Rejection Sensitivity as an Interpersonal Vulnerability

JANINA PIETRZAK, GERALDINE DOWNEY, and OZLEM AYDUK

The rejection sensitivity (RS) model posits that hypersensitivity to rejection cues, with its subsequent overreactions, is fallout from a normal learning process; rejection sensitivity is born of early, prolonged, or acute rejection experiences with caregivers and significant others. Through such experiences, children learn to expect rejection in situations involving close others, and because the relationships are significant, these expectations are emotion-laden. Thus, anxious expectations of rejection characterize the departure point of the RS dynamic. What follows are a lowered threshold for perception of negativity, an increased propensity for personalizing negative cues, and intense affective reactions. Such cognitions and affects can then lead to expressions of distress in the form of hostility or depression, creating the potential for a feedback loop that becomes a self-fulfilling prophecy. This dynamic, once acquired, can guide interpersonal perceptions and behavior throughout the life course.

The RS model was introduced to explain why some individuals appear more vulnerable to maladaptive responses to rejection experiences than do others (Downey & Feldman, 1996). In this chapter, we first describe the historical backdrop of social cognition and personality in which rejection sensitivity evolved. These two fields of research, along with research on personal relationships, intersect where cognitive and affective constructs are identified and the process by which they affect relationship behavior is delineated. The RS dynamic is one illustration of the marriage of these fields. We then describe how the recent incorporation of psychophysiological approaches to the study of social-psychological phenomena has shaped our view of RS, and provide an in-depth description of the RS model, outlining its unique contribution to work on personal relationships, and exposing the sometimes paradoxical ways in which high RS individuals cope with imminent self-threat. Finally, we take a look down avenues of current and future research.

The idea that early traumatic experiences can lead to later relationship difficulties is not novel; clinicians starting with Freud, and personality theorists starting with Horney (1937), Erikson (1950), and Sullivan (1953) proposed that interactions with parents lead to later patterns of interpersonal behavior or personality traits. Theories of why people encountered difficulties in their relationships focused on individual differences in personality attributes such as global self-esteem, attributional bias (e.g., Beadbury & Fincham, 1990; Holtzworth-Munroe & Hutchinson, 1993), and attachment style (Hazan & Shaver, 1987) as predictors of relationship success or failure. The introduction of social-cognitive paradigms provided a framework in which to examine these ideas and opened up avenues of relationship research that could be identified as psychodynamic in approach—looking at unconscious, automatic processes that led to particular relationship outcomes (Reis & Downey, 1999). Social information selection and processing began to be studied, and social phenomena gained a cognitive spin: accessibility, memory errors, and attributional biases all became valid areas of study. Drawing on notions borrowed from theories of the structure of long-term memory, interest arose in the chronically accessible scripts and processing dispositions that were activated and implemented in particular situations—for example, in close relationships. The high accessibility and availability of scripts and schemas coming from early relationships shed light on the mechanism by which previous relationships dictated new relationships.

At the same time, social cognition was affecting research in individual differences. Theorists were moving away from viewing the individual as a combination of global and consistently activated traits and toward a more dynamic vision of the individual as driven by stable cognitive-affective processing dynamics that result in systematic and coherent variability of affect, cognition, and behavior across situations (Mischel & Shoda, 1995). Emerging conceptualizations of personality drew on cognitive as well as affective phenomena to get at the unconscious processes of social information processing that underlie relationship behavior. This shift from individual differences to intraindividual processing dynamics brought a focus on the mechanisms that lead to behavior: beliefs, expectations, desires, and motivations. The strategy adopted by some researchers at the time was to observe intraindividual stability in patterns of behavior across various situations (Mischel & Shoda, 1995). This led to a focus on the cognitive and affective processing that was taking place when an individual made sense
INTERPERSONAL COGNITION

of a particular situation and decided on a course of action. Such cognitive-affective units were used to explain what made the same person behave in such different ways at different times.

Though our conceptualization of RS is rooted in attributional and attachment theories and in interpersonal approaches to personality, notably the work of Karen Horney, our approach departs from these traditional approaches in several respects. It has adopted the developments of social cognition to delineate the immediate cognitive and affective antecedents of behavior in specific situations, rather than to describe global orientations to relationships. This approach lets us look at parenting history as a determinant of personal dispositions based in mechanisms of information processing and memory, and can help us to understand the development of personality and its effects on current relationships, including cross-situational inconsistency in relationship behavior. RS can be viewed as delineating some of the key cognitive and affective subprocesses incorporated in people's working model of attachment. The RS model provides a process account of how anxious expectations of rejection lead to attributional biases and then to maladjustment through specific physiological, perceptual, and cognitive mechanisms.

