

## ***Minimizing the Pain and Probability of Rejection: Evidence for Relational Distancing and Proximity Seeking Within Face-to-Face Interactions***

The Faculty of Oregon State University has made this article openly available.  
Please share how this access benefits you. Your story matters.

<b>Citation</b>	Sommer, K. L., & Bernieri, F. (2014). Minimizing the pain and probability of rejection evidence for relational distancing and proximity seeking within face-to-face interactions. <i>Social Psychological and Personality Science</i> , 6(2), 131-139. doi:10.1177/1948550614549384
<b>DOI</b>	10.1177/1948550614549384
<b>Publisher</b>	SAGE Publications
<b>Version</b>	Accepted Manuscript
<b>Terms of Use</b>	<a href="http://cdss.library.oregonstate.edu/sa-termsfuse">http://cdss.library.oregonstate.edu/sa-termsfuse</a>

Minimizing the Pain and Probability of Rejection: Evidence for  
Relational Distancing and Proximity Seeking Within Face-to-Face Social Interactions

Kristin L. Sommer

Baruch College and The Graduate Center, City University of New York

Frank Bernieri

Oregon State University

**Kristin Sommer** is a Professor of Psychology at Baruch College and a member of the Basic and Applied Social Psychology and Industrial/Organizational Psychology doctoral faculties at the Graduate Center, City University of New York.

**Frank Bernieri** is an Associate Professor in the School of Psychological Science at Oregon State University.

*Total Word Count: 4930*

Acknowledgements

This research was supported by National Institute of Mental Health grant # MH066828-01 awarded to the first author. We thank Alissa Czajka, Nicholas Reyna, Ben Barkowski, Alyssa Raymond, and Jennifer Ochoa-Evers for their assistance with data collection and coding. Correspondence concerning this article can be sent to Kristin Sommer, Department of Psychology, Baruch College; 55 Lexington Ave., Box B 8-215, New York, NY 10010 (email: Kristin.Sommer@baruch.cuny.edu).

## Abstract

Prior research has revealed evidence for both proximity seeking and relational distancing following interpersonal rejection (Williams, 2007). The present study explored evidence for both processes in the context of face-to-face interactions. Participants were accepted or rejected by one person then asked to interact with a new relationship partner for the purposes of an impression-formation task. Conversations were recorded and transcribed. Results revealed higher levels of linguistic style matching and reciprocated conversational content among dyads containing a previously rejected compared to accepted target. Simultaneously, rejected targets rated their new partners as less kind and reported lower concern for the relationship. Both evaluations of partners and reductions in self-reported concern among the rejected were mediated by expectations of rejection. We suggest that automatic proximity seeking and the appraisal-mediated devaluation of new partners reflect efforts to minimize the potential for and pain of future rejection. Limitations and areas for future research are discussed.

*Key Words:* social rejection; linguistic style matching; avoidance; social pain; attachment regulation

Minimizing the Pain and Probability of Rejection: Evidence for  
Relational Distancing and Proximity Seeking Within Face-to-Face Social Interactions

Few would disagree that rejection hurts. In fact, the affective and somatosensory representations of social rejection overlap with those of physical pain (Eisenberger, Lieberman, & Williams, 2003; Kross, Berman, Mischel, Smith, & Wager, 2011), suggesting that physical pain and social pain share a common set of neural substrates (MacDonald & Leary, 2005). Similar to the way that physical pain motivates people to reduce the probability of painful future events, social pain should lead people to take preventative measures within their social contexts. Despite burgeoning work on this topic (Smart Richman & Leary, 2009; Williams, 2007), however, few studies have investigated directly the strategies that rejected individuals employ to reduce their vulnerability to future rejection and its coincident emotions when circumstances compel them to interact with new relationship partners.

**Responses to social rejection**

Some prior research suggests that individuals engage in more proximity seeking following social rejection. For example, rejected individuals are more likely than others to attend to smiling faces (Dewall, Maner, & Rouby, 2009), perceive friendliness in the face of others (Maner, DeWall, Baumeister, Schaller, 2007), remember social events embedded in others' diaries (Gardner, Pickett, & Brewer, 2000), identify with and bolster the value of the groups to which they belong (Knowles & Gardner, 2008), and exhibit an increased interest in meeting new people (Maner et al., 2007). Rejection also increases implicit behavioral mimicry (Lakin, Chartrand, & Arkin, 2008) and conformity (Williams, Cheung, & Choi, 2000), both of which have their evolutionary roots in self-protection and have been linked empirically to threatened sense of security or safety (Griskevicius, Goldstein, Mortensen, Cialdini, & Kenrick, 2006).

Other research, in contrast, has found evidence for relational distancing and psychological “numbness” in response to rejection. For example, targets of rejection exhibit decreases in empathy and pain sensitivity (Dewall & Baumeister, 2006) and increases in aggression toward innocent targets (Twenge, Baumeister, Tice, & Stucke, 2001). Both analgesia and aggression responses to rejection mimic defensive, adaptive responses to physical pain (MacDonald & Leary, 2005) and have been linked empirically (Bernstein & Claypool, 2012; Twenge, Zhang, Catanese, Dolan-Pascoe, Lyche, & Baumeister, 2007) and theoretically (Molden & Maner, 2013; Smart Richman & Leary, 2010) to negative appraisals of others’ interpersonal regard.

