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The Role of Rejection Sensitivity in People's Relationships with Significant Others and Valued Social Groups

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An event that caught the attention of America in 1998 was the shocking behavior of 13-year-old Mitchell Johnson and 11-year-old Andrew Golden, who opened fire in their schoolyard, killing four classmates and a teacher in Jonesboro, Arkansas. Friends' accounts of the events leading to the shootings revealed that Johnson was troubled by the recent divorce of his parents and by the ending of his relationship with a girl. Earlier that week, Johnson had apparently told a friend that he intended to shoot all the people at school who rejected him (Labi, 1998). Yet another tragic story in 1998 involving unrequited love is that of Julie Scully, who was murdered and dismembered by her boyfriend Giorgos Skiadopoulos in a jealous rage, supposedly triggered by her comment that she missed her young son who was living far away. In 1999, another school shooting shocked the nation; this time two high school seniors in Denver, Colorado, killed 13 classmates and a teacher before taking their own lives. Eric Harris and Dylan Klebold's rampage appears to have been, in part, a reaction to a group of peers who teased and marginalized them.

These anecdotes suggest that the fear of abandonment and feelings of rejection can be associated with crimes of passion and revenge. Research also has shown that people who lack or have insecure social bonds are susceptible to a variety of psychological difficulties, including depressive symptomalogy (e.g., Davila, Burge, & Hammen, 1997; Hammen, Burge, Daley, & Davila, 1995), mental illness (e.g., Bowlby, 1969, 1973; Leary, 1990), physical illness (see Lynch, 1979; also see Goodwin, Hunt, Key, & Samet, 1987), and even suicide (e.g., Rothberg & Jones, 1987; Trout, 1980).

Although belonging and acceptance are basic, universal needs (e.g., Bowlby, 1969, 1973; Freud, 1936; Horney, 1937; Maslow, 1962; Sullivan, 1953; for a review, see Baumeister & Leary, 1995), not everyone whose needs are being neglected responds in such maladaptive ways. It is necessary, there-

fore, to account for these differences. Drawing on the attachment (e.g., Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987) and attributional perspectives (e.g., Dodge, 1980; Dodge & Somberg, 1987), Downey and her colleagues have proposed a cognitive-affective processing disposition, rejection sensitivity, that helps explain why individuals respond differently to perceived rejection (Downey & Feldman, 1996; Feldman & Downey, 1994).

In the following sections, we describe the rejection sensitivity (RS) model and evidence bearing on it. We review long-standing work in our laboratory on the role of RS in relationships with significant others (parental, peer, and romantic relationships) and then turn to more recent research regarding how RS can influence individuals' relationships with valued social groups and institutions. In the final section, we propose how to interrupt and break the vicious cycle of rejection sensitivity.

The Rejection Sensitivity Model

Defensive (i.e., anxious or angry) expectations of rejection by valued others represent the core of RS (see fig. 10.1). RS develops when people's needs are met repeatedly with rejection so that they come to expect significant others to reject them (link 1 of fig. 10.1). Yet, unlike an attachment perspective that views attachment style in global terms (e.g., global behavioral tendencies), RS is not a global disposition. Rather, defensive expectations of rejection are triggered only in situations that afford the possibility of rejection by valued others. Anxious expectations of rejection foster a hypervigilance for rejection cues, such that features of even innocuous social interactions are readily perceived as signs of intentional rejection (link 2 of fig. 10.1). After the behaviors of others are encoded as "rejecting" behavior, hurt and anger follow (link 3 of fig. 10.1) as well as the enactment of maladaptive behaviors (link 4 of fig.

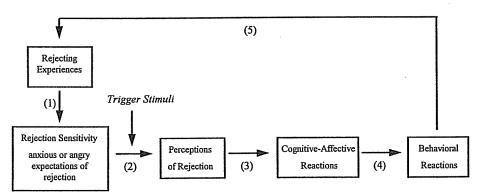


Figure 10.1 Rejection Sensitivity Model

10.1). To the extent that individuals' perceptions of rejection may be inaccurate, their negative responses to others' ambiguous behaviors can produce a self-fulfilling prophecy (e.g., Merton, 1948) in which actual rejection is elicited (link 5 of fig. 10.1).

Before we turn to a more detailed description of each link of the model, it is important to note variability in the RS cycle. First, rejection expectations lie on a continuum: low RS (LRS) individuals more calmly expect acceptance whereas high RS (HRS) individuals defensively expect rejection in ambiguous situations. Second, although HRS individuals may have all experienced prolonged or severe social rejection, their specific experiences may produce differences in, for example, their expectations (anxious vs. angry) and behavioral reactions (avoidance vs. intimacy seeking) in social situations.

The Development of Rejection Sensitivity (Link 1)

Consistent with an attachment perspective, RS is thought to develop from prior rejection experiences. Although early childhood problems between primary caregivers and children seem to have profound and long-lasting consequences for individuals' socioemotional adjustment (e.g., Bowlby, 1969, 1973, 1980; Sroufe, 1990), rejection by people other than primary caregivers also may lead to the formation of rejection expectations any time in the developmental course. In an ecological framework (Bronfenbrenner, 1979), the need to be accepted can be fulfilled or denied in many types of relationships, including proximal (parents, peers, romantic) and distal relationships (group, community, society). People can simultaneously experience social acceptance or rejection in one or more kinds of relationships.

Imagine, for example, a child who is adored and supported by her parents but who is constantly teased and rejected by her peers. Although she may be securely attached to her parents, peer rejection may lead her to expect rejection from other people such as romantic partners and colleagues. Indeed, early peer rejection has been linked to later maladjustment extending into adolescence and adulthood both in the form of externalizing problems (aggression) and internalizing problems (depression) (e.g., Bagwell, Newcomb, & Bukowski, 1998; Coie, Terry, Lenox, Lochman, & Hyman, 1998; Hecht, Inderbitzen, & Bukowski, 1998; Rudolph, Hammen, & Burge, 1997; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1998).

However, if one experiences rejection later in life, its effects on the strength and the scope of the rejection expectations may be restricted. In this case, imagine a college senior dumped by his fiancee and emotionally traumatized. Although he may approach other potential partners with wariness and at times with expectations of rejection, we would not expect him to approach his childhood friends or his parents with defensive expectations of

In short, we propose that rejection experiences in any type of social relationship may produce defensive expectations of rejection in one or more types of relationships. That is, rejection experienced in one type of relationship (e.g., with peers) may produce expectations of rejection in current and future relationships of the same type (e.g., with other peers) and may transfer to other types of relationships (e.g., with romantic partners, within valued social groups).

Rejection Expectations and Perceptions of Rejection (Link 2)

A key assumption of the RS model is that HRS individuals' expectations of rejection are activated in situations that afford the possibility of rejection (e.g., disapproval of or a conflict with a friend or romantic partner; see Mischel & Shoda, 1995, for other situation-specific models). These expectations of rejection may take the form of anxious or angry expectations of rejection—two high arousal, negatively valenced reactions to perceived threat (Lang, 1995). As we discuss later, the type of expectation that people have may be influenced by their age and cultural or environmental factors.

For HRS individuals who have experienced rejection in past social relationships, potentially rejecting interactions are threatening not only because they think rejection is likely but also because they are uncertain when rejection will actually occur. Under these conditions, a person becomes vigilant, meticulously scanning the environment for any possible rejection cues (e.g., Compas, 1987; Krohne & Fuchs, 1991) and preparing to act defensively once cues of rejection are detected. Although vigilance may be an attempt to predict rejection and, thus, be intended as a coping strategy, it makes the individual susceptible to false alarms as the threshold for perception of rejection is lowered. Therefore, activation of anxious expectations of rejection may result in the HRS individual more readily perceiving rejection even in the innocuous behaviors of others.

Perceptions of Rejection and Reactions (Links 3 and 4)

The RS model posits that perceptions of rejection first elicit cognitive-affective reactions such as hurt, anger, and blaming self or others (link 3), which may spill over into dejection, aggression, or withdrawal (link 4). People who have a tendency to blame others when things go wrong (other-blame) may be more prone to aggressive reactions, whereas those who have a tendency to blame themselves (self-blame) may be at higher risk for depressive symptoms and withdrawal.

What is the psychological mechanism that leads HRS individuals to maladaptively react to perceived rejection? Why do HRS individuals react to ambiguously intentioned negative behavior with hostility? Given that HRS individuals are vigilant for signs of rejection, they may readily attribute harmful intent to potential sources of rejection and disregard contextual cues

that may provide alternative explanations for others' behavior. This readiness to attribute intentional rejection to others' behaviors, in turn, may facilitate feelings of hurt and anger and even justify defensive behavioral reactions (see Dodge, 1980; Dodge, Murphy, & Buchsbaum, 1984; Dodge, Pettit, McClaskey, & Brown, 1986; Holtzworth-Munroe & Anglin, 1991; Holtzworth-Munroe & Hutchinson, 1993). For example, aggressive children who chronically expect rejection tend to attribute hostile intent to their peers' negative behaviors even when the underlying intent of their peers' behavior is ambiguous. Such attributional biases subsequently result in reactive aggression (Dodge, 1980; Dodge, Murphy, & Buchsbaum, 1984; Dodge, Pettit, McClaskey, & Brown, 1986). Likewise, wife assaulters have been found to attribute more hostile intent to their wives' behavior than nonassaulters (Holtzworth-Munroe & Hutchinson, 1993). Thus, the perceived rejection-to-defensive reactions link may be mediated by HRS individuals' readiness to attribute harmful intent to others' actions.

Coping with Sensitivity to Rejection

How do HRS individuals regulate their interactions with others? Drawing on clinical theories of coping with rejection (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1973, 1980; Horney, 1937), the RS model includes two broad strategies people may use to cope with their heightened sensitivity to rejection. These strategies are associated with different behavioral reactions to perceived rejection; unfortunately, both strategies likely perpetuate the RS cycle.

For instance, some HRS individuals may try to avoid rejection by securing intimacy and unconditional love in the belief that "If you love me, you will not hurt me" (Horney, 1937, p. 96). High investment in a relationship, coupled with anxious expectations of rejection, is likely to heighten HRS individuals' propensity to perceive and overreact to minor or ambiguous cues of rejection in their significant others' behavior. This strategy may put intimacy-seeking HRS individuals at heightened risk for inappropriate attempts to avoid rejection. Specifically, they may be vulnerable to blind actions, even those they are uncomfortable doing, to please their partner and maintain the relationship (e.g., Purdie & Downey, in press).

Alternatively, some HRS individuals may try to avoid rejection by shunning intimate relationships in the belief that "If I withdraw, nothing can hurt me" (Horney, 1937, p. 96). Intimacy-avoidant HRS individuals then may attempt to shield themselves from rejection through reduced involvement in intimate relationships, such as close friendships and serious romantic relationships. Whereas this strategy may help HRS individuals avoid stormy interpersonal relationships, they may also lose opportunities for attaining the sense of acceptance missing from their lives. Therefore, this strategy may put people at risk for constant loneliness and depression.