This new ability to map the development of relationships through social-cognitive variables can be applied not only in a long-term sense, over an individual's lifetime, but also within a relationship, and even within a particular interaction. This approach deconstructs dispositional terms into concrete cognitions and affects, which can be independently observed, described, and then perhaps changed. Because RS is more specific and precise in its definition of the content, structure, and dynamics of insecure attachment, in our studies we have typically found it to be a better predictor of how people cope with rejection in specific situations than traditional measures of insecure attachment (for a detailed discussion of the distinction between RS and attachment style, see Ayduk, Downey, & Kim, 2000, and Downey & Feldman, 1996).

The unique contribution that the RS model makes in the context of relationship cognition is its account of the processes linking the individual's social learning history with an unfolding social situation. It is a model that embraces the social-cognitive approach and exploits its merits—focusing on dynamic processing of both cognitive and affective information—to demonstrate how these invisible factors shape relationship behavior within a specific interpersonal situation. The model focuses on the psychological (cognitive and affective) mediators of anxious expectations of rejection that lead to a hypervigilance for rejection cues, which can then affect perceptions of, attributions for, and responses to others' ambiguous behavior. Some other constructs have similar social-cognitive roots and emphases but are not as specific (e.g., transference; see Andersen & Chen, 2002), while other, more global constructs (e.g., self-esteem) lack the transparency of mechanism that leads to clear and testable predictions—as well as to viable interventions. The outcome of an interpersonal situation must involve the confluence of intermediary processes, which combine to increase the likelihood of a benign or a malevolent response. Understanding the mechanisms through which anxious attachment style, self-esteem, and other dispositions yield relationship behaviors can greatly facilitate the development of more effective intervention intended to reduce the negative consequences of interpersonal vulnerabilities (Freitas & Downey, 1998).

THE REJECTION SENSITIVITY MODEL

Extensive evidence links child maltreatment with a variety of negative outcomes (Downey, Feldman, Khouri, & Friedman, 1994; Manly, Kim, Rogosch, & Cicchetti, 2001; Widom, 1989). Researchers have long proclaimed early experiences as formative because they affect all relationships that follow. The relationships of children with parents, then with peers and teachers, form a framework of understanding and expectations for all future interactions (Stroebe, 1990). Acceptance/rejection schemas begin to develop as soon as a child is born; all human contact becomes a field for learning the rules of social interaction (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1973, 1980). This framework, if confirmed and again through interpersonal experiences, can grow stronger as the individual grows older. If a child is rejected repeatedly, close interpersonal situations in the future can essentially serve as primes for rejection: strong mental associations exist between the relevant situational cues and rejection experiences. The RS model posits that such associations, formed of prolonged or acute rejecting experiences with significant others, lead to the development of anxious expectations of rejection (Feldman & Downey, 1994; Downey, Khouri, & Feldman, 1997). Such expectations can affect the way social information is processed in later life because the perceptions and attributions people make are driven in a top-down processing manner by the expectations with which people enter an interaction (Olson, Roese, & Zanna, 1996). Anxious expectations are thus carried from one relationship to the next, and can form a stable pattern of interaction with future partners.

Because close interpersonal contexts are likely to follow automatic, routinized sequences (Berscheid, 1994) and have significance for goal attainment, they are likely to be dominated by "hot" processing. This unintentional, unconscious processing is contrasted with a rational "cool" processing system that drives deliberate action (Epstein, 1994; Metcalfe & Mischel, 1999). This "hot" processing system relies on the mental schemas and frameworks that are (chronically or temporarily) accessible, guiding perceptions and interpretations of new situations. Both Baldwin and col-
extended our social-cognitive approach to studying this dynamic into the realm of physiological and neurological underpinnings. Many aspects of an interaction with another person can determine one's comfort during and after it. Because the need for belonging/affiliation is so dominant in humans, because of the evolutionary validity of this need, it seems that assessing the basic valence of a social interaction may be the first and crucial step to take. For this reason, we have posited that acceptance-rejection is a privileged dimension of information processing, and RS has been explicitly reconceptualized as a defensive motivational system (DMS), a physiologically based mechanism that is triggered in response to threat from the environment.