The existing evidence is thus mixed as to whether rejection will motivate primarily affiliative, avoidant, or aggressive behavior within new interactions. Attempts to predict how rejected people will behave within face-to-face interactions are further complicated by the fact that most of the prior research examining interpersonal responses to rejection has used hypothetical targets or pseudo-partners with whom rejected individual have no direct contact. Real-life instances of rejection occur within dynamic social situations in which immediate escape from others is not always possible or even desired. Relationally distancing or destructive behaviors may be less likely to occur when the prospect for additional rejection is immediate and salient.

### **The present investigation**

We propose that rejected individuals will seek to minimize both the pain and probability of future rejection when circumstances compel them to interact immediately with novel partners. We envisioned two general means by which this could occur. The first involves drawing closer to partners and emphasizing commonalities, which would function primarily to decrease the *probability* of additional rejection. The second involves avoiding closeness with the new partner

and accentuating perceived differences, which would serve primarily to minimize the *pain* of possible rejection. These motivations could further manifest in different domains that differ along a continuum of relatively automatic to controlled processes. For example, efforts to minimize one's prospects of rejection could take the form of implicit proximity seeking (e.g., increased mimicry) or overt ingratiation strategies. Efforts to minimize the pain of rejection could take the form of implicit distancing (e.g., decreased mimicry) or overt derogation of the partner.

One promising method for assessing the implicit affiliation/distancing behaviors within conversations is through the analysis of spontaneous word choices (Gonzales, Hancock, & Pennebaker, 2010; Pennebaker et al., 2001). Research suggests that a person's linguistic style (LS; Pennebaker & King, 1999) and the extent to which it matches the style of a conversation partner (linguistic style matching; LSM) can be employed to assess the nature of an ongoing human interaction (Gonzales et al., 2010). LSM in particular is presumed to reflect affiliation goals and, like nonverbal behavioral mimicry, occurs out of conscious awareness (Niederhoffer & Pennebaker, 2002). Relative differences in LSM and related linguistic behaviors could thus reveal whether rejected (compared to accepted) individuals behave in a manner that facilitates an interaction or subtly undermines it.

Participants were rejected or accepted by one partner following a brief interaction that was designed to serve as a "practice session" for the actual study. They were then introduced to another partner for the purposes of an impression-formation task. Prior to meeting their new partners, targets reported their expectations of, and concerns about, the upcoming interaction. Targets and their partners also evaluated each other along a series of traits following the interaction.

Interactions were recorded, transcribed, and subjected to linguistic analyses. In this manner, we assessed both targets' spontaneous expressive behaviors during the interaction and their later appraisals of these interactions. Whereas linguistic behaviors and LSM were assumed to be the result of relatively automatic processes (Ireland & Pennebaker, 2010; Niederhoffer & Pennebaker, 2002; Pennebaker & King, 1999), partner expectancies, trait ratings and other self-report measures were expected to be a consequence of more controlled processes (Hadjistavropoulos & Craig, 2002). Both types of data were explored for evidence of proximity seeking and social distancing.

## Method

### Participants and procedure

Participants were 182 undergraduates (121 females) enrolled in introductory psychology courses at a small, predominantly Caucasian university in the Pacific Northwest. Four participants were scheduled for each session. Upon arrival, participants were paired off and escorted to separate rooms. One dyad was chosen randomly to receive the experimental manipulation, while the other provided the interaction partners with whom accepted and rejected participants would later interact. Members of both dyads were informed they would meet with a different individual later for a five-minute impression formation task. First, however, they would complete a "practice" or warm-up session by interacting briefly with one another.

Each pair conversed for three minutes talking about whatever they wanted. Those chosen to receive the manipulation then privately evaluated their partner on four items including "How much did you like the other participant?" and "Do you feel you could be friends with this person in the future?" Responses were recorded on seven-point scales (1 = not at all, 7 = very much). The experimenter mentioned casually that, "*participants are typically curious to know if they*

*formed similar impressions of one another,”* and thus they would be permitted to see each other’s ratings. Participants’ actual ratings were replaced with previously prepared forms reflecting either acceptance (ratings of 6 or 7) or mild rejection (ratings of 3 or 4). The experimenter placed the rating forms face up on the desk where the participant was seated as she administered the next set of questionnaires (described below). This procedure was skipped for the second pair of participants.

The two dyads then switched partners such that each new pairing contained a person who was just accepted or rejected (“target”) and a person who received no manipulation (“partner”). Targets and their partners were seated in swivel chairs, roughly five feet apart, and provided with a list of moderately intimate questions (e.g., “What would be the perfect lifestyle for you?”) from the Relationship Closeness Induction Task (Sedikides, Campbell, Reeder & Elliot, 1999). The experimenter emphasized that the questions were intended to facilitate conversation and that participants should feel free to deviate from the list. These five-minute interactions were videotaped. Upon completion, participants were separated and asked to report their impressions of one another as well as the interaction. All participants underwent an extensive debriefing in which the hypotheses and false feedback were explained.