Why do HRS individuals adopt one course of action rather than another? Relationship seeking versus avoidance strategies may be specific to a particular relationship or type of relationship. Temperamental factors such as dispositionally high inhibition also can influence the strategy used to cope with rejection sensitivity. The strategy an individual typically uses may also reflect one's early rejection experiences. Ainsworth et al. (1978), for example, suggested that consistent parental rejection may prompt avoidance of relationships, whereas intermittent rejection may prompt an ambivalent preoccupation with relationships with mixed support. These two forms of behavioral reactions also may have precursors in the kind of expectation—anxious versus angry expectations—HRS individuals possess. That is, anxious expectations of rejection may be more closely linked to ingratiating behavior, and angry expectations may be more closely linked to hostility. Although it is not completely clear what prompts HRS individuals to behave in one way or another, both relationship seeking and avoidance strategies could perpetuate rejection. As we will describe, such behavioral patterns are likely to undermine the relationships of rejection-sensitive people and result in actual rejection to become self-fulfilling prophecies (e.g., Jussim, 1986; Merton, 1968).

Operationalization of RS

The context-sensitive conceptualization of rejection sensitivity is captured in the measurement tool. The RS measure used in most of the studies described in this chapter taps expectations of rejection from important others. Respondents are asked for their expectations of rejection in hypothetical situations in which an important acquaintance or a significant other may potentially refuse their request for help, advice, or companionship. The two forms of the measure, a child/early adolescent version and late adolescent/ young adult version, are similar in format. The adult rejection-sensitive measure (RSQ; Downey & Feldman, 1996) contains 18 interpersonal situations, including situations involving peers (e.g., "You ask a friend to do you a big favor"), parents (e.g., "You ask your parents to come to an occasion important to you"), and romantic partners (e.g., "You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her"). The child version of the rejection sensitivity questionnaire (CRSQ; Downey, Lebolt, Rincon, & Freitas, 1998), by contrast, contains 12 situations, including items pertaining to peers (e.g., "You had a really bad fight with a friend the other day. You wonder if your friend will want to talk to you today") and teachers (e.g., "You decide to ask the teacher if you can take a video game for the weekend. You wonder if she will let you have it").

In each version of the measure, respondents are asked to rate their expectations of rejection (e.g., "I would expect that s/he would be willing to help me out") as well as their concern about the outcome (e.g., "How anxious/or angry would you be whether your friend would want to help you out"). Level of RS in each situation is calculated by multiplying the degree of concern by

the degree of expectation of rejection. The adoption of an expectancy-value model (e.g., Bandura, 1986) captures the notion that HRS individuals do not merely expect rejection (as, for example, telephone solicitors do) but also are anxious or concerned about the possibility of rejection (which telephone solicitors are not).

The adult version of RSQ operationalizes the concern component for each scenario in terms of anxiety, and the CRSQ asks respondents about both how anxious and how angry they would be about the prospect of rejection in each scenario described. In the studies summarized in this chapter, the CRSQ was used with the angry component of rejection expectations rather than the anxious component of expectations. The decision to examine the consequences of angry expectations of rejection in children was based on pilot work indicating that both anxiety and anger were salient emotions for them in situations in which rejection was possible.

Because both the child and adult forms of the measure show a stable onefactor structure, a rejection sensitivity score is calculated as the average of the total (cross-situational) responses. The one-factor structure also suggests that rejection sensitivity is likely to impact different types of interpersonal relationships (e.g., peer, romantic, parent). In most of our studies, HRS individuals are defined as those with scores above the median, and the reverse is true for LRS individuals. The RS measures show good internal and test-retest reliability and discriminant validity in both the late adolescent/adult (see Downey & Feldman, 1996) and child/early adolescent samples (Downey, Lebolt, et al., 1998). Validation studies showed that RS is not redundant, in its predictive validity, with measures of introversion (Eysenck & Eysenck, 1964), self-esteem (Rosenberg, 1979), general attachment style (Hazan & Shaver, 1987; Levy & Davis, 1988), or social anxiety (Watson & Friend, 1969).

In the following sections, we show the impact of rejection sensitivity on social functioning in different relationships. We begin by describing our research on dyadic relationships (peer, parent, romantic) and then turn to our recent research on relationships with valued social groups and institutions.

Significant Dyadic Relationships

In examining each link hypothesized by the RS model in the context of significant dyadic relationships, we will lean heavily on data from college student samples, although we also will note relevant findings from younger samples.

Early Rejection and the Development of Rejection Expectations

In a study of college students, Feldman and Downey (1994) explored whether the roots of anxious expectations of rejection lie in experiences of rejection from parents. Participants completed the RSQ and then answered questions about the quality and nature of their relationships with family members during childhood. They also completed the Conflict Tactics Scale (CTS; Straus, 1979), which assessed their exposure to their parents' use of physical conflict tactics toward each other and toward them. As predicted, if college students had been exposed to frequent and severe family violence during childhood, they anxiously expected rejection in current relationships. In addition, Downey, Khouri, and Feldman (1997) found that emotional neglect and conditional love by parents were associated with heightened levels of rejection sensitivity.

Although this study suggested continuity between early experiences and later rejection expectations, its retrospective design did not allow strong causal inferences. Therefore, Downey, Bonica, and Rincon (1999) explored the relation between rejection experiences and rejection expectations in early adolescents in a longitudinal study. Specifically, fifth, sixth, and seventh graders completed the CRSQ, and their primary caregiver completed a questionnaire assessing their use of hostile and rejecting behavior toward their child. The following year when the children were in sixth to eighth grade, they completed the CRSQ a second time. Primary caregivers' reports of harsh parenting practices predicted an increase in their children's defensive expectations of rejection. These data provide support for a continuity between exposure to parenting that communicates rejection and the development of rejection expectations that guide people's feelings, thoughts, and behaviors in their future relationships. As previously discussed, our model suggests that rejection experiences involving significant others aside from parents also may lead to the development of rejection experiences. Clearly, future research should address this possibility directly. In the next section, we address the process through which defensive (anxious or angry) rejection expectations lead to both personal distress and interpersonal difficulties, and we present empirical evidence for each link hypothesized in the RS model.

Rejection Expectations and Distress and Perceptions of Rejection

We found empirical support for the hypothesized link between the activation of anxious rejection expectations, on the one hand, and increased distress and a readiness to perceive intentional rejection, on the other hand, in two studies with college students (Downey & Feldman, 1996). The first study was a laboratory experiment. After completing an initial mood scale and the RSO, participants were introduced to a stranger of the other gender, a confederate, with whom they expected to converse during two short sessions. Following the first session, however, the experimenter informed participants in the experimental condition that their study partner (i.e., the confederate) did not want to continue with the experiment. No explanation for the confederate's behavior was given. In the control condition, the experimenter told the participants that there was not enough time to complete the second session. Subsequently, participants in both conditions completed a mood scale used to assess their post-manipulation anxious, angry, depressed, and rejected moods. In addition, the experimenter rated the participants' reaction to the manipulation. Results indicated that only HRS individuals in the experimental condition reported a significant increase in rejected mood. Such an increase was not observed for any other mood ratings and was thus restricted to feelings of rejection. Experimenter ratings of participants' negative affect also corroborated these findings: HRS individuals were perceived as being more upset and confused in reaction to the experimental manipulation. These findings were replicated with adolescents in a study using a similar paradigm (Downey, Lebolt, et al., 1998; study 2).

To establish whether anxious expectations of rejection predicted the perception of intentional rejection in a romantic partners' behavior, Downey and Feldman (1996; study 3) undertook a prospective study of college students. The study tested whether a person's rejection expectations assessed before he or she began a new romantic relationship would predict attributions of hurtful intent to a new partner's insensitive behavior (e.g., being inattentive and distant). To assess the predictive utility of the RSQ above and beyond constructs that are conceptually and empirically related to anxious expectations of rejection, participants also completed measures that assessed social anxiety (Watson & Friend, 1969), social avoidance (Watson & Friend, 1969), adult attachment styles (Hazan & Shaver, 1987; Levy & Davis, 1988), self-esteem (Rosenberg, 1979), neuroticism (Eysenck & Eysenck, 1964), and introversion (Eysenck & Eysenck, 1964). Anxious rejection expectations assessed before a romantic relationship began predicted the extent to which people would attribute hurtful intent to their new romantic partner's insensitive behavior. The prospective relationship between RS and attributions did not change when other personality dispositions were used as statistical controls, and none of these other measures was significantly related to individuals' attributions for their new partner's behavior.

Taken together, this set of findings supported three basic premises of the RS model: (1) HRS individuals experience distress and negative moods in situations that activate their expectations of rejection; (2) HRS individuals more readily feel rejected in response to ambiguous interpersonal cues than LRS individuals; and (3) activation of defensive rejection expectations occurs in situations when rejection is a possibility.

Impact of RS on Reactions to Rejection, Quality of Relationships, and Psychosocial Adjustment

Given HRS individuals' tendency to perceive intentional rejection in the ambiguous behaviors of their partners, we hypothesized that they would feel more insecure and unhappy about their relationships and respond to rejection cues by their partners with hostility, diminished support, or jealous, controlling behavior. When unjustified, these behaviors are likely to erode even the most committed partner's satisfaction with the relationship. These hypotheses were investigated in a series of studies with college undergraduates.

In one study (Downey & Feldman, 1996; study 4), college-student couples in committed nonmarital relationships completed the RSQ and provided information about themselves and their partner. As hypothesized, HRS individuals showed higher levels of concern about being rejected by their partners, irrespective of their partners' actual (self-reported) commitment to the relationship. Their concern was obvious to their partners, who perceived them to be insecure in the relationship. Partners of HRS individuals also were less satisfied with their relationship than were partners of LRS individuals. Nevertheless, HRS individuals held more exaggerated views of their partners' level of dissatisfaction than LRS individuals. An investigation of the role of HRS individuals' behaviors on their partners' dissatisfaction revealed that jealous and controlling behavior accounted for almost a third of the effect of men's RS on their female partner's relationship dissatisfaction. Hostility and lack of support accounted for over a third of the effect of women's RS on their male partner's relationship dissatisfaction.

Hypersensitivity to rejection, jealousy, and controlling behavior has been identified as characteristic of abusive men in numerous studies (e.g., Dutton, 1988; Walker, 1979, 1984). The findings of heightened levels of jealous, controlling behavior in HRS men led Downey and her colleagues to also investigate whether HRS men are more violent toward their partners than LRS men (Downey, Feldman, & Ayduk, 2000). Specifically, they hypothesized that anxious rejection expectations would predict intimate violence in men who were highly invested in romantic relationships. Downey et al. (2000) reasoned that, among men who are not invested in relationships, anxious expectations of rejection should be associated with social isolation and avoidance and thus might be related to lower intimate violence.

Cross-sectional data from male college students were used to test these hypotheses. Participants completed the RSQ, a measure of relationship investment, the CTS (Straus, 1979), the Social Avoidance and Distress Scale (SADS; Watson & Friend, 1969), and a measure of social involvement in close relationships. Dating violence was assessed by the CTS, which assesses participants' physically aggressive behavior toward a dating partner. Social isolation was indexed by the SADS, which measures people's anxiety or distress about public social situations and their tendency to avoid such situations. Relationship investment was assessed by items (e.g., "Some students feel that being able to establish romantic relationships is important") taken from Neeman and Harter's (1984) measure of the importance of a variety of interpersonal and noninterpersonal domains (e.g., relations with parents, academic achievement). Participants also reported the number of close friends they had seen or talked to on the phone in the past 2 weeks and the number of serious or committed relationships in which they had been involved.

Downey et al.'s (2000) hypotheses were confirmed. Among college men who reported relatively high investment in romantic relationships, anxious expectations of rejection predicted dating violence. Among men who reported relatively low investment in romantic relationships, anxious expectations of rejection predicted reduced involvement in close relationships with friends and romantic partners and, more generally, increased distress in and avoidance of social situations.

