents was not born in Germany). 226 of 604 participants (37.4%) completed the questionnaire. Dropout rate did not differ between conditions, X^2 (4) = .812, p = .937. Thirty-eight participants were excluded because they did not answer the attention check item correctly. Twenty-three participants were excluded because their first language was not German.

Sixty-one participants were randomly assigned to the control condition, 49 to the indulging condition and 54 to the mental contrasting condition.

Procedure and Materials

Participants individually answered the whole questionnaire online. Before starting with the study, we explained in the cover story that the aim of the study was to learn more about what thoughts and images people have in everyday life. Participants were assured that participation is voluntary and that their answers will be kept confidential. Only after participants gave consent, they started with the study. This study consisted of five parts.

In the first part of the study, we measured RS with the translated and adapted German version of the Rejection Sensitivity Questionnaire (RSQ-20, Staebler, Helbing, Rosenbach, & Renneberg, 2011). Sixteen items of the American RSQ were adopted for a German adult population and four additional items were created, which included interpersonal situations in professional life and group situations (Staebler et al., 2011). Equivalent to the questionnaires

used in Study 1 and 2, the German RSQ includes hypothetical situations, in which persons have to make a request (e.g. "Du bittest einen Kollegen an deinem Arbeitsplatz, Dir eine Frage zum Arbeitsablauf zu beantworten."). We reformulated items from the formal address "Sie" to the more informal "Du", because the questionnaire was mainly spread among students and their friends and we wanted to induce a more open and intimate atmosphere, in which participants felt free to answer the questions as naturally as possible. Following each situation participants had to answer how concerned or anxious (on a 6-point-scale) they would be and whether they expected (on a 6-point-scale) that their request will be honored (Downey & Feldman, 1996). Anxiety of rejection correlated negatively with the expectation that the request is honored (*r*s = -.10 – -.57, *p*s = .205 – <.001). We computed RS scores by taking the product of level of anxiety and the expectation of a rejecting outcome for each situation and then taking the mean of all twenty situations (α = .87).

In the second part of the study, in line with Study 2, participants were asked to name a pressing problem, for which they would need to ask a close other for help. To ensure that the help-seeking problem would be challenging, but feasible, we further instructed participants to choose a situation, in which asking for help is not easy, but they can make it. Participants noted the problem in keywords and specified the relationship with the close other they needed to ask for help. One participant for example wanted to ask her superior for an increase of salary. Participants were informed that we would refer to the person they named as *Person X*. In the following we assessed *relationship closeness* using the 2-item Subjective Closeness Index (Berscheid et al., 1989), which we translated into German and measured on 7-point scales from 1 (not at all close) to 7 (extremely close): "Verglichen mit all Deinen Beziehungen (gleich- und gegengeschlechtlich), wie würdest Du Deine Beziehung zu Person X beschreiben?" "Verglichen mit dem, was Du über enge Beziehungen anderer Personen weißt, wie würdest Du Deine Beziehung zu Person X beschreiben?" (α = .92). We furthermore measured *expectancies* and *incentives* that Person X can help with the problem,

that the person will ask Person X for help, and that the Person X will help when asked for, and the *difficulty* of asking Person X for help. Answers were made on 7-point rating scales from 1 (not at all) to 7 (very).

In the third part of the study, we manipulated the self-regulation strategies mental contrasting and indulging in the same way as in Study 1. Participants were asked to name the best outcome about successfully asking their close other for help and to elaborate on that best outcome. Participants in the mental contrasting condition were then asked to name and elaborate on their main obstacle of successfully asking their close other for help. Participants in the indulging condition were asked to name and elaborate on a second best outcome of successfully asking their close other for help. Additionally, we instructed participants in a third condition to freely think about the problem for which the participant needs to ask Person X for help (no self-regulation control condition).

In the fourth part of the questionnaire, we measured feelings of rejection following an ambiguously intentioned hypothetical rejection as the dependent variable (see below).

In the fifth and final part, we assessed other personality dimensions as control variables with a short scale for assessing the Big Five Dimensions of Personality (BFI-10, (Rammstedt & John, 2007). The scale assesses the five personality dimensions neuroticism (e.g., “Ich werde leicht nervös und unsicher.”), extraversion (e.g., Ich gehe aus mir heraus, bin gesellig.”), openness (e.g., “Ich habe eine active Vorstellungskraft, bin fantasievoll.”), conscientiousness (e.g., “Ich erledige Aufgaben gründlich.“), and agreeableness (e.g.,Ich neige dazu, andere zu kritisieren.”) with two items each. Participants answer each item on a 5-point scale from 1 “disagree strongly” to 5 “agree strongly”. In the end, we measured socio-demographic information and debriefed participants fully.

Further variables were assessed, which are not reported here (see Appendix 4).

Dependent variable: Feeling rejected. According to Study 1 and 2, we activated a hypothetical ambiguously intentioned rejection by stating: "Now imagine you ask *Person X*

for help and he/she denies your request." We measured feelings of rejection with five items adapted from Downey and Feldman (1996): I would feel … "unaccepted", "rejected", "hurt", "disliked", "discouraged" on a 5-point scale from 1 (not at all) to 5 (extremely). To control for expectancy effects we mixed these items with 10 positive and 10 negative affect items taken from the Positive and Negative Affect Schedule (PANAS, Krohne, Egloff, Kohlmann, & Tausch, 1996). We calculated the mean of the five items assessing feeling rejected and used it as the dependent variable (α. = .83).

Attention item. We added one item to check, if participants were reading the instructions carefully. Participants were instructed to answer on a 5-point scale from 1 (not at all) to 5 (extremely): "This is not a question. Please check not at all."

Results

Descriptive analyses. Significant others whom participants needed to ask for help were mainly a friend (30.5%), the parents (26.8%) or the partner (18.3%). The mean relationship closeness to significant others, who could provide help (M = 5.54, SD = 1.50), was well-above the midpoint of the 7-point scale and indicated that participants felt close to the others they needed to ask for help. Participants' incentives that Person X can help (M = 6.02, SD = 1.17), to ask Person X for help (M = 5.40, SD = 1.56), and that Person X will help when asked for (M = 6.13, SD = 1.18) were at the upper end of the 7-point scale, indicating that participants chose important problems. Mean expectations that Person X can help (M = 6.02, SD = 1.17), to ask Person X for help (M = 5.68, SD = 1.46), and that Person X will help when asked for (M = 6.18, SD = 1.17) were also at the upper end of the 7-point scale, indicating that students chose feasible wishes. Furthermore, the mean difficulty (M = 3.61, SD = 2.05) indicated that asking for help was not very easy for participants.

Participants had a mean RS of M = 10.12 (SD = 3.71, Min = 2.70, Max = 24.65). There was a tendency that men were more rejection sensitive than women, $t(162) = 1.76$, p = .081. Participants with and without migration background did not differ in RS, $t(162) = -0.01$,

p = .994. The mean feelings of rejection measured on a 5-point scale were M = 3.20 (SD = 1.04). Women felt more rejected than men, $t(162) = -2.40$, p = .018. Participants with and without migration background did not differ in feeling rejected, $t(162) = 0.03$, p = .979. Further correlations can be found in Table 5.

Rationale for data analysis. The rationale for data analysis will be analogous to Study 1 and 2. But because we examined the interaction effect of RS with a three-factorial moderator, which was not regularly provided within the PROCESS Tool, we used a PROCESS hack proposed by Andrew Hayes (Hayes, 2015). Therefore we dummy coded the condition, setting mental contrasting as the reference condition, and comparing it to the no self-regulation control condition (D_1), and indulging (D_2). We used PROCESS model 2 and defined M as D_1 and W as D_2. PROCESS provided a test of interaction between M and X and W and X as well as conditional effects of X on Y for the three conditions. As mental contrasting was set to 0 and the spontaneous self-regulation control condition, respectively the indulging control condition was set to 1, we expected a positive interaction effects, indicating that the more rejection sensitive the more participants feel rejected in the no self-regulation control condition and in the indulging control condition compared to the mental contrasting condition.

Table 5

Correlations of All Metric Variables Reported in Study 3 (N = 164)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Rejection sensitivity	–														
2. Feeling rejected	**.22****	–													
3. Relationship closeness	-.12	-.01	–												
4. Expectancy that Person X can help	**-.23****	.13	**.33****	–											
5. Expectancy to ask for help	-.10	.02	**.22****	**.41****	–										
6. Expectancy that Person X will help	**-.22***	.11	**.42****	**.63****	**.51****	–									
7. Incentive to solve the problem	-.03	**.19***	-.01	**.24****	**.26****	**.21****	–								
8. Incentive to ask for help	.04	**.18***	.04	**.31****	**.30****	**.26****	**.46****	–							
9. Incentive that Person X will help	-.06	**.23****	.20*	**.51****	**.32****	**.36****	**.32****	**.50****	–						
10. Difficulty to ask for help	**.26****	.07	**-.33****	**-.19***	**-.48****	**-.28****	.01	-.05	-.10	–					
11. Age	**-.21****	-.04	.00	.09	.12	.01	**.17***	.02	.02	.03	–				
12. Neuroticism	**.37****	.14	-.02	-.11	-.04	-.14	.07	.08	-.08	**.22****	-.09	–			
13. Extraversion	**-.35****	**-.17***	.09	**.17***	.14	**.19***	**.16***	.08	**.15***	**-.24****	.03	**-.43****	–		
14. Openness	-.14	.08	.06	.02	-.01	.02	.11	-.05	-.09	.06	**.23****	-.03	-.09	–	
15. Agreeableness	-.06	**-.16***	.03	.11	.00	.11	-.01	.03	-.01	.00	.04	-.10	-.02	**.23****	–
16. Conscientiousness	**-.18***	-.04	-.06	.09	.02	-.06	.07	.04	-.01	-.06	**.26****	**-.19***	**.17***	.13	-.06

Note. $^{*}p < .05$. $^{**}p < .01$.

Dependent variable: Feeling rejected. As we hypothesized the moderation analysis yielded positive interaction effects of RS and self-regulation strategy on feeling rejected, no self-regulation vs. mental contrasting: b = 0.14, 95% CI [0.02, 0.25], t = 2.40, p = .018; indulging vs. mental contrasting: b = 0.10, 95% CI [-0.01, 0.20], t = 1.88, p = .062. This finding implies that mental contrasting weakens the link between RS and the interpretation of ambiguous stimuli as rejection compared to indulging and a no self-regulation control condition. The model, which includes the interaction effects explained significantly more variance than the model without the interaction effects, ΔR^2 = .04, $F(2, 158)$ = 3.11, p = .047. Transforming R^2 into Cohen`s f^2 effect size for multiple partial correlations resulted in the value of f^2 = 0.04, which can be interpreted as a small effect. The interaction effect is illustrated in Figure 7.

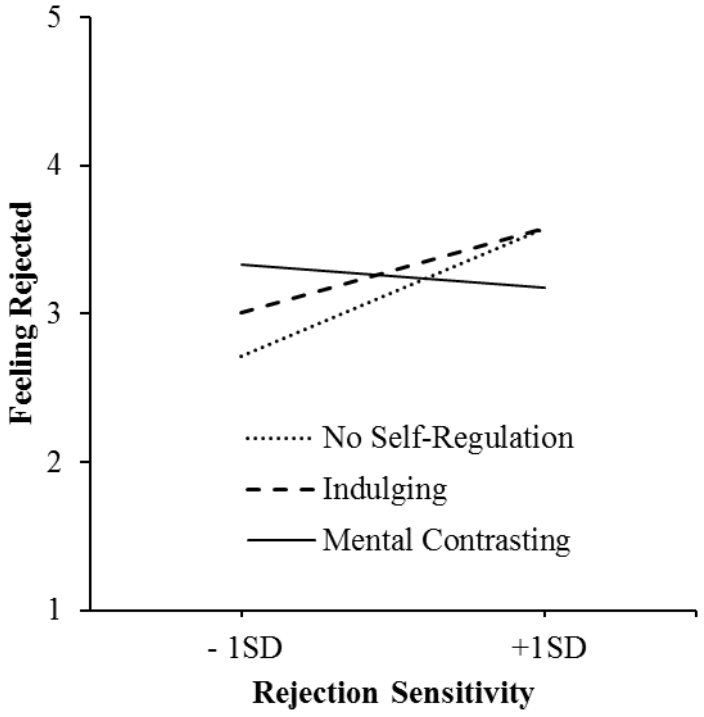


Figure 7. Feeling rejected as a function of rejection sensitivity and self-regulation strategy in Study 3.

The analysis of simple slopes showed that RS predicted feeling rejected in the no self-regulation control condition, b = 0.12, 95% CI [0.04, 0.20], t = 2.86, p = .005, and in the indulging condition, b = 0.08, 95% CI [0.01, 0.14], t = 2.33, p = .021, but not in the mental contrasting condition, b = -0.02, 95% CI [-0.1, 0.06], t = -0.51 p = .613. We further hypothesized that mental contrasting (compared to the other conditions) would desensitize high RS people and sensitize low RS people. Analysis of simple slopes did not produce significant results for all analyses, but all results were in the hypothesized direction: high RS people (+ 1*SD*) felt less rejected in the mental contrasting compared to the no self-regulation control condition, b = 0.61, 95% CI [0.06, 1.17], t = 2.19, p = .030. The comparison between the mental contrasting and the indulging condition was not significant, but in the hypothesized direction, b = 0.32, 95% CI [-0.26, 0.89], t = 1.08, p = .280. Low RS people (-1*SD*) did not feel significantly more rejected in the mental contrasting compared to the no self-regulation and indulging condition but results were in the hypothesized direction, no self-regulation: b = -0.40, 95% CI [-0.97, 0.18], t = -1.37, p = .173, indulging: b = -0.41, 95% CI [-0.93, 0.11], t = -1.54, p = .125.