### **Dependent measures**

**Reactions to the manipulation.** Immediately following the manipulation, accepted and rejected participants completed four items tapping their expectations for the upcoming 5-minute interaction (e.g., “How much are you looking forward to the interaction?” “Do you think this person will like you?”) and two items assessing how concerned they were about the interaction (e.g., “How important is it to you that this person likes you?”). Items were collapsed to provide an overall measure of *social expectancies* ( $\alpha = .88$ ) and *interpersonal concern* ( $\alpha = .79$ ). A



subset of 68 participants also completed measures of *positive affect* ( $\alpha = .79$ ) and *negative affect* ( $\alpha = .78$ ) (Watson, Clark, & Tellegen, 1988).

**Trait ratings.** Following the second interaction, targets and their partners were asked to rate the extent to which the other person displayed each of 15 positive and 15 negative traits. These ratings were collapsed and subjected to Principal Components Analyses (PCA). Items whose component loadings failed to differ by at least .30 within the initial and secondary PCAs were discarded. The final solution (accounting for 66% of the variance) yielded four components we labeled: *Kind* (kind, open, patient, understanding, modest, responsive to others' needs, tolerant); *Moody* (moody, thoughtless, irrational, complaining, childish); *Self-assured* (self-assured, sociable, witty); and *Critical* (critical, arrogant, fake).

**Post-interaction assessment.** Participants completed a deindividuation scale (Rogers & Prentice-Dunn, 1981) and four items written for this study that were all intended to measure the extent to which participants were consciously involved and engaged in the interaction. These items were subject to data reduction as well. The final solution yielded of four components we labeled: *Rapport/Liking* (6 items, e.g., "Time seemed to pass quickly; I liked my partner), *Self-Consciousness* (4 items, e.g., "I was concerned with what my partner was thinking about me"), *Personal Responsibility* (2 items, e.g., "I was primarily responsible for what transpired during the conversation") and *Focus/Concentration* (2 items, e.g., "My thoughts seemed concentrated and focused on the moment").

**Verbal behaviors.** Conversations were transcribed and analyzed with the Linguistic Inquiry Word Count (LIWC) (Pennebaker, 2001). Three sets of linguistic dimensions were identified for analyses. The first set was intended to tap interpersonal and emotional processes associated with rejection and acceptance. *Positive* and *negative emotion words* provided

linguistic markers of emotional tone (Pennebaker & King, 1999). *Laugh symbols* were added to our LIWC dictionary as an additional, indirect behavioral marker of emotion. Previous research (Owen, Giese-Davis, Cordova, Kronenwetter, Golant, & Spiegel, 2006) has found that self-report and linguistic markers of affect are generally uncorrelated, suggesting that linguistic emotional content does not reflect the conscious experience of mood. *Number of questions asked* reflected the amount of attention directed toward the partner.

The second set of measures assessed LSM, or coordination in the structure or style of speech. In addition to standard linguistic dimensions, we employed several factor-analytically derived composite variables identified in prior work by Pennebaker and colleagues (Pennebaker & King, 1999). *Psychological immediacy* reflects the use of a more personal, experiential tone rather than an impersonal, rational speaking tone. *Making distinctions* refers the use of more qualifiers and negations (“but” “maybe” “never”) while speaking. *Social past* reflects a higher number of past tense references to relationships (friends, coworkers) or social events (talking). *Rationalization* refers to causation and insight words (“because,” “consider”), and less frequent use of negative emotion words. *Emotional positivity* refers to the simple difference between the use of positive and negative emotion words.

The third set of measures assessed convergence in the topics or themes discussed during the conversation. We examined three of the five personal concern categories generated by the LIWC (2001): *Occupation, leisure activity and money/financial issues*. The remaining two personal concerns (metaphysical issues and physical states) were not examined due to their low frequency within participants’ interactions. Functional word categories (e.g., negations, conjunctions, quantifiers) appearing in prior LSM work were also omitted due to dictionary omissions within the 2001 program. Ireland and Pennebaker (2010) provided evidence that LSM

and linguistic content matching cannot be intentionally bolstered. This increased our confidence that the linguistic patterns under investigation were not subject to conscious awareness or control.

## Results

**Immediate reactions to the manipulation.** As shown in Table 1, rejected targets reported more negative social expectancies and lower concern for the quality of the upcoming interaction. Positive and negative affect scores were strongly inversely correlated ( $-.50$ ) so the latter was subtracted from the former to provide an overall index of affective responses to the manipulation. Rejected and accepted targets differed significantly in overall self-reported affect.

**Post-interactional assessment.** As revealed in Table 2, rejected targets evaluated their new partners as less kind and reported lower levels of rapport and focus/concentration during the interaction than did accepted targets. One might expect these negative self-reports to have reflected negative conversational behavior that their partners would observe and react to but this did not happen. Although partners interacting with rejected targets reported feeling more self-conscious than those interacting with accepted targets, they rated rejected targets as being *less* critical than accepted targets. Apparently the rejected targets were exhibiting interpersonal behavior that was more positive than their self-reports alone would have suggested.