The relationship between RS and interpersonal difficulties also was investigated in a 1-year longitudinal study with early adolescents. Specifically, Downey, Lebolt, et al. (1998; study 3) explored whether children who expected rejection from peers and teachers experienced increased interpersonal difficulties over time. The RS model predicts that rejection expectations will lead to cognitive-affective-behavioral reactions to perceived rejection which, in turn, may elicit further rejection (e.g., victimization) and social maladjustment (e.g., getting into fights). Thus, Downey, Lebolt, et al. (1998) predicted that negative influences would be increasingly clear over the course of a year—that children who expected rejection would act in ways that elicited rejection. The children were first tested when they were in fifth, sixth, or seventh grade and then were tested with the same set of measures a year later. Children completed the CRSQ and reported acts of aggression and of being victimized. Teachers evaluated each child's aggression, social competence, and rejection sensitivity, and the dean of students provided reports of serious transgressions including fights with peers and conflicts with school personnel. The children's self-reports revealed that RS predicted differences in aggressive, antisocial behavior and being victimized. Over time, HRS children became more aggressive toward peers, showed a decline in competent classroom behavior, and became more sensitive and reactive to negative interpersonal events. Moreover, official reports revealed that, compared with LRS children, HRS children were more frequently referred for official punishment from conflicts with peers and for being defiant with adults and were more frequently suspended from school as punishment for such behavior.

In summary, the findings described here support predictions from the RS model that rejection expectations are related to negative behavioral and interpersonal outcomes, such as jealousy, controlling behavior, physical violence (among men), as well as hostility and withdrawal of support (among women). Rejection expectations also are related to troubled, volatile, and aggressive relationships with both peers and teachers and suspension from school for early adolescents.

In the next section, we describe a series of studies that test whether the link between defensive expectations of rejection and behavioral overreactions is indeed mediated through HRS individuals' readiness to perceive intentional rejection in others' negative behaviors, even when the underlying intent is ambiguous.

Perceived Rejection and Overreactions

Rejection and hostility. The hypothesis that HRS women would display hostility to a greater extent than LRS women only in situations in which they felt rejected was investigated in a series of studies (Ayduk, Downey, Testa, Yen, & Shoda, 1999). The first study used a sequential priming-pronunciation paradigm to assess whether priming thoughts of rejection would automatically facilitate hostile thoughts. Ayduk et al. hypothesized that priming thoughts of rejection would facilitate thoughts of hostility to a greater extent in HRS than LRS women. However, they did not expect that thoughts of hostility would be more chronically accessible to HRS than LRS women, as should occur if HRS women were dispositionally more hostile than LRS women across situations.

In this paradigm, participants pronounce, as quickly as possible, a target word presented on a computer screen that is preceded by the presentation of a prime word. Time to the onset of pronunciation has been established as a reliable measure of the strength of mental associations in previous research (e.g., Bargh, Chaiken, Raymond, & Hymes, 1996; Bargh, Raymond, Pryor, & Strack, 1995). The assumption underlying this paradigm is that, to the extent that responses to target words representing a particular concept are facilitated by prime words representing another concept (as compared to a control or neutral prime), an automatic mental association exists between the concept represented by the prime and the concept represented by the target.

The results supported Ayduk et al.'s hypotheses. The HRS women began pronouncing hostility words (e.g., "hit") faster than LRS women when the words were preceded by rejection words (e.g., "abandon"). When other negative words (e.g., "vomit") served as a prime, HRS and LRS women did not differ in the onset of their pronunciation of hostile words, indicating that negative words in general do not elicit hostility from HRS women. Moreover, HRS and LRS women did not differ in the condition in which hostile words were preceded by neutral words (e.g., "board"), suggesting that HRS women are not dispositionally more hostile than LRS women.

In another laboratory experiment, Ayduk et al. (1999, study 2) also examined whether hostile thoughts activated by rejection thoughts translate into hostile behaviors. Participants were told that the goal of the study was to understand how people established on-line relationships such as through virtual dating services. First, female participants exchanged biographical sketches with a potential (fictitious) dating partner with whom they expected to interact over the Internet. Following the exchange, participants were told that the interaction would not occur. Participants in the experimental condition were told that the male participant did not want to continue with the on-line interaction part of the study and had departed. Participants in the control condition were given a situational explanation, equipment failure, for why the interaction would not occur. In contrast to the Downey and Feldman experiment (1996; study 2) in which the experimental rejection was

less personal and more ambiguous and the context of the study was potentially more innocuous (a study of impression formation), the experimental manipulation in this study was a more explicit, personal rejection and the context of the study was more disconcerting (i.e., to consider potential romantic partners). Therefore, Ayduk et al. expected, and found, that HRS and LRS women in the experimental condition showed an equivalent increase in feelings of rejection following the rejection manipulation.

Participants then were given the opportunity to evaluate their impressions of their assigned partner's biographical sketch. Hostility was operationalized as the reduced positivity of the women's evaluations of their partner. In the rejection condition, HRS women evaluated their partners less positively than LRS women, whereas in the control condition, in which there was no reason to feel rejected, HRS women and LRS women had similar evaluations of their partners. Thus, the hypothesis that hostility is a specific reaction to rejection for HRS women was supported in this controlled experimental setting.

Because the ultimate goal of this program of research is to understand the impact of RS on people's ongoing relationships, Ayduk et al. (1999, study 3) also conducted a longitudinal daily diary study with undergraduate dating couples. The daily diary design allowed Ayduk et al. to examine HRS and LRS women's hostility toward romantic partners as a function of the day-to-day variation in feelings of rejection. From previous findings, Ayduk et al. hypothesized that HRS women would react in a hostile way toward their romantic partners only when they felt rejected. They used conflicts to index hostility and expected HRS women to show a higher probability of reporting conflicts than LRS women on days after they felt rejected, but not otherwise. They did not expect the likelihood of conflicts for LRS women to be related to feelings of rejection.

The analyses used a multilevel or hierarchical linear model approach, which permits the simultaneous analysis of within- and between-person variation (Bolger & Zuckerman, 1995; Bryk & Raudenbush, 1992; Kenny, Kashy, & Bolger, 1998). In short, Ayduk et al. compared the probability of women getting into conflicts with their partners following days when they felt rejected to days when they did not feel rejected. As expected, HRS women were more likely than LRS women to get into conflicts with their partners on a diary day if they had felt rejected the previous day. On days following low perceived rejection, HRS women did not differ from LRS women in likelihood of conflict.

Does a similar link between feelings and perceptions of rejection and angry overreactions exist among HRS men? Hypothesizing that men may be more concerned about social status and respect among peers (socially prescribed masculine values) than women, Ayduk and Downey (1999) have explored whether publicly threatening HRS men's status would trigger perceptions of rejection and resulting angry reactions. To test this hypothesis, they adapted the general procedure and cover story of the rejection experiment used by Ayduk et al. (1999, study 2). Unlike in the Ayduk et al. study,

however, these participants (all male) were told that a male peer whom they did not know would be watching them and forming an impression of them. They were told that a video camera in the experimental room was connected to a monitor in another room where the observer would be watching them interact with their female partner while they chat over e-mail. Following the exchange of biosketches, participants in the rejection condition were told that their partner did not want to continue with the experiment, whereas participants in the control condition were told the interaction could not occur because of a situational explanation (equipment failure). Subsequently, they were asked to evaluate their impressions of their partner based on her biosketch.

Preliminary results from this study suggest that, like HRS women in the Internet rejection condition (Ayduk et al., 1999, study 2), HRS men who believed that a peer observed the rejection evaluated their partner less positively than HRS men who were in the control condition, as well as LRS men in both conditions. In contrast, HRS men in the control condition did not respond differently than LRS men. These results support a link between rejection and retaliatory hostility in men. They also suggest that rejection cues that trigger hurt and anger for HRS men may specifically jeopardize their public self and social status.

Rejection and depression. Hostility, of course, is not the only type of reaction that HRS individuals may display in response to perceived rejection from romantic partners. Internalizing reactions such as self-blame, low self-esteem, and depression may be expressions of pain as well. To begin to address these alternative reactions to perceived rejection, Ayduk, Downey, and Kim (in press) examined whether HRS women show a heightened vulnerability to depressive symptomatology following rejection by their romantic partners. A sample of 220 female undergraduates completed the RSQ and the Beck Depression Inventory (BDI; Beck & Steer, 1987) during their first month of college. At the end of the college year, they completed the BDI for a second time. At that time, they also recorded their dating history for the intervening period. From that record, it was possible to determine whether they had experienced the ending of a romantic relationship over the course of the year and, if so, who had initiated the breakup. Findings supported the hypothesis that HRS women would be more vulnerable to depression than LRS women when their partners initiated the dissolution of their relationship. The HRS women whose romantic partners ended the relationship showed the highest increase in depressive reactions over the course of the year. Controlling for women's academic performance did not change this pattern. Therefore, these results supported two conclusions: (1) HRS women are not dispositionally more depressed than LRS women; rather, they show depressive reactions in the face of rejection, and (2) this pattern is not attributable to low academic performance, an alternative explanation for increased depression.

RS and Actual Rejection: A Self-Fulfilling Prophecy

As described in the preceding sections, anxious expectations of rejection are positively related to partner dissatisfaction among college students, and this relationship is mediated by HRS men's jealous and controlling behavior and HRS women's hostile and support-withdrawing behavior (Downey & Feldman, 1996; study 4). These results suggest that the negative behavior of HRS individuals in relationships, especially if they frequently react to innocuous behaviors on their partners' part, may erode the satisfaction of even a highly committed partner and the foundations of the relationship. Reduced partner satisfaction may eventually bring about actual rejection by the partner through the dissolution of the relationship. In this way, the legacy of RS may be maintained, at least partly, by a self-fulfilling feedback loop.

Downey, Freitas, Michealis, and Khouri (1998) directly investigated the self-fulfilling prophecy hypothesis in a daily diary study. Participants were couples in committed dating relationships; at least one partner was an undergraduate. Participants first completed a set of background measures including the RSQ, global measures of relationship satisfaction and commitment, and demographic questions. Then for the next 4 weeks, both members of each couple completed a daily structured questionnaire that included questions about participants' relationship dissatisfaction, thoughts of ending the relationship, perceptions of accepting partner behavior, and perceptions of rejecting partner behavior. A year after the completion of the diary study, one member of each couple was contacted and asked whether the couple was still together. Of the couples contacted, 29% had broken up.

In fact, RS predicted relationship breakup for both men and women, even when controlling for partners' initial level of RS, relationship satisfaction, and commitment. Data from the diary study were used to help shed light on the processes whereby RS undermines relationships for women but not men. Specifically, naturally occurring conflicts were found to trigger a process through which women's rejection expectancies led to their partners' rejecting responses, operationalized as partner-reported relationship dissatisfaction and thoughts of ending the relationship. Both of these indices of rejection predicted breakup for men and for women.

On days preceded by conflict, HRS women's partners were more likely than LRS women's partners to experience relationship dissatisfaction and to think of ending the relationship. Moreover, HRS women's partners felt significantly more negatively about the relationship on days preceded by conflict than on days that were not. The pattern was reversed, but to a non-significant degree, for the partners of LRS women. These findings are not attributable to the stable effects of partner background characteristics, because these are held constant in within-couple analyses. Nor can they be accounted for by the contaminating effect of the prior day's dissatisfaction and thoughts of ending the relationship, which were also held constant in the analyses.