In the context of RS, the DMS system is hypothesized to get activated specifically in response to acceptance-rejection cues and to function to provide a quick and effective response to threat in the environment, sheltering the self from the feared rejection. This conceptualization is rooted in work on the neurobiology of motivational systems. The understanding of how organisms defend themselves against threats in general has increased tremendously over the past decade as researchers have brought developments in cognitive, behavioral, and affective neuroscience to bear on the issue. Converging evidence from neurological and behavioral research suggests that two primary affective-motivational systems organize behavior: an appetitive system that responds to positive stimuli (i.e., rewards), motivating approach and consummatory behavior, and a defensive system that responds to negative, aversive stimuli (i.e., punishments, threat), disposing the individual toward active avoidance, and fight-or-flight (Cacioppo & Gardner, 1999; Gray, 1987; Lang, 1995; Lang, Bradley, & Cuthbert, 1990, 1995; LeDoux, 1993, 1996; Metcalfe & Mischel, 1999). Drawing from this literature, Lang and colleagues (1990) proposed a model that views human emotions as action dispositions that organize behavior along an appetitive-aversive dimension. According to this model, when negatively valenced and highly arousing stimuli are encountered, the DMS becomes activated to prepare for rapid execution of a set of automatic behaviors aimed at self-protection. What constitutes a threat can be biologically based (e.g., an inherent threat reaction to seeing a snake) or socially learned (e.g., people can learn through direct or vicarious rejection experiences to expect rejection in certain situations). Valence directs the system (i.e., approach vs. avoidance), but level of arousal determines the intensity of response.

Research on both animals and humans suggests that when this high-arousal negative-valence system is activated by the potential of danger, there is an amplification of physiological responses to newly encountered threat-congruent cues and an attenuation of physiological response to threat-incongruent cues. Thus, the organism is oriented to detect cues that are congruent with a state of threat (see LeDoux, 1996, LeDoux & Phelps,
INTERPERSONAL CODITION

2000, and Ohman, 2000, for review). The high level of arousal and negative valence also readies the organism to act when cues confirming that the threatened outcome has occurred are detected (e.g., Lang et al., 1993; LeDoux, Iwata, Cacchetti, & Reis, 1988). Gray (1987) has argued that threat also activates inhibitory behaviors reflected in vigorous efforts to freeze and remain silent. The defensive motivation that underlies this inhibitory behavioral set is to be inconspicuous, to become part of the existing context, to go "unnoticed" as a way to prevent threat from being directed at the self. This behavioral "freeze" must be highly vigilant to maintain a high state of readiness for action in case prevention efforts fail (Gray, 1987, 2000). This framework thus suggests that a shift is likely to occur from prevention-focused inhibitory tactics to intense fight-or-flight reactions if and when a threatened outcome is perceived to be inevitable or to have already occurred (see Figure 3.1).

Our phenomenological description of the operation of the RS system closely parallels the operation of the DMS. According to our conceptualization of RS, in situations where rejection is a possibility (e.g., meeting a prospective dating partner, asking one's friend to do favors), people who are high in RS are uncertain about whether they will be accepted or rejected, but the outcome is of critical importance to them. This view leads to hypotheses surrounding physiological correlates of being in a rejection-relevant situation. As mentioned above, situations where one anxiously expects rejection are threatening. The DMS should be activated, leading to a heightened focus on and advanced processing of threat cues (LeDoux, 1996; Ohman, 2000). Ambiguous stimuli will be more likely then to be interpreted in line with these expectations—in order to ensure survival, it is safer to overreact than to fail to react to mild cues that might turn out to be life-threatening. The high RS individual, then, prefers a "better safe than sorry" strategy to protect from rejection, whereas the low RS individual might risk not detecting mild rejection cues, because such cues are less subjectively threatening to the low RS individual. Thus, for high RS individuals, situations where they anxiously expect rejection incorporate cognitive appraisals of threat under conditions of uncertainty—these are the very conditions that research in affective neuroscience as well as stress and coping suggest are likely to activate the DMS (Davis, 1992; Fanselow, 1994; Lazarus, Averill, & Opton, 1970; LeDoux, 1995; Metcalfe & Mischel, 1999; Zillman, 1993). In contrast to high RS individuals, the RS model suggests that, in the same situations, those low in RS take acceptance more for granted and are less concerned with the threat of rejection, and are thus less likely to experience heightened activation of the DMS.