**Language use.** Table 3 presents the data for language use. Compared to accepted targets, rejected targets used more anger, and anxiety words, evinced fewer laugh symbols and asked more questions of their partners.

**LSM and conversational themes.** Table 4 shows significant LSM among rejected (but not accepted) dyads on 6 of the 11 linguistic dimensions examined, and substantially higher levels of convergence across all three conversational topics. Because some degree of convergence was

found for both accepted and rejected dyads, only two of the comparisons of effect sizes (for words > 6 letters and psychological immediacy) reached significance.

**Mediational analyses.** Additional analyses were conducted to determine whether expectancies mediated the effects of experimental condition on the outcomes reported in Tables 1, 2 and 3. Simple regressions revealed that social expectancies were significantly correlated with interpersonal concern, self-reported affect, perceived kindness, engagement/rapport, and anger words (all  $ps < .05$ ). Expectancies remained uncorrelated with all other variables. For each of these outcome variables that yielded an expectancy effect, its mediation effect (indirect effect) was tested using bootstrapping procedures based on 1000 samples and a 95% bias-corrected confidence interval (Preacher & Hayes, 2008). The indirect effect (IE) is considered significant if the confidence interval does not include zero. Results revealed that social expectancies mediated the effects of rejection on interpersonal concern,  $IE = -.57$ ,  $CI [-.95, -.29]$ , self-reported affect,  $IE = -.28$ ,  $CI [-.59, -.10]$ , perceived kindness,  $IE = -.44$ ,  $CI [-.79, -.24]$ , engagement/rapport,  $IE = -.24$ ,  $CI [-.51, -.10]$ . Thus, participants derogated and detached from their interaction partners to the extent that they anticipated being rejected by their partners. Social expectancies did not mediate the effects of rejection on targets' use of anger words,  $IE = .05$ ,  $CI [.00, .14]$ .

### Discussion

The present investigation was predicated on the assumption that the pain of a recent rejection would motivate individuals avoid additional injury to the self. Our findings pointed to a complex pattern of responses that, collectively, appeared to serve the goals of thwarting both the pain of and potential for additional rejection. Evidence for the former was found in targets' ratings of their partners and their interactions. Rejected (compared to accepted) individuals evaluated their new partners as being less kind and reported lower levels of rapport with them.

We saw no evidence that partners randomly paired with rejected targets actually *behaved* in ways that were less warm or friendly than partners paired with accepted targets. Rather, targets of a previous rejection appeared to be motivated to *evaluate* their partners and interactions more negatively, presumably in efforts to weaken the blow of possible criticism by that partner. These evaluations – along with self-reported concern about the interaction and self-reported mood – were mediated by the anticipation of additional rejection.

Despite pre-emptive efforts to thwart the pain of rejection, rejected individuals behaved in a way that drew them closer to partners. Evidence for proximity seeking was found in participants' interpersonal linguistic behaviors. Specifically, rejected targets were more likely to match the conversational content of their new partners and to mimic their partners' linguistic styles. Two categories of LSM that did not show this pattern are noteworthy. First, word counts among rejected individuals and their partners remained unrelated, whereas word counts among accepted targets and their partners were significantly *inversely* related. The significant inverse relationship in word count within accepted pairs indicates that those interactions tended to have a speaker who dominated the conversation while the other listened. Research suggests that complementarity in dominance behaviors is more characteristic of interactions within nonclose relationships than close relationships (Moskowitz, Ho, & Turcotte-Tremblay, 2007).

Second, high levels of linguistic matching were observed within accepted but not rejected dyads on the category of 1<sup>st</sup> person pronouns. This category is meaningfully different than other linguistic categories in that matching reflects a tendency to reciprocate a conversation partner's self-references by shifting attention back onto the self (i.e., responding to "I" with "I"). The lack of reciprocated self-referencing among rejected individuals is consistent with their tendency to ask more questions of their partners. Collectively, these findings suggest that 1) rejection

increases implicit proximity seeking via LSM and reciprocated conversational content, and 2) LSM is unlikely to occur when it thwarts rather than strengthens connections with others.

Note that LSM did not result in higher ratings of interaction quality; rejected individuals reported lower levels of rapport/liking, and their partners' ratings did not differ. Niederhoffer and Pennebaker (2002) argue that self- and observer-rated assessments of interaction quality reflect the overall positivity of the relationship, not the degree to which two people are coordinated or verbally synchronized. The authors theorized that LSM may be more reflective of *engagement* rather than rapport, the latter of which is also defined by the valence (positivity/negativity) of the interaction. Thus, our findings might be best interpreted as evidence that rejected participants were implicitly more invested or engaged in their interactions, despite feeling bad and explicitly denying concern or liking for their partners.