The differential impact of conflict on the partners of HRS and LRS women was evident to the women. On days preceded by conflict, HRS women perceived partners to be less accepting and more withdrawn. This link was partially mediated by partner satisfaction and commitment. Conflicts did not precipitate changes in relationship satisfaction or commitment for HRS and LRS men's partners. Thus, these findings add to accumulating evidence that typical conflicts may be more appropriate contexts for examining the impact of women's than of men's relationship cognitions.

Overall, these findings implicate conflicts as critical situations in which to examine the processes leading to the fulfillment of HRS women's rejection expectations. The next step was to examine what happened during the conflicts between HRS women and their partners that might account for the partners' heightened feeling of rejection of the relationship postconflict. Toward this end, Downey, Freitas, et al. (1998; study 2) used a behavioral observation paradigm developed by Gottman (1979) to test whether women's conflict behavior mediated the relation between their rejection expectancies and their partners' postconflict rejecting reactions. Participants were college-age couples in the early stages of an exclusive dating relationship. In an initial session, each member of the couple separately completed a background questionnaire that included measures of RS, relationship satisfaction and commitment, and demographic information. One to two weeks later, couples came into the laboratory to be videotaped while discussing an unresolved relationship issue.

On arrival, both members separately completed a measure of their current mood. Both members of each couple selected five topics of ongoing conflict from a list of 19 and then marked the most salient one. The experimenters then assigned the couples to discussion topics picked by both members. Common themes among these topics were "spending time together," "other friendships," "commitment," and "sex" (HRS and LRS individuals chose similar topics). To reduce distraction, couples were videotaped for 20 minutes by a camera set up behind a one-way mirror. After the interaction, participants completed a second mood questionnaire, which assessed how angry, anxious, and sad they felt when they thought of their partner and their relationship.

Videotaped interactions were coded using the Marital Interaction Coding System-IV (MICS-IV) (Weiss & Summers, 1983) by coders at the University of Oregon Marital Studies Program. In the analyses, behavior codes that included both verbal and nonverbal behaviors were combined to form a Negative Behavior composite, and the proportion of total negative behavior was calculated.

Results showed that partners of HRS women were more angry and more resentful about the relationship following the conflict discussion than were partners of LRS women. This difference reflected a nonsignificant increase in the anger of partners of HRS women and a significant decline in the anger

of LRS women's partners. Controlling for partners' preconflict anger, relationship commitment and satisfaction did not change this relationship. Next, Downey et al. tested the hypothesis that the relationship between RS and partners' postconflict anger for women was mediated by women's negative behavior during the conflict. Path analyses indicated that women's negative behavior accounted for 54% of the effect of women's RS on their partners' change in anger. Consistent with the findings from the diary study, men's RS predicted neither their conflict behavior nor their partners' postconflict anger.

Together with the findings from the diary study, these results provide evidence that people's expectations influence, rather than merely reflect, the reality of their ongoing relationships. In other words, rejection expectations can lead people to behave in ways that actually elicit rejection from others, confirming people's initial expectations about the likelihood of rejection. This self-fulfilling prophecy, we believe, is one reason why it may be difficult to intervene in this RS cycle. Because HRS individuals are active participants in the construction of their social worlds, their tendency to expect, perceive, and overreact to rejection may simply increase their likelihood of being rejected.

Summary

The empirical evidence described here points to rejection sensitivity as a cognitive-affective processing disposition to anxiously expect, readily perceive, and overreact to rejection and as a risk factor for difficulties in dyadic relationships during late adolescence. To review, rejection cues activate anxious expectations of rejection and thus elicit negative affect and distress in HRS individuals. When anxious rejection expectations are activated, HRS individuals, more readily than LRS individuals, perceive rejection in the ambiguous behaviors of their romantic partners as well as new acquaintances. In turn, their perceptions and feelings of rejection automatically elicit negative affect (anger and hurt) and lead not only to maladaptive interpersonal behaviors (retaliatory hostility and negative conflict tactics) but also to intrapersonal difficulties (depression).

Given their readiness to perceive rejection, HRS individuals tend to overestimate their partners' dissatisfaction with the relationship. Over time, partners characterize HRS women as hostile and unsupportive and HRS men as jealous and controlling, and they report lower levels of relationship satisfaction than partners of LRS individuals (Downey & Feldman, 1996, study 4). It is not surprising, then, that the relationships of HRS individuals are more likely to dissolve than the relationships of LRS individuals, reflecting a self-fulfilling prophecy that may maintain and perpetuate the RS dynamic (Downey, Freitas, et al., 1998, study 1). To conclude this section, we mention implications of these findings and offer directions for future research.

Implications and Future Directions

Self-control ability as a buffer against overreactions to rejection. A self-fulfilling prophecy may not always emanate from the romantic relationships of HRS individuals. People bring not only their vulnerabilities to social situations but also strengths that may then counteract the effects of the former. For example, in HRS individuals, self-control competencies may reduce the risk of negative outcomes.

As previously discussed, biases in attributions of intent may be one information-processing mechanism that links rejection sensitivity with overreactions (Downey & Feldman, 1996, study 3). Research indeed indicates that biases in attributions of intent characterize aggressive children and adult men (e.g., Dodge, 1980; Dodge & Somberg, 1987; Holtzworth-Munroe & Hutchinson, 1993). Activation of rejection expectations may lead HRS individuals to focus on the internal (e.g., their affective states) as well as external threat-related cues (e.g., behaviors of the perpetrator) but to disregard contextual cues that may provide alternative (and more benign) explanations for others' behaviors. Consequently, RS may facilitate feelings of anger and defensive behavioral overreactions through a readiness to attribute hostile intent to the potential source of rejection.

HRS individuals who can avoid such biases may be buffered against the relatively automatic reactions to perceived rejection in the RS cycle. How could HRS individuals avoid such biases? They can inhibit their tendencies to focus on the emotional and arousing aspects of interpersonal interactions or they can access attentional-cognitive strategies to construe trigger features of interpersonal situations in less emotional terms. Preliminary evidence supports these possibilities. In both early and late adolescent samples, strategic self-control (as measured by ability to delay gratification during early childhood) among HRS individuals was related to higher levels of self-worth, self-esteem, and peer acceptance and lower levels of aggression (Ayduk, Mendoza-Denton, Downey, Mischel, Peake, & Rodriguez, in press). Although future work needs to directly test the causal impact of self-control strategies on the link between anxious rejection expectations and maladaptive overreactions in HRS individuals, these preliminary results suggest that interventions aimed at individuals' cognitive-affective information-processing system and coping mechanisms may be effective. We will return to intervention strategies for reducing RS in the final section of the chapter.

Early adolescent romantic relationships. So far, Downey and her colleagues' research into the implications of RS for romantic relationships has focused on college students' dating relationships. Many people, however, first become romantically involved during middle school years. These short-lived romances provide the context for sexual experimentation and socioemotional development (Erikson, 1968; Sullivan, 1953), the lessons likely to set the scripts for future relationships.

Accordingly, we have started investigating the romantic relationships of middle school children. We are particularly interested in understanding how often HRS girls engage in socially motivated delinquent behavior to prevent rejection or gain acceptance from their boyfriends. We hypothesize that the desire to prevent rejection and gain acceptance may motivate HRS girls toward compliance and self-silencing (Jack, 1991) in situations of disagreement with delinquency-prone boyfriends, which would put them at higher risk for cutting classes, joining gangs, or having unprotected sex. Compliance also can reinforce a perpetrator's abusive behavior, increasing the risk of future victimization. In support of these hypotheses, our preliminary findings indicate that, compared to LRS girls, HRS girls were more willing to do things they know are wrong to keep their boyfriends (Purdie & Downey, in press).

At the same time we are exploring whether RS is a risk factor for boys in the development of coercive conflict resolution strategies with dating partners. We are also investigating the possibility that RS may be related to social delinquency among boys. In their search for approval and acceptance, for example, HRS boys may be more likely to join gangs than LRS boys. In subsequent sections, we elaborate on how RS may play itself out in intragroup relationships.

Relationships with Valued Social Groups and Institutions

The findings reviewed thus far indicate that rejection expectations in one type of dyadic relationship (e.g., with peers) influence similar current and future dyadic relationships as well as extend to other types of relationships (e.g., with romantic partners). We wondered whether rejection sensitivity developing out of rejecting experiences with significant individuals also influences people's experiences within valued social groups. Are intragroup interactions threatening to HRS individuals, or are the effects of rejection sensitivity specific to dyadic relationships? Do the rejection sensitivity processes governing perception of individual others also apply to groups of others? Are the same cognitive, affective, and behavioral reactions elicited in response to perceptions of rejection by groups of others as by individual others?

Such questions are part of the broader debate of whether impression formation of individuals is similar to that of groups. Based on an extensive review, Hamilton and Sherman (1996) concluded that the same fundamental information-processing system underlies impression formation of individuals and groups, but that specific processes and their results can differ for individual and group targets. For instance, some research suggests that perceivers tend to expect more stability in an individual than in a group (e.g., McConnell, Sherman, & Hamilton, 1997), and research indeed indicates that impressions formed of individuals tend to be more stable (i.e., resistant to

counter-expectant information) than impressions of groups (e.g., Weisz & Jones, 1993). Whereas a growing body of work indicates that, in general, perceivers process information differently for individual and group targets, some research on individual differences has shown that differences lie in the targets as well as in the perceivers. Research by Dweck and her colleagues, for instance, shows that perceivers' dynamic versus static views of human attributes predict the same pattern of attributions and judgments regardless of the target—self, individual other, or group (see Levy & Dweck, 1998).

In the studies reviewed next, we pursued the possibility that rejection sensitivity operates consistently across individual and group targets. Reasoning that relationships with a single individual and a group of individuals are similar in that both can provide or deny acceptance, we hypothesized that rejection expectations would have similar cognitive, affective, and behavioral influences on people's relationships with groups as on people's relationships with individuals.

Perceptions of Rejection Within Groups and Cognitive-Affective Reactions

One group context likely to trigger concerns about rejection is a transition to an unfamiliar yet important group setting (e.g., entering college and beginning a job in a new corporation). The meaning and intentions behind others' behaviors are not clear in such contexts. Transitions tend to be difficult times because (1) social networks are disrupted and changed (e.g., Lewin, 1947), and (2) new schemas are developing and information is being integrated into existing ones (e.g., Ruble, 1994). Accordingly, transitions such as to parenthood (e.g., Ruble, Fleming, Hackel, & Stangor, 1988) and to new school settings (e.g., Eccles & Midgley, 1990; Simmons, Rosenberg, & Rosenberg, 1973) make people vulnerable to depression and to self-doubt. Although new life phases may be inherently stressful for most people (e.g., Hormuth, 1990), HRS individuals may experience heightened stress during these times because of their rejection expectations. Ruble's phase model of transitions (1994) proposes that an individual's expectations when entering a transitional state can influence the outcome of that transition. As an example, maternal expectations formed during pregnancy affect postpartum mothering self-definitions (e.g., Deutsch, Ruble, Fleming, Brooks-Gunn, & Stangor,

On the basis on this reasoning, Levy, Eccleston, Mendoza-Denton, and Downey (1999; study 1) selected a transitional context—entrance to college—for an initial examination of the influence of rejection sensitivity on relationships within important institutions. With the upheaval of leaving home (perhaps for the first time) and becoming independent, the transition surely can be threatening and uncertain. Past work has indeed shown that this transition can trigger negative affective states (depression and anxiety) and disengagement from university activities (e.g., Hoyle & Crawford, 1994;

also see Ethier & Deaux, 1994). Such reactions seem likely to be accentuated for those entering college with expectations of social rejection and with a tendency to perceive intentional rejection in innocuous or ambiguous social interactions. In some cases, representatives of the university may unintentionally communicate rejection to incoming students. For example, residence advisors, professors, counselors, and financial aid advisors, to name a few university representatives, may be unavailable or unhelpful in meeting new students' needs. And HRS individuals are likely to perceive rejection in such encounters rather than take into account the inherent stress of transitional periods for all involved. In short, Levy et al. hypothesized that the college transition would trigger rejection concerns in HRS individuals, and the same basic set of cognitive-affective-behavioral reactions HRS individuals display in dyadic interactions would emerge during this transition into a new social institution.