We propose that, when activated, the DMS facilitates the monitoring and detection of threat-relevant cues and prepares the individual for swift response when cues of danger are detected. In situations where rejection is expected, this system is automatically activated in high RS individuals. The activation of this system can help account for the readiness with which high RS individuals perceive rejection in others' behavior and contributes to the intensity of their responses to the perceived rejection.

A recent study conducted by Downey, Mougois, Aydik, London, and Shoda (2004) tested the hypothesis that ambiguous interpersonal situations would induce a sense of threat in high RS individuals, and activation of the DMS, wherein they would experience high negative arousal. High negative arousal can be determined in humans by measuring the startle reflex, the amplitude of the eye-blink response to a sudden extreme stimulus, like a burst of white noise. In this study, participants were exposed to such a stimulus while viewing various artworks depicting four kinds of themes: rejection, acceptance, noninterpersonal positivity, or noninterpersonal negativity. High RS individuals who were viewing rejection images showed a potentiation of the startle reflex; no other condition showed such an increase. This study demonstrated that indeed negative interpersonal situations put high RS people into a state of threat, wherein they responded more intensely to stimuli that could communicate interpersonal rejection.

Behavioral studies demonstrate the further links in the model. Because people are likely to interpret events in accordance with their expectations—stimmuli are attended to, processed, and remembered in ways that confirm expectations—negative or ambiguous interpersonal interactions are perceived by high RS individuals to be personal affronts, attributed to others' intentional rejection of them. Accordingly, the link between anxious expectations of rejection and perceptions of intentional rejection in the negative or ambiguous behavior of close or newly encountered others was tested by Downey and Feldman (1996, Study 2). High RS individuals, when not given an alternative explanation for a negative interpersonal outcome (such as time constraints limiting a social interaction) were more likely to
construct this outcome as personally motivated and intentionally rejecting. Likewise, high RS individuals reported perceiving intentional rejection in the aloof behavior of their dating partners (Downey & Feldman, 1996, Study 3). For high RS individuals, alternative explanations for seemingly rejecting behaviors are not considered; displays of acceptance might be misinterpreted or undervalued. Because of this top-down processing (i.e., processing driven more by preexisting knowledge than by proximal stimuli), and the strong affective response it engenders, reactive behavior often follows perceived rejection.

Though perceptions of rejection are likely to lead to some kind of reaction in everyone, for high RS individuals they lead to reactions that are inappropriately intense and highly defensive. For example, in a priming study, participants were asked to pronounce as quickly as they could target words that appeared on the screen following a masked prime. For high RS women, rejection primes facilitated pronunciations of hostility targets that followed. This suggests an automatic association between rejection and hostility (Ayduk, Downey, Testa, Yen, & Shoda, 1999, Study 1). Furthermore, in a daily diary study of dating couples, feelings of rejection from their romantic partners on one day elicited hostility from high RS women on the next day (Ayduk et al., 1999, Study 2). In contrast, low RS women's likelihood of getting into conflicts with their partners was not contingent on their feelings of rejection. Consistently, when discussing an unresolved relationship conflict in a lab situation, women high in RS were shown to behave more negatively and aggressively, both in terms of their verbal and nonverbal behavior (Downey, Freitas, Michaelis, & Khouri, 1998, Study 3).

Because their partners may be surprised by strong reactions to seemingly neutral behavior, high RS people can be perceived (and responded to) as excessively sensitive and difficult, which leads to relationship dissatisfaction on both ends. Personal attributions for rejection were shown to undermine romantic relationships by increasing jealous behavior among men and increasing hostile behavior among women (Downey & Feldman, 1996, Study 4). Because intent is usually invisible and must be inferred, it is open to misinterpretation; high RS people, by overestimating the likelihood of rejection, may overestimate their partner's intent to do them harm. Partners of high RS individuals, meanwhile, may have trouble recognizing their own neutral, ambiguous, or even nonpersonally negative behavior as potentially conveying rejection.

In a daily diary study including committed dating couples, Downey, Freitas, and colleagues (1998, Study 1) showed that in days following a conflict, high RS women perceived their partners as less accepting and more withdrawn than did low RS women. High RS women's partners, meanwhile, were more likely to express relationship dissatisfaction than were low RS women's partners. Partial mediation points to partner satisfaction as the link between RS and perceptions of partner acceptance after conflict. A lab study of videotaped interactions showed that high RS women's negative behavior during conflict evoked postconflict anger in both the men and their partners (Downey, Freitas, et al., 1998, Study 3). These two studies suggest that the dynamic acts as a self-fuelling prophecy, wherein expectations of rejection increase the probability of its occurrence (Merton, 1948; Rosenthal, 2002; Struwe, 1990). High RS individuals are responding to rejection cues that, to them, appear too real, in ways that a significant other may find aversive. Thus, the rejection that high RS people expect occurs, validating their cognitions and cementing them afresh. In this way, the expectations that a person brings into an interaction shape that interaction, and can create stable and destructive patterns of relational behavior. These patterns can diminish a partner's satisfaction in and commitment to the relationship, leading to breakup and a confirmation of the high RS individual's rejection expectations.