### **Temporal differences in attachment regulation**

We entered this investigation unsure of whether our findings would reveal evidence of affiliative or avoidant/aggressive behaviors following rejection, and the domains in which these behaviors might occur. Ultimately, most of the evidence for affiliative responses was revealed in spontaneous linguistic behaviors, whereas most of the evidence for distancing or destructive responses to rejection appeared in self-reports. These findings provide good corroborating support for proximity seeking as a relatively implicit process that occurs quickly and without conscious awareness (Lakin et al., 2008), and relational distancing as a relatively deliberate or higher order mental process that is mediated by conscious appraisals of others' regard (Bernstein & Claypool, 2012; Twenge et al., 2007).

However, not all our data were perfectly consistent with this proposed dichotomy. For example, we found that rejected participants spontaneously used a higher proportion of anger and

anxiety words, and fewer laugh syllables, while speaking. These findings could reflect the immediate or reflexive pain of rejection (Williams, 2007), however, without having any direct bearing or negative impact on the extent to which targets and their partners were synchronized or coordinated in their speech. Another source of ambiguity involves the verbal and/or nonverbal behaviors that served as the basis for partners' ratings. Partners rated rejected targets as less arrogant and critical than did partners of accepted targets. The fact that partner impressions were uncorrelated with targets' expectations of rejection suggests that rejected individuals' suppression of critical behaviors were a relatively automatic response to the previous rejection rather than a controlled response to the expectation of future rejection. Unfortunately, however, our coding procedures did not allow us to assess every relevant verbal or nonverbal behavior that may have been responsible for these impressions or to determine the extent to which they may have resulted from explicit impression management concerns or relatively automatic connection goals.

These limitations notwithstanding, we note strong parallels between our findings and regulatory responses to threatened security in close relationships. For example, the model of attachment regulation proposed by Mikulincer and Shaver (Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2002) places responses to rejection along a continuum of automatic to controlled processes. Automatic proximity-seeking thoughts and behaviors aimed at reducing physical or psychological distance from attachment figures represent unconscious efforts to minimize the distress associated with threat. Controlled thoughts and behaviors result from conscious appraisals of whether specific others will be responsive to one's needs. Attachment figures who are perceived as available sources of support are approached as trusted sources of renewed attachment, whereas attachment figures who are perceived as unavailable or unresponsive

compound feelings of threat, resulting in “hyperactivation” (hypervigilance to threat) or “deactivation” (defensive exclusion of threat) of the attachment system (Cassidy & Kobak, 1988; Main, 1990). Both manifestations of attachment insecurity are associated with higher levels of hostility and aggression (Péloquin, Lafontaine, & Brassard, 2011; Mikulincer & Shaver, 2011).

A similar set of processes appears in the risk regulation framework proposed by Murray and colleagues (Murray, Derrick, Leder, & Holmes, 2008). According to this model, threatened individuals experience automatic activation of connectedness goals unless the threat is salient and internal to the relationship (e.g., in which case self-protection may be prioritized). The conflict between connection and protection goals is then resolved by an executive (controlled) system wherein individuals assess the likelihood that partners will be responsive to their needs. Individuals risk greater vulnerability and dependence on partners to the extent that they feel they can trust in the partner’s ongoing regard. Situational or dispositional cues that undermine trust in the partner, by comparison, lead to avoidance processes that manifest in the devaluation of their partner and the relationship.

Thus, one promising set of frameworks for future work that allow for the simultaneous execution of affiliative and avoidant/aggressive responses to rejection are those grounded in attachment theory and risk regulation. Both models place proximity seeking early in the sequence of temporal responses to rejection and highlight the critical role of expectancies in determining controlled responses to rejection. Both would also predict that individuals will seek to derogate and downplay the importance of relationships with those (like strangers) who are viewed as nonviable sources of connection. Though created primarily to account for threats to security within close relationships, the tenets of these attachment regulation models may be



adapted to explain interpersonal responses to rejection within nonclose relationships as well (see also Maxwell, Spielmann, Joel, & MacDonald, 2013; Sommer & Benkendorf, 2009).

### **Future directions**

Our findings were both consistent and inconsistent with previous work linking rejection to increases in aggression toward novel others (Twenge et al., 2001). Rejected individuals in the present study rated their partners as less kind. Simultaneously, partners rated rejected individuals as *less* critical and arrogant than accepted individuals. These findings call for a more nuanced understanding of aggression -- one that gives greater attention to the moderating role of proximity to targets of aggression. Unlike in previous research, accepted and rejected individuals interacted face-to-face with their partners, and the only evidence of “aggression” came in the form of private derogation and relational distancing. This suggests that the rejected can suppress overt displays of aggression toward disliked others when the situation requires that they do so in order to avoid additional rejection.

Our study also examined how rejection from one source affected behaviors toward novel partners. In line with previous work documenting early stage proximity seeking in response to rejection (Dewall et al., 2009; Gardner et al., 2000; Lakin et al., 2008), our findings revealed evidence of higher LSM and language matching among our rejected compared to accepted participants. However, as Murray et al. (2008) have observed, automatically activated connection goals may occasionally give way to automatic distancing goals in relationships characterized by intense or repeated threat. Specifically, avoidance behaviors stemming from a history of perceived rejection by the partner may become automated with repeated use, and hence show stronger activation than connection goals following reminders of threat. By extension, we

suspect that the LSM behaviors observed in the present study may be restricted to relationships in which ongoing concerns about rejection are not operating.