Including variables, that were confounded with the dependent variable (the incentive that Person X can help, incentive to ask for help, incentive that Person X will help, extraversion, agreeableness, gender), as covariates in the model did not change the pattern of the results, ΔR^2 = .03, F(2, 152) = 3.15, p = .045. RS predicted feeling rejected in the no self-regulation control condition, b = 0.11, 95% CI [0.03, 0.19], t = 2.85, p = .005, and in the indulging condition, b = 0.07, 95% CI [0.01, 0.13], t = 2.14, p = .034, but not in the mental contrasting condition, b = -0.02, 95% CI [-0.09, 0.06], t = -0.46, p = .647.

Including variables that were confounded with the independent variable (expectancy to solve the problem, difficulty to ask for help, age, neuroticism, extraversion, conscientiousness) did not change the pattern of the results, ΔR^2 = .04, F(11, 152) = 2.19, p = .017. RS predicted feeling rejected in the no self-regulation control condition, b = 0.12, 95%

CI [0.04, 0.20], t = 2.79, p = .006, and tended to predict it in the indulging condition, b = 0.06, 95% CI [-0.01, 0.13], t = 1.75, p = .08. RS did not predict feeling rejected in the mental contrasting condition, b = -0.02, 95% CI [-0.10, 0.07], t = -0.38, p = .708.

Positive and negative affect. The interaction effect was not significant for positive affect, $\Delta R^2 < .01$, $F(2, 158) = 0.33$, p = .719. RS did not predict positive affect in the no self-regulation control condition, b = -0.03, 95% CI [-0.09, 0.03], t = -0.91, p = .365, and in the indulging condition, b = -0.01, 95% CI [--0.06, 0.04], t = -0.32, p = .075. RS did not predict positive affect in the mental contrasting condition, b = 0.01, 95% CI [-0.05, 0.06], t = 0.23, p = .816. There was a tendency that RS interacted with condition on negative affect, ΔR^2 = .03, $F(2, 158) = 2.74$, p = .068. RS predicted feeling rejected in the no self-regulation control condition, b = 0.08, 95% CI [0.02, 0.14], t = 2.53, p = .012, and in the indulging condition, b = 0.06, 95% CI [0.01, 0.11], t = 2.21, p = .029. RS did not predict feeling rejected in the mental contrasting condition, b = -0.02, 95% CI [-0.08, 0.04], t = -0.57, p = .571.

Discussion

We conceptually replicated the findings of Study 1 and 2 and thereby strengthened the support for our hypothesis that mental contrasting can help people to react to ambiguous rejection situations independently from their RS disposition. While more RS predicted stronger feelings of rejection in the control conditions, it did not in the mental contrasting condition. Furthermore, the data tendentially supported the assumption that mental contrasting (compared to the control conditions) sensitizes people with low RS and desensitizes people with high RS. Following mental contrasting (compared to the control conditions) people with low RS felt more rejected while people with high RS felt less rejected after an ambiguously intentioned rejection.

In this study we could furthermore invalidate the alternative explanation that the interaction effect between RS and self-regulation strategy is driven by the indulging condition. We showed that another control strategy, in which we did not manipulate the self-

regulation strategy, paralleled the pattern of the indulging condition. This supports our assumption that indulging does not change the dispositional response to ambiguous rejection, while mental contrasting does.

Furthermore, we reduced possible subject-expectancy effects by hiding the items of interest that measured feelings of rejection between items that measured positive and negative affect. While we found the hypothesized effects on the feeling rejected-items, we did not find it on items assessing overall positive and negative affect. Although, the interaction effect tended to be significant for negative affect, we assume that this is due to the association of feeling rejected and negative affect ($r = .77$, $p < .001$), but that there is some meaningful difference between feeling rejected and negative affect.

General Discussion

In three studies, we showed that mental contrasting weakened the link between RS and a sensitive response to an ambiguously intentioned rejection. Specifically, the presented data supported our hypotheses that RS would predict a sensitive response in the control conditions, but not in the mental contrasting condition. The results imply that mental contrasting helps people to react independently of their RS disposition. Following mental contrasting people did not readily translate their rejection-related information processing dynamics into situational responses. Instead, the results tendentially supported our assumption that mental contrasting balances RS dispositions by sensitizing people with low RS and desensitizing people with high RS to possible rejection.

We conceptually replicated these findings in samples of German high school students (Study 1), and American (Study 2) and German adults (Study 3), and in laboratory (Study 1) and online settings (Study 2 and 3). RS was measured with different questionnaires developed for the different populations (Study 1: German version of the Children's Rejection Sensitivity Questionnaire (FZE-K, part I, Rosenbach et al., submitted for publication); Study 2: Adult-Rejection Sensitivity Questionnaire (A-RSQ, Berenson et al., 2009, Study 2); Study 3:

German version of the Rejection Sensitivity Questionnaire (RSQ-20, Staebler et al., 2011). The sensitive reaction to an ambiguously intentioned rejection was measured as a composite of cognitive-affective reactions and behavior tendencies including “disappointment”, “self-attribution/resignation”, “anger/aggression” (Study 1), and as “feelings of rejection”, which specifically assess the interpretation of an ambiguously intentioned rejection (Study 2 and 3).

Assumed Processes

We assumed that mental contrasting would balance individual RS dispositions in two ways, (1) by helping people to gain insight into their obstacles, i.e. their RS dynamics, and (2) by helping people to transform their reflexive responses to situations, in which rejection is possible, into a reflective analysis of the problem-situation in which all possible reasons for the ambiguously intentioned rejection are considered. A computerized text-analysis of the written elaborations of participants in the mental contrasting and control condition provided some evidence in support of the assumed processes. First, we found that participants in the mental contrasting condition (compared to the indulging condition) thought more about negative emotions, less about positive emotions, more about rejection and used words that are related to cognitive insight-processes. Importantly, the main effect of condition was not qualified by an interaction effect of condition and RS. Consequently, people with high and low RS in the mental contrasting condition thought more about rejection and dealt with more negative emotions. Second, we found that mental contrasting moderated the relationship between RS and the use of self-related pronouns (e.g., “I”, “me”, “my”). While participants with low RS used more self-related words, participants with high RS used less self-related words in the mental contrasting compared to the indulging condition. These finding might imply that mental contrasting helps people to deal with negative emotions from an appropriately distanced perspective (“cool, but not cold”) (Kross, Ayduk, & Mischel, 2005). Mental contrasting might help people with low and high RS to achieve a more balanced view of the complex problem situation of an ambiguously intentioned rejection, in which personal

as well as impersonal reasons of the rejection are possible. Mental contrasting might have pushed participants with low RS to additionally consider personal reasons, and participants with high RS to additionally consider impersonal reasons. Further support for the assumption that mental contrasting would change the attribution of the rejection, which in turn mediates the effects on a sensitive response to rejection, comes from sub-analyses of the data of Study 1. In Study 1, we found that the effect of mental contrasting especially hold for the self-attribution of the rejection (“Ich würde denken, dass ich selbst Schuld habe.” “Ich würde denken, dass die Person mich absichtlich so gemein behandelt.” „Ich hätte das Gefühl, dass es an mir liegt, dass die Person mir nicht geholfen hat.“). While participants with low RS tended to attribute the rejection more to themselves, participants with high RS attributed the rejection less to themselves. Further support for the assumption that attributional processes mediate the reported effect can be seen in the “feeling rejected” items, on which we found the effect in Study 2 and 3. We reason that the items of the feeling rejected-scale ("unaccepted", "rejected", "hurt", "disliked", "discouraged") do not only measure personal feelings as the language of “feeling” rejected might suggest, but to a considerable amount measure interpersonal cognitions, specifically an attribution of hurtful intent. Feeling hurt or disliked presumes the cognition that another person was intentionally hurtful or expressed dislike. We assume that laypeople do not readily make the fine-grained distinction between themselves feeling hurt and the intention of the other person to be hurtful.

Nevertheless, at this point our results on the processes that mediate the interaction effect of RS and self-regulation strategy are only tentative and need to be substantiated. Future studies might specifically develop more explicit measures of “insight in ones RS dynamic”, e.g. by asking participants to self-evaluate their responses to rejection. Moreover, we assumed that people with high expectations in a specific situation, which is relevant to RS, do not only commit to pursuing the direct wish (seeking help), but also to the indirectly activated goal to enhance debilitating individual processing dynamics (RS). To test this

assumption, future research might assess the commitment to change individual RS dynamics. Additionally, future studies could assess emotional regulation processes physiologically (e.g., using a startle eye blink paradigm) and attributional processes (esp., the attribution of hurtful intent) as a dependent variable.

Control conditions. We compared the effects on mental contrasting to another way of thinking about a wished for future, i.e., indulging. In mental contrasting people first name and elaborate on the best outcome of realizing their wish, and subsequently contrast this positive future outcome with obstacles in the present reality, that stand in the way of realizing the future. During indulging, people solely focus on the wished for positive future outcomes. We chose indulging as a strong control condition because thinking more positively about risky interpersonal situations might be a naïve strategy, which is especially suggested for people who fear being rejected by significant others. In keeping with the motto "Do not always expect the worst, be more positive!" As previous research on mental contrasting documents, contrary to popular thinking, indulging in a positive future does not help people to change their behavior and achieve their goals (for a review, see Oettingen, 2012). In line with our hypotheses, the results of Study 1 and 2 showed that indulging did not change the RS dynamic, which implies a positive relationship between RS (expectation of rejection before a rejection occurs) and a sensitive response after an ambiguously intentioned rejection. Nevertheless, empirical findings on the effects of happy mood in people with fear of rejection ("Icarus effect", Sokolowski & Schmalt, 1996) implied that the interaction effect between RS and self-regulation strategy may be driven by the indulging condition. Because of that we added a control condition in Study 3, in which we did not manipulate a self-regulation strategy. The results showed that the RS dynamic was neither changed in the indulging nor in the no self-regulation control condition: In both control conditions RS predicted how rejected participants felt following an ambiguously intentioned rejection, while RS did not predict a sensitive response in the mental contrasting condition.

Implications for Research on Rejection Sensitivity

Rejection sensitivity model. The present research is based on a revised understanding of individual differences in RS. According to previous research, high RS is associated with an inappropriately anxious expectation, ready perception and overreaction to rejection, which leads to relationship problems, actual experiences of rejection and reinforcement of rejection expectations (for a review, see Pietrzak et al., 2005). Adding to the current theory, we argued that calm expectations of acceptance and downplaying of rejection cues can also be inappropriate and could lead to interpersonal difficulties. We argued that both extremely high and low RS might be inappropriate strategies to successfully manage interpersonal relationships and satisfy the need to belong. While high RS people might be overly concerned about rejection, low RS people might not be sensitive enough for signs of interpersonal devaluation. We suggested that both extremes are particularly at risk for interpersonal problems. Our revised model is supported by first empirical evidence on perceptual biases in people with low RS (Romero-Canyas & Downey, 2013) and theoretical implications of the sociometer theory, according to which hyper- as well as hyposensitivity are assumed to be associated to problematic interpersonal behavior (Leary & Guadagno, 2011). However, a comprehensive theoretical basis and empirical evidence supporting a revised RS model still needs to be developed.

Future research might specifically profit from reconceptualizing RS in a larger social competence or social problem solving framework, according to which social competence is "the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations" (Rubin & Rose-Krasnor, 1992), p. 285). A framework that incorporates personal as well as interpersonal motives encourages an understanding of situations in which rejection is possible, as a more complex approach-avoidance conflict, which needs to be kept in balance. While high RS people might tend to subordinate their personal goals to interpersonal ones and be therefore more focused

on avoiding rejection by significant others, low RS people might tend to disregard interpersonal relationships in pursuit of their personal goals and be therefore less focused on avoiding rejection and may even be intrusively approaching their significant others. Transferred to the help-seeking situation we used in our studies, we would assume that high RS people would be reluctant to seek help because their fear of being disliked, while low RS people would be driven by their own interest of solving their problem, taking the help of others for granted and not caring about whether their demands might threaten the relationship.

Another approach to reconceptualize the RS model might refer to research on individual difference in coping with anxiety. Specifically, comparing RS to the concept of repression-sensitization (Krohne, 1996) might be promising. While repression is characterized by an avoidance of threatening thoughts, which might parallel the psychological processes in people with low RS, sensitization describes people who cope with their fear by cognitive vigilance for threat cues, which might parallel the psychological processes in people with high RS.

Self-regulation of rejection sensitivity. Our revised view on RS has important implications for the self-regulation of the RS dynamic. Contrary to previous conceptualizations (Ayduk et al., 2000; Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010) we do not only assume self-regulatory potential in people with high RS. Instead, we argue that the highly automated response to rejection based on the generalized expectations and related anticipatory emotions needs to be changed into a controlled process, whether people are more or less sensitive to rejection. Therefore, we suggest that the primary goal of self-regulating RS is to enhance a situationally appropriate reaction to (potential) rejection, which is independent of RS. Referring to (Mischel et al., 2008, p. 434), we identified motivational and volitional components necessary for gaining insight and for transforming debilitating individual processing dynamics.

Analyzing RS in a social problem solving context would furthermore enhance a perspective that furthers self-regulatory approaches to cope with RS. For example, (D'Zurilla & Goldfried, 1971) suggested multiple stages of problem solving that could be used to guide research on the self-regulation of RS: "1. The identification of a situation as problematic; 2. The generation of possible alternatives, 3. The decision of choosing the appropriate alternative for the situation; and 4. Strategy implementation" (Rubin & Rose-Krasnor, 1986, p. 4).

The self-regulation strategy of mental contrasting emerged as an effective and efficient tool, which is specifically advantageous because it combines both motivational and volitional aspects of self-regulating RS. The implicit activation of people`s RS by targeting a problem situation which is relevant to RS, became specifically advantageous in helping people to become aware of their RS dynamics, without provoking reactance effects due to prescribing a goal ("You need to improve your rejection sensitivity!").