The consequences of RS are not limited to adult relationships. The dynamic is acquired early; evidence of its functioning has been observed in children as young as fifth grade. Studies conducted with middle-school children have shown that high RS children experience interpersonal difficulties including aggressive and antisocial behavior, troubled relationships with peers and teachers, and disciplinary problems leading to suspensions (Downey, Lebolt, Rincon, & Freitas, 1998).

Our findings within a social-cognitive approach provide support for the view that RS operates within a vicious cycle with rejection expectations, setting in motion actions that lead to their fulfillment. Thus, at first glance, RS appears to be a dysfunctional system that perpetuates personal and interpersonal difficulties. An alternative viewpoint is that the RS dynamic functions to defend the self against rejection by significant others and social groups. To the extent that the individual has been exposed to the pain of rejection, protecting the self from rejection while maintaining close relationships will become an important goal and a protective system such as RS will develop to serve it. The adaptive value of the DMS comes from its ability to trigger quick defensive responses under threat conditions without needing time to think (e.g., LeDoux, 1996; Mesulam & Mishel, 1999; Olson, 2000). Such an emergency system can become maladaptive, however, if activated indiscriminately in situations that require reflective strategic behavior, when the threat is minimal, or when efforts to prevent the realization of the threat occur at the expense of other personal goals. We propose that the initial self-protective function of the RS system does sometimes turn into this maladaptive pattern.

Though we suggest that the RS dynamic develops over time as a mechanism to protect the self, we clearly distinguish rejection expectations in the model from coping strategies. In attachment theory, beliefs and coping orientations are seen as part of an amalgamated "attachment style" consisting of cognitions and affects about the likelihood of acceptance/rejection and strategies to cope with potential rejection. There is an as-
COPING WITH THE THREAT OF REJECTION VERSUS COPING WITH REJECTION

The model exposes how normal cognitive functions can develop with experience into maladaptive stable patterns of processing. In uncovering the mental steps leading to a hostile behavioral response to a seemingly innocuous comment, such as one that a distracted boyfriend might make, we seek to isolate potentially fruitful avenues of intervention. Indeed, we suggest that the dynamic can be disrupted at one of the model’s links between history and expectation, between expectation and perception, or between perception and response. Since we posit that, most commonly, the process is swift and automatic, it may seem difficult to avert the negative affective and interpersonal outcomes of RS. However, there are points that are particularly ripe for disruption. We suggest that the detection of threat cues triggers not only the RS dynamic, but also strategies designed to protect the self from the potential rejection. These strategies, however, can appear just as mitigated and extreme as would the hostile reactions that are inhibited.

One way in which the RS process can be interrupted is through targeted behaviors intended to prevent rejection from occurring, even in the presence of threatening cues—i.e., when rejection is recognized as a possibility but before it occurs. Another way is through conscious and controlled efforts to self-regulate responses to rejection once it has occurred. Both of these coping strategies involve highly regulated behavior in the service of the activated DMS. We describe them more fully below.
between RS and risk of engagement in self- or other harmful behavior in order to maintain the relationship. A prospective study of early adolescents (Purdie & Downey, 2000) showed that, to the extent that girls were high in RS in fifth-seventh grade, they were more likely 2 years later to agree with a statement indicating that they would be willing to do things that they knew were wrong to maintain their current dating relationship (e.g., "I would do anything to keep my boyfriend with me even if it's things that I know are wrong."). Similarly, in a cross-sectional pilot study of college women, RS was associated with a heightened likelihood of reporting having actually done things that felt wrong or uncomfortable to maintain a relationship (Downey & Ayduk, 2002). Second, we have shown a link between RS and self-silencing (Jack & Dill, 1992) which is enacted to preserve a relationship (Ayduk, May, Downey, & Higgins, 2003; Downey & Ayduk, 2002). In addition, in a study of college women, RS was associated with having avoided disclosing things about one's self or one's past to prevent rejection (Downey & Ayduk, 2002). In this study, RS was also related to an unstable sense of self, consistent with the hypothesis that people who are chronically concerned with actively preventing rejection may have self-schemas that are highly contingent on perceived evaluation by important others (Downey & Ayduk, 2002). That is, in their attempts to prevent rejection, these people may align their preferences, goals, and beliefs with those of important others because they see this as a way to establish a firm interpersonal connection. When they come into contact with various important others, then, their preferences, goals, and beliefs must change with the company, and their "true" but unspoken needs are never met.