Finally, our findings should be interpreted within the context of the rejection manipulation that was employed. Recent work by Molden and colleagues (Molden, Lucas, Gardner, Dean, & Knowles, 2009) shows that “active exclusion” or clear devaluation by others activates a prevention focus, characterized by higher anxiety, regrets over actions taken, and withdrawal from social contact. In contrast, “passive exclusion” or feeling ignored by others activates a promotion focus, characterized by increases in sadness, regrets over actions not taken and efforts to increase social contact. Although subtle, our manipulation took the form of active exclusion. A passive exclusion manipulation that merely denied opportunities for connection might have resulted in more proactive social behaviors, including self-presentation strategies to garner positive impressions (rather than avoid negative impressions) by others. In other words, both active and passive exclusion might be expected to increase automatic (unregulated) proximity seeking but then diverge in the use of others to regulate negative affect. Those who are actively rejected may view novel interaction partners as non-viable sources of reconnection and defensively reduce closeness with them, whereas those who are passively ignored may view others as promising sources of connection and seek to draw closer to them. We view this as a critical question for future research.

### **Conclusions**

Social rejection represents an immediate and painful threat to the belongingness for which humans ordinarily strive (Baumeister & Leary, 1995). Our findings suggest that rejected people exhibit a complex mix of affiliative and distancing behaviors that vary in the extent to which regulatory control is involved. We argue that a fuller understanding of rejection’s outcomes can

be achieved by appreciating the multiple means by which people minimize the pain and probability and future rejection.

*Not the published version*

### References

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. doi: 10.1037/0033-2909.117.3.497
- Bernstein, M. J., & Claypool, H. M. (2012). Social exclusion and pain sensitivity: Why exclusion sometimes hurts and sometimes numbs. *Personality and Social Psychology Bulletin*, *38*(2), 185-196. doi: 10.1177/0146167211422449
- Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relationship with other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 300–323). Hillsdale, NJ: Erlbaum.
- DeWall, C. N., & Baumeister, R.F. (2006). Alone but feeling no pain: Effects of social exclusion on physical pain tolerance and pain threshold, affective forecasting, and interpersonal empathy. *Journal of Personality and Social Psychology*, *91*(1), 1-15. doi: 10.1037/0022-3514.91.1.1
- DeWall, C. N., Maner, J. K., & Rouby, D. A. (2009). Social exclusion and early-stage interpersonal perception: Selective attention to signs of acceptance. *Journal of Personality and Social Psychology*, *96*(4), 729-741. doi: 10.1097/PSY.0b013e3182464dd1
- Eisenberger, N.I., Lieberman, M.D., Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*(5643), 290-292. Doi: 10.1126/science.1089134
- Gardner, W. L., Pickett, C. L., & Brewer, M. B. (2000). Social exclusion and selective memory: How the need to belong influences memory for social events. *Personality and Social Psychology Bulletin*, *26*(4), 486-496. doi: 10.1177/0146167200266007
- Gonzales, A.L., Hancock, J.T., Pennebaker, J.W. (2010). Language style matching as a predictor

of social dynamics in small groups. *Communication Research*, 37 (1), 3-19. doi: 10.1177/0093650209351468

Griskevicius, V., Goldstein, N.J., Mortensen, C.R., Cialdini, R.B., & Kenrick, D.T. (2006).

Going along versus going alone: When fundamental motives facilitate strategic (non)conformity. *Journal of Personality and Social Psychology*, 91(2), 281–294. doi: 10.1037/0022-3514.91.2.281

Hadjistavropoulos, T., & Craig, D.D. (2002). A theoretical framework for understanding self-report and observational measures of pain: A communications model. *Behavioral Research and Therapy*, 40 (5), 551-570. doi: 10.1016/S0005-7967(01)00072-9

Ireland, M.E., & Pennebaker, J.W. (2010). Language style matching in writing: Synchrony in essays, correspondence, and poetry. *Journal of Personality and Social Psychology*, 99, 549–571. doi: 10.1037/a0020386

Knowles, M.L., & Gardner, W.L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin*, 34(9), 1200-1213. doi: 10.1177/0146167208320062

Lakin, J., Chartrand, T., & Arkin, R.M. (2008). I am too just like you: Nonconscious mimicry as an automatic behavioral response to social exclusion. *Psychological Science*, 19(8), 816-822. doi: 10.1111/j.1467-9280.2008.02162.x

Kross, E., Berman, M.G., Mischel, W., Smith, E.E., & Wager, T.D. (2011). Social rejection shares somatosensory representations with physical pain. *Proceedings of the National Academy of Sciences (PNAS)* 108(15), 6270-6275. doi: 10.1073/pnas.1102693108

MacDonald, G., & Leary, M.R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, 131(2), 202-223. doi:

