Responses to Self-Threat: Linking Self and Relational Constructs with Approach and Avoidance Motivation

Lora E. Park*
University at Buffalo, The State University of New York

Abstract

Over the past few decades, researchers have amassed a large body of evidence documenting the consequences of self-esteem (SE), attachment styles, rejection sensitivity (RS), domain-specific aspects of SE (e.g., contingencies of self-worth), and RS (e.g., race-RS; appearance-RS) following self-threats. The present article suggests that these personality constructs share a common substrate reflecting approach and avoidance temperament and motivation. Approach and avoidance temperaments are theorized to interact with intrapersonal and interpersonal experiences to shape approach and avoidance motivation. Personality constructs serve as dispositional markers of underlying approach-avoidance motivational orientations, which, in turn, lead to predictable patterns of goal pursuit following self-threats. Individuals who feel self-confident and relationally secure (e.g., high SE, securely attached, and low RS individuals) respond to self-threats by adopting approach-motivated goals to attain positive outcomes. Individuals who lack self-confidence and feel less relationally secure (e.g., low SE, avoidantly attached, and high RS individuals) respond to self-threats by decreasing approach motivation and/or increasing avoidance-motivated goals to prevent negative outcomes. Consequences of adopting approach- and avoidance-motivated goals are discussed.

From an early age, children vary in their responses to the environment. Whereas some children are fearful and behaviorally inhibited, other children are less fearful and behaviorally uninhibited. Individual differences in temperament – i.e., reactivity and self-regulation in the areas of emotionality, motor activity, and attention (Rothbart & Derryberry, 1981) – are thought to be biologically based, to emerge in early childhood, and to be relatively stable over time (Posner, Rothbart, & Sheese, 2007; Rothbart & Ahadi, 1994; Rothbart, Ahadi, & Evans, 2000). Cultural, environmental, and experiential factors, however, are also thought to interact with dispositional temperaments to shape cognitions about the self, others, and the social world (Rothbart, 2007). Thus, personality can be viewed as emerging from the joint influence of both constitutionally based dispositions and a history of intrapersonal and interpersonal experiences.

In the present article, I propose a model that integrates across personality constructs that are often studied in social personality psychology. Specifically, I propose that self-esteem (SE), attachment styles, and rejection sensitivity (RS) serve as dispositional markers, or developmental symptoms, of underlying approach and avoidance temperaments and motivations. When people experience proximal self-threats, they may respond with approach or avoidance-motivated goals and strategies that reflect their underlying motivations and temperaments (see Figure 1). Individuals with high self-esteem (HSE), a secure attachment style, or low rejection sensitivity (LRS) are expected to respond to self-threats with approach-motivated goals and strategies, consistent with their underlying approach temperament and motivation (e.g., sensitivity to rewards). In contrast, individuals with

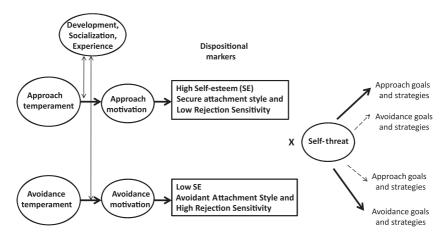


Figure 1 Theoretical model of motivational dispositions, dispositional markers, and motivated outcomes following self-threat.

low self-esteem (LSE), an avoidant attachment style, or high rejection sensitivity (HRS) are expected to respond to self-threats with avoidance-motivated goals and strategies, consistent with their underlying avoidance temperament and motivation (e.g., sensitivity to punishment and novel stimuli).

To this end, I first distinguish between approach and avoidance temperaments, motivations, and goals. Next, I review research on temperament and the role of environment in shaping motivation and personality. I then discuss how specific personality constructs interact with self-threats to shape approach- and avoidance-motivated outcomes. The current framework thus integrates both distal and proximal influences in predicting goal pursuit and behavior following self-threatening events.

Approach and Avoidance Temperament, Motivation, and Goals

Motivation involves the energization and direction of behavior via internal and/or external cues toward desired end-states. Two basic motivational systems that are theorized to guide thoughts, feelings, and behaviors are the approach and avoidance motivational systems. There is a long history of theory and research documenting a distinction between a system that is responsible for facilitating behavior and/or generating positive affect and a system that is responsible for inhibiting behavior and/or generating negative affect (see Elliot, 2008; for a review, see also Cacioppo & Berntson, 1994; Dickson & Dearing, 1979; Elliot & Thrash, 2002; Gable, 2006; LeDoux, 1995; Lewin, 1935; Miller, 1944; Schneirla, 1959).

According to Gray (1987, 1990) an appetitive motivational system, or Behavioral Activation System, activates behavior and positive affect in response to signals of reward, whereas an aversive motivational system, or Behavioral Inhibition System, inhibits behavior and generates negative affect in response to signals of punishment and novelty. Individuals with strong appetitive motivation are biased toward positive cues (indicating gain), whereas those with strong aversive motivation are biased toward negative cues (indicating loss; Derryberry & Reed, 1994). The decision to approach or avoid/withdraw is thought to reflect a fundamental adaptive decision that organisms had to face during their evolutionary history (Tooby & Cosmides, 1990) and all living organisms are

presumed to possess basic approach-avoidance tendencies toward environmental stimuli (i.e., observable objects/events/possibilities or abstract, internal representations of objects/ events/possibilities; Elliot, 2008).

Higgins (1997, 1998) made a similar motivational distinction in his theory of regulatory focus. Individuals with a promotion focus are sensitive to the presence and absence of positive outcomes; they strive toward ideals and aspirations and are concerned with growth and advancement. Individuals with a prevention focus are sensitive to the presence and absence of negative outcomes and are focused on safety concerns. These two perceptual orientations are related to approach and avoidance motivational processes and are neuroanatomically distinct (Amodio, Shah, Sigelman, Brazy, & Harmon-Jones, 2004; Sutton & Davidson, 1997).