Further evidence of this tendency comes from studies involving potential rejection from Internet groups formed on the basis of attitudes that are highly salient for college students. Romero and Downey (2004) gave participants attitude questionnaires purportedly to aid in assigning them to appropriate (fictitious) established Internet groups. Participants who were high in RS were more likely to agree to do menial tasks for a group after receiving a lukewarm set of e-mails from its members than after receiving clearly rejecting messages. That is, when acceptance was still a possibility, high RS participants were more likely to perform unpleasant tasks for the group, possibly because they saw this as a strategy to ensure acceptance. In a follow-up study, Romero and Downey investigated if this strategy of subjugating one's own needs for the group's needs would translate into self-presentation of attitudes. Participants were asked to fill out a set of questionnaires designed to assess their preferences and values, allegedly to fit them into an appropriate Internet group. They then wrote a message to and received several (fictitious) replies from their group members, who either matched or mismatched with the participants' political affiliation. Participants who were high in RS actually changed their attitudes (from their background responses) in an attempt to fit better with the group norm. Thus, when acceptance was seen as possible, high RS individuals tried to change their selves in ways that they perceived would likely maximize their chance of being eventually accepted.

We argue, in line with the RS model, that such attempts to meet the needs of others are attempts to maintain relationships, and that dismissing one's own needs may be seen by individuals who are high in RS as a necessary sacrifice. In the RS model, unmitigated communion can be thought of as a behavioral strategy motivated by a desire to prevent rejection. We would argue that this strategy is implemented only under certain circumstances, when the individual believes acceptance is still possible. Although such overaccommodation may help reduce the threat of immediate rejection by the partner, it may in the long run be harmful both to self and to the relationship (e.g., Allan & Gilbert, 1997; Jack, 1991, 1999, 2003; Jack & Dill, 1992). The negative effects of overaccommodation may be direct, such that these behaviors take a toll on mood and self-concept as one makes undue sacrifices. They may also be indirect, fueling maladaptive reactions to the perception of rejection, which indicates that prevention efforts have proved futile despite one's best efforts. This is evidenced by hostile responses to rejection among high RS individuals in both lab and diary studies (Downey & Feldman, 1996; Downey, Feldman, & Ayduk, 2000; Downey, Freitas, et al., 1998).

This shift from ingratiation before rejection to hostility after rejection can be more global: it can take place over the course of a relationship. High RS individuals are presumed to come into relationships eager and enthusiastic, though anxious. In order to ensure continued acceptance from their new partner, these individuals are ready to engage in self-silencing and ingratiating, subverting their own needs and goals in the interest of maintaining the relationship they are so anxious about losing. Over time, however, as minor (or ambiguously negative) cues build up, there may be a shift toward hostile overreactions. These can be all the more surprising and apparently unmotivated, if they are made in response to behaviors that have not elicited hostility in the past (before the shift, when the high RS individual was still vying for acceptance).

If one defines one's self solely relationally, in interaction with another person (or several people, if there is more than one "relational self") to go with more than one significant other), then the self exists only to the extent that the relationship does. In this case, what does rejection signal? Does RS come from a fear of loss of self should the relationship end? Do high RS people see relationships as a source of identity that they must be discarded when the relationship ends? This inconsistent self-presentation, leading potentially to a lack of self-concept clarity, is one of the dangers of the RS dynamic that we have not yet studied thoroughly. Together, these findings suggest that high RS individuals are vulnerable to engaging in potentially
self-defeating behavior in order to prevent the realization of threats to their sense of self.

Self-Regulation
The kinds of hostile and unrestrained reactions to rejection that we have found to be associated with RS may suggest the absence of effective self-control, or dysfunctional emotional regulatory systems. However, not all people who fear and expect rejection experience its negative consequences to the same degree. Though these individuals show similar physiological responses in trigger situations, indicating an activation of the DMS, they are able either to inhibit maladaptive responses or to access a repertoire of adaptive ones. How do these individuals differ from the high RS reactors?