Limitations

Generalizability to real rejection experiences. In the present studies we only measured participant`s responses to a written hypothetical rejection of a help-seeking wish. It is unclear whether our findings can be generalized to real rejection experiences, which are manipulated in the laboratory or naturally occur in real life. However, Blackhart, Nelson, Knowles, and Baumeister (2009) showed that hypothetical manipulations lead to equally strong affective responses than real experiences of rejection, specifically being left out of a group (Imagined rejection: $z_r = .49$; Left out of a real group: $z_r = .46$). Nevertheless, future studies should replicate our findings in settings, in which people experience real rejection.

Generalizability to behavioral responses. The results of our studies imply that mental contrasting affects cognitive-affective responses to ambiguously intentioned rejection, specifically self-attribution of rejection and feeling rejected. In Study 1, we also measured aggressive behavioral intentions. Although the self-regulation strategy did not significantly

weaken the link between RS and anger/aggression, the results were in the hypothesized direction. Given the low test power there is good reason to assume that we would find moderating effects of self-regulation strategy on the relationship between RS and (aggressive) behavior in larger samples.

Generalizability to other interpersonal situations, in which rejection is possible.

The situations to which we applied mental contrasting were furthermore characterized by high incentive value and medium difficulty (challenging, but feasible). These seem to be necessary prerequisites to produce relevant situations, in which mental contrasting can regulate RS. In our studies, we applied mental contrasting to a problem for which participants needed to ask a significant other for help. Thereby we aimed to activate and transform individual RS dynamics. Although we would assume that mentally contrasting about similar situations, in which rejection is possible (e.g., looking forward to be invited to a party or to go on a date), would show similar effects, future studies need to test this assumption. Furthermore, it is unclear, whether mentally contrasting about a RS-relevant situation with a specific significant other produces transfer-effects to other RS-relevant situations or other significant relationships or whether mental contrasting effects on rejection sensitive behavior dissolve as soon as the specific RS-relevant situation is over.

Practical Implications

Acknowledging the limitations of the presented research, the studies provide good evidence to assume that immediate cognitive-affective responses to ambiguously intentioned rejection can be changed without much time and effort by applying the self-regulation strategy of mental contrasting. Future research needs to translate the findings into real life applications, e.g., by teaching participants mental contrasting as a meta-cognitive strategy (Oettingen, 2012) and/or by adding implementation intentions (Gollwitzer, 2012) to mental contrasting can help to trigger planned behavior change by helping people to identify relevant

situations. We would hope that repeatedly interrupting ones RS dynamic will weaken the social-cognitive associations and thereby change the dynamic itself in the long run.

Conclusion

The present research showed that mental contrasting enhances a balanced, considerate, and situationally appropriate reaction to interpersonal rejection that is independent of individually different rejection sensitivity dispositions. A thoughtful response to interpersonal rejection helps people to establish and maintain stable and caring relationships in all areas of life, e.g., work, school, romantic relationships, friendships, which are essential for personal and professional success and for mental and physical health (Baumeister & Leary, 1995; Cacioppo & Patrick, 2009; Rubin, Bukowski, & Parker, 2007).

References

Achtziger, A., Fehr, T., Oettingen, G., Gollwitzer, P. M., & Rockstroh, B. (2009). Strategies of intention formation are reflected in continuous MEG activity. *Social neuroscience*, *4*(1), 11–27. doi:10.1080/17470910801925350

Arriaga, X. B., & Rusbult, C. E. (1998). Standing in My Partner's Shoes: Partner Perspective Taking and Reactions to Accommodative Dilemmas. *Personality and Social Psychology Bulletin*, *24*(9), 927–948. doi:10.1177/0146167298249002

Ayduk, O., Downey, G., & Kim, M. (2001). Rejection sensitivity and depressive symptoms in women. *Personality and Social Psychology Bulletin*, *27*, 868–877.

Ayduk, O., Downey, G., Testa, A., & Yen, Y. (1999). Does Rejection Elicit Hostility in Rejection Sensitive Women? *Social Cognition*, *17*, 245–271.

Ayduk, O., Mendoza-Denton, R., Mischel, W., Downey, G., Peake, P. K., & Rodriguez, M. (2000). Regulating the interpersonal self: Strategic self-regulation for coping with rejection sensitivity. *Journal of Personality and Social Psychology*, *79*(5), 776–792. doi:10.1037//0022-3514.79.5.776

Ayduk, Ö., Zayas, V., Downey, G., Cole, A. B., Shoda, Y., & Mischel, W. (2008). Rejection sensitivity and executive control: Joint predictors of borderline personality features. *Journal of Research in Personality*, *42*(1), 151–168. doi:10.1016/j.jrp.2007.04.002

Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, *84*, 191–215.

Bargh, J. A. (2014). The Four Horsemen of Automaticity: Awareness, Intention, Efficiency, and control in Social Cognition. In R. S. Wyer JR. & T. K. Srull (Eds.), *Handbook of Social Cognition, Second Edition. Volume 1: Basic Processes Volume 2: Applications* (2nd ed., pp. 1–40). Hoboken: Taylor and Francis.

Baumeister, R. F., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497–529. doi:10.1037/h0021235

Berenson, K. R., Gyurak, A., Ayduk, Ö., Downey, G., Garner, M. J., Mogg, K.,. . . Pine, D. S. (2009). Rejection sensitivity and disruption of attention by social threat cues. *Journal of Research in Personality*, *43*(6), 1064–1072. doi:10.1016/j.jrp.2009.07.007

Berscheid, E., Snyder, M., & Omoto, A. M. (1989). The Relationship Closeness Inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology*, *57*(5), 792–807. doi:10.1037/0022-3514.57.5.792

Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: a meta-analytic review of 192 studies on social exclusion. *Personality and social psychology review : an official journal of the Society for Personality and Social Psychology, Inc*, *13*(4), 269–309. doi:10.1177/1088868309346065

Bourgeois, K. S., & Leary, M. R. (2001). Coping With Rejection: Derogating Those Who Choose Us Last. *Motivation and Emotion*, *25*(2), 101–111. doi:10.1023/A:1010661825137

Bowlby, J. (1973). *Attachment and loss: Vol. 2 Separation: Anxiety and anger*. New York: Basic Books.

Cacioppo, J. T., Hawkley, L. C., & Thisted, R. A. (2010). Perceived social isolation makes me sad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychology and aging*, *25*(2), 453–463. doi:10.1037/a0017216

Cacioppo, J. T., & Patrick, W. (2009). *Loneliness: Human nature and the need for social connection* (1st pbk ed.). New York, London: W.W. Norton & Company.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*, 155–159.

Derryberry, D., & Reed, M. A. (2002). Anxiety-related attentional biases and their regulation by attentional control. *Journal of Abnormal Psychology*, *111*(2), 225–236. doi:10.1037/0021-843X.111.2.225

Downey, G., Lebolt, A., Rincón, C., & Freitas, A. L. (1998). Rejection Sensitivity and Children`s Interpersonal Difficulties. *Child Development*, *69*(4), 1074–1091.

Downey, G., Mougios, V., Ayduk, O., London, B., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system: Insights from the startle response to rejection cues. *Psychological Science*, *15*(10), 668–673.

Downey, G., & Feldman, S. I. (1996). Implications of Rejection Sensitivity for Intimate Relationships. *Journal of Personality and Social Psychology*, *70*(6), 1327–1343.

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The Self-Fulfilling Prophecy in Close Relationships: Rejection Sensitivity and Rejection by Romantic Partners. *Journal of Personality and Social Psychology*, *75*(2), 545–560.

D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem solving and behavior modification. *Journal of Abnormal Psychology*, *78*(1), 107–126. doi:10.1037/h0031360

Eisenberger, N., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*, 290–292.

Feldman, S. I., & Downey, G. (1994). Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology*, *6*, 231–247.

Gollwitzer, P. M. (2012). Chapter 25: Mindset Theory of Action Phases. In Lange, Paul A. M. van, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 526–546). Los Angeles: SAGE.

Gyurak, A., & Ayduk, O. (2007). Defensive Physiological Reactions to Rejection: The Effect of Self-Esteem and Attentional Control on Startle Responses. *Psychological Science, 18*(10), 886–892. doi:10.1111/j.1467-9280.2007.01996.x

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. *Methodology in the social sciences Research methods*. New York: Guilford Press.

Hayes, A. F. (2015, May). *HACKING PROCESS: Some Advanced and Undocumented Applications in Mediation and Moderation Analysis.* Workshop hold at the Association for Psychological Science (APS), New York.

Kappes, A., Oettingen, G., & Pak, H. (2012). Mental Contrasting and the Self-Regulation of Responding to Negative Feedback. *Personality and Social Psychology Bulletin*, *38*(7), 845–857. doi:10.1177/0146167212446833

Kappes, A., & Oettingen, G. (2014). The emergence of goal pursuit: Mental contrasting connects future and reality. *Journal of Experimental Social Psychology*, *54*, 25–39. doi:10.1016/j.jesp.2014.03.014

Kappes, A., Singmann, H., & Oettingen, G. (2012). Mental contrasting instigates goal pursuit by linking obstacles of reality with instrumental behavior. *Journal of Experimental Social Psychology*, *48*(4), 811–818. doi:10.1016/j.jesp.2012.02.002

Kappes, A., Wendt, M., Reinelt, T., & Oettingen, G. (2013). Mental contrasting changes the meaning of reality. *Journal of Experimental Social Psychology*, *49*(5), 797–810. doi:10.1016/j.jesp.2013.03.010

Kelly, K. M. (2001). Individual Differences in Reactions to Rejection. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 291–315). New York: Oxford University Press.

Kenny, D. A. (1994). *Interpersonal perception: A social relations analysis*. New York: Guilford Press.

Kirk, D., Oettingen, G., & Gollwitzer P. M. (2011). Mental contrasting promotes integrative bargaining. *International Journal of Conflict Management*, *22*, 324–341.

Knowles, M. L. (2014). Social rejection increases perspective taking. *Journal of Experimental Social Psychology*, *55*, 126–132. doi:10.1016/j.jesp.2014.06.008

Kowalski, R. M. (2000). "I was Only Kidding! ": Victims' and Perpetrators' Perceptions of Teasing. *Personality and Social Psychology Bulletin*, *26*(2), 231–241. doi:10.1177/0146167200264009

Krohne, H. W. (1996). Repression-Sensitization. In M. Amelang (Ed.), *Enzyklopädie der Psychologie: Differentielle Psychologie und Persönlichkeitsforschung: Band 3. Temperaments- und Persönlichkeitsunterschiede. Enzyklopädie der Psychologie* (pp. 153–184). Göttingen: Hogrefe.

Krohne, H. W., Egloff, B., Kohlmann, C.-W., & Tausch, A. (1996). Untersuchungen mit einer deutschen Version der "Positive and Negative Affect Schedule" (PANAS). *Diagnostica*, *42*(2), 139–156.

Kross, E., Ayduk, O., & Mischel, W. (2005). When Asking "Why" Does Not Hurt: Distinguishing Rumination From Reflective Processing of Negative Emotions. *Psychological Science*, *16*, 709–715.

Leary, M. R. (2006). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European Review of Social Psychology*, *16*, 75–111.

Leary, M. R., & Cottrell, C. A. (2013). Evolutionary Perspectives on Interpersonal Acceptance and Rejection. In C. N. DeWall (Ed.), *Oxford library of psychology. The Oxford handbook of social exclusion* (pp. 9–19). New York, NY: Oxford University Press.

Leary, M. R., & Guadagno, J. (2011). The Sociometer, Self-Esteem, and the Regulation of Interpersonal Behavior. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation. Research, theory, and applications* (2nd ed., pp. 339–354). New York, NY: Guilford Press.

Leary, M. R., & Springer., C. A. (2001). Hurt Feelings: The Neglected Emotion. In R. M. Kowalski (Ed.), *Behaving badly. Aversive behaviors in interpersonal relationships* (1st ed., pp. 151–175). Washington, D.C: American Psychological Association.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-Esteem as an Interpersonal Monitor: The Sociometer Hypothesis. *Journal of Personality and Social Psychology*, *68*(3), 518–530.

Levy, S. R., Ayduk, O., & Downey, G. (2001). The Role of Rejection Sensitivity in People`s Relationships with Significant Others and Valued Social Groups. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 251–289). New York: Oxford University Press.

Metcalfe, J., & Mischel, W. (1999). A Hot/Cool-System Analysis of Delay of Gratification: Dynamics of Willpower. *Psychological Review*, *106*, 3–19.

Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, *80*, 252–283.

Mischel, W. (1974). Processes in delay of gratification. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, *7* (pp. 249–292). New York: Academic Press.

Mischel, W., & Ayduk, O. (2002). Self-Regulation in a Cognitive-Affective Personality System: Attentional Control in the Service of the Self. *Self and Identity*, *1*, 113–120.

Mischel, W., & Shoda, Y. (1995). A Cognitive-Affective System Theory of Personality: Reconceptualizing Situations, Dispositions, Dynamics, and Invariance in Personality Structure. *Psychological Review*, *102*, 246–268.

Mischel, W., Shoda, Y., & Peake, P. K. (1988). The Nature of Adolescent Competencies Predicted by Preschool Delay of Gratification. *Journal of Personality and Social Psychology*, *54*, 687–696.

Mischel, W., Shoda, Y., & Rodriguez, M. L. (1989). Delay of Gratification in Children. *Science*, *244*, 933–938.

Mischel, W. (2004). Toward an integrative science of the person. *Annual Review of Psychology*, *55*, 1–22. doi:10.1146/annurev.psych.55.042902.130709

Mischel, W., Ayduk, O., & Shoda, Y. (2008). *Introduction to personality: Toward an integrative science of the person* (8th ed.). Hoboken, NJ: Wiley.

Morey, L. C. (1991). *The Personality Assessment Inventory Professional Manual*. Odessa, FL: Psychological Assessment Resources.