Entering college students initially were contacted during orientation and were asked to complete the RSQ measure and then to complete a short, structured diary at the end of each day during their first 3 weeks of college. The main dependent measure from the daily diary was the extent to which participants felt as though they fit into the university community. We predicted that perceptions of rejection among HRS students would appear as soon as the students entered college and would lead to low reported levels of belonging at the college.

Hierarchical linear modeling analyses indicated that HRS students felt less of a sense of belonging than LRS students when they first arrived, and this initial gap widened over time. That is, LRS students had an increasing sense of belonging over the first 3 weeks, indicating that they were adapting and easing through the stressful transition. In contrast, HRS students' sense of belonging did not increase during the 3-week transition. Moreover, when students were contacted at the end of the academic year, Levy et al. found that the difference in sense of belonging between HRS and LRS students persisted. Why did HRS individuals feel more alienated even after the initial transition period? One possibility is that over time an increasing number of possibilities for rejection may make it difficult for HRS individuals to overcome initial feelings of alienation or rejection.

Like HRS individuals in past studies experiencing negative affective reactions in romantic relationships (e.g., Downey & Feldman, 1996; Downey, Freitas, et al., 1998), these HRS individuals also reported more negative feelings about the university than did LRS individuals. For example, HRS individuals felt significantly less satisfaction with the university, less respect for the university, and less trust in the university to make decisions good for everyone. Additionally, unlike LRS students, HRS students reported less willingness to recommend the university to a friend who was accepted for admission, suggesting that they might be likely to act on their more negative evaluations of the university.

Could the differences between HRS and LRS students' beliefs and feelings

about the university reflect differences in their academic performance expectations or differences in their actual performance during the first semester of college? Such alternative explanations for these findings seem unlikely because rejection sensitivity levels did not relate to reported high school grade point average or to reported fall semester grade point average. Rather, these results suggest that students' preexisting expectations of rejection colored their initial and lasting impressions of a new social institution.

Coping Strategies

How do HRS individuals cope with perceived rejection in group settings? According to the rejection sensitivity model, higher levels of RS can lead to both relationship avoidance and relationship preoccupation. Our preliminary findings suggest that these coping strategies apply when HRS individuals regulate their social relations within valued social organizations.

Avoidance strategies. In the longitudinal diary study just described, Levy et al. also explored differences in behavioral responses as a function of rejection sensitivity. Much research has shown that people tend to react to threatening, uncertain experiences (like the transition to college) by withdrawing into a close-knit group—usually bonding with several others in the same setting. For instance, highly cohesive small groups can grow naturally out of life-threatening experiences (e.g., Elder & Clipp, 1988) and severe initiation into an organization (e.g., Hautaluoma, Enge, Mitchell, & Rittwager, 1991). Given the greater likelihood that HRS individuals will identify threat (i.e., perceive rejection) in an uncertain context, we expected that they might be more likely to react to the college transition by limiting their social circles.

The college environment provides incoming students with a variety of people with whom to affiliate. Who would HRS individuals tend to seek out? People generally tend to seek friends and partners similar in interests, age, and race (e.g., Cash, Janda, Byrne, Murstein, Merighi, & Malloy, 1994; Hallinan & Williams, 1987; Moreland & Zajonc, 1982), and the same is true in group memberships (e.g., Diehl, 1988; Osbeck, Moghaddam, & Perreault, 1997). Pursuing others similar to oneself increases the likelihood of acceptance, increases social-verification (e.g., Hardin & Higgins, 1996; Shah, Kruglanski, & Thompson, 1998), and reduces uncertainty (e.g., Hogg & Abrams, 1993). Are HRS individuals especially likely to restrict their relationships to similar others in response to uncertain group experiences such as entering college (cf. Ethier & Deaux, 1994)?

To examine this question among participants in the diary study, Levy et al. obtained measures of friendship at the end of the academic year. Participants were asked to list all of the close friends they had made and to list their characteristics such as age, sex, and race. In addition, to explore whether respondents sought out clearly defined groups of similar others, we asked them to report their affiliations with campus clubs and organizations.

The analysis of respondents' lists of close friends revealed two key findings. First, HRS individuals listed fewer friends than did LRS individuals, indicating that some HRS individuals either could not make friends, were unable to maintain new friendships, or avoided social interaction. Second, HRS students who made new friends reported, as predicted, fewer friends with differing characteristics (i.e., other-race friends) than LRS students, suggesting that they were more likely to limit their social relations to friends with similar characteristics. To test the hypothesis that HRS individuals might try to affiliate with similar others by joining relatively homogeneous clubs on campus, we restricted our analysis to the largest such club on campus, race-minority organizations. Results indeed indicated that those racial minority students who were high in rejection sensitivity were more likely than those who were low in rejection sensitivity to join an ethnic organization on campus.

In summary, the greater students' level of rejection sensitivity, the more the students seemed to react to a threatening social transition by limiting social relations over the course of the first year.

Social preoccupation strategies. In group settings, do HRS individuals also display the other coping strategy—social preoccupation—characteristic of some HRS individuals in dyadic settings? In another study with college students, Levy et al. (1999; study 2) explored whether HRS individuals exhibit social preoccupation strategies for gaining acceptance in groups with which they identify. Levy et al. hypothesized that HRS individuals who perceive rejection from a valued group of which they are a member may try to win group approval with ingratiating behavior. In this study, college students were asked to select the group with which they identify the most and to answer a series of questions about their standing and role in the group. As a measure of perceived rejection in the group, participants were asked to evaluate how isolated they felt and how well they fit in the group. Students were also asked for their willingness to comply with group rules and standards.

As predicted, the more rejection sensitive individuals were, the more isolated they reported feeling in the group they identified as most important to them. Thus, in the same way HRS individuals have trouble meeting their social needs within relationships with significant others (i.e., romantic partners), they also have trouble meeting their needs within valued social groups. Levy et al. additionally explored whether HRS individuals adopt strategies for dealing with feelings of isolation within valued groups different from those LRS individuals use. To examine this, we regressed participants' willingness to comply with group rules on RS, feelings of isolation, and the interaction between RS and feelings of isolation. Only the interaction was significant, indicating that HRS and LRS individuals reported nearly opposite patterns of compliance. That is, LRS students who felt the most isolated in the group reported the least willingness to adhere to the group's rules, whereas HRS students who felt the most isolated in the valued group re-

ported the greatest willingness to adhere to the group's rules. The HRS students' greater obedience to the group's rules is somewhat paradoxical. One would think that an individual who feels isolated in a group would feel less allegiance and commitment to a group and, thus, be less willing to adhere to its rules. The HRS individuals' greater willingness to adopt group rules, even when they feel isolated, may reflect more than just a strategy for gaining acceptance. Adopting group norms may also provide a "social reality." As Hardin and Higgins (1996) noted, social groups can serve the function of creating a social reality by being a source of social verification and comparison (also see Festinger, 1954; Shah et al., 1998). Future work will investigate whether HRS individuals' behavior within groups reflects their pursuit of needs such as social acceptance and verification.

Summary

Rejection expectations can negatively influence individuals' perceptions of and relations within familiar and valued groups as well as negatively color their impressions of an unfamiliar group whose behavioral intentions may appear ambiguous. Rejection sensitivity prompted negative affect, dissatisfaction, and both social preoccupation and avoidance coping strategies. Hence, the RS model developed to account for dynamics in dyadic relationships seems also to apply to how people think, feel, and respond to social groups and institutions. These findings suggest that rejection sensitivity affects social perception and behavior consistently across individual and group targets.

Implications and Future Directions

The influence of RS on transitional periods other than college. To follow up on our initial findings showing that HRS students struggle more with the college transition than do LRS students, we will be exploring the consequences of RS through the transition in greater detail throughout the 4 years of college. Since entering college is only one of the many transitions people face, an important future direction is to trace the consequences of RS through other important life phases. A particularly important and stressful transition is the one to junior high or middle school (e.g., Eccles & Midgley, 1990; Simmons et al., 1973). During this period, adolescents face many challenges-puberty, dating, more challenging school work, and shifting peer groups. How HRS individuals fare during such a transition may be particularly illuminating. This transition allows for tests of how RS influences emerging romantic relationships and shifts in reference groups. The transition to junior high or middle school presents an opportunity to investigate the implications of RS for individuals' dyadic relationships and relationships with groups. As a side note, other transition periods also open up possibilities for simultaneously examining the role of RS in different relationships. That is, a well-studied and also extremely stressful period is the transition to parenthood (e.g., Ruble et al., 1988) when consequences of RS could be tracked in marital relationships as well as in newly developing relationships with children.

In-group favoritism and out-group devaluation. Our findings suggest that HRS individuals may exhibit more in-group favoritism than LRS individuals. In the diary study of the transition to college, HRS students were more likely to affiliate with groups of similar others, and in the study of group identity, HRS students were more willing to comply with their in-groups' rules. Given that strongly identifying with in-groups and in-group favoritism often promotes out-group devaluation (see Brewer & Brown, 1998), we anticipate that even HRS individuals who have found a secure base (however temporary) within a group would hold stronger negative views of out-groups than LRS individuals. Furthermore, devaluing out-groups may also be a strategy for gaining in-group acceptance.

Could RS then be a motivating factor in prejudice? Social rejection as an explanation for developing prejudice has a precedent in the classic personality explanation of prejudice—the authoritarian personality (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950). Working within a psychodynamic framework, Adorno et al. portrayed this personality syndrome as arising from early childhood experiences, particularly from parents' threatening, forbidding, and punitive responses to their child's "unconventional" behavior. These difficult childhood experiences were thought to contribute to the development of an inadequate ego, which relied on defense mechanisms (such as projection of anger toward out-groups rather than toward parents) to release the aggressive and sexual impulses of their poorly controlled "ids." Although this work was criticized on theoretical (the untestable nature of psychoanalytic theory), conceptual (vague operationalization), and methodological grounds (psychometric properties of the F-scale), higher prejudice levels were found among authoritarians. These shortcomings have been subsequently addressed, and researchers have continued to find that authoritarians tend to be prejudiced toward a wide variety of groups (see Altemeyer, 1998). We are currently exploring how our construct relates to authoritarianism and fits with other motivational explanations of prejudice (e.g., self-esteem maintenance: Fein & Spencer, 1997).

Marginalization and joining "fringe" groups. People who are socially rejected often become marginalized members of society. The findings from the diary study in which HRS first-year college students seemed to seek out subgroups of similar others (i.e., student clubs) in their college may reflect a more general process through which rejected people opt out of broader, more mainstream groups and into more marginalized, fringe groups. As HRS individu-

als have been shown to feel more isolated within mainstream institutions, some HRS individuals may find solace in marginalized peer groups.