In some of our recent work, we have started to examine possible mechanisms that might moderate effect of RS on interpersonal difficulties and maladaptive personal outcomes. As we described earlier, high RS people typically overreact both in anticipation of and in reaction to rejection. At the anticipation stage, rejection cues automatically activate the DMS, leading to vigilance for rejection and making individuals susceptible to perceiving and magnifying intentional rejection even with minimally ambiguous cues. High RS people also overreact to perceived rejection because this heightened anticipatory stress appears to accentuate already active fight-or-flight or affiliation-seeking response mechanisms. The challenge for high RS individuals in rejection-related situations, then, seems to be regulating themselves so that they can restrict and modulate their automatic DMS reactivity. This conceptualization suggests that people who have the competencies to strategically down-regulate "hot" DMS activation associated with RS may be better able to cope more rationally and reflectively with rejection, and to behave in accordance with their long-term relationship goals rather than their defensive impulses, thus avoiding characteristic patterns of maladjustment.

Converging evidence from delay-of-gratification studies (Mischel & Mischel, 1999; Mischel, 1973, 1996) and developmental research shows that flexible and strategic attention deployment is crucial for distress and impulse inhibition (Derryberry & Reed, 2002; Derryberry & Rothbart, 1997; Thompson, 1994; Wilson & Gottman, 1996). Experimental studies of delay of gratification, for example, have shown that the child's ability to forgo immediate gratification for a delayed but preferred reward is mediated by effective attention deployment in the service of arousal reduction (Mischel, Shoda, & Rodriguez, 1989). Attention deployment strategies used to successfully delay gratification include purposeful self-distraction and cognitive reframing operations that "cool" the frustrating "hot" aspects of the delay situation (Mettaflle & Mischel, 1999).

Despite surface differences, regulation of behavior in the appetitive domain (delay of gratification) and in the defensive domain (fight-or-flight and anxiety-driven support seeking) appear to hinge on the ability to attenuate arousal by cooling the "hot" arousing and impulse-eliciting features of the situation. Maintaining the frustration inherent in these seemingly different regulatory tasks at manageable levels then enables individuals to inhibit impulsive reactions and access reflective processes that facilitate the attainment of long-term goals. Vigilance, or narrowing of attentional focus on rejection cues, adaptive in the short term (see, e.g., Ohman, 2000) but maladaptive in the long term, may mediate the relationship between anxious rejection expectations and deleterious responses.

The prototypical RS dynamic that we have described so far may characterize primarily those high RS individuals with self-regulatory difficulties. These difficulties may play out both in the rejection-anticipation phase and in the reaction-to-rejection phase. In the anticipation phase, an inability to divert attention away from rejection features and from one's own internal emotional states in the face of possible rejection may hinder high RS individuals from encoding contextual information that may provide alternative explanations for others' behaviors (Arriaga & Rusbult, 1998; Dodge, 1980; Dodge & Somberg, 1987; Downey & Feldman, 1996; Holtworth-Munroe & Hutchinson, 1993). The absence of alternative explanations may foster a readiness to perceive intentional rejection in a perpetrator's behavior (Dodge, 1980). When rejection is perceived, lack of self-regulatory ability may make high RS individuals susceptible to the "here-and-now" focus that would make them respond destructively to behavior that they perceive to be hurtful without considering the long-term impact on valued goals (Rusbult et al., 1991).

Conversely, through strategic attention deployment (i.e., purposeful avoidance of rejection cues), high RS individuals with high self-regulatory ability can dampen the activation of vigilance, better attend to situational information, and generate alternative explanations to that of intentional rejection. By making finer distinctions between intentional rejection and ambiguous behavior that may be benignly intended, they may be less susceptible to false alarms and a rapid generation of a fight-or-flight or an anxiety-driven reassurance-seeking response. Individuals high in delay-of-gratification ability also may be better at using cognitive reappraisal strategies (Gross, 1998; Kelly, 1955; Lazarus, 1999; Mischel, 1973) that transform the subjective meaning of a threatening situation (e.g., a partner's negative behavior) in such a way that it is less threatening. For example, rather than encoding an argument with a romantic partner as a globally negative event with irreversible consequences (e.g., breakup of the relationship), rejection-sensitive people high in self-regulation may be able to construe the event as simply a difference of opinions, restricting the event's negativity to the here-and-now rather than catastrophizing it. Likewise, a partner's currently negative behavior can be understood as transitory and situationally induced (e.g., due to stress), and its importance or centrality for the person's long-term goals can be attenuated by placing such behav-
We hope that avenues currently under investigation will lead us to implementable interventions for high RS individuals, whose relationship behaviors can turn their rejection expectations into reality (Downey, Freitas, et al., 1998).

Many researchers have taken advantage of developments in social cognition and personality, creating a field of relationship science that delves beyond broad categorizations and global descriptions. Viewing personal- sity as a set of processing dispositions, triggered by cues acquired from an individual's social-cognitive learning history, can demystify the personality- relationship link. This focus on psychological mediators is shared by other models that incorporate in their conceptualization some version of the notion of "mental representations" of relationships (e.g., Andersen & Chen, 2002; Baldwin, 1992). A number of attempts have been made to explain the link between relationship behavior and global personality traits through investigations of the self. While the "self" remains an elusive concept in psychology, various theories about self processes have appeared to unravel the links between, for example, low self-esteem and unsuccessful relationship histories (e.g., self-discrepancy theory; see Higgins, 1987).

Many, or most, of the existing theories of individual differences in interpersonal relationships can be interpreted as social-cognitive, with at least a recognition (though not always clearly defined) of the dynamics that lead to relationship behavior. These models share a few key components.

First, though not all theories explicitly outline the process whereby cognitive-affective mediators link experience with behavior, the emphasis on them, born of new paradigms and research methodologies, is almost ubiquitous. The age of global, pan situational, stable trait characterizations is over; the tools that psychology has available to it today are leading to a more precise and more dynamic investigation of people's cognitions, affects, and behavior. One key contribution that new approaches in psychology make is to assess more definitively how theoretically and empirically related constructs (e.g., self-esteem, RS, and attachment style) differ from each other—if at all. Overall, relatively little attention has been paid to comparing the psychophysiological correlates of conceptually and empirically related personality dispositions. Yet the burgeoning interest in the neurobiological bases of psychological processes suggests the importance of this line of research. Are RS and self-esteem driven by the same neurobiological correlates? The new paradigms allow us to establish whether the profile of psychophysiological reactions to rejection and acceptance associated with each of these relevant constructs is similar to or different from that associated with RS.

A related idea common to current models of relationships is that individual differences in relationship behavior develop due to a social-cognitive learning history, beginning with parental interactions and developing over time. Mental representations of, and expectations and beliefs about, relationships are generated quickly and early. The contingencies of the
INTERPERSONAL COGNITION

mother–child relationship must be mastered to maintain contact (e.g., security, food) and so ensure survival. These early representations of how a caregiver responds to a baby's needs provide the foundation for later relationships. Security, a form of relationship behavior and outcomes that may appear dispositional, can be reinforced through a self-fulfilling system of attributions and inferences. This depersonalization of relationship styles and dispositions is a misnomer for the increasing frequency of using personality traits to describe innate human characteristics. Finally, the self model, along with attachment theory and other social-cognitive models of interpersonal interactions, emphasizes the dimension of acceptance–

denial personality disorder, narcissistic personality disorder, and avoidant personality disorder. This is considered to be a normal part of the developmental process of the self system and to have implications in situations where the self system may be in conflict with the external environment.

This research was supported by Grant No. R01-MH069703-01 from the National Institute of Mental Health.

REFERENCES


INTERPERSONAL COGNITION


### Interpersonal Cognition and the Quest for Social Acceptance

MARK R. LEARY

During the 1980s and much of the 1990s, social psychology was dominated by an interest in social cognition, the processes by which people perceive, draw inferences about, and think about other individuals and social groups. Literally thousands of studies focused on the processes that guide people's inferences about one another and the consequences of those inferences for phenomena such as person perception, attribution, stereotyping, intergroup behavior, attraction, conflict, aggression, and emotion. This emphasis on social cognition was certainly not misplaced—after all, human beings derive a great deal of thought to discerning the characteristics, feelings, and intentions of other people, and how people think about others obviously affects their own feelings and behaviors. Yet, in exploring the nature, determinants, and consequences of social cognition, researchers have largely ignored a broad portion of interpersonal thought that deals with the reflexive process by which people think specifically about what other people might be thinking about them.

When people think about other individuals, they are at least as interested in trying to determine how those individuals perceive and evaluate them as they are in trying to draw inferences about the others' personal traits or motives, if not more so. A man and a woman on a first date undoubtedly want to get to know one another, but they are also acutely interested in determining the other's impressions of and feelings about him- or