Newsom, J. T., Mahan, T. L., Rook, K. S., & Krause, N. (2008). Stable negative social exchanges and health. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, *27*(1), 78–86. doi:10.1037/0278-6133.27.1.78

Oettingen, G., Hönig, G., & Gollwitzer P. M. (2000). Effective self-regulation of goal attainment. *International Journal of Educational Research*, *33*, 705–732.

Oettingen, G., Mayer, D., Sevincer, T. A., Stephens, E. J., Pak, H.-J., & Hagenah, M. (2009). Mental Contrasting and Goal Commitment: The Mediating Role of Energization. *Personality and Social Psychology Bulletin*, *35*(5), 608–622. doi:10.1177/0146167208330856

Oettingen, G., Pak, H., & Schnetter, K. (2001). Self-regulation of goal setting: Turning free fantasies about the future into binding goals. *Journal of Personality and Social Psychology*, *80*, 736–753. doi:10.1037/0022-3514.80.5.736

Oettingen, G. (2000). Expectancy effects on behavior depend on self-regulatory thought. *Social Cognition*, *18*(2), 101–129.

Oettingen, G. (2012). Future thought and behaviour change. *European Review of Social Psychology*, *23*(1), 1–63. doi:10.1080/10463283.2011.643698

Oettingen, G., Marquardt, M. K., & Gollwitzer, P. M. (2012). Mental contrasting turns positive feedback on creative potential into successful performance. *Journal of Experimental Social Psychology*, *48*(5), 990–996. doi:10.1016/j.jesp.2012.03.008

Oettingen, G., Mayer, D., & Thorpe, J. (2010). Self-regulation of commitment to reduce cigarette consumption: Mental contrasting of future with reality. *Psychology & Health*, *25*(8), 961–977. doi:10.1080/08870440903079448

Oettingen, G., & Stephens, E. J. (2009). Fantasies and motivationally intelligent goal setting. In G. B. Moskowitz & H. Grant (Eds.), *The psychology of goals* (pp. 153–178). New York [u.a.]: Guilford Press.

Oettingen, G., Stephens, E. J., Mayer, D., & Brinkmann, B. (2010). Mental Contrasting and the Self-Regulation of Helping Relations. *Social Cognition*, *28*(4), 490–508.

Pennebaker, J. W., Booth, R. J., & Francis, M. E. (2007). Linguistic Inquiry and Word Count [Computer Software]. Austin, TX: LIWC.net.

Pickett, C. L., Gardner, W. L., & Knowles, M. (2004). Getting a cue: the need to belong and enhanced sensitivity to social cues. *Personality & social psychology bulletin*, *30*(9), 1095–1107. doi:10.1177/0146167203262085

Pietrzak, J., Downey, G., & Ayduk, O. (2005). Rejection Sensitivity as an Interpersonal Vulnerability. In M. W. Baldwin (Ed.), *Interpersonal cognition* (pp. 62–84). New York: Guilford Press.

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, *41*(1), 203–212. doi:10.1016/j.jrp.2006.02.001

Rasch, B., Friese, M., Hofmann, W., & Naumann, E. (2010). *Quantitative Methoden: Einführung in die Statistik für Psychologen und Sozialwissenschaftler; Bd. 1* (3., erw. Aufl.). Berlin: Springer.

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin, 128*(2), 330–366. doi:10.1037/0033-2909.128.2.330

Romero-Canyas, R., & Downey, G. (2005). Rejection Sensitivity as a Predictor of Affective and Behavioral Responses to Interpersonal Stress. In K. D. Williams, J. P. Forgas, & W. v. Hippel (Eds.), *Sydney Symposium of Social Psychology series: Vol. 7. The social outcast. Ostracism, social exclusion, rejection, and bullying* (pp. 131–151). New York: Psychology Press.

Romero-Canyas, R., & Downey, G. (2013). What I see when I think it's about me: People low in rejection-sensitivity downplay cues of rejection in self-relevant interpersonal situations. *Emotion, 13*(1), 104–117. doi:10.1037/a0029786

Romero-Canyas, R., Downey, G., Berenson, K., Ayduk, O., & Kang, N. J. (2010). Rejection Sensitivity and the Rejection-Hostility Link in Romantic Relationships. *Journal of Personality, 78*(1), 119–148. doi:10.1111/j.1467-6494.2009.00611.x

Rosenbach, C., Nißlein, J., Schultze-Krumbholz, A., Bull, H. D., Scheithauer, H., & Renneberg, B. (submitted for publication). Übersetzung und Validierung des Fragebogens zur Zurückweisungsempfindlichkeit für Kinder und Jugendliche (FZE-K)/ German translation and validation of the Children Rejection Sensitivity Questionnaire (CRSQ).

Rubin, K. H., & Rose-Krasnor, L. (1986). Social-cognitive and social behavioral perspectives on problem solving. In M. Perlmutter (Ed.), *The Minnesota symposia on child psychology: Vol. 18. Cognitive perspectives on children's social and behavioral development* (pp. 1–68). Hillsdale, N.J: L. Erlbaum Associates.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2007). Peer Interactions, Relationships, and Groups. In W. Damon & R. M. Lerner (Eds.), *Handbook of Child Psychology.* Hoboken, NJ, USA: John Wiley & Sons, Inc. doi:10.1002/9780470147658.chpsy0310

Rubin, K. H., & Rose-Krasnor, L. (1992). Interpersonal Problem Solving and Social Competence in Children. In V. B. van Hasselt & M. Hersen (Eds.), *Handbook of Social Development. A lifespan perspective* (pp. 283–323). New York: Plenum Press.

Ryan, R. M., & Powelson, C. L. (1991). Autonomy and Relatedness as Fundamental to Motivation and Education. *The Journal of Experimental Education, 60*(1), 49–66.

Sevincer, A. T., Schlier, B., & Oettingen, G. (2015). Ego depletion and the use of mental contrasting. *Motivation and Emotion, 39*(6), 876–891. doi:10.1007/s11031-015-9508-8

Shoda, Y., Mischel, W., & Peake, P. K. (1990). Predicting Adolescent Cognitive and Self-Regulatory Competencies From Preschool Delay of Gratification: Identifying Diagnostic Conditions. *Developmental Psychology*, *26*, 978–986.

Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychological Review*, *116*(2), 365–383.

Sokolowski, K., & Schmalt, H.-D. (1996). Emotionale und motivationale Einflußfaktoren in einer anschlußthematischen Konfliktsituation. *Zeitschrift für Experimentelle Psychologie*, *48*, 461–482.

Staebler, K., Helbing, E., Rosenbach, C., & Renneberg, B. (2011). Rejection sensitivity and borderline personality disorder. *Clinical Psychology & Psychotherapy*, *18*(4), 275–283. doi:10.1002/cpp.705

Tausczik, Y. R., & Pennebaker, J. W. (2010). The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods. *Journal of Language and Social Psychology*, *29*(1), 24–54. doi:10.1177/0261927X09351676

Twenge, J. M., Catanese, K. R., & Baumeister, R. F. (2003). Social exclusion and the deconstructed state: time perception, meaninglessness, lethargy, lack of emotion, and self-awareness. *Journal of Personality and Social Psychology*, *85*(3), 409–423. doi:10.1037/0022-3514.85.3.409

Vohs, K. D., & Baumeister, R. F. (2004). Understanding Self-Regulation. An Introduction. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation. Research, theory, and applications* (pp. 1–9). New York: Guilford Press.

Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, *79*(5), 748–762. doi:10.1037//0022-3514.79.5.748

Appendix

Appendix 1

Self-generated LIWC category "rejection"

1. abandon*
2. ache*
3. aching
4. banned
5. banning
6. bans
7. crushed
8. damn*
9. darn
10. defeat*
11. degrad*
12. denia*
13. denie*
14. deny*
15. discourag*
16. dishearten*
17. dislike
18. disliked
19. dislikes
20. disliking
21. dismay*
22. dismiss*
23. disregard*
24. distraught
25. doom*
26. dump*
27. exclu*
28. expel*
29. expulsion*
30. harm
31. harmed
32. harmful*
33. harming
34. harms
35. heartbreak*
36. heartbroke*
37. humiliat*
38. ignor*
39. injur*
40. mobb*
41. no
42. nope
43. pain
44. pained
45. painf*
46. paining
47. pains
48. refrain*
49. refus*
50. reject*
51. unaccept*
52. unwant*
53. unwelcom*

*new word added to dictionar

Appendix 2

Questionnaire Study 1 (Paper Pencil)

[page break changes due to commentary]

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

Fakultät für
Psychologie und
Bewegungswissenschaft

Studie „Gedanken und Tagträume“

Informierte Einwilligungserklärung zur Studie „Gedanken und Tagträume“

Liebe/r Teilnehmer/in,

in dieser Studie untersuchen wir die Gedanken und Tagträume von Schülerinnen und Schülern in hypothetischen und persönlichen Situationen. Im Folgenden wirst Du gebeten, geschlossene Fragen zu verschiedenen Situationen zu beantworten und Deine Gedanken zu einer Situation frei aufzuschreiben.

Es besteht jederzeit das Recht, die Teilnahme ohne Angabe von Gründen abzulehnen oder vorzeitig zu beenden, auch wenn die Untersuchung bereits begonnen hat. Da die Teilnahme an der Studie freiwillig ist, hat eine Nicht-Teilnahme oder vorzeitige Beendigung keinerlei Konsequenzen.

Die Studie dauert insgesamt ungefähr 30 Minuten. Weiterhin wird am Ende das Ziel der Studie, die Erwartungen sowie der ganze Prozess vom Aufbau bis zur Datenauswertung besprochen.

Du hast die Gewährleistung von Vertraulichkeit und Anonymität.

Für Fragen bezüglich der Studie (zum Forschungsvorhaben und zu Deinen Rechten als Forschungsteilnehmer) wende Dich bitte an die Versuchsleiter.

Ich habe die oben stehende Information zur Kenntnis genommen und nehme aus freien Stücken an dieser Studie teil.

Vor- und Nachname:_____

Unterschrift:_____

Datum : _____

Bitte kreuze die zutreffenden Zahlen an.
(Fragebogen für Zurückweisungsempfindlichkeit bei Kindern, FZE-K, Rosenbach et al., submitted for publication)

1) Stell Dir vor, es ist Pause und Du bist der/die letzte, der/die den Klassenraum verlässt. Als Du die Treppen zum Schulhof runter rennst, hörst Du einige Schüler auf dem Treppenabsatz tiefer flüstern. Du fragst Dich, ob sie über Dich reden.

   a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob diese Schüler über Dich lästern?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

   b) Glaubst Du, sie lästern über Dich?

JA!					**NEIN!**
1	2	3	4	5	6

2) Stell Dir vor, Du hast Dich kürzlich mit einer Person gestritten, die Du sehr gerne magst. Jetzt bedrückt Dich ein anderes Problem, welches Du am liebsten mit dieser Person besprechen würdest. Du wartest nach der Schule auf sie, um mit ihr zu reden. Du fragst Dich, ob die Person überhaupt mit Dir sprechen möchte.

   a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob die Person überhaupt mit Dir reden und sich Dein Problem anhören will?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

   b) Glaubst Du, dass er/sie mit Dir sprechen und sich Dein Problem anhören möchte?

JA!					**NEIN!**
1	2	3	4	5	6

3) Stell Dir vor, dass eine berühmte Person, die Du sehr gut findest, Deine Schule besuchen wird. Deine Lehrerin wird fünf Schüler/innen aus Deiner Klasse auswählen, die diese Person treffen dürfen. Du fragst Dich, ob die Lehrerin Dich auswählen wird.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob Deine Lehrerin Dich auswählen wird?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, die Lehrerin wird Dich auswählen, um diese berühmte Person zu treffen?

JA!					**NEIN!**
1	2	3	4	5	6

4) Stell Dir vor, Du bist gerade umgezogen, gehst in eine neue Schule und gehst nun immer zu Fuß von der Schule nach Hause. Du wünschst, es gäbe jemanden, mit dem Du einen gemeinsamen Heimweg hast. Da siehst Du, dass vor Dir eine Person aus Deiner neuen Klasse geht, die Du gerne kennenlernen würdest. Du entscheidest Dich, die Person einzuholen, um mit ihr zu reden. Während Du schneller gehst, fragst Du Dich, ob er/sie überhaupt mit Dir reden möchte.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob die Person mit Dir reden möchte?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, die Person möchte mit Dir reden?

JA!					**NEIN!**
1	2	3	4	5	6

5) Stell Dir vor, Du möchtest ein Geburtstagsgeschenk für jemanden kaufen, der Dir sehr wichtig ist, hast jedoch nicht genug Geld dabei. Also fragst Du jemanden aus Deiner Klasse, ob er/sie Dir das Geld borgen kann.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob die Person Dir das Geld borgt?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, sie wird Dir das Geld borgen?

JA!					**NEIN!**
1	2	3	4	5	6

6) Stell Dir vor, Du bist in Deiner Klasse und es sollen sechs Gruppen gebildet werden, um an einem Projekt zu arbeiten. Du sitzt da und siehst zu, wie immer mehr Mitschüler/innen in die Gruppen gewählt werden. Während Du wartest, fragst Du Dich, ob die anderen auch Dich in ihrer Gruppe haben wollen.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob sie Dich auswählen werden?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, Deine Mitschüler/innen werden Dich in ihre Gruppe wählen?

JA!					**NEIN!**
1	2	3	4	5	6

7) Stell Dir vor, Deine Familie ist in einen neuen Ort gezogen und Du besuchst eine neue Schule. Morgen gibt es eine Mathearbeit und Du machst Dir große Sorgen, denn Du verstehst den Stoff überhaupt nicht. Du entscheidest dich, nach der Stunde zu jemandem aus Deiner Klasse zu gehen und mit ihm/ihr darüber zu reden. Du fragst Dich, ob er/sie Dir Hilfe anbieten wird.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob die Person Dir Hilfe anbieten wird?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, die Person wird Dir Hilfe anbieten?

JA!					**NEIN!**
1	2	3	4	5	6

8) Stell Dir vor, auf dem Schulhof spielen einige Deiner Klassenkameraden ein Spiel. Du magst dieses Spiel sehr gerne und fragst sie daher, ob Du mitspielen darfst.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob sie Dich mitspielen lassen?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, dass sie Dich mitspielen lassen?

JA!					**NEIN!**
1	2	3	4	5	6

9) Stell Dir vor, jemand aus Deiner Klasse, den Du sehr gerne magst, hat Geburtstag. Die Person beginnt vor der ersten Schulstunde, Einladungen für ein Geburtstagsfest zu verteilen. Du fragst Dich, ob Du auch eingeladen bist.

a) Wie nervös/besorgt wärst Du genau in diesem Moment darüber, ob die Person Dich einlädt?

nicht nervös/ besorgt					**sehr nervös/ besorgt**
1	2	3	4	5	6

b) Glaubst Du, die Person wird Dich einladen?

JA!					**NEIN!**
1	2	3	4	5	6

Hin und wieder haben Schülerinnen und Schüler ein drängendes Anliegen oder Problem, bei dem sie die Hilfe von Mitschülern benötigen, die sie nicht so gut kennen oder bei denen es ihnen nicht ganz leicht fällt um Hilfe zu bitten.

Bei welchem Anliegen oder Problem könntest Du momentan die Hilfe eines/r Mitschülers/in gebrauchen? Bitte wähle ein **drängendes** Anliegen oder Problem, bei dem Dir ein/e Mitschüler/in helfen könnte, den/die Du nicht so gut kennst oder bei dem/der es Dir **nicht ganz leicht** fällt um Hilfe zu bitten.

Bitte nenne Dein **Anliegen oder Problem**:

✎ _____

Wie nah stehst Du dem/r Mitschüler/in, der/die Dir bei der Lösung Deines Problems helfen könnte?
Bitte kreuze die zutreffende Zahl an.

gar nicht nah	1	2	3	4	5	6	7	8	9	**sehr nah**

Wie wichtig ist es Dir Dein Anliegen oder Problem zu lösen?

gar nicht wichtig						**sehr wichtig**
1	2	3	4	5	6	7

Wie wichtig ist es Dir, dass Du es schaffst, Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten?

gar nicht wichtig						**sehr wichtig**
1	2	3	4	5	6	7

Wie wichtig ist es Dir, dass Dein/e Mitschüler/in Dir hilft, Dein Anliegen oder Problem zu lösen, wenn Du ihn/sie um Hilfe bittest?

gar nicht wichtig						**sehr wichtig**
1	2	3	4	5	6	7

Wie wahrscheinlich ist es, dass Du Dein Anliegen oder Problem lösen wirst?

gar nicht wahrscheinlich						**sehr wahrscheinlich**
1	2	3	4	5	6	7

Wie wahrscheinlich ist es, dass Du es schaffst, Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten?

gar nicht wahrscheinlich						**sehr wahrscheinlich**
1	2	3	4	5	6	7

Wie wahrscheinlich ist es, dass Dein/e Mitschüler/in Dir hilft, Dein Anliegen oder Problem zu lösen, wenn Du ihn/sie um Hilfe bittest?

gar nicht wahrscheinlich						**sehr wahrscheinlich**
1	2	3	4	5	6	7

Was wäre das Schönste daran, wenn Du es schaffst Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten? Bitte nenne den wichtigsten positiven Aspekt:

Das Schönste: _____ (3-6 Wörter)

Mal Dir das Schönste in Deinen Gedanken so intensiv wie möglich aus. Lass Deinen Gedanken dabei freien Lauf! Nimm Dir so viel Zeit und Raum wie Du zur Beschreibung dieser Szene benötigst.

Bitte schreibe Deine Gedanken hier auf:

Manchmal klappen Dinge nicht so wie wir uns das wünschen. Was steht Dir dabei im Weg, Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten? Was **in Dir** (Gedanken, Gefühle, Verhalten) könnte verhindern, dass Du Deine/n Mitschüler/in um Hilfe bittest? Bitte nenne Dein wichtigstes Hindernis.

Wichtigstes Hindernis: _____ (3-6 Wörter)

Mal Dir dieses eine Hindernis in Deinen Gedanken so intensiv wie möglich aus. Lass Deinen Gedanken freien Lauf! Nimm Dir so viel Zeit und Raum wie Du zur Beschreibung dieser Szene benötigst.

Bitte schreibe Deine Gedanken hier auf:

Was wäre das Schönste daran, wenn Du es schaffst Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten? Bitte nenne den wichtigsten positiven Aspekt:

Das Schönste: _____ (3-6 Wörter)

Mal Dir das Schönste in Deinen Gedanken so intensiv wie möglich aus. Lass Deinen Gedanken dabei freien Lauf! Nimm Dir so viel Zeit und Raum wie Du zur Beschreibung dieser Szene benötigst.

Bitte schreib Deine Gedanken hier auf:

Was wäre ein weiterer positiver Aspekt daran, wenn Du es schaffst Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten? Bitte nenne einen weiteren positiven Aspekt:

Ein zweiter positiver Aspekt: _____ (3-6 Wörter)

Mal Dir diesen zweiten positiven Aspekt in Deinen Gedanken so intensiv wie möglich aus. Lass Deinen Gedanken dabei freien Lauf! Nimm Dir so viel Zeit und Raum wie Du zur Beschreibung dieser Szene benötigst.

Bitte schreib Deine Gedanken hier auf:

Stell Dir nun einmal vor, Du bittest Deine/n Mitschüler/in um Hilfe bei der Lösung Deines Anliegens oder Problems und er/sie **lehnt ab**.

Wenn das passieren würde: Wie würdest Du Dich fühlen, was würdest Du denken? Kreuze an inwieweit die folgenden Aussagen auf Dich zutreffen würden.

		trifft **überhaupt nicht** zu	trifft **eher nicht** zu	trifft **teilweise** zu	trifft **eher** zu	trifft **voll und ganz** zu
1.	Ich würde denken, dass ich der Person egal bin. (FZE-K, Enttäuschung)	❒	❒	❒	❒	❒
2.	Ich würde in Zukunft nicht mehr glauben/hoffen, dass mir einer meiner Mitschüler/innen helfen wird. (FZE-K, Resignation/Selbstattribution)	❒	❒	❒	❒	❒
3.	Ich würde immer wieder darüber nachgrübeln, warum die Person mir nicht geholfen hat. (FZE-K, Enttäuschung)	❒	❒	❒	❒	❒
4.	Ich würde denken, dass ich selbst Schuld habe. (FZE-K, Selbstattribution)	❒	❒	❒	❒	❒
5.	Ich würde denken, dass die Person mich absichtlich so gemein behandelt. (FZE-K, Selbstattribution)	❒	❒	❒	❒	❒
6.	Ich würde die Person gerne schlagen. (FZE-K, Aggression)	❒	❒	❒	❒	❒
7.	Ich hätte das Gefühl, dass es an mir liegt, dass die Person mir nicht geholfen hat. (FZE-K, Selbstattribution)	❒	❒	❒	❒	❒
8.	Ich würde mich von der Person fernhalten, da sie mich eh nicht mag. (FZE-K, Aggression)	❒	❒	❒	❒	❒
9.	Das würde ich mir merken und es der Person auf die eine oder andere Art heimzahlen. (FZE-K, Aggression)	❒	❒	❒	❒	❒
10.	Ich wäre traurig, dass mir nicht geholfen wurde. (FZE-K, Enttäuschung)	❒	❒	❒	❒	❒
11.	Wenn die Person mir nicht hilft, wird sie schon sehen, was sie davon hat. (FZE-K, Aggression)	❒	❒	❒	❒	❒
12.	Ich würde mich so hilflos fühlen, dass ich es kaum aushalten würde.	❒	❒	❒	❒	❒

(FZE-K, Selbstattribution)					
13. Ich wäre sehr enttäuscht von der Person. (FZE-K, Enttäuschung)	❒	❒	❒	❒	❒

Wenn Dein/e Mitschüler/in Deine Bitte um Hilfe bei der Lösung Deines Anliegens oder Problems **ablehnen** würde: Wie würdest Du Dich fühlen, was würdest Du denken?

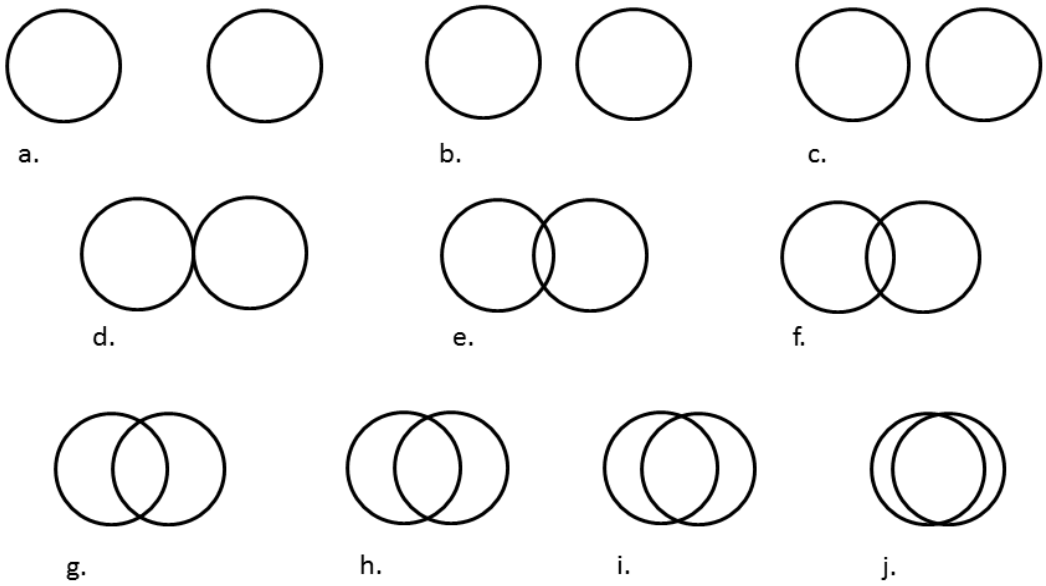
Kreuze an inwieweit die folgenden Aussagen auf Dich zutreffen würden.

	trifft **überhaupt nicht** zu	trifft **eher nicht** zu	trifft **teilweise** zu	trifft **eher** zu	trifft **voll und ganz** zu
14. Ich wäre sauer auf die Person, da sie mir nicht geholfen hat. (FZE-K, Aggression)	❒	❒	❒	❒	❒
15. Ich würde mich fühlen, als ob ich etwas zerschlagen oder kaputt machen möchte. (FZE-K, Aggression)	❒	❒	❒	❒	❒
16. Ich würde denken, dass keiner mich beachtet. (FZE-K, Selbstattribution)	❒	❒	❒	❒	❒
17. Ich würde die Person eh nicht mögen, da sie nie nett zu mir ist. (FZE-K, Selbstattribution)	❒	❒	❒	❒	❒
18. Ich würde der Person sagen, dass es okay ist und ich jemand anderen um Hilfe bitten werde. (eigenes Item, prosoziale Reaktion)	❒	❒	❒	❒	❒
19. Ich würde mich erst einmal nicht mehr bei der Person melden. (eigenes Item, Rückzug)	❒	❒	❒	❒	❒
20. Ich würde denken, dass ich die Person nicht noch einmal um Hilfe bitte. (eigenes Item, Rückzug)	❒	❒	❒	❒	❒
21. Ich würde Verständnis dafür haben. (eigenes Item, prosoziale Reaktion)	❒	❒	❒	❒	❒
22. Ich würde denken, dass die Person gute Gründe dafür hatte meine Bitte abzulehnen. (eigenes Item, prosoziale Reaktion)	❒	❒	❒	❒	❒
23. Ich würde am liebsten weglaufen. (eigenes Item, Rückzug)	❒	❒	❒	❒	❒
24. Ich würde denken, dass die Person mich sicher nicht verletzen wollte.	❒	❒	❒	❒	❒

	(eigenes Item, prosoziale Reaktion)					
25.	Ich würde denken, dass es ein Fehler war, die Person um Hilfe zu bitten. (eigenes Item, Rückzug)	❒	❒	❒	❒	❒
26.	Ich wäre selbstbewusst. (Selbstwert, Robins, Hendin, & Trzesniewski, 2001)					

Wenn Dein/e Mitschüler/in Deine Bitte um Hilfe bei der Lösung Deines Anliegens oder Problems **ablehnen** würde: (Aron, Aron, & Smollan, 1992)

Welches Bild würde Eure Beziehung **in diesem Moment** am besten beschreiben? *Bitte kreuze den zugehörigen Buchstaben an.*



In diesem Moment…

Wie wichtig wäre Dir die Beziehung zu Deinem Freund?

überhaupt nicht wichtig	○	○	○	○	○	○	○	○	○	**sehr wichtig**

Was würdest Du denken: Wie wichtig wäre Deinem Freund die Beziehung zu Dir?

überhaupt nicht wichtig	○	○	○	○	○	○	○	○	○	**sehr wichtig**

Geschlecht:

Männlich □

Weiblich □

Alter: _____ Jahre

Name der Schule: _____

Gymnasium □
Stadtteilschule□

In welchem Jahrgang bist Du? 11 □ **12** □ **13** □

Angestrebter Schulabschluss:

Fachabitur □

Allgemeine Hochschulreife/Abitur □

Sonstiges: _____

Welchen Beruf übt Deine Mutter aus?

(z. B. Grundschullehrerin, Gymnasial-Lehrerin, Küchengehilfin, Verkaufsleiterin)

Wenn Deine Mutter derzeit nicht berufstätig ist, gib bitte an, welchen Beruf sie zuletzt ausgeübt hat.

Beruf: _____

Was macht Deine Mutter in diesem Beruf?

(z. B. in einer Grundschule unterrichten, in einem Gymnasium unterrichten, dem Koch in einem Restaurant beim Kochen helfen, ein Verkaufsteam leiten)

Beschreib bitte die Tätigkeiten in einigen Worten. Wenn Deine Mutter derzeit nicht berufstätig ist, gib bitte an, was sie in ihrer letzten Arbeit gemacht hat.

_____

□ Meine Mutter hat ihren Beruf nie ausgeübt/ hat keinen Beruf.

Welchen Beruf übt Dein Vater aus?

(z. B. Grundschullehrer, Gymnasial-Lehrer, Küchengehilfe, Verkaufsleiter)

Wenn Dein Vater derzeit nicht berufstätig ist, gib bitte an, welchen Beruf er zuletzt ausgeübt hat.

Beruf: _____

Was macht Dein Vater in seinem Beruf?

(z. B. in einer Grundschule unterrichten, an einem Gymnasium unterrichten, dem Koch in einem Restaurant beim Kochen helfen, ein Verkaufsteam leiten)

Beschreib bitte die Tätigkeiten in einigen Worten. Wenn Dein Vater derzeit nicht berufstätig ist, gib bitte an, was er in seiner letzten Arbeit gemacht hat.

_____

☐ Mein Vater hat seinen Beruf nie ausgeübt/ hat keinen Beruf.

Welche Sprache sprecht Ihr die meiste Zeit zu Hause?

Deutsch: ☐

Andere: ☐und zwar: _____

Was denkst Du worum es in dieser Studie ging?

_____

Vielen Dank für Deine Teilnahme!

Debriefing zur Studie „Gedanken und Tagträume“

In dieser Studie untersuchen wir, welchen Einfluss „mentales Kontrastieren“ über einen persönlichen Hilfe-Wunsch auf den Umgang mit sozialer Ablehnung hat. Mentales Kontrastieren ist eine Denkstrategie, bei der der positiven Zukunft der Wunscherfüllung Hindernisse in der Realität entgegengestellt werden (Oettingen, 2012). Schwelgen ist eine Denkstrategie bei der nur positive Aspekte in der Zukunft berücksichtigt werden. Wir nehmen an, dass durch das mentale Kontrastieren über eine Hilfe-Situation die Angst vor Ablehnung besser bewältigt wird und man daher weniger empfindlich (d.h. beispielsweise weniger aggressiv oder traurig) auf eine hypothetische Ablehnung reagiert als wenn man über eine Hilfe-Situation „schwelgt“. Um den Einfluss von mentalem Kontrastieren und Schwelgen auf den Umgang mit sozialer Ablehnung zu vergleichen, wurdest Du zufällig einer dieser Bedingungen zugeteilt.

Die Ergebnisse dieser Studie sollen genutzt werden, um einfache Interventionsprogramme für Schülerinnen und Schüler zu entwickeln, die Ihnen helfen mit sozialen Zurückweisungen umzugehen und dadurch soziale Beziehungen langfristig aufrechtzuerhalten.

Literatur:

Oettingen, G. (2012). Future thought and behavior change. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology, 23*, 1-63.

Bitte ankreuzen:

☐ Ich wurde ausreichend über den Sinn der Studie informiert. Die Forscherin/der Forscher hat das Ziel der Studie erklärt. Fragen meinerseits wurden zufriedenstellend beantwortet.

Vor- und Nachname:_____

Unterschrift:_____

Datum : _____

References

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*(4), 596–612. doi:10.1037/0022-3514.63.4.596

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, *27*, 151–161.

Rosenbach, C., Nißlein, J., Schultze-Krumbholz, A., Bull, H. D., Scheithauer, H., & Renneberg, B. (submitted for publication). Übersetzung und Validierung des Fragebogens zur Zurückweisungsempfindlichkeit für Kinder und Jugendliche (FZE-K)/ German translation and validation of the Children Rejection Sensitivity Questionnaire (CRSQ).

Appendix 3

Questionnaire Study 2 (Online)

Druckversion

Fragebogen

1 Informed Consent

Informed Consent

You are invited to take part in a study named "Thoughts and images in everyday life". The study is designed to learn more about what thoughts and images people have in everyday life and how they are expressed in writing. This study is being conducted by Jenny Voth, Dipl.-Psych. M.A., University of Hamburg, Germany, who is the principal investigator, as part of her dissertation.

To take part in this study you have to be 18 years or older.

If you agree to be in this study, you need to fill out an online-questionnaire, which contains questions about hypothetical and personal everyday life situations. Your total participation will take max. 20 minutes and you will receive $1 in appreciation of your time and effort. We estimated the time needed to answer all the questions very generously. **So please take your time to answer all the questions carefully.**

There are no known risks associated with your participation in this research beyond those of everyday life. Taking part in this study is voluntary. If you withdraw at any time, no reward but also no penalty will be given. At the end of the questionnaire you are provided with a unique study code you need to enter in mturk. We will check contents and you will receive payment within three days.

Confidentiality of your research records will be strictly maintained. The data from the study will be kept at least until 5 years after publication, as recommended by the American Psychological Association. When it is destroyed, this will be done by deletion of electronic media.

If there is anything about the study or taking part in it that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact the principal investigator, Jenny Voth by e-mail Jenny.Voth@uni-hamburg.de.

Agreement to participate:

- I agree.

2 rs 1

The items on the following pages describe situations in which people sometimes ask things of others.

For each item, imagine that you are in the situation, and then answer the questions that follow it.

1. You ask your parents or another family member for a loan to help you through a difficult financial time.

How concerned or anxious would you be over whether or not your family would want to help you?

- very unconcerned
-
-
-
-
- very concerned

I would expect that they would agree to help as much as they can.

- very unlikely
-

- very likely

3 rs 2

2. You approach a close friend to talk after doing or saying something that seriously upset him/her.

How concerned or anxious would you be over whether or not your friend would want to talk with you?

- very unconcerned
- very concerned

I would expect that he/she would want to talk with me to try to work things out.

- very unlikely
- very likely

4 rs 3

3. You bring up the issue of sexual protection with your significant other and tell him/her how important you think it is.

How concerned or anxious would you be over his/her reaction?

- very unconcerned
- very concerned

I would expect that he/she would be willing to discuss our possible options without getting defensive.

- very unlikely

- very likely

5 rs 4

4. You ask your supervisor for help with a problem you have been having at work.

How concerned or anxious would you be over whether or not the person would want to help you?

- very unconcerned
- very concerned

I would expect that he/she would want to try to help me out.

- very unlikely
- very likely

6 rs 5

5. After a bitter argument, you call or approach your significant other because you want to make up.

How concerned or anxious would you be over whether or not your significant other would want to make up with you?

- very unconcerned
- very concerned

I would expect that he/she would be at least as eager to make up as I would be.

- very unlikely
- very likely

7 rs 6

6. You ask your parents or other family members to come to an occasion important to you.

How concerned or anxious would you be over whether or not they would want to come?

- very unconcerned
-
-
-
-
- very concerned

I would expect that they would want to come.

- very unlikely
-
-
-
-
- very likely

8 rs 7

7. At a party, you notice someone on the other side of the room that you'd like to get to know, and you approach him or her to try to start a conversation.

How concerned or anxious would you be over whether or not the person would want to talk with you?

- very unconcerned
-
-
-
-
- very concerned

I would expect that he/she would want to talk with me.

- very unlikely
-
-
-
-
- very likely

9 rs 8

8. Lately you've been noticing some distance between yourself and your significant other, and you ask him/her if there is something wrong.

How concerned or anxious would you be over whether or not he/she still loves you and wants to be with you?

- very unconcerned
-
-
-
-
- very concerned

I would expect that he/she will show sincere love and commitment to our relationship no matter what else may be going on.

- very unlikely
-
-
-
-
- very likely

10 rs 9

9. You call a friend when there is something on your mind that you feel you really need to talk about.

How concerned or anxious would you be over whether or not your friend would want to listen?

- very unconcerned
-
-
-
-
- very concerned

I would expect that he/she would listen and support me.

- very unlikely
-
-
-
-
- very likely

11 Hilfewunsch

Every now and then we have pressing problems for which we need to ask a close other (e.g. spouse/partner, friend, colleague or supervisor) for help.

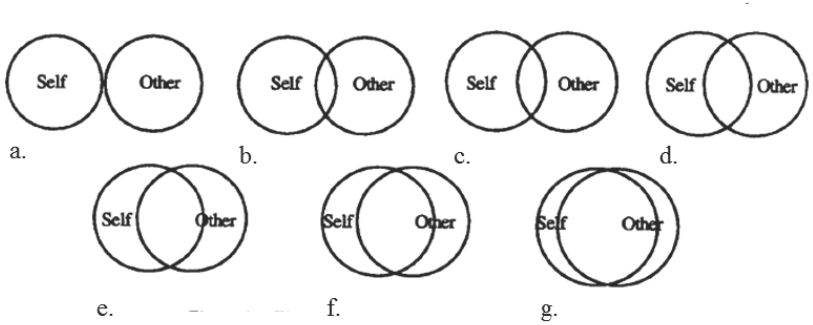
What is currently a pressing problem for which you need to ask a close other for help? Please choose a close other who could provide this help, but asking him/her is not very easy for you.

Please note your problem in 3-6 keywords:

The significant other I need to ask is my:

- spouse/ partner
- friend
- colleague
- supervisor
- parent
- sibling
- child
- other

For the remainder of the questionnaire we will refer to this person as *Person X*.



Which of the pictures above best describes your relationship with *Person X*?

- a
- b
- c
- d
- e

- f
- g

Relative to *all* your other relationships (both same and opposite-sex), how would you characterize your relationship with *Person X*?

- not at all close
-
-
-
-
-
- extremely close

Relative to what you know about *other people's* close relationships, how would you characterize your relationship with *Person X*?

- not at all close
-
-
-
-
-
- extremely close

How close do you feel toward *Person X*?

- not at all close
-
-
-
-
-
- extremely close

How likely is it that you will solve your problem?

- not at all
-
-
-
-
-
- very

How likely is it that you will ask *Person X* for help?

- not at all
-
-
-
-
-
- very

How likely is it that *Person X* will help you, if you ask him/her?

- not at all
-
-
-
-
-
- very

How likely is it that *Person X* will <u>gladly</u> help you, if you ask him/her?

- not at all
-
-
-
-
-
- very

How important is it to you to solve your problem?

- not at all
-
-
-
-
-
- very

How important is it to you to ask *Person X* for help?

- not at all
-
-
-

very

How important is it to you that *Person X* will help you, if you ask him/her?

not at all

very

How important is it to you that *Person X* will gladly help you, if you ask him/her?

not at all

very

How difficult is it for you to ask *Person X* for help?

not at all

very

12.1 MC Best Outcome

What would be the best thing, the best outcome, about successfully asking *Person X* for help?

Note your best outcome using 3-6 words

Now take a moment and imagine as vividly as possible all of the events and scenarios associated with this best outcome. Let your mind and feelings go and imagine things fully.

Please write your thoughts and images in the space below:

12.1.1 MC Obstacle

Sometimes things don't work out as we would like them to. What holds you back from successfully asking *Person X* for help? What is it within you (thoughts, feelings, behavior) that stands in the way of you successfully asking *Person X* for help? What is your main obstacle?

Note your main obstacle using 3-6 words

Now take a moment and imagine as vividly as possible all of the events and scenarios associated with your main obstacle. Let your mind and feelings go and imagine things fully.

Please write your thoughts and images in the space below:

12.2 Indulging Best Outcome

What would be the best thing, the best outcome, about successfully asking *Person X* for help?

Note your best outcome using 3-6 words

Now take a moment and imagine as vividly as possible all of the events and scenarios associated with this best outcome. Let your mind and feelings go and imagine things fully.

Please write your thoughts and images in the space below:

12.2.1 Indulging Second Best Outcome

What would be the second best thing, the second best outcome, about successfully asking *Person X* for help?

Note your second best outcome using 3-6 words

Now take a moment and imagine as vividly as possible all of the events and scenarios associated with this second best outcome. Let your mind and feelings go and imagine things fully.

Please write your thoughts and images in the space below:

13 Ablehnung

Now imagine you ask *Person X* for help and he/she denies your request.

If this would happen to you: How much would you experience each of the thoughts and feelings described below?

	not at all				extremely
I would feel unaccepted.					
I would feel rejected.					
I would feel hurt.					
I would feel disliked.					
I would feel discouraged.					
I would feel like *Person X* doesn't care about me.					
I would feel like *Person X* ignores me even though he/she knows I really need help.					
I would have the feeling that *Person X* was being intentionally hurtful to me.					
I would have the feeling that *Person X*					

was being mean to me.

In future I would no longer believe/hope that *Person X* would help me.

This is not a question. Please check "not at all".

14 Soziodemographie

What is your gender?

male female

How old are you?

What level of education have you completed?

- less than high school
- some high school
- high school diploma or GED
- some college
- college degree
- associate degree
- some graduate or professional training
- graduate or professional degree

What is your employment status?

- Disabled
- Homemaker
- Retired
- Self-employed
- Student
- Unemployed, not seeking work
- Unemployed, seeking work
- Working, part-time <35 p/w

- ○ Working, full-time >= 35 p/w

What racial/ethnic group do you belong to?

Fill out all that apply.

- ☐ African American, Black, of African descent
- ☐ Alascan native
- ☐ American Indian (Native American)
- ☐ Asian/Pacific Islander
- ☐ Hispanic/Latino
- ☐ White, Caucasian, European descent
- ☐ Other
- ☐ Unknown

What is your first language?

- ○ English
- ○ Other: _____

What is your occupation?

_____

What is your zip-code?

_____

What do you think this study is about?

_____

15 Debriefing

Debriefing for «Thoughts and images in everyday life»

In this study we hope to explore the effects mentally contrasting about wishes regarding help-seeking has on anxious expectations of rejection in ambiguous interpersonal situations (Rejection Sensitivity, Berenson et al., 2009). Mental contrasting is the mode of thought in which one imagines a positive future and juxtaposes that image with those aspects of reality standing in the way (Oettingen, 2012). Indulging is a mode of thought in which one imagines a positive future only. You have been assigned to one of the two groups by chance. We are interested in differential situational effects of these modes of thoughts on anxious expectations of rejection.

We apologize for not fully revealing the purpose of thinking and writing about wishes regarding seeking help before completing the questionnaires. If you had known our hypotheses it would have biased your responses and made the study worthless.

If there is anything about the study or taking part in it that is unclear or that you did not understand, if you have questions or wish to report a research-related problem, you may contact the principal investigator, Jenny Voth by e-mail Jenny.Voth@uni-

hamburg.de.

References

Berenson, K. R., Gyurak, A., Ayduk, Ö., Downey, G., Garner, M. J., Mogg, K., Bradley, B. P., & Pine, D. S. (2009). Rejection sensitivity and disruption of attention by social threat cues. *Journal of Research in Personality, 43*, 1064-1072.

Oettingen, G. (2012). Future thought and behavior change. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology*, *23*, 1-63.

I feel that I have been adequately debriefed about the nature of the study. The investigator has explained the purposes of the research to me, and I feel that any questions I have asked were satisfactorily answered.

For comments and remarks on the survey, please use the space provided below.

16 mturk worker ID

Please enter your worker ID so we can make sure you did not take part in this study repeatedly.

17 Unique study code

Thank you very much for participating!

Your unique study code is: pfg24zt

Please type this unique study code into the space below AND the space provided on our mTurk page and submit your work to receive payment.

PRESS CONTINUE TO COMPLETE THE STUDY!!!

18 Endseite

You successfully completed the study!

Appendix 4

Questionnaire Study 3 (Online)

Druckversion

Fragebogen

1 Informed Consent

Informierte Einwilligung

Die folgende Studie untersucht "Gedanken und Tagträume in Alltagssituationen" und ist Teil der Dissertation von Jenny Voth.

Um an der Studie teilzunehmen, musst Du 18 Jahre oder älter sein.
Im Folgenden wirst Du gebeten, einen Online-Fragebogen ausfüllen, der Fragen zu hypothetischen und persönlichen Alltagssituationen enthält. Die Teilnahme wird ca. 30 Minuten beanspruchen, wobei diese Angabe sehr großzügig gewählt wurde. Nimm Dir folglich genügend Zeit, um die Fragen sorgfältig zu beantworten.

Es besteht jederzeit das Recht, die Teilnahme ohne Angabe von Gründen abzulehnen oder vorzeitig zu beenden, auch wenn die Untersuchung bereits begonnen hat. Eine Nicht-Teilnahme oder vorzeitige Beendigung hat keinerlei Konsequenzen, da die Teilnahme an der Studie freiwillig ist.
Deine Daten werden anonym erhoben und gespeichert, sodass keine Rückschlüsse auf Personen möglich sind, und werden zudem mindestens zehn Jahre nach Veröffentlichung aufbewahrt, so wie es von der Deutschen Forschungsgemeinschaft empfohlen wird. Die Löschung der Daten erfolgt durch Löschen des elektronischen Materials.

Falls weiterhin Unklarheiten bestehen sollten, oder Du etwas nicht verstanden hast, falls Du noch Fragen hast oder ein Problem melden willst, so kontaktiere die Leiterin der Studie unter jenny.voth@uni-hamburg.de .

Einverständnis

○ Ich stimme zu.

2 Rejection Sensitivity (Staebler, K., Helbing, E., Rosenbach, C. & Renneberg, B., 2011)

In den unten aufgeführten Fragen werden verschiedene Situationen beschrieben, in denen man andere Personen um etwas bittet.

Bitte stelle Dir bei jeder Frage vor, wie es wäre, wenn Du Dich persönlich in dieser Situation befinden würdest und kreuze dann die passende Antwort an.

Du bittest einen Kollegen an Deinem Arbeitsplatz, Dir eine Frage zum Arbeitsablauf zu beantworten.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Du die Reaktion Deines Kollegen erwartest?

nicht beunruhigt					sehr beunruhigt
○	○	○	○	○	○

Für wie wahrscheinlich würdest Du es halten, dass er/sie gerne Deine Frage beantwortet?

sehr unwahrscheinlich					sehr wahrscheinlich
○	○	○	○	○	○

Du fragst Deinen Partner/Deine Partnerin, ob er/sie mit Dir zusammenziehen möchte.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Du die Reaktion Deines/r Partner/in erwartest?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie mit Dir zusammenziehen möchte?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du bittest eine Dir nahe stehende Person bei einer Entscheidung, bezüglich Deiner beruflichen Zukunft, zu helfen.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Du die Person um Rat bittest?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass die Person Dir helfen wird?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du fragst jemanden, den Du nicht gut kennst, ob er/sie mit Dir ausgehen möchte.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei der Nachfrage, ob die Person mit Dir ausgehen wird oder nicht?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass diese Person mit Dir ausgehen wird?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Dein Partner/Deine Partnerin plant heute Abend mit Freunden/innen auszugehen. Du möchtest aber gerne, dass er/sie den Abend mit Dir verbringt, und sagst ihm/ihr dies.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Erwartung, ob Dein/Deine Partner/Partnerin zu hause bleibt oder nicht?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass Dein/e Partner/in auf Dein Anliegen eingeht?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du bittest eine nahe stehende Person um einen größeren Geldbetrag für eine dringende Anschaffung (z.B. Waschmaschine).

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei der Nachfrage, ob die Person Dir den benötigten Geldbetrag geben wird oder nicht?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass Dir die Person finanziell aushilft?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du verstehst in einer Unterrichtsstunde Deiner Weiterbildung oder Umschulung einen Teil des Lehrstoffes nicht. Du bittest den Leiter nach der Unterrichtsstunde, Dir noch einmal einige Inhalte zu erklären.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, nach Deiner Bitte an den Lehrer um weitere Erklärungen zum Lehrstoff, extra für Dich?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass Dir Dein Lehrer nochmals Teile des Lehrstoffes erläutert?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du hast irgendetwas getan oder gesagt, was einen engen Freund oder eine enge Freundin ziemlich verletzt hat. Nun wendest Du Dich ihm/ihr wieder zu.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken daran, ob er/sie wieder mit Dir sprechen wird oder nicht?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie wieder mit Dir spräche, um die Angelegenheit zu klären?

sehr unwahrscheinlich sehr wahrscheinlich

Du fragst jemanden an Deinem Arbeitsplatz, ob er/sie mit Dir einen Kaffee trinken geht.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken daran, ob die Person mit Dir einen Kaffee trinken geht?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass der-/diejenige mit Dir einen Kaffee trinken geht?

sehr unwahrscheinlich sehr wahrscheinlich

Du hast in einer Teambesprechung eine andere Meinung zu einem Problem, als das Team. Du erläuterst Deine Position und erwartest Stellungnahmen der anderen Teilnehmer.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Erwartung, dass Deine Meinung beachtet und berücksichtigt wird?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass Deine Meinung berücksichtigt wird?

sehr unwahrscheinlich sehr wahrscheinlich

3 Rejection Sensitivity II

Du fragst einen guten Freund/in, ob er/sie mit Dir in Urlaub fahren wird.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei der Frage, ob Dein

Freund/Deine Freundin mit Dir verreisen wird?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie mit Dir verreisen wird?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Nach einem heftigen Streit am Vortag, rufst Du Deinen Partner/Deine Partnerin an und sagst ihm/ihr, dass Du ihn/sie treffen willst.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken daran, ob Dein Partner/Deine Partnerin Dich sehen will oder nicht?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie Dich sehen will?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du fragst einen Freund/in, ob Du etwas von ihm/ihr ausleihen könntest (z.B. ein Mountainbike).

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Erwartung, ob Dein/e Freund/in bereit wäre, es Dir auszuleihen?

nicht beunruhigt ○ ○ ○ ○ ○ ○ sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie es Dir ausleiht?

sehr unwahrscheinlich ○ ○ ○ ○ ○ ○ sehr wahrscheinlich

Du bittest eine nahe stehende Person, Dich zu einem für Dich sehr wichtigen Anlass, zu begleiten (z.B. Arztbesuch, Gerichtstermin).

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken, ob die Person mitkommen wird oder nicht?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass der-/diejenige Dir zusagt?

sehr unwahrscheinlich sehr wahrscheinlich

Du fragst einen Freund/in, ob er/sie Dir einen großen Gefallen tun würde.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken daran, ob er/sie Dir den Gefallen tut?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie Dir den Gefallen tut?

sehr unwahrscheinlich sehr wahrscheinlich

Du fragst Deinen Partner/Deine Partnerin, ob er/sie Dich wirklich liebt.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei dem Gedanken daran, ob Dein Partner/Deine Partnerin „ja" sagen wird?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass er/sie „ja" sagt?

sehr unwahrscheinlich sehr wahrscheinlich

Du gehst auf eine Party und Dir fällt jemand am anderen Ende des Raumes auf. Du fragst ihn/sie, ob er/sie mit Dir tanzt.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, in der Erwartung, dass der-/diejenige mit Dir tanzt oder nicht?

nicht beunruhigt sehr beunruhigt

Für wie wahrscheinlich würdest Du es halten, dass diese Person mit Dir tanzen wird?

sehr unwahrscheinlich					sehr wahrscheinlich
○	○	○	○	○	○

Du fragst Deinen Partner/Deine Partnerin, mit dem/der Du noch nicht sehr lange zusammen bist, ob er/sie Deine Eltern kennen lernen will.

Wie angespannt oder beunruhigt wärst Du in dieser Situation, bei der Nachfrage, ob er/sie Deine Eltern kennen lernen will oder nicht?

nicht beunruhigt					sehr beunruhigt
○	○	○	○	○	○

Für wie wahrscheinlich würdest Du es halten, dass Dein/e Partner/in Deine Eltern gerne kennen lernen will?

sehr unwahrscheinlich					sehr wahrscheinlich
○	○	○	○	○	○

Du kommst allein auf eine Party. Niemand bemerkt Dein Eintreten. Du sprichst einen Bekannten an, der sich intensiv mit jemanden anderen unterhält.

Wie angespannt oder beunruhigt wärst Du in dieser Situation auf der Party?

nicht beunruhigt					sehr beunruhigt
○	○	○	○	○	○

Für wie wahrscheinlich würdest Du es halten, dass der Bekannte und andere Gäste Dir Beachtung schenken?

sehr unwahrscheinlich					sehr wahrscheinlich
○	○	○	○	○	○

Du kannst eine Arbeit nicht fristgerecht fertig stellen und bittest den Auftraggeber um eine Fristverlängerung.

Wie angespannt oder beunruhigt wärst Du in dieser Situation beim Warten auf eine Fristverlängerung?

nicht beunruhigt					sehr beunruhigt
○	○	○	○	○	○

Für wie wahrscheinlich würdest Du es halten, dass Du eine Fristverlängerung bekommst?

sehr					sehr

unwahrscheinlich wahrscheinlich

○ ○ ○ ○ ○ ○

4 Hilfewunsch

Hin und wieder haben wir ein drängendes Anliegen oder Problem, bei dem wir die Hilfe einer nahestehenden Person (z.B. Ehegatte/Partner/-in, Freund/-in, Kollege/-in, Vorgesetzte/-r) benötigen.

Was ist aktuell ein drängendes Anliegen oder Problem, bei dem Dir eine nahestehende Person helfen könnte? Bitte wähle etwas, bei dem es Dir nicht ganz leicht fällt, um Hilfe zu bitten, Du es aber schaffen kannst!

Bitte nenne Dein Problem oder Anliegen in einem Stichpunkt:

Die Bezugsperson, die mir helfen kann, ist mein(e):

- ○ Ehegatte(in) / Partner(in)
- ○ Freund(in)
- ○ Kollege(in)
- ○ Vorgesetzter(in)
- ○ Elternteil
- ○ Geschwisterteil
- ○ Kind
- ○ anderes:

Die ausgewählte Person wird im Folgenden als *Person X* bezeichnet.

5 Beziehung zu Person X / Problem

Verglichen mit all Deinen anderen Beziehungen (gleich- und gegengeschlechtlich), wie würdest Du Deine Beziehung zu *Person X* beschreiben?

gar nicht nah extrem nah

○ ○ ○ ○ ○ ○ ○

Verglichen mit dem, was Du über enge Beziehungen anderer Personen weißt, wie würdest Du Deine Beziehung zu *Person X* beschreiben?

gar nicht nah extrem nah

○ ○ ○ ○ ○ ○ ○

Für wie wahrscheinlich hältst Du es, dass *Person X* Dir bei Deinem Problem oder Anliegen helfen kann?

gar nicht sehr

Für wie wahrscheinlich hältst Du es, dass Du es schaffst, *Person X* um Hilfe zu bitten?

gar nicht sehr

Für wie wahrscheinlich hältst Du es, dass *Person X* Dir helfen wird, wenn Du ihn/sie um Hilfe bittest?

gar nicht sehr

Wie wichtig ist es Dir, Dein Anliegen oder Problem zu lösen?

überhaupt nicht sehr

Wie wichtig ist es Dir, dass Du es schaffst, *Person X* um Hilfe zu bitten?

überhaupt nicht sehr

Wie wichtig ist es Dir, dass *Person X* Dir helfen wird, wenn Du ihn/sie um Hilfe bittest?