Approach and avoidance motivational systems are theorized to be rooted in approach and avoidance temperaments, respectively (Elliot & Thrash, 2002, In press). Temperaments are conceptualized as general networks of neurobiological sensitivities to positive and negative stimuli. Approach temperament reflects an overall neurobiological sensitivity to the real or imagined presence of positive/desirable stimuli (rewards) and is accompanied by vigilance, affective reactivity, and behavioral tendencies toward such stimuli. Avoidance temperament reflects neurobiological sensitivity to the real or imagined presence of negative/undesirable stimuli (punishment) and is accompanied by vigilance, affective reactivity, and behavioral tendencies away from such stimuli. Whereas temperaments are unlearned predispositions that energize individuals in response to valenced stimuli in general, motives are thought to emerge from a history of socialization and to orient individuals toward or away from domain-specific positive and negative experiences (see Elliot, 1999; Elliot & Thrash, In press). Goals serve a more directive function, guiding behavior toward specific end-states; they are conceptualized as concrete, cognitively based representations that can be activated in a given situation to direct behavior toward or away from specific possibilities (Elliot, 1999; Elliot & Church, 1997). Goals can be viewed in terms of approaching a positive outcome or avoiding a negative outcome. For example, in the achievement domain, people can adopt approach goals (e.g., 'I want to try to do well in my classes') or avoidance goals (e.g., 'I want to avoid doing poorly in my classes') (Elliot & Sheldon, 1998). Similarly, in the social domain, people can adopt approach goals (e.g., 'I am trying to deepen my relationships with my friends') or avoidance goals (e.g., 'I am trying to avoid disagreements and conflicts with my friends') (Elliot, Gable, & Mapes, 2006). Whereas approach goals typically produce positive outcomes for oneself and one's relationships, avoidance goals typically produce negative outcomes, such as poor academic performance, loneliness, increased anxiety, and low subjective well-being (Elliot & McGregor, 1999; Elliot & Sheldon, 1997, 1998; Elliot et al., 2006; Gable, 2006).

If personality constructs (e.g., SE, attachment styles, and RS) are linked to basic approach and avoidance temperaments and motivations, then experiencing a proximal self-threat ought to strengthen approach-motivated responses (and/or weaken avoidancemotivated responses) for those with dispositional approach temperament and motives (e.g., HSE, secure attachment, and LRS individuals), and strengthen avoidance-motivated responses (and/or weaken approach-motivated responses) for those with avoidance temperament and motives (e.g., LSE, avoidant attachment, and HRS individuals). Furthermore, people's responses to self-threat may be shaped not only by general personality constructs, but by the degree to which they base self-worth on specific domains or are sensitive to rejection based on certain domains.

Temperament, Motivation, and Personality

Allport defined temperament as 'the characteristic phenomena of an individual's emotional nature' (Allport, 1961, p. 61) and personality as the 'dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment' (Allport, 1937, p. 48). Based on these ideas, dispositional approach and avoidance temperament - combined with a cumulative history of idiosyncratic experiences of rewards and punishments - may provide a basis for the development of motivation and personality.

Individual differences in emotional reactivity and behavioral inhibition appear at an early age. For example, high reactive infants are fearful, inhibited, and have a low arousal threshold for unfamiliar stimuli, whereas low reactive infants display little fear, are uninhibited, and have a high arousal threshold for unfamiliar stimuli. The degree to which individuals are inhibited versus uninhibited is heritable to a modest degree (DiLalla, Kagan, & Reznick, 1994). Whereas high reactive infants are likely to become fearful and subdued in early childhood, low reactive infants are likely to become bold and sociable in early childhood (Kagan, 1994). Although genetics play a role in personality development, 'genetic vulnerabilities (or strengths) may not be manifested except in the presence of a pertinent environmental trigger' (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000b, p. 223). In other words, 'temperament is important, but life intervenes' (Henig, 2009, p. 64). From an ecological perspective, socialization occurs through the influence of social spheres (e.g., families, peers, and schools) that occurs within broader social contexts (e.g., neighborhood, culture, and historical period) (Bronfenbrenner, 1979). The ecological perspective thus emphasizes the dynamic and interactive nature of the links among varying levels of social influence.

Children's temperament can interact with the environment in various ways (Collins, Feeney, & Brooke, 2000a). For example, mothers who rated their 2-year-old children as temperamentally 'difficult' used intrusive control tactics more frequently than mothers of 'easy' or 'average' children, and temperamentally difficult children, in turn, experienced more conflicts (i.e., resisted their mothers' control attempts) than did easy or average children (Lee & Bates, 1985). Indeed, the structure of personality may be affected by children's developing capacities and experiences. With maturation, children develop motor skills, language, cognition, self-awareness, and self-concepts that enable them to express new personality traits. Children's initial temperaments develop into more differentiated personality traits through transactions with the environment. Children's subjective perceptions of the environment and increasing freedom to select such environments may also contribute to personality development and functioning.

Self-Esteem

Various theories have been proposed to account for the development of individual differences in SE. One perspective is that SE is shaped by biological/genetic influences. For example, twin studies suggest that SE is heritable to some degree (McGuire et al., 1999), with hereditability estimates around 30% (Kendler, Gardner, & Prescott, 1998). Research also suggests that heredity accounts for variance in changes in SE across time (Neiss, Sedikides, & Stevenson, 2002). Sociocultural and environmental factors, however, also influence SE. For example, behavioral genetic studies suggest that individual differences in SE are accounted for by non-shared (i.e., unique) environments, such as schools, peers, social circles, and different patterns of parental treatment (see Hart, Atkins, & Tursi, 2006, for a review).