10.1037/0033-2909.131.2.202

- Main, M. (1990). Cross-cultural studies of attachment organization: Recent studies, changing methodologies, and the concept of conditional strategies. *Human Development*, 33 (1), 48-61. doi: 10.1159/000276502
- Maner, J. K. DeWall, C.N., Baumeister, R.F. , & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the 'porcupine problem. *Journal of Personality and Social Psychology*, 92(1), 42-55. doi: 10.1037/0022-3514.92.1.42
- Maxwell, J.A., Spielmann, S.S., Joel, S., & MacDonald, G. (2013). Attachment theory as a framework for understanding responses to social exclusion. *Social and Personality Psychology Compass*, 7(7), 444-456. doi: 10.1111/spc3.12037.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M.P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 35 (pp. 53-152). San Diego, CA, US: Elsevier Academic Press, 2003. doi: 10.1016/S0065-2601(03)01002-5
- Mikulincer, M. & Shaver, P.R. (2011). Attachment, anger, and aggression. In P.R. Shaver and M. Mikulincer (Eds.), *Human aggression and violence: Causes, manifestations, and consequences* (pp. 241-257). Washington, DC, US: American Psychological Association.
- Molden, D.C., & Maner, J.K. (2013). How and when social exclusion motivates social reconnection. In C.N. Dewart (Ed.) *The Oxford Handbook of Social Exclusion* (pp. 121-131). New York: Oxford University Press.
- Molden, D.C., Lucas, G.M., Gardner, W.L., Dean, K., Knowles, M.L. (2009). Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored. *Journal of Personality and Social Psychology*, 96(2), 415-431. doi: 10.1037/a0012958

- Moskowitz, D.S., Ho, M.R., & Turcotte-Tremblay, A. (2007). Contextual influences on interpersonal complementarity. *Personality and Social Psychology Bulletin*, 33(8), 1051-1063. doi: 10.1177/0146167207303024.
- Murray, S. L., Derrick, J. L., Leder, & Holmes, J. G. (2008). Balancing connectedness and self-protection goals in close relationships: A levels-of-processing perspective on risk regulation. *Journal of Personality and Social Psychology*, 94(3), 429-459. doi: 10.1037/0022-3514.94.3.429
- Niederhoffer, K. G., & Pennebaker, J. W. (2002). Linguistic style matching in social interaction. *Journal of Language and Social Psychology*, 21, 337-360. doi: 10.1177/026192702237953
- Owen, J.E., Giese-Davis, J., Cordova, M., Kronenwetter, C., Golant, M., & Spiegel, D. (2006). Self-report and linguistic indicators of emotional expression in narratives as predictors of adjustment to cancer. *Journal of Behavioral Medicine*, 29 (4), 335-345. doi: 10.1007/s10865-006-9061-8.
- Péloquin, K., Lafontaine, M., Brassard, A. (2011). A dyadic approach to the study of romantic attachment, dyadic empathy, and psychological partner aggression. *Journal of Social and Personal Relationships*, 28 (7), 915-942. doi: 10.1177/0265407510397988.
- Pennebaker, J.W., Francis, M.E., & Booth, R.J. (2001). *Linguistic Inquiry and Word Count: LIWC2001*. Mahwah, NJ: Erlbaum Publishers
- Pennebaker, J.W., King, L.A. (1999). Linguistic styles: Language use as an individual difference. *Journal of Personality and Social Psychology*, 77(6), 1296-1312. doi: 10.1037/0022-3514.77.6.1296
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40,

879–891. doi: 10.3758/BRM.40.3.879

Rogers, R.W., & Prentice-Dunn, S. (1981). Deindividuation and anger-mediated interracial aggression: Unmasking regressive racism. *Journal of Personality and Social Psychology*, *41*(1), 63-73. doi: 10.1037/0022-3514.41.1.63

Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1999). The relationship closeness induction task. *Representative Research in Social Psychology*, *23*, 1–4.

Sommer, K.L., & Benkendorf, D. (2009). Looking before leaping: The role of social expectancies in attachment regulation following interpersonal rejection. In M.J. Harris (Ed.), *Bullying, Rejection, and Peer Victimization: A Social Cognitive Neuroscience Perspective* (pgs. 225 – 250). Springer. New York: Springer Publishing Company.

Shaver, P.R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development*, *4*(2), 133-161. doi: 10.1080/14616730210154171

Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychological Review*, *116*, 365–383. doi: 10.1037/a0015250

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, *81*(6), 1058-1069. doi: 10.1037/0022-3514.81.6.1058.

Twenge, J.M., Zhang, L., Catanese, K.R., Dolan-Pascoe, B., Lyche, L.F., & Baumeister, R.F. (2007). Replenishing connectedness: Reminders of social activity reduce aggression after social exclusion. *British Journal of Social Psychology*, *46*(1), 205-224. doi: 10.1348/014466605X90793

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures



of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070. doi: 10.1037/0022-3514.54.6.1063

Williams, K.D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425-452. doi: 10.1146/annurev.psych.58.110405.085641

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

Not the published version

Table 1

*Reactions to the Manipulation*

	<i>F</i> (1, 88)	$\eta^2$	<i>Accepted</i> <i>M</i> ( <i>SD</i> )	<i>Rejected</i> <i>M</i> ( <i>SD</i> )
Social expectancies	21.44**	.20	4.94 (.75)	4.09 (.92)
Interpersonal concern	6.07*	.07	3.70 (1.45)	2.97 (1.37)
Affect <sup>a</sup>	4.32*	.06	1.25 (.74)	.81 (1.00)

\* $p \leq .05$ . \*\*  $p \leq .01$ . <sup>a</sup>df = 1, 66. Higher means reflect higher positive/lower negative affect.