What kind of marginalized groups might draw HRS individuals? In the Nature of Prejudice, Gordon Allport (1954) suggested that "it may well turn out that followers [of demagogues] are nearly all individuals who have felt themselves to be somehow rejected" (p. 392). Could our work then have implications for understanding membership and activities within extreme groups such as cults, marginalized political groups, and even "hate" groups (i.e., groups organized around the hatred of political, religious, ethnic, or racial groups)? Although there is little empirical work on the psychological characteristics of such group members, the theme of social rejection runs through the literature on these types of groups. As one example, hate group members tend to come from troubled homes in which divorce, separation, and abuse (physical abuse; drug abuse) are prevalent (Hamm, 1993) and in which there are no positive role models (e.g., Wang, 1994). Although social factors may lead people to join such groups, the ideology of these groups may not be the primary motive. Rather, finding a place to belong may be an underlying motivation.

Besides fitting the characteristics of individuals prone to join extreme or marginalized groups, our model also may explain in part what motivates people to carry out violent acts once they enter such groups. Results from the group identity study, in which HRS individuals who felt isolated in a group reported greater willingness to adopt group rules and standards, suggest that some HRS individuals may blindly follow group rules to gain acceptance. Thus, people who blindly follow a group norm and act in violent, socially deviant ways may actually be seeking the positive, socially valued goal of obtaining acceptance. We are not suggesting that all fringe or subversive group members are HRS or that all HRS individuals would join fringe or subversive groups if they were available; however, interesting, important links may connect our work and work on such groups.

Strategies for Breaking the RS Cycle

In the previous sections, we delineated processes that promote and maintain the RS cycle within a variety of social relationships. We also have begun to investigate how these detrimental processes can be interrupted and how the cycle can be broken. In this section, we propose diverse approaches for undermining links in the RS cycle. We focus on interventions that specifically challenge the damaging perceptions, cognitions, and behavioral patterns characteristic of HRS individuals, and, consistent with an ecological framework, we also discuss interventions targeting HRS individuals' social environments. While tracing each intervention possibility, we also note potential obstacles to change, and, unfortunately, these are numerous.

Targeting the HRS Individual

Breaking specific links in the RS cycle. Attacking perceptions of rejection may be a good place to start undermining the RS cycle (link 2 of Figure 10.1). As previously noted, HRS individuals attribute hurtful intent to the ambiguous behaviors of others (also see Dodge, 1980; Dodge et al., 1986). An intervention strategy, then, would be to replace attributional biases of harmful intent with alternative explanations such as situational attributions. Several attributional retraining programs seem particularly apt for HRS individuals (for reviews of attributional theory and therapy, see Graham & Folkes, 1990).

For example, Hudley and Graham (1993) designed a social cognitive intervention to lessen 10–12-year-old boys' hostile attributional biases in negative social encounters of ambiguous causal origins. During 12 sessions across a 4-month period, the boys in the experimental condition role-played less violent (more adaptive) responses to hypothetical and laboratory simulations of peer provocation. The intervention included training in accurately interpreting the verbal and behavioral cues of others and in making attributions to nonhostile intent. In addition, children were taught how to respond to negative outcomes without hostility, a component of the intervention that could beneficially undermine affective reactions characteristic of some HRS individuals (link 3 of fig. 10.1). Hudley and Graham found that boys' tendency to attribute malicious intent to ambiguous peer provocations could be retrained (at least temporarily). Such an intervention also could also be adopted for older age groups and seems particularly appropriate for HRS individuals who tend to react to perceived rejection with hostility and violence.

A more indirect attributional retraining procedure that Mark Schaller and colleagues developed with college students (e.g., Schaller, Asp, Rosell, & Heim, 1996) also may prove helpful in undermining HRS individuals' negative attributions of others' intentions. To teach participants to be attentive to alternative explanations for others' behaviors and outcomes (nondispositional explanations), Schaller and colleagues gave participants 40 minutes of statistical training in the logic of analysis of covariance (ANCOVA). They reasoned that the ANCOVA training would show that obvious inferences sometimes can be wrong. Specifically, participants were provided with scenarios (e.g., win-loss records of two fictitious tennis players from two leagues) and then led through the logic of ANCOVA to uncover a confounding variable in drawing an impression of the targets (e.g., in determining who was the better player, one needed to consider the competitiveness of each league and the number of games of each player). Schaller et al. found that participants who received the training were less likely than those who did not receive training to form erroneous judgments of others. Although this intervention training should be adapted to social situations more applicable to HRS individuals, training HRS individuals to attend to the details of social situations could

help them recognize nonhurtful intentions in others and in turn arrive at less erroneous and malicious dispositional conclusions about others' behaviors.

Beyond attributional retraining interventions, other preexisting interventions could be adapted to attack different links in the RS cycle. For example, interventions that target people's emotional competence could address the cognitive-affective component of RS (link 3 of fig. 10.1) by helping HRS individuals better identify others' feelings toward them and better regulate their own reactive feelings toward others. The PATHS program (Promoting Alternative Thinking Strategies; Greenberg, Kusche, Cook, & Quamma, 1995), an emotion-focused school-based unit for elementary school-age children, seems particularly well-suited for their purpose. For three days a week during one school year, classroom teachers and PATH staff taught secondand third-grade children to attend to their own and others' feelings, to correctly label them, to discuss them, and to decide under what circumstances to keep their feelings private or make them public. Children were also taught how to control their emotions using a simple metaphor—a traffic light (also see Weissberg, Caplan, & Bennetto, 1988). A poster of a traffic light was placed in each class with a red light referring to "Stop—Calm Down," a yellow light referring to "Go Slow-Think," and a green light signaling "Go-Try My Plan." Greenberg et al. found that children in regular and special needs classrooms (e.g., children with severe behavioral problems) who participated in the intervention had a better understanding of cues for recognizing emotions in others, identifying their own emotions, managing their own emotions, and appreciating the malleability of feelings than did children in the control condition. These data may suggest that HRS individuals need not be singled out (and potentially stigmatized) while they learn to monitor and control their emotions in stressful social situations.

Finally, to undermine hostile behavioral patterns characteristic of some HRS individuals (link 4 of fig. 10.1), antisocial behavioral and aggression reduction intervention programs could be utilized (e.g., Aber, Jones, Brown, Chaudry, & Samples, 1998; Huesmann et al., 1996). Besides focusing specifically on how individuals overcome hostile behavior, some of these interventions also focus on the role of individuals' social networks (parents, teachers, and peers) in different contexts (classroom, playground, home) in the expression and perpetuation of hostile reactions. The multifaceted nature and ecological approach of these interventions complement our conception of diverse factors influencing RS, and, thus, these interventions may be particularly worthwhile for HRS individuals who have experienced prolonged or severe rejection in different relationships and settings. For example, Resolving Conflict Creatively Program (RCCP; Aber et al., 1998) is a social skills improvement program in which elementary school children are taught negotiation and problem-solving skills for dealing with social conflict. Classroom teachers are trained to use a variety of techniques such as roleplaying and small group discussions to guide children in resolving conflicts nonaggressively. Additionally, as part of the program, a subset of children is

nominated and trained to serve as conflict resolution mediators in and out of the classroom. From the fall to spring semester, Aber et al. (1998) found that children who were exposed to many RCCP lessons (M=23 lessons) had less aggressive interpersonal negotiation strategies in reactive situations than did children who received only a few lessons (M=2 lessons) or no RCCP lessons. These promising preliminary findings suggest that programs such as RCCP may prove successful in reducing aggressive behavioral reactions among HRS individuals.

Believing in the potential for change. To begin the process of undermining their heightened rejection concerns, HRS individuals need not only sufficient motivation but probably also the belief that "change" is possible. When one believes that people can change, then the dynamics of specific person-situation interactions can change. Those who are encouraged to believe that people are dynamic actors in specific situations can perhaps break the domino effect of the RS chain. Believing that change is possible both for oneself (e.g., "I can change my expectations and behavior") and for valued others (e.g., "he [or she or they] can become less rejecting") would be beneficial. Some research has provided encouraging support for persuading individuals to (at least temporarily) adopt the view that people can change (Chiu, Hong, & Dweck, 1997; Levy, Stroessner, & Dweck, 1998). Moreover, this line of work by Dweck and her colleagues also suggests that people who view human nature as malleable are less prone to engage in detrimental attributions and judgments. That is, they make weaker trait judgments (Chiu et al., 1997, Levy & Dweck, 1999; Levy et al., 1998), expect less cross-situational behavioral consistency in others (Chiu et al., 1997), and make more situational attributions for others' behavior (Levy & Dweck, 1999; Levy et al., 1998). However, believing that others, such as one's partner, can change may not be without costs; people with a malleable view of human nature may, for example, stay too long in destructive relationships, not knowing when to give up (e.g., see Janoff-Bulman & Brickman, 1982).

Reducing RS Through Supportive Social Relationships

Supportive relationships may be key in breaking the rejection-sensitivity cycle. First, an accepting relationship may reduce HRS individuals' future expectations of rejection. Second, supportive others who are not rejection sensitive can serve as models because they generate fewer malevolent explanations for others' behavior and use adaptive conflict resolution strategies. As previously mentioned, violence intervention programs show that training parents, teachers, and peers to support children to overcome their antisocial behavior can be successful. Moreover, research indicates that a supportive partner can help women break intergenerational cycles of child abuse (e.g., Egeland, Jacobvitz, & Sroufe, 1988; Quinton, Rutter, & Liddle.

1984), and parental support can buffer peer-rejected children from negative outcomes (e.g., Patterson, Cohn, & Kao, 1989).

A possible barrier to the use of supportive relationships as a tool for breaking the RS cycle is getting HRS individuals involved in "healthy," supportive relationships—getting them to seek out and identify supportive relationships. This may be especially difficult for HRS individuals who are socially withdrawn. One social avenue particularly well-suited to these individuals is the Internet, which has opened up possibilities (e.g., chat-rooms, newsgroups, on-line dating services) for people to interact with others in a relatively anonymous way, thereby providing a possible safe context for seeking acceptance. Parks and Roberts (1998), for instance, found that virtual environments known as MOOs (Multi-User Dimensions, Object-Oriented) stimulated the formation of personal relationships including close friendships and relationships that transferred to off-line, face-to-face intimate relationships (also see Parks & Floyd, 1996). Perhaps most applicable to our research on rejection sensitivity is the finding that the Internet has been successfully used by individuals who otherwise have difficulty reaching out for social support (e.g., people with marginalized or stigmatized social identities). McKenna and Bargh (1998) have recently shown that people with marginalized identities who participate in Internet newsgroups can develop greater self-acceptance. Broader-based evaluations of self-help resources and on-line therapy are also under way and appear promising (King & Morreggi, 1998).

Furthermore, HRS individuals may need help in identifying truly supportive relationships. Although future work needs to address this issue directly, some HRS individuals may have difficulty identifying supportive social networks. For example, they may not be sufficiently selective and thus enter into relationships with anyone who shows interest or support. They also may place so much value on one dimension of their partner or group members—acceptance—that they are blind to other potentially harmful characteristics. They may enter or stay in abusive relationships with partners or join groups that engage in violent acts toward others or that make other potentially harmful demands as a condition of membership. Individual, family, and couples therapy can also help people identify healthy relationships and learn to trust others (e.g., Ginsberg, 1997). Additionally, school-based interventions that specifically assist students in recognizing and building healthy relationships may be helpful. Two examples are the Youth Relationships Project, which raises middle adolescents' awareness of how to identify and avoid patterns of violence unfolding in relationships (e.g., Wolfe, Wekerle, & Scott, 1997) and cooperative learning classrooms, which foster healthy relationships among school-age children (e.g., McCallum & Bracken,

Supportive relationships may be crucial to breaking the RS cycle, yet it is unclear whether finding acceptance in one relationship (e.g., with a romantic partner) can help a person overcome RS. Special consideration will need to be given the possibility that acceptance in one type of relationship (e.g.,

finding a supportive intimate partner) can lead to rejection in another type of relationship (e.g., parents may not approve of one's significant other).

Timing of Interventions

Early interventions often have been heralded as the best strategy for improving social, cognitive, and academic outcomes of at-risk youths (such as those targeted by Project Headstart). After an extensive review, Ramey and Ramey (1998) concluded that early academic and cognitive interventions are indeed effective. Moreover, Coie (1996) reiterated the need for early social interventions, noting the early detection of violence and antisocial behavior among adolescents (i.e., as young as age 6 or 7) and the accumulating deficits, levels of subsequent violence, and academic failure with age. Therefore, identifying and interrupting rejection sensitivity as early as possible is clearly ideal.

When intervening early is not possible, another promising opportunity to instigate change may be times of environmental or experiential change. Although our findings suggest that HRS individuals' expectations can be confirmed or self-fulfilled during transitions, Ruble's phase model of transitions (1994) additionally suggests that preexisting beliefs and expectations may be challenged during passage through new life phases. For example, expectations about the characteristics that distinguish men from women were shown to become flexible and susceptible to change during adolescents' transition to junior high school (Alfieri, Ruble, & Higgins, 1996). If such well-defined expectations of others (such as gender) can be challenged during transitions, perhaps rejection expectations also can be challenged during such periods. Why are preexisting beliefs susceptible to change during these periods? Ruble proposed three core phases of transitions: construction, consolidation, and integration. Transitions are thought to prompt a construction phase in which people actively seek information to understand changes. Information seeking continues in the consolidation phase as new conclusions about the self and others are incorporated in knowledge structures. In the final phase (integration), new conclusions are elaborated and integrated into one's identity (perhaps rigidly, if no counterinformation is subsequently received). Therefore, HRS individuals may be receptive to interventions (e.g., some of the strategies we suggested) during periods of transition, when people may be willing to redefine themselves and shed old expectations.

Summary

In sum, we have identified a number of strategies for interrupting the RS cycle. Incorporating these strategies into a broad intervention may ultimately prove fruitful. Several components of such an intervention would draw on preexisting interventions (i.e., attributional retraining, emotional competence, and antisocial behavior interventions) to target specific links in the RS

cycle. Another component would be training individuals in identifying and maintaining supportive social networks. Beyond directly addressing HRS individuals' cognitions, affects, and behaviors, the intervention could consist of an outreach program targeting the individuals' social networks in the home (e.g., parents and other family members) and outside the home (e.g., peers, teachers) for education about HRS individuals' special needs. Moreover, because social norms can be such a powerful force in the acceptability of antisocial behavior (e.g., Anderson, 1994; Cohen, 1998), the intervention could include a component addressing how particular environments make individuals vulnerable to RS. Finally, and ideally, the intervention would begin in early childhood and continue through late childhood. Clearly, taking steps toward testing one or more specific components of such a broad-based intervention is an important direction for our research.

Conclusion

In this chapter, we have described how RS can be maladaptive, negatively influencing how people think, feel, and behave in different relationships. We have shown how RS can be self-fulfilling and can be carried from one type of relationship to another (e.g., from relationships with parents to relationships with romantic partners).

It is important to highlight here that all rejection-sensitive individuals are not the same; HRS individuals may have different kinds of expectations (anxious vs. angry) and behavioral reactions (avoidance vs. intimacy seeking), and these differences may depend on their environments (e.g., the acceptability of different expressions of frustration, their specific experiences). Moreover, the differences between LRS individuals and HRS individuals lie on a continuum

In closing, this chapter has highlighted how some people develop heightened needs for acceptance in response to severe and prolonged forms of social rejection and how these urgent attempts to gain acceptance can undermine their success. The cycle of rejection also can have negative repercussions for those in contact with rejected individuals, as dramatically demonstrated all too often in tragic news stories, such as the school shootings in Jonesboro and Denver. Further investigations of RS may broaden our understanding of the processes underlying these consequences and may in turn contribute to our understanding of how to divert them.

References

Aber, J. L., Jones, S. M., Brown, J. L., Chaudry, N., & Samples, F. (1998). Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. *Development and Psychopathology*, 10, 187–213.

- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). The authoritarian personality. New York: Harper.
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.
- Alfieri, T., Ruble, D. N., & Higgins, E. T. (1996). Gender stereotypes during adolescence: Developmental changes and the transition to junior high school. *Developmental Psychology*, 32, 1129–1137.
- Allport, G. W. (1954). The nature of prejudice. Reading, MA: Addison-Wesley.
- Altemeyer, B. (1998). The other "authoritarian personality." Advances in Experimental Social Psychology, 30, 47–92.
- Anderson, E. (1994). The code of the streets. Atlantic Monthly, 81-94.
- Ayduk, O., & Downey, G. (1999). *Rejection sensitivity and anger in men.* Unpublished data, Columbia University.
- Ayduk, O., Downey, G., & Kim, M. (in press). Rejection sensitivity and depression in women. *Personality and Social Psychology Bulletin*.
- Ayduk, O., Downey, G., Testa, A., Yen, Y., & Shoda, Y. (1999). Does rejection elicit hostility in high rejection sensitive women. *Social Cognition*, 17, 245–271.
- Ayduk, O., Mendoza-Denton, R., Downey, G., Mischel, W., Peake, P., & Rodriguez, M. (in press). Regulating the interpersonal self: Strategic self-regulation for coping with rejection sensitivity. *Journal of Personality and Social Psychology*.
- Bagwell, C. L, Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development*, 69, 140-153.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bargh, J. A., Chaiken, S., Raymond, P., & Hymes, C. (1996). The automatic evaluation effect: Unconditional automatic attitude activation with a pronunciation task. *Journal of Experimental Social Psychology*, 32, 104–128.
- Bargh, J. A., Raymond, P., Pryor, J. B., & Strack, F. (1995). Attractiveness of the underling: An automatic power → sex association and its consequences for sexual harassment and aggression. *Journal of Personality and Social Psychology*, 68, 768–781.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Social and Personality Psychology*, 61, 147–178.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Beck, A. T., & Steer, R. A. (1987). *Manual for the Revised Beck Depression Inventory*. San Antonio, TX: Psychological Corporation.
- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology, 69,* 890–902.
- Bowlby, J. (1969). Attachment and loss, Vol. 1: Attachment. New York: Basic Books.

- Bowlby, J. (1973). Attachment and loss, Vol. 2: Separation. New York: Basic Books.
- Bowlby, J. (1980). Attachment and loss, Vol. 3: Loss, sadness, and depression. New York: Basic Books.
- Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., vol. 2, pp. 554–594). New York: McGraw Hill.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Bryk, A. S., & Raudenbush, S. W. (1992). Toward a more appropriate conceptualization of research on school effects: A three-level hierarchical linear model. *American Journal of Education*, *97*, 65–108.
- Cash, T. F., Janda, L. H., Byrne, D., Murstein, B. I., Merighi, J. R, & Malloy, T. E. (1994). Interpersonal attraction. In W. A. Lesko et al. (Eds.), Readings in social psychology: General, classic, and contemporary selection (2nd ed., pp. 171–187). Boston: Allyn & Bacon.
- Chiu, C., Hong, Y., & Dweck, C. S. (1997). Lay dispositionism, culture and implicit theories of personality. *Journal of Personality and Social Psychology*, 73, 19–30.
- Cohen, D. (1998). Culture, social organization, and patterns of violence. *Journal of Personality and Social Psychology, 75,* 408–419.
- Coie, J. D. (1996). Prevention of violence and antisocial behavior. In R. D. Peters, R. J. McMahon, et al. (1996). Preventing childhood disorders, substance abuse, and delinquency. Banff international behavioral science series, Vol. 3 (pp. 1–18). Thousand Oaks, CA: Sage.
- Coie, J., Terry, R., Lenox, K., Lochman, J., & Hyman, C. (1998). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development & Psychopathology*, 10, 587–588.
- Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, 101, 393–403.
- Davila, J., Burge, D., & Hammen, C. (1997). Why does attachment style change? *Journal of Personality and Social Psychology*, 73, 826-838.
- Deutsch, F. M., Ruble, D. N., Fleming, A., Brooks-Gunn, J., & Stangor, C. S. (1988). Information seeking and maternal self-definition during the transition to motherhood. *Journal of Personality and Social Psychology*, 55, 420–431
- Diehl, M. (1988). Social identity and minimal groups: The effects of interpersonal and intergroup attitudinal similarity on intergroup discrimination. *British Journal of Social Psychology*, 27, 289–300.
- Dodge, K. (1980). Social cognition and children's aggressive behavior. *Child Development*, 51, 162–170.
- Dodge, K., Murphy, R. R., & Buchsbaum, K. (1984). The assessment of intention-cue detection skills in children: Implications for developmental psychopathology. *Child Development*, 55, 163–173.
- Dodge, K., Pettit, G., McClaskey, C., & Brown, M. (1986). Social competence in children. Monographs of the Society for Research in Child Development 51, 1–85
- Dodge, K., & Somberg, D. (1987). Hostile attributional biases among aggres-

- sive boys are exacerbated under conditions of threat to self. *Child Development*, 58, 213-224.
- Downey, G., Bonica, C., & Rincon, C. (1999). Harsh parenting and rejection sensitivity: A longitudinal study. Unpublished data, Columbia University.
- Downey, G., & Feldman, S. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70, 1327–43.
- Downey, G., Feldman, S., & Ayduk, O. (2000). Rejection sensitivity and male violence in romantic relationships. *Personal Relationships*, 7, 45–61.
- Downey, G., Freitas, A. L., Michealis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Do rejection sensitive women get rejected by romantic partners? *Journal of Personality and Social Psychology*, 75, 545-560.
- Downey, G., Khouri, H., & Feldman, S. (1997). Early interpersonal trauma and later adjustment: The mediational role of rejection sensitivity. In D. Cicchetti, S. L. Toth, et al. (Eds.), Developmental perspectives on trauma: Theory, research, and intervention. Rochester symposium on developmental psychology, Vol. 8 (pp. 85–114). Rochester, NY: University of Rochester Press.
- Downey, G., Lebolt, A., Rincon, C., & Freitas, A. L. (1998). Rejection sensitivity and children's interpersonal difficulties. *Child Development*, 69, 1072–1089.
- Dutton, D. G. (1988). The domestic assault of women: Psychological and criminal justice perspectives. Boston: Allyn & Bacon.
- Eccles, J. S., & Midgely, C. (1990). Changes in academic motivation and self-perception during adolescence. In R. Montemayor, G. Adams, & T. Gullotta (Eds.), From childhood to adolescence: A transitional period? (pp. 134–155). Newbury Park, CA: Sage.
- Egeland, B., Jacobvitz, D., & Sroufe, L. A. (1988). Breaking the cycle of abuse. *Child Development*, *59*, 1080–1088.
- Elder, G. H., & Clipp, E. C. (1988). Wartime losses and social bonding: Influences across 40 years in men's lives. *Psychiatry*, *51*, 177–198.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: Norton.
- Ethier, K. A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology, 67,* 243–251.
- Eysenck, H. J., & Eysenck, S. B. G. (1964). *Manual of the Eysenck Personality Inventory*. San Diego: Educational and Industrial Testing Service.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73, 31–44.
- Feldman, S., & Downey, G. (1994). Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology*, 6, 231–247.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140.
- Freud, S. (1936). *The ego and the mechanisms of defense* (C. Baines, Trans.). New York: International Universities Press.