Intrapersonal self-evaluations also affect global SE. According to James (1890), SE is determined by the ratio of one's successes to pretensions. Individuals evaluate themselves based on their performance in domains of importance. If individuals perceive themselves to be competent in domains where they aspire to excel, they may develop HSE; if a person fails to meet ideals in domains in which they aspire to achieve, they may develop LSE. In contrast, Cooley (1902) proposed that the origins of SE in adults are primarily social in nature. His metaphor of the 'looking glass self' suggested that the self and SE are shaped by reflected appraisals, or the internalized evaluations of significant others, toward oneself. Mead (1934) also emphasized the importance of other people in the development of the self. He posited that the 'generalized other,' or collective judgments of significant others in one's life, contribute to SE. From a developmental perspective, children's differing rates of cognitive and social development translate into emerging individual differences in SE in middle childhood (Harter, 1999). Indeed, both James' and Cooley's theories are predictive of SE from middle childhood to adulthood and beyond (Harter, 1990, 1993, 1999).

According to sociometer theory, the primary determinants of SE are the perceived reactions of other people and self-evaluations in domains that one thinks are important to significant others (Leary, 1999). SE thus functions as a psychological gauge of one's relational value; it monitors the environment and alerts individuals to the possibility of relational devaluation (Leary & Baumeister, 2000; Leary, Tambor, Terdal, & Downs, 1995). Having HSE indicates that one has high relational value; HSEs feel accepted by others and are not worried about rejection. Having LSE indicates that one has low relational value; LSEs doubt their inclusion with others and are concerned about the possibility of rejection or disapproval. Consistent with this idea, SE has been shown to be inversely related to anxious expectations of rejection (Downey & Feldman, 1996) and is positively related to a secure attachment style, characterized by the belief that one is lovable, worthy of care, and the belief that others will be available and responsive to one's needs (Griffin & Bartholomew, 1994).

Indeed, HSEs possess favorable, confidently held self-views and have a clear sense of who they are (Baumeister, 1998; Campbell, 1990). Because they feel self-confident and relationally secure, they may be more motivated by the prospect of attaining positive end-states (e.g., positive affect, SE) than by the possibility of experiencing negative endstates (e.g., potential loss of SE, rejection). In fact, HSE is related to a tendency toward risk-taking, self-enhancement, promotion focus, and approach-motivated goals (Baumeister, Tice, & Hutton, 1989; Cavallo, Fitzsimons, & Holmes, 2009a; Heimpel, Elliot, & Wood, 2006; McGregor, Gailliot, Vasquez, & Nash, 2007; Tice, 1991).

Following self-threats, HSEs quickly call to mind their strengths versus weaknesses, dismiss the validity of the negative feedback, derogate out-group members, make selfserving judgments, and express increased zeal about value-laden opinions and ideologies (Beauregard & Dunning, 1998; Blaine & Crocker, 1993; Crocker, Thompson, McGraw, & Ingerman, 1987; Dodgson & Wood, 1998; McGregor & Marigold, 2003; Shrauger & Lund, 1975). This pattern of approach motivation is also evident at a neurological level; HSEs who experience self-threat show greater activation in the left frontal cortex (McGregor, Nash, & Inzlicht, 2009) - a region associated with approach motivation, positive mood, risk-taking, and behavioral activation (Harmon-Jones & Allen, 1997; Harmon-Jones, Lueck, Fearn, & Harmon-Jones, 2006).

High self-esteem people also engage in approach-motivated responses toward romantic partners following self-threats by strengthening attachments with their partner. For example, HSEs who were reminded of their faults or prior transgressions (Murray, Holmes, MacDonald, & Ellsworth, 1998), or were led to believe that their partners perceived a problem in the relationship (Murray, Rose, Bellavia, Holmes, & Kusche, 2002), subsequently affirmed their commitment to their relationships and increased perceptions of their partners' love and regard for them, thereby minimizing the effects of threat and bolstering their SE and perceived regard.

Although HSEs' responses to threat may help them feel better and more connected to others (e.g., romantic partners), their self-promoting responses may sometimes incur interpersonal costs (e.g., when interacting with strangers). For example, HSEs who received negative performance feedback were subsequently rated by an interaction partner as being less likeable and more antagonistic (Heatherton & Vohs, 2000); their decreased likeability was due, in part, to their adoption of an independent self-construal following self-threat, focusing more on their personal abilities than on their relationships (Vohs & Heatherton, 2001). Although LSEs were rated as more likeable following self-threat, they were also perceived to be more cautious, inhibited, and restrained during the interaction (Vohs & Heatherton, 2001). Overall, these findings suggest that whereas HSEs become approach-motivated following self-threat to directly enhance SE, LSEs adopt a more cautious stance to avoid further loss of SE.

Compared with HSEs, LSEs possess less favorable self-evaluations, lack self-confidence, self-clarity, and are chronically concerned about rejection (Blaine & Crocker, 1993; Campbell, 1990; Leary & Baumeister, 2000). LSEs are quick to perceive rejection from others; they automatically associate failure with rejection, whereas HSEs do not have this contingency of interpersonal acceptance (Baldwin & Sinclair, 1996). LSEs tend to base self-worth on what others think of them; they derive self-worth from domains that depend heavily on external feedback and validation, such as their appearance, outdoing others in competition, or gaining others' approval (Crocker, Luhtanen, Cooper, & Bouvrette, 2003b; Park, Crocker, & Vohs, 2006).

Whereas HSEs have an arsenal of tactics to refute self-threats directly, LSEs lack the inner resources to defend against such threats. LSEs are less skilled than HSEs at automatically recruiting positive thoughts about themselves following self-threats (Dodgson & Wood, 1998), are less likely to show self-serving biases (see Blaine & Crocker, 1993), and are thought to possess fewer positive aspects of their self-image with which to affirm themselves with following self-threats (see Spencer, Josephs, & Steele, 1993). Instead, LSEs generalize failure to other aspects of themselves (Kernis, Brockner, & Frankel, 1989) and feel ashamed and humiliated following self-threats (Brown & Dutton, 1995).