überhaupt nicht sehr

Wie schwierig ist es für Dich *Person X* um Hilfe zu bitten?

gar nicht sehr

Wie enttäuscht wärst Du, wenn Du es nicht schaffst, *Person X* um Hilfe zu bitten?

gar nicht sehr

6.1 MC

Was wäre das Schönste daran, wenn Du es schaffst *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten?

Bitte nenne das Schönste in 3 – 6 Wörtern:

Mal Dir das Schönste in Deinen Gedanken so intensiv wie möglich aus. Scheue Dich nicht, Deinen Gedanken freien Lauf zu lassen.

Bitte notiere deine Gedanken in das unten stehende Feld:

6.1.1 MC_OBSTACLE

Manchmal klappen Dinge nicht so wie wir uns das wünschen. Was steht Dir dabei im Weg *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten? Was ist es in Dir (Gedanke oder Gefühl), das verhindern könnte, dass Du *Person X* um Hilfe bittest?

Bitte nenne Dein wichtigstes Hindernis in 3 – 6 Wörtern:

Mal Dir dieses Hindernis in Deinen Gedanken so intensiv wie möglich aus. Scheue Dich nicht, Deinen Gedanken freien Lauf zu lassen.

Bitte notiere deine Gedanken in das unten stehende Feld:

6.2 Schwelgen

Was wäre das Schönste daran, wenn Du es schaffst *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten?

Bitte nenne das Schönste in 3 – 6 Wörtern:

Mal Dir das Schönste in Deinen Gedanken so intensiv wie möglich aus. Scheue Dich nicht, Deinen Gedanken freien Lauf zu lassen.

Bitte notiere deine Gedanken in das unten stehende Feld:

6.2.1 Schwelgen_2ndBEST

Was wäre das Zweitschönste daran, wenn Du es schaffst *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems zu bitten?

Bitte nenne das Zweitschönste in 3 – 6 Wörtern:

Mal Dir das Zweitschönste in Deinen Gedanken so intensiv wie möglich aus. Scheue Dich nicht, Deinen Gedanken freien Lauf zu lassen.

Bitte notiere deine Gedanken in das unten stehende Feld:

6.3 Kontrollgruppe

Bitte denke nun einmal über Dein Anliegen oder Problem, bei dem Du die Hilfe von *Person X* benötigst, nach. Du kannst an alle Aspekte, die Dir zu Deinem Anliegen oder Problem in den Sinn kommen, nachdenken. Mal Dir Deine Gedanken so intensiv wie möglich aus. Scheue Dich nicht, Deinen Gedanken freien Lauf zu lassen.

Bitte notiere deine Gedanken in das unten stehende Feld:

7 Zielbindung

Wie enttäuscht wärst Du, wenn Du es nicht schaffst, *Person X* um Hilfe zu bitten?

gar nicht ○ ○ ○ ○ ○ ○ ○ sehr

Wie entschlossen bist Du, *Person X* um Hilfe zu bitten?

gar nicht ○ ○ ○ ○ ○ ○ ○ sehr

Wie schlimm wäre es für Dich, wenn Du es nicht schaffst, *Person X* um Hilfe zu bitten?

gar nicht ○ ○ ○ ○ ○ ○ ○ sehr

8 Ablehnung (Krohne et al., 1996; Downey & Feldman, 1996)

Stell Dir nun einmal vor, du bittest *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems und **er/sie lehnt ab.**

Bitte kreuze an, wie Du Dich in diesem Moment fühlen würdest.

	gar nicht	ein bisschen	einigermaßen	erheblich	äußerst
aktiv	○	○	○	○	○
bekümmert	○	○	○	○	○
nicht akzeptiert	○	○	○	○	○
freudig erregt	○	○	○	○	○
verärgert	○	○	○	○	○
stark	○	○	○	○	○
zurückgewiesen	○	○	○	○	○

erschrocken	○	○	○	○	○
feindselig	○	○	○	○	○
angeregt	○	○	○	○	○
stolz	○	○	○	○	○
gereizt	○	○	○	○	○
verletzt	○	○	○	○	○
beschämt	○	○	○	○	○
entmutigt	○	○	○	○	○
nervös	○	○	○	○	○
entschlossen	○	○	○	○	○
aufmerksam	○	○	○	○	○
durcheinander	○	○	○	○	○
ängstlich	○	○	○	○	○
interessiert	○	○	○	○	○
schuldig	○	○	○	○	○
begeistert	○	○	○	○	○
unbeliebt	○	○	○	○	○
wach	○	○	○	○	○

Ich würde in Zukunft nicht mehr glauben, dass *Person X* mir helfen wird.

trifft überhaupt nicht zu						trifft voll und ganz zu
○	○	○	○	○	○	○

Ich würde *Person X* in Zukunft nicht mehr um Hilfe bitten.

trifft überhaupt nicht zu						trifft voll und ganz zu
○	○	○	○	○	○	○

9 Attributionsstile (Poppe, Stiensmeier-Pelster, Pelster, 2005)

Stell Dir nun noch einmal vor, Du bittest *Person X* um Hilfe bei der Lösung Deines Anliegens oder Problems und **er/sie lehnt ab!**

Welche Hauptursache ziehst Du zur Erklärung des ablehnenden Verhaltens von *Person X* heran?

Bitte mache nun Angaben über die von Dir genannte Hauptursache:

Die Hauptursache dafür, dass *Person X* sich mir gegenüber ablehnend verhält,

liegt vollkommen in anderen Menschen oder den Umständen	○	○	○	○	○	○	○	liegt vollkommen in mir selbst
wird in Zukunft nie wieder beeinflussen, ob sich eine nahestehende Person mir gegenüber ablehnend verhält	○	○	○	○	○	○	○	wird auch in Zukunft immer wieder beeinflussen, ob sich eine nahestehende Person mir gegenüber ablehnend verhält
beeinflusst nur, ob sich eine nahestehende Person mir gegenüber ablehnend verhält	○	○	○	○	○	○	○	beeinflusst auch viele andere Bereiche meines Lebens negativ
hat etwas mit den Umständen zu tun	○	○	○	○	○	○	○	hat etwas mit mir zu tun
wird sich über die Zeit verändern	○	○	○	○	○	○	○	wird über die Zeit stabil bleiben
wirkt sich nur auf die vorliegende Situation aus	○	○	○	○	○	○	○	wirkt sich auch auf viele andere Situationen, die mich betreffen, negativ aus

10 Perspektivübernahmefähigkeit (Paulus, 2012) / Decentering (Gecht et al., 2014)

Kreuze an, inwieweit die folgenden Aussagen auf Dich zutreffen.

Ich werde leicht von meinen Gedanken und Gefühlen mitgerissen.

trifft gar nicht zu ○ ○ ○ ○ ○ trifft sehr gut zu

Ich merke, dass ich Schwierigkeiten persönlich nehme.

trifft gar nicht zu ○ ○ ○ ○ ○ trifft sehr gut zu

Ich kann mich von meinen Gedanken und Gefühlen abgrenzen.

trifft gar nicht zu ○ ○ ○ ○ ○ trifft sehr gut zu

Ich kann unangenehme Gefühle beobachten ohne in sie hineingezogen zu werden.

trifft gar nicht zu ○ ○ ○ ○ ○ trifft sehr gut zu

Ich versuche, bei einem Streit zuerst beide Seiten zu verstehen, bevor ich eine Entscheidung treffe.

trifft gar nicht zu trifft sehr gut zu

Ich glaube, jedes Problem hat zwei Seiten und versuche deshalb beide zu berücksichtigen.

trifft gar nicht zu trifft sehr gut zu

Wenn mir das Verhalten eines anderen komisch vorkommt, versuche ich mich für eine Weile in seine Lage zu versetzen.

trifft gar nicht zu trifft sehr gut zu

Bevor ich jemanden kritisiere, versuche ich mir vorzustellen, wie die Sache aus seiner Sicht aussieht.

trifft gar nicht zu trifft sehr gut zu

Dies ist keine Frage. Bitte kreuze "trifft sehr gut zu" an.

trifft gar nicht zu trifft sehr gut zu

11 BIG5 (Rammstedt et al. 2013)

Kreuze an, inwieweit die folgenden Aussagen auf Dich zutreffen.

Ich bin eher zurückhaltend, reserviert.

trifft überhaupt nicht zu | trifft eher nicht zu | weder noch | eher zutreffend | trifft voll und ganz zu

Ich schenke anderen leicht Vertrauen, glaube an das Gute im Menschen.

trifft überhaupt nicht zu | trifft eher nicht zu | weder noch | eher zutreffend | trifft voll und ganz zu

Ich bin bequem, neige zur Faulheit.

trifft überhaupt nicht zu | trifft eher nicht zu | weder noch | eher zutreffend | trifft voll und ganz zu

Ich bin entspannt, lasse mich durch Stress nicht aus der Ruhe bringen.

trifft überhaupt nicht zu | trifft eher nicht zu | weder noch | eher zutreffend | trifft voll und ganz zu

Ich habe nur wenig künstlerisches Interesse.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

Ich gehe aus mir heraus, bin gesellig.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

Ich neige dazu, andere zu kritisieren.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

Ich erledige Aufgaben gründlich.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

Ich werde leicht nervös und unsicher.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

Ich habe eine aktive Vorstellungskraft, bin fantasievoll.

trifft überhaupt nicht zu	trifft eher nicht zu	weder noch	eher zutreffend	trifft voll und ganz zu
○	○	○	○	○

12 Soziodemografie

Was ist Dein Geschlecht?

○ männlich ○ weiblich

Wie alt bist Du?

Wie ist Dein aktueller Beziehungsstatus?

○ Single

○ Kurzzeitpartnerschaft [Affäre, Liebschaft, One-Night-Stand, unverbindlicher sexueller Kontakt, usw.]

- ○ Langzeitpartnerschaft [feste, verbindliche Partnerschaft]

Was ist Dein höchster Bildungsabschluss?

- ○ Hauptschulabschluss
- ○ Mittlere Reife
- ○ Fachabitur
- ○ Abitur
- ○ Hochschulabschluss

Wo bist Du geboren?

- ○ Deutschland
- ○ anderes:

Wo ist Deine Mutter geboren?

- ○ Deutschland
- ○ anderes:

Wo ist Dein Vater geboren?

- ○ Deutschland
- ○ anderes:

Was ist Dein aktueller Beschäftigungsstatus?

- ○ Vollzeit
- ○ Teilzeit
- ○ arbeitslos
- ○ Student(in)
- ○ selbstständig
- ○ Rentner(in)
- ○ Hausfrau(mann)
- ○ behindert

Was ist Deine Erstsprache?

- ○ deutsch
- ○ anderes:

Wie hast Du von dieser Studie erfahren?

Was denkst Du, ist die Hypothese dieser Studie?

13 Debriefing

Vielen Dank für Deine Teilnahme an der Studie!

In dieser Studie untersuchen wir, welchen Einfluss die Denkstrategie „mentales Kontrastieren" auf Zurückweisungsempfindlichkeit hat. Zurückweisungsemfindlichkeit beschreibt die Tendenz von Menschen, Ablehnung ängstlich zu erwarten und auf diese übermäßig stark zu reagieren. Mentales Kontrastieren ist eine Denkstrategie, bei welcher einer positiven Zukunft (z.B. Hilfe erhalten), Hindernisse in der Realität (z.B. Scham um Hilfe zu bitten) entgegengestellt werden. Schwelgen ist eine Denkstrategie bei der nur positive Aspekte in der Zukunft berücksichtigt werden. In einer weiteren Kontrollbedingung messen wir die spontanen Denkstragien.
Wir nehmen an, dass mentales Kontrastieren (im Gegensatz zu Schwelgen und der Kontrollbedingung) über eine Hilfe-Situation individuelle Persönlichkeitstendenzen ausgleichen kann und zu einer angemesseneren Reaktion auf Ablehnung führt. Um den Einfluss von mentalem Kontrastieren, Schwelgen und Kontrolle auf den Umgang mit sozialer Ablehnung zu vergleichen, wurdest Du zufällig einer dieser Bedingungen zugeteilt.

Wir entschuldigen uns dafür, dass wir Dir das Ziel der Studie nicht vollständig vor Beginn Deiner Teilnahme mitgeteilt haben, doch Deine Ergebnisse würden verfälscht sein, wenn Du das Ziel von Anfang an gewusst hättest. So wären Deine Antworten nicht mehr aussagekräftig.

Falls weiterhin Unklarheiten bestehen sollten, oder Du etwas nicht verstanden hast, falls Du noch Fragen hast oder ein Problem melden willst, so kontaktiere die Leiterin der Studie unter jenny.voth@uni-hamburg.de .

○ Ich wurde ausreichend über den Sinn der Studie informiert.

Bitte klicke auf "Weiter" um die Studie vollständig zu beenden!

14 Endseite

Du hast die Studie erfolgreich beendet.

Erklärung gemäß § 5 (4d) der Promotionsordnung des Instituts für Psychologie der Universität Hamburg vom 20.08.2003

Hiermit erkläre ich, Jenny Voth, dass ich mich an einer anderen Universität oder Fakultät noch keiner Doktorprüfung unterzogen oder mich um Zulassung zu einer Doktorprüfung bemüht habe.

Hamburg, den _____ _____

Jenny Voth

Erklärung gemäß § 9 (1c und 1d) der Promotionsordnung des Instituts für Psychologie der Universität Hamburg vom 20.08.2003

Hiermit erkläre ich an Eides statt,

1. dass die von mir vorgelegte Dissertation nicht Gegenstand eines anderen Prüfungsverfahrens gewesen oder in einem solchen Verfahren als ungenügend beurteilt worden ist.
2. dass ich die von mir vorgelegte Dissertation selbst verfasst, keine anderen als die angegebenen Quellen und Hilfsmittel benutzt und keine kommerzielle Promotionsberatung in Anspruch genommen habe. Die wörtlich oder inhaltlich übernommenen Stellen habe ich als solche kenntlich gemacht.

Hamburg, den _____ _____

Jenny Voth