Goodwin, J. S., Hunt, W. C., Key, C. R., & Samet, J. M. (1987). The effect of marital status on stage, treatment, and survival of cancer patients. *Journal of American Medical Association*, 258, 3125–3130.

Gottman, J. M. (1979). Detecting cyclicity in social interaction. *Psychological Bulletin*, 86, 338–348.

Graham, S., & Folkes, V. S. (Eds.). (1990). Attribution theory: Applications to achievement, mental health, and interpersonal conflict. Hillsdale, NJ: Lawrence Erlbaum.

Greenberg, M. T., Kusche, C. A., Cook, E. T., & Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. *Development and Psychopathology*, 7, 117–136.

Hallinan, M. T., & Williams, R. A. (1987). The stability of students' interracial friendships. *American Sociological Review*, 52, 653–664.

Hamilton, D. L., & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological Review*, 103, 336–355.

Hamm, M. S. (1993). American skinheads: The criminology and control of hate crime. Westport, CT: Praeger.

Hammen, C. L., Burge, D., Daley, S. E., & Davila, J. (1995). Interpersonal attachment cognitions and prediction of symptomatic responses to interpersonal stress. *Journal of Abnormal Psychology*, 104, 436–443.

Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In R. M. Sorrentino, E. T. Higgins, et al. (Eds.), The interpersonal context. Handbook of motivation and cognition (pp. 28–84). New York: Guilford Press.

Hautaluoma, J. E., Enge, R. S., Mitchell, T. M., & Rittwager, F. J. (1991). Early socialization into a work group: Severity of initiations revisited. *Journal of Social Behavior and Personality*, 6, 725–748.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.

Hecht, D. B., Inderbitzen, H. M., & Bukowski, A. L. (1998). The relationship between peer status and depressive symptoms in children and adolescents. *Journal of Abnormal Child Psychology*, 26, 153–160.

Hogg, M., & Abrams, D. (1993). Towards a single process uncertainty-reduction model of social motivation in groups. In M. A. Hogg & D. Abrams (Eds.), Group motivation (pp. 173–190). New York: Harvester Wheatsheaf.

Holtzworth-Munroe, A., & Anglin, K. (1991). The competency of responses given by maritally violent versus nonviolent men to problematic marital situations. *Violence and Victims*, 6, 257–269.

Holtzworth-Munroe, A., & Hutchinson, G. (1993). Attributing negative intent to wife behavior: The attributions of maritally violent versus nonviolent men. *Journal of Abnormal Psychology*, 102, 206–211.

Hormuth, S. E. (1990). The ecology of the self: Relocation and self-concept change. Cambridge: Cambridge University Press.

Horney, K. (1937). *The neurotic personality of our time*. New York: Norton. Hoyle, R. K., & Crawford, A. M. (1994). Use of individual-level data to in-

- vestigate group phenomena: Issues and strategies. Small Group Research, 25, 464–485.
- Hudley, C., & Graham, S. (1993). An attributional intervention to reduce peerdirected aggression among African American boys. Child Development, 64, 124-138.
- Huesmann, L. R., Maxwell, C. D., Eron, L., Dahlberg, L. L., Guerra, N. G., Tolan, P. H., VanAcker, R., & Henry, D. (1996). Evaluating a cognitive/ecological program for the prevention of aggression among urban youth. *American Journal of Preventive Medicine*, 12(5 suppl), 120–128.

Jack, D. C. (1991). Silencing the self: Women and depression. Cambridge, MA: Harvard University Press.

Janoff-Bulman, R., & Brickman, P. (1982). Expectations and what people learn form failure. In N. T. Feather (Ed.), *Expectations and actions: Expectancy-value models in psychology* (pp. 207–237).). Hillsdale, NJ: Erlbaum.

Jussim, L. (1986). Self-fulfilling prophecies: A theoretical and integrative review, *Psychological Review*, *93*, 425–445.

Kenny, D. A., Kashy, D., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Edś.), *Handbook of social psychology* (4th ed., pp. 233–268). New York: McGraw Hill.

King, S. A., & Morreggi, D. (1998). Internet therapy and self help groups: The pros and cons. In J. Gackenbach et al. (Ed.), *Psychology and the internet: Intrapersonal, interpersonal, and transpersonal implications* (pp. 77–109). San Diego: Academic Press.

Krohne, H. W., & Fuchs, J. (1991). Influence of coping dispositions and danger-related information on emotional and coping reactions of individuals anticipating an aversive event. In C. D. Speileberger, I. G. Sarason, J. Strelau, & J. M. T. Brebner (Eds.), Stress and anxiety, Vol. 13. The series in clinical psychology and the series in clinical and community psychology (pp. 131–155). New York: Hemisphere.

Labi, N. (April, 1998). The hunter and the choirboy. Time, 151.

Lang, P. J. (1995). The emotional probe. American Psychologist, 50, 372–385.
Leary, M. (1990). Responses to social exclusion: Social anxiety, jealousy, loneliness, depression, and low self-esteem. Journal of Social and Clinical Psychology, 9, 221–229.

Levy, M. B., & Davis, K. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships*, 5, 439–471.

Levy, S. R., & Dweck, C. S. (1998). Trait- versus process-focused social judgment. *Social Cognition*, 16, 151–172.

Levy, S. R., & Dweck, C. S. (1999). The impact of children's static vs. dynamic conceptions of people on stereotype formation. Child Development, 70, 1163-1180.

Levy, S. R., Eccleston, C., Mendoza-Denton, R., & Downey, G. (1999). Rejection sensitivity in group processes. Unpublished manuscript.

Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74, 1421–1436.

Lewin, K. (1947). Group decision and social change. In T. M. Newcomb &

- E. L. Hartley (Eds.), *Readings in social psychology* (pp. 330–344). New York: Holt.
- Lynch, J. J. (1979). The broken heart: The medical consequences of loneliness. New York: Basic Books.
- Maslow, A. H. (1962). Toward a psychology of being. New York: Van Nostrand.
- McCallum, R. S., & Bracken, B. A. (1993). Interpersonal relations between school children and their peers, parents, and teachers. *Educational Psychology Review*, 5, 155–176.
- McConnell, A., Sherman, J. W., & Hamilton, D. L. (1997). Target entitativity: Implications for information processing about individual and group targets. *Journal of Personality and Social Psychology*, 72, 750–762.
- McKenna, K., & Bargh, J. (1998). Coming out in the age of the internet: Identity "de-marginalization" through virtual group participation. *Journal of Personality and Social Psychology*, 75, 681–694.
- Merton, R. K. (1948). The self-fulfilling prophecy. *Antioch Review, 8,* 193–210. Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structures. *Psychological Review,* 246–268.
- Moreland, R. L., & Zajonc, R. B. (1982). Exposure effects in person perception: Familiarity, similarity, and attraction. *Journal of Experimental Social Psychology*, 18, 395–415.
- Neeman, K., & Harter, S. (1984). The self-perception profile for college students. Unpublished manuscript, University of Denver.
- Osbeck, L. M., Moghaddam, F. M., & Perreault, S. (1997). Similarity and attraction among majority and minority groups in a multicultural context. *International Journal of Intercultural Relations*, 21, 113–123.
- Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Communication*, 46, 80-97.
- Parks, M. R., & Roberts, L. D. (1998). "Making MOOsic": The development of personal relationships on line and a comparison to their off line counterparts. *Journal of Social and Personal Relationships*, 15, 517–537.
- Patterson, C., Cohn, D., & Kao, B. (1989). Maternal warmth as a protective factor against risks associated with peer rejection among children. *Development and Psychopathology*, 1, 21–38.
- Purdie, V., & Downey, G. (in press). Rejection sensitivity: A psychological legacy of victimatization that places adolescent girls at risk in romantic relationships. *Child Maltreatment*.
- Quinton, D., Rutter, M., & Liddle, C. (1984). Institutional rearing, parenting difficulties, and marital support. *Psychological Medicine*, 14, 107–24.
- Ramey, C. T., & Ramey S. L. (1998). Early intervention and early experience. American Psychologist, 53, 109–120.
- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.
- Rothberg, J. M., & Jones, F. D. (1987). Suicide in the U.S. Army: Epidemiological and periodic aspects. Suicide and Life-Threatening Behavior, 17, 119–132.
- Ruble, D. N. (1994). A phase model of transitions: Cognitive and motivational consequences. Advances in Experimental Social Psychology, 26, 163–214.
 Ruble, D. N., Fleming, A. S., Hackel, L., & Stangor, C. S. (1988). Changes in

- the marital relationship during the transition to motherhood: Effects of violated expectations concerning division of household labor. *Journal of Personality and Social Psychology*, 55, 78–87.
- Rudolph, K. D., Hammen, C., & Burge, D. (1997). A cognitive-interpersonal approach to depressive symptoms in preadolescent children. *Journal of Abnormal Child Psychology*, 25, 33–45.
- Schaller, M., Asp, C., Rosell, M. C., & Heim, S. J. (1996). Training in statistical reasoning inhibits the formation of erroneous group stereotypes. *Personality and Social Psychology Bulletin*, 22, 829–844.
- Schwartz, D., McFadyen-Ketchum, S. A., Dodge, K. A, Pettit, G. S., & Bates, J. E. (1998). Peer group victimization as a predictor of children's behavior problems at home and in school. *Development and Psychopathology, 10,* 87–99.
- Shah, J. Y., Kruglanski, A. W., & Thompson, E. P. (1998). Membership has its (epistemic) rewards: Need for closure effects on in-group bias. *Journal of Personality and Social Psychology*, 75, 383–393.
- Simmons, R. G., Rosenberg, F., & Rosenberg, M. (1973). Disturbance in the self-image at adolescence. *American Sociological Review, 38*, 553–568.
- Sroufe, L. A. (1990). An organizational perspective on the self. In D. Cicchetti & M. Beeghly (Eds.), The self in transition: Infancy to childhood, The John D. and Catherine T. MacArthur Foundation series on mental health and development. (pp. 281–307). Chicago: University of Chicago Press.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scale. *Journal of Marriage and the Family*, 41, 75–88.
- Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.
- Trout, D. L. (1980). The role of social isolation in suicide. Suicide and Life-Threatening Behavior, 10, 10–23.
- Walker, L. E. (1979). The battered woman. New York: Harper & Row.
- Walker, L. E. (1984). The battered woman syndrome. New York: Springer.
- Wang, A. Y. (1994). Pride and prejudice in high school gangs. *Adolescence*, 29, 281–291.
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology, 33, 448–457.
- Weiss, R. L., & Summers, K. (1983). Marital interaction coding system III. In E. Filsinger (Ed.), *Marriage and family assessment* (pp. 35–115). Beverly Hills, CA: Sage.
- Weissberg, R. B., Caplan, M. Z., & Bennetto, L. (1988). The Yale-New Haven middle-school social problem solving (SPS) program. New Haven, CT: Yale University.
- Weisz, C., & Jones, E. E. (1993). Expectancy disconfirmation and dispositional inference: Latent strength of target-based and category-based expectations, *Personality and Social Psychology Bulletin*, 19, 563–573.
- Wolfe, D. A., Wekerle, C., & Scott, K. (1997). Alternatives to violence: Empowering young youth to develop healthy relationships. Thousand Oaks, CA: Sage.