In fact, LSEs are averse to risking potential social disapproval that may accompany the brash strategies that HSEs often use to repair their SE and mood following self-threats, such as engaging in aggressive self-presentation or increasing zeal (Baumeister et al., 1989; McGregor et al., 2007). LSEs hesitate to self-enhance, even in the presence of positive feedback, because such feedback could elicit concerns about attaining such outcomes in the future (Swann, Griffin, Predmore, & Gaines, 1987). Rather than displaying selfenhancing, approach-motivated responses, LSEs appear to reduce approach motivation following self-threat. For example, Heimpel, Wood, Marshall, and Brown (2002) found that fewer LSEs than HSEs reported the goal to improve their mood following failure in their everyday lives.

In addition to reducing approach motivation, LSEs may at times adopt avoidancemotivated goals to prevent further rejection or loss of SE. For example, LSEs weakened their attachments following self-threat by distancing themselves from partners and devaluing their relationships (Murray, Holmes, & Griffin, 2000; Murray et al., 1998, 2002). LSEs are also likely to use the silent treatment - a form of defensive ostracism - to avoid feeling bad or inferior and to buffer against the impact of anticipated rejection or SE threat (Sommer, Williams, Ciarocco, & Baumeister, 2001). Such findings are consistent with the idea that individuals who lack perceived regard prioritize self-protection goals over self-enhancement or relationship-promotion goals following self-threats (see Murray, Holmes, & Collins, 2006; Sommer, 2001). Self-protection goals may be linked to decreased approach motivation and/or increased avoidance motivation more broadly within an approach-avoidance motivational framework.

In sum, HSEs and LSEs differ in their approach and avoidance-motivated responses to self-threats. These differences may stem, in part, from differences in dispositional temperaments and motivations, reinforced over a history of positive or negative self-evaluations, reflected appraisals, and idiosyncratic experiences. HSEs, who are likely to feel selfconfident and relationally secure, adopt approach-motivated goals to directly enhance feelings of SE and belonging following self-threats. LSEs - who lack self-confidence and relational security - are motivated by a desire to avoid negative outcomes. They may therefore reduce approach motivation and/or adopt avoidance-motivated goals and strategies to minimize the possibility of further threats or losses.

Contingencies of Self-Worth

The specific ways that HSEs and LSEs respond to self-threats may depend further on the degree to which their self-worth is contingent in the domain of threat. In childhood, people experience events, such as being abandoned, rejected, or criticized, that threaten their sense of safety and security. Consequently, they may draw conclusions about how others will respond to them and determine what they need to be or do in order to be safe from future harm. These conclusions are theorized to take the form of specific beliefs, or contingencies of self-worth, regarding what one must be or do to be a person of worth (Crocker & Park, 2004; Park et al., 2006). The conclusions that people draw likely depend on intrapersonal factors as well as social contexts, such as family, neighborhood, and culture. One's cumulative history of rewards and punishments in specific domains may thus contribute to variability in the domains on which individuals stake self-worth. Importantly, the domains in which people base self-worth are not necessarily the areas in which they believe they will succeed, but rather, are theorized to be the domains in which if they could succeed, they would feel safe and protected from threats they perceived in childhood (Crocker & Park, 2004). For example, contingencies of selfworth are associated with specific attachment styles in adulthood, consistent with the idea that attachment relationships may be a source of distressing events that lead individuals to conclude that their value depends on being or doing certain things (Park, Crocker & Mickelson, 2004).

According to the Contingencies of Self-Worth model, self-threats are more devastating to individuals when their SE is strongly invested in the domain than when it is not (Crocker & Wolfe, 2001). For example, students who highly based self-worth on academic competence reported lower state SE, less positive affect, and more negative affect, depressive symptoms, and negative self-evaluative thoughts when they performed poorly on academic tasks, received lower-than-expected grades, or were rejected from graduate schools, compared with those whose self-worth was less contingent in this domain (Crocker, Karpinski, Quinn, & Chase, 2003a; Crocker, Sommers, & Luhtanen, 2002; Park & Crocker, 2003).

Whereas previous research on SE has often focused on trait SE differences in response to self-threats, examining interactive effects of SE, contingencies of self-worth, and self-threats provides a more nuanced, integrative account of how various intrapersonal processes function together. This multifaceted perspective is consistent with the work of other researchers who have also emphasized the benefits of assessing specific aspects of the self, rather than focusing solely on global, trait SE (Campbell, 1990; Jordan, Spencer, Zanna, Hoshino-Brown, & Correll, 2003; Kernis, Cornell, Sun, Berry, & Harlow, 1993; Pelham, 1995; Swann, Chang-Schneider, & McClarty, 2007).

Individuals are presumed to be motivated to achieve boosts and to avoid drops in their state SE in domains on which their self-worth is staked (Crocker & Park, 2003). HSEs who feel self-confident and relationally secure - should be motivated to attain boosts to state SE following self-threats (reflecting approach motivation). This pattern may be especially evident among HSEs who strongly base self-worth in the threatened domain, compared with those who base self-worth less in the domain or do not undergo a threat. LSEs who strongly base self-worth in a threatened domain may show decreased approach and/or increased avoidance motivation following threat, compared with those who base self-worth less in the domain or do not undergo a threat. Thus, the goals that people adopt following threat depend not only on their SE but also, the degree to which they base self-worth in the threatened domain.

Consistent with these ideas, the more HSEs based self-worth on academic competence, the more they wanted to prove and validate their competence to others following failure (Park, Crocker, & Kiefer, 2007). In fact, academically contingent HSEs showed a slight boost in their state SE following failure, which could be interpreted as evidence of increased approach motivation to defend against the threat. On the other hand, academically contingent LSEs showed decreased motivation to appear competent to others following failure. Experiencing failure may have undermined LSEs' already fragile self-perceptions of competence, leading them to disengage from this domain in order to protect their SE from further threat. Indeed, academically contingent LSEs showed lowered state SE following failure and were quicker to associate themselves with failure versus success on an implicit, automatic level. Together, these findings suggest that whereas HSEs seek to vigorously defend and affirm their self-views following self-threat (reflecting approach motivation), LSEs withdraw from the situation (e.g., disengage) and try to avoid further damaging their SE.

Studies have examined responses to self-threat in other domains as well, such as physical appearance. Because self-perceived attractiveness is strongly tied to feelings of SE and social acceptance (Dion, Berscheid, & Walster, 1972; Harter, 1993), threats to appearance are likely to activate concerns about SE and social belonging. However, given that HSEs and LSEs differ in their self-confidence and relational security, they may adopt different goals following threats to appearance. In fact, HSEs - but only those who highly based self-worth on appearance and experienced a threat to this domain - reported increased desire to interact with close others following an appearance threat. In contrast, appearance contingent LSEs expressed decreased desire for social interaction following an appearance threat (Park & Maner, 2009).

Overall, research on contingencies of self-worth highlights the value of considering the joint influence of multiple intrapersonal processes when predicting outcomes. Findings suggest that self-threats shape motivation as a function of people's SE and contingencies of self-worth. Specifically, HSEs adopt risky, approach-motivated goals aimed at directly enhancing feelings of SE and belonging following self-threat in contingent domains. In contrast, LSEs reduce approach motivation following threat in contingent domains, such as disengaging from the domain or preferring to avoid social interaction.

Attachment Styles

Early child-caregiver experiences are viewed as critical to development because they instill "...a basic sense of emotional connectedness, confidence regarding the availability of others, and feelings of self-worth" (Sroufe, Carlson, Levy, & Egeland, 1999, p. 6). Given that individuals are thought to emerge from ongoing transactions between the developing child and changing circumstances (Sameroff & Chandler, 1975), it seems plausible that temperamental characteristics may interact with the environment over the course of development to influence internal working models of attachment. Indeed, individual differences in adult attachment-related anxiety and avoidance are heritable, but also influenced by non-shared environmental influence (Donnellan, Burt, Levendosky, & Klump, 2008). Individual differences in adult attachment-related anxiety and avoidance are heritable, but also influenced by non-shared environmental influence (Donnellan, Burt, Levendosky, & Klump, 2008). Thus, both temperament and environment may account for variation in attachment styles.

Caregivers' responses to a child's proximity-seeking attempts in times of need are thought to contribute to individual differences in attachment styles and functioning (Bowlby, 1969/1982). For example, infants who are temperamentally irritable are more likely to be classified as insecurely attached (particularly in the avoidant category), whereas temperamentally non-irritable infants are more likely to be classified as securely attached (van den Boom, 1994). However, differences in mothers' responsiveness to irritable versus non-irritable children may also contribute to differences in children's attachment styles. For example, among mothers with temperamentally irritable children, those who received an intervention (on how to soothe their babies and play with them) were more likely to have their children classified as securely attached a year later, whereas those who received no intervention were more likely to have their children classified as insecurely attached a year later (van den Boom, 1994). Such studies suggest that infant temperamental irritability may operate, in part, by influencing the quality of child-caregiver interactions. Infants who are irritable may behave in ways that push their mothers away and force infants to learn to provide for their own comfort (Rothbart & Ahadi, 1994).

According to attachment theory, individual differences in attachment styles reflect differences in prototypical, internal working models of relationships that are formed in the early context of the caregiver-infant relationship (Bowlby, 1969/1982; Hazan & Shaver, 1987; Mikulincer & Shaver, 2003; Rholes & Simpson, 2004). Individual differences in attachment style are theorized to reflect the internalization of experiences with caregivers and their expectations about whether the caregiver is available and responsive toward them in times of need (Bowlby, 1973). Mental representations, or working models, of the self (as worthy or unworthy of love) and others (as responsive or unresponsive) are thought to guide social interaction and emotion regulation in childhood and adulthood (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973, 1979; Collins & Read, 1994).

Three attachment styles were initially identified (using the laboratory Strange Situation) to classify infant-parent relationships as secure, avoidant, or anxious-ambivalent (Ainsworth et al., 1978). Of particular interest in the present article is the distinction between individuals with secure versus avoidant attachment. Secure infants are confident in the availability and responsiveness of their caregiver and rely more on their caregiver as a secure base to regulate feelings of distress and anxiety than do avoidant infants. Following a brief period of separation from their caregiver, secures actively seek contact with and comfort from their caregiver, whereas avoidant infants react with avoidance and

detachment and do not use their caregiver to regulate and dissipate negative affect when it arises

Paralleling the infant attachment styles that Ainsworth et al. (1978) identified, Hazan and Shaver (1987) classified adults into the same three attachment categories as they relate to adult romantic relationships. Secures have a positive internalized sense of self-worth that is not highly dependent on ongoing external validation (Bartholomew, 1990). Indeed, Park, Crocker, and Mickelson (2004) found that secures derived SE from family support – a source of self-worth that is relatively unconditional in nature (i.e., does not require continual validation from others). Indeed, secures are more likely to recall positive perceptions of their early family relationships (Feeney & Noller, 1990), describe their parents as more benevolent and less punitive (Levy, Blatt, & Shaver, 1998), and show better adjustment in adolescence than individuals with insecure attachments (Cooper, Shaver, & Collins, 1998).

Given their attachment history, it is not surprising that secure adults possess mental models of themselves as valuable and worthy of others' love and support and of significant others as being available, reliable, and trustworthy (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). Indeed, secures score relatively low in both attachment-related anxiety (fear of rejection and abandonment) and avoidance (discomfort with closeness and dependence on others); they are comfortable with closeness and interdependence, expect partners to be available and responsive to their needs, and have relationships that are characterized by trust, commitment, satisfaction, and interdependence (Collins & Read, 1990; Simpson, 1990).

Avoidants, on the other hand, possess representations of their parents as relatively punitive and malevolent (Levy et al., 1998), are likely to report childhood separation from their mother, and are mistrustful of others (Feeney & Noller, 1990). Indeed, adults with avoidant attachment report feeling uncomfortable with closeness and find it difficult to trust and depend on others (Hazan & Shaver, 1987); they are less likely to base self-worth on others' approval, family support, and God's love (Park et al., 2004), and their romantic relationships are characterized by negative affect (Simpson, 1990), low trust, commitment, satisfaction, and interdependence (Collins & Read, 1990; Simpson, 1990). Dismissing-avoidant individuals are low in anxiety and high in avoidance; they view close relationships as relatively unimportant and value independence and self-reliance. Fearful-avoidant individuals are high in both attachment anxiety and avoidance; they desire close relationships and the approval of others, but avoid intimacy because they fear being rejected. In the present article, I focus on the commonality between dismissing and fearful attachment – the dimension of avoidance.

According to attachment theorists, the attachment system should be most strongly activated under conditions of distress and elicit different responses among secures versus avoidants (Ainsworth et al., 1978; Bowlby, 1973, 1980). Given that secure attachment reflects a history of experiences in which attempts to seek closeness with attachment figures during times of distress were typically met with success, secures may be inclined to approach close others for emotional support and reassurance in times of anxiety or distress, consistent with their internalized working models of self and others. In contrast, avoidant attachment is thought to reflect a history of experiences in which attempts to seek closeness with attachment figures were often rejected or thwarted (Crittenden & Ainsworth, 1989). Over time, these individuals may come to suppress approach-motivated behaviors and defensively distance themselves from others in response to anxiety or distress. Indeed, avoidants are theorized to associate the need for proximity with rejection and to react defensively to feelings of anxiety and distress by suppressing their desire for proximity, rather than seeking it (Ainsworth et al., 1978).

The ways in which secures and avoidants respond to self-threat suggest underlying differences in dispositional temperaments and motivations. Secures typically pursue approach-motivated strategies and behaviors to cope with self-threats. For example, when dealing with divorce, secures appraise themselves as more capable of coping with the divorce, seek support from others, and engage in more problem-focused coping than those with less secure attachment styles (Birnbaum, Orr, Mikulincer, & Florian, 1997). Secures also use more proactive, support-seeking strategies in response to stressful military combat training (Mikulincer & Florian, 1995) and traumatic experiences (e.g., Iraqi missile attack on Israel during the Gulf War) (Mikulincer, Florian, & Weller, 1993). Among dating couples, researchers have found that secure women turned to partners as sources of comfort and reassurance as their anxiety increased, and secure men provided greater reassurance, emotional support, and supportive comments as their partners' anxiety levels increased (Simpson, Rholes, & Nelligan, 1992). Avoidants, in contrast, use deactivating strategies to defensively dismiss or downplay their needs to protect themselves from feeling vulnerable following self-threats. Deactivating strategies are thought to reflect an avoidance reaction to an attachment figure's unavailability, which may develop from relationships with attachment figures who punish or disapprove of closeness and expressions of vulnerability (Cassidy & Kobak, 1988).

Thus, the primary aim of deactivating strategies is to down-regulate the attachment system in order to avoid frustration and distress produced by attachment figure unavailability. Strategies include diverting attention away from threats, distancing from threats, avoiding thoughts related to the need for comfort and closeness, and relying on oneself rather than on others. For example, avoidant adults suppress their attachment systems by restricting the encoding and accessibility of attachment-related thoughts and memories (Mikulincer & Orbach, 1995) and use distancing coping strategies in response to stressors (Mikulincer & Florian, 1995; Mikulincer et al., 1993).

Given that avoidants are uncomfortable with closeness in relationships, they may be less likely to seek support or provide support to others in times of distress. Indeed, avoidant women withdrew from their romantic partners both emotionally and physically as their level of anxiety increased in a laboratory setting, and avoidant men showed a decline in overall supportiveness as their partners' anxiety increased (Simpson et al., 1992). Indeed, avoidants behaved in a less warm and supportive manner toward their romantic partner when discussing a major problem (Simpson, Rholes, & Phillips, 1996), were less likely to seek support from their partner in response to increased feelings of personal stress (Collins & Feeney, 2000), and avoidant women sought less contact with their partner while separating at an airport (Fraley & Shaver, 1998). Such findings parallel those found with infants in Ainsworth et al.'s (1978) research using the Strange Situation: Whereas secure infants sought close physical and emotional contact with their attachment figure in response to situationally activated anxiety (i.e., the presence of a stranger), avoidant infants retracted from their attachment figure in response to feelings of attachment-related distress and anxiety.

In sum, secures respond to self-threats by adopting approach-motivated goals and strategies, such as engaging in problem-focused strategies and actively seeking out emotional and instrumental support. In contrast, avoidants deal with self-threat by adopting avoidance-motivated goals and strategies, such as distancing, disengaging from sources of anxiety, and devaluing events that cause painful feelings. Although using deactivating strategies may protect avoidants from rejection and feelings of vulnerability, such responses could interfere with the development and maintenance of close, mutually caring relationships over time.

Rejection Sensitivity

Rejection sensitivity is a cognitive-affective processing dynamic characterized by anxious concerns and expectations of rejection (Downey & Feldman, 1996; see Downey & Romero-Canyas, 2005). To the extent that individuals experience rejection during their formative years, they may come to develop the anxious expectation that other people are likely to reject them. Consequently, they may carry anxious expectations of rejection into new situations and relationships and readily perceive and overreact to signs of rejection (Downey & Feldman, 1996); these overreactions, in turn, may elicit further rejection by others and reinforce anxious expectations of rejection (Downey, Freitas, Michaelis, & Khouri, 1998). RS is associated with childhood experiences of abandonment, abuse, neglect, exposure to family violence, and peer rejection (Downey, Khouri, & Feldman, 1997; Feldman & Downey, 1994; London, Downey, Bonica, & Paltin, 2007), is negatively related to SE and secure attachment, and positively related to avoidant attachment and social avoidance (Downey & Feldman, 1996).

Just as individuals with LSE are theorized to have a sociometer that is sensitive to the possibility of relational devaluation (Leary & Baumeister, 2000), HRS individuals possess a defensive motivational system (DMS) that is hypervigilant to signs of potential disapproval or rejection (Downey, Mougios, Ayduk, London, & Shoda, 2004). Activation of the DMS automatically heightens detection of threat-relevant cues (e.g., interpersonal negativity) and motivation to respond once cues of threat are detected. Furthermore, just as individuals with HSE or a secure attachment style are unlikely to be concerned about the possibility of rejection, LRS individuals are unlikely to experience heightened DMS activation in potentially rejecting situations, because they view rejection as less probable or of less concern (Downey et al., 2004).

Given the parallels between SE, attachment styles, and RS, it seems plausible that one response of HRS individuals to feeling rejected would be to reduce approach motivation and increase avoidance-motivated goals and strategies to prevent further rejection. Indeed, a longitudinal study of middle school students found that compared with LRS children, HRS children engaged in more socially avoidant and withdrawal behaviors and experienced more loneliness as a result (London et al., 2007). Furthermore, just as individuals differ in their levels of SE, attachment styles, and the degree to which they base selfworth in specific domains, individuals may also differ in their overall level of RS and in the degree to which they are sensitive to rejection based on specific domains. Two programs of research that have examined domain-specific forms of RS are those of Race-RS (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002) and Appearance-RS (Park, 2007). Underlying each of these constructs is feelings of low self-confidence (e.g., selfdoubts) and relational insecurity based on specific attributes. Although dispositional temperaments and motivations have not been discussed in the framework of RS, it seems plausible - given the associations among RS, SE, and attachment styles (Downey & Feldman, 1996) - that RS could also serve as a dispositional marker, or developmental symptom, of underlying avoidance temperament and motivation, reinforced by a cumulative history of negative interpersonal experiences.

Race-RS

As a result of direct or vicarious experiences of perceived mistreatment, prejudice, or discrimination based on one's membership in a stigmatized social group, individuals may come to doubt their abilities and sense of belonging or inclusion in majority-dominated

contexts (Branscombe, Schmitt, & Harvey, 1999; Goffman, 1963; Steele, 1997). In particular, some individuals may come to anxiously expect rejection based on status characteristics (e.g., their race) (Mendoza-Denton et al., 2002). Experiences of self-threat, in turn, may lead individuals to decrease approach motivation and increase avoidancemotivated goals, which could then hinder them from achieving important personal goals.

Supporting this idea, Mendoza-Denton et al. (2002) followed a sample of African American students entering a potentially threatening context (i.e., a predominantly White university) over a two to three year period. Compared with African American students with low Race-RS, those with high Race-RS expressed more discomfort and less trust in their university, reported having fewer White friends, were less likely to attend academic review sessions, and showed significant declines in their grades over time. Indeed, higher levels of Race-RS at the beginning of college was associated with greater anxiety about approaching professors and teaching assistants with an academic problem during participants' sophomore or junior year. Participants may have coped with their anxiety by avoiding contexts and activities that could have otherwise helped them to excel in their courses and obtain higher grades. Importantly, the findings of this research support the links of the proposed model. Participants who doubted themselves and felt relationally insecure (i.e., high Race-RS participants) responded to a threatening context (i.e., an institution perceived as rejecting) by diminishing their motivation to pursue important goals and adopting instead avoidance-motivated goals to protect themselves from further loss of SE or belonging. Although engaging in such actions might help alleviate feelings of anxiety in the short term, doing so could incur costs over time. For example, avoiding contact with out-group members could limit the diversity of one's social contacts, and avoiding potentially threatening academic settings could limit access to available resources and lead to academic disidentification and underperformance (Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Steele, 1997).

There are ways, however, to mitigate the negative effects of Race-RS. For example, Mendoza-Denton et al. (2002) found that high Race-RS participants' sense of belonging at their institution increased on days after a positive race-related event had occurred. Such findings suggest that institutional support for events and organizations that explicitly value diversity may help to reduce anxious expectations of race-based rejection. On a broader level, increasing feelings of unconditional acceptance and positive regard (i.e., relational security) may also have a positive impact in motivating students toward achieving their personal goals.

Appearance-RS

Appearance-RS refers to the dispositional tendency to anxiously expect, readily perceive, and overreact to signs of rejection based on one's physical attractiveness (Park, 2007). Like other RS constructs, Appearance-RS consists of an affective component (i.e., anxious concerns) and a cognitive component (i.e., rejection expectations). These components are thought to interact with one another in a multiplicative fashion, such that anxieties about rejection amplify cognitions, or expectations, of appearance-based rejection. Appearance-RS is related to LSE, low secure attachment, insecure attachment (i.e., preoccupied and fearful attachment styles), sensitivity to rejection in general, and basing self-worth on appearance (Park, 2007; Park & Pinkus, 2009). High Appearance-RS individuals perceive conditional acceptance from their peers based on their looks, and feel pressured by the media to meet standards of attractiveness (Park, DiRaddo, & Calogero, 2009b). Just as LSEs automatically associate failure with rejection (Baldwin & Sinclair,

1996), high Appearance-RS individuals link feelings of unattractiveness with feelings of rejection. For example, reminding high Appearance-RS participants of disliked aspects of their appearance led them to feel more alone and rejected than those with low Appearance-RS or those who were reminded of neutral stimuli (Park, 2007).

High Appearance-RS individuals often respond to appearance-based threats by decreasing approach motivation and adopting avoidance-motivated goals and strategies. For example, high Appearance-RS participants preferred to avoid social interaction, even with close others, after receiving negative interpersonal feedback about their physical appearance (Park & Pinkus, 2009). Additionally, a daily diary study revealed that on days when high Appearance-RS participants felt sensitive to appearance rejection, they were more inclined to actually avoid other people than on days when they did not feel sensitive to rejection (Park & Pinkus, 2009). High Appearance-RS individuals thus expect to be rejected when they feel unattractive and adopt avoidance-motivated goals after experiencing real or perceived appearance-related rejection.

In addition to weakened social connections, high Appearance-RS individuals experience mental and physical health risks as a result of their heightened sensitivity to appearance rejection. High Appearance-RS individuals compare their appearance more with others, feel badly about themselves when making such comparisons, and exhibit more symptoms of eating disorders, body dysmorphic disorder, and interest in cosmetic surgery than those with low Appearance-RS (Calogero, Park, Rahemtulla, & Williams, In press; Park, 2007; Park, Calogero, Harwin, & DiRaddo, 2009a; Park, Calogero, Young, & DiRaddo, In press). In addition, they are more likely to experience negative mood and to interpret ambiguous appearance commentary more negatively than those with low Appearance-RS after experiencing an ambiguous instance of appearance-based rejection (Park & Harwin, In press). There may be ways, however, to temporarily alleviate anxieties about appearance rejection for those with high Appearance-RS. For example, high Appearance-RS participants who wrote about a disliked aspect of their appearance and then listed their greatest strength (self-affirmation) or the initials of a close relationship partner (secure attachment prime) showed attenuated effects on measures of state SE and feelings of rejection (Park, 2007). Reminders of SE and belonging thus buffered individuals from the negative impact of an appearance threat.

In sum, converging evidence from research programs on RS provides suggestive support for the current model linking personality constructs with approach and avoidance motivational systems. Regardless of whether RS is based on race or appearance, HRS individuals often reduce approach motivation and adopt avoidance-motivated goals to protect themselves from the possibility of further rejection. Although doing so may temporarily relieve anxiety, there may be costs to personal goal pursuit, relationships, and to mental and physical health in the process.

Implications and Future Directions

A large body of research has accumulated on the consequences of SE, contingencies of self-worth, attachment styles, RS, and domain-specific aspects of SE and RS following self-threats. In the present article, I proposed a theoretical model of how these various constructs and outcomes might be related. Individuals who feel self-confident and relationally secure (e.g., HSE, securely attached, LRS individuals) respond to self-threats with self-enhancing, approach-motivated goals and strategies. This response is heightened when examining domain-specific effects, as evident in research on contingencies of self-worth and domain-specific RS. In contrast, individuals who lack self-confidence or feel

relationally insecure (e.g., LSE, avoidantly attached, and HRS individuals) tend to decrease approach motivation and/or increase avoidance motivation following self-threats.

Although approach-motivated goals and strategies often produce favorable outcomes, there may be costs associated with both approach- and avoidance-motivated responses to self-threat. For example, although HSEs typically repair SE by engaging in self-enhancement following self-threats, doing so may at times incur costs to their interpersonal evaluations and likeability. Similarly, although LSEs may seek to protect themselves following self-threats, their adoption of avoidance-motivated goals could distance themselves from close others who might otherwise serve as sources of affirmation or support. On a similar note, although avoidantly attached individuals may alleviate attachment-related distress by adopting deactivating strategies that distance themselves from others, such responses could hinder them from sustaining close relationships. Finally, although individuals with high Race- or Appearance-RS may try to protect themselves by avoiding potential sources of rejection, doing so could exacerbate feelings of loneliness over time.

Some studies have shown positive effects of using techniques (e.g., self-affirmation, activation of a secure base schema) to alleviate feelings of self-doubt or relational insecurity (Mikulincer & Shaver, 2001; Park, 2007; Sherman, Nelson, & Steele, 2000). Other studies, however, have found that attempts to bolster SE or feelings of interpersonal acceptance can backfire for those who lack self-confidence and relational security, such as people with LSE (Cavallo, Marigold, & Holmes, 2009b; Swann, Hixon, & De La Ronde, 1992; Wood, Perunovic, & Lee, 2009). Future research is needed to examine further the conditions under which vulnerable individuals may benefit from interventions designed to reduce feelings of self-doubt and relational insecurity.

Researchers could also expand the current approach-avoidance motivational framework to examine other intrapersonal or relational constructs. For example, defensive HSEs are thought to simultaneously possess two discrepant attitudes toward the self: at a conscious, explicit level, they feel good about themselves, but at a less conscious, implicit level they feel negative about themselves (Jordan et al., 2003). When their explicitly positive selfviews are threatened, their underlying self-doubts are thought to motivate them to actively defend their explicitly positive self-views. For example, individuals with high explicit (but low implicit) SE discriminate more against outgroup members following negative feedback (Jordan, Spencer, & Zanna, 2005), exaggerate consensus estimates for personal beliefs about unrelated social issues following failure (McGregor, Nail, Marigold, & Kang, 2005), exaggerate their conviction about unrelated social issues following an uncertainty threat (McGregor & Marigold, 2003), and increase their endorsement of positive personality descriptions following a mortality salience manipulation (Schmeichel et al., 2009).

In the present model, HSEs were conceptualized as having high self-confidence and high relational security. However, given the research reviewed above, there may be a subset of HSEs (i.e., with implicit self-doubts) who also exhibit approach-motivated responses to self-threat. Future research could examine potential differences between 'genuine' forms of approach-motivated responses versus 'defensive' or 'reactive' approach-motivated responses that stem from fragile SE, rather than true feelings of selfconfidence or relational security. Along similar lines, there may be times when individuals with HRS respond to self-threat (e.g., rejection) with strategies that appear approachmotivated (e.g., ingratiating themselves), but may be rooted in feelings of self-doubt and relational insecurity versus security.

Another future direction is to examine neurobiological regions that underlie SE, attachment styles, and RS. Given that regions of the prefrontal cortex have been differentially linked to approach/withdrawal motivation (e.g., Harmon-Jones & Allen, 1997; Sutton & Davidson, 1997), HSE, securely attached, or LRS individuals may show similar brain activation in response to self-threats, as might those with LSE, insecure attachment, or HRS.

Overall, the present model offers a synthesis of how dispositional temperaments, experiences, motivations, and personality constructs may be linked with goal strivings following self-threats. By integrating across subareas of psychology, this model contributes to a greater understanding of how intrapersonal and relational constructs are interrelated.

Short Biography

Lora Park is an Assistant Professor in the Department of Psychology at the University at Buffalo, The State University of New York. Her research investigates questions pertaining to the self, self-esteem, motivation, and interpersonal processes. In