Not the published version

Table 2

*Post-Interaction Assessment.*

	<i>F</i> (1, 87)	$\eta^2$	<i>Accepted</i> <i>M</i> ( <i>SD</i> )	<i>Rejected</i> <i>M</i> ( <i>SD</i> )
<b>Targets' ratings of partners<sup>a</sup></b>				
Kind	7.79**	.08	5.62 (.87)	5.00 (1.00)
Moody	1.61	.0	1.54 (.73)	1.73 (.69)
Self-assured	3.63†	.04	4.85 (1.19)	4.31 (1.03)
Critical	.11	.00	1.87 (.98)	1.91 (.62)
<b>Partners' ratings of targets<sup>a</sup></b>				
Kind	.81	.01	5.48 (1.05)	5.31 (.84)
Moody	.02	.00	1.61 (.74)	1.65 (.85)
Self-assured	1.14	.01	4.60 (1.31)	4.39 (1.12)
Critical	4.06*	.05	1.99 (1.04)	1.67 (.76)
<b>Targets' ratings of the interaction<sup>b</sup></b>				
Rapport/liking	7.30**	.09	4.06 (.49)	3.68 (.73)
Self-consciousness	.02	.00	2.35 (.82)	2.34 (.85)
Personal responsibility	.51	.01	2.62 (.73)	2.73 (.74)
Focus/concentration	13.53***	.16	4.14 (.64)	3.51 (.87)
<b>Partners' ratings of the interaction<sup>b</sup></b>				
Rapport/liking	.00	.00	3.93 (.69)	3.92 (.46)
Self-consciousness	3.95*	.05	2.12 (.73)	2.46 (.76)
Personal responsibility	1.70	.02	2.54 (.89)	2.80 (.81)
Focus/concentration	.85	.01	4.04 (.64)	3.89 (.83)

† $p = .06$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . <sup>a</sup>Analyses controlled for sex of rater and sex of target.

<sup>b</sup>df = 1,74.

Table 3

*LIWC Analysis: Target Differences in Language Use.*

	<i>Definition/examples</i>	<i>F</i> (1, 88)	$\eta^2$	<i>Accepted</i> <i>M (SD)</i>	<i>Rejected</i> <i>M (SD)</i>
Positive emotions	Happy, optimistic	.98	.01	3.11 (1.15)	2.87 (1.38)
Negative emotions	Enemy, worthless	2.88	.03	1.01 (.66)	1.25 (.68)
Anxiety/fear	Afraid, tense	4.09*	.04	.15 (.25)	.28 (.32)
Anger	Hate, kill	4.38*	.05	.13 (.21)	.23 (.27)
Sadness	Cry, sad	.13	.00	.12 (.17)	.11 (.28)
Laugh symbols	Hehe, hehehe	8.58**	.09	5.72 (4.79)	3.74 (2.52)
Questions asked	Number questions asked	4.58*	.05	2.53 (1.15)	3.04 (1.36)

\* $p \leq .05$ . \*\* $p \leq .01$ .

Table 4

*Language Style Matching (LSM) and Conversational Themes.*

	<i>Definitions/ examples</i>	<i>Accepted dyads</i>	<i>Rejected dyads</i>	<i>Z</i>
<b>Standard Dimensions</b>				
Word Count	Total word count	-.44**	-.18	-1.34
Words per sentence	Words per sentence	.20	.48**	-1.48
Words > 6 letters	Words over 6 letters	.09	.56**	-2.50*
1 <sup>st</sup> person	I, me, we	.52**	.06	2.38*
2 <sup>nd</sup> person	you	-.24	-.27	.15
3 <sup>rd</sup> person	He, she, they	.33*	.41*	-.43
<b>Composites Variables</b>				
Immediacy	(Zi + Zdiscrep + Zpresent) -(Zarticle + Zsixltr)	.18	.59**	-2.28*
Making distinctions	(Zdiscrep + Zexcl + Ztentat + Znegate) - Zincl	.04	.31*	-1.29
Social past	(Zsocial + Zpast) - (Zpresent + Zposemo)	.43**	.43**	0.00
Rationalization	(Zcause + Zinsight) - (Znegemo)	.04	.40**	-1.77
Emotional positivity	Zposemo - Znegemo	.17	.45**	1.44
<b>Conversational Themes</b>				
Occupation	School, job, goal	.43**	.67***	-1.62
Leisure activity	Home, sports, music	.36*	.60***	-1.46
Money/Financial Issues	Cash, income, money	.40**	.63***	-1.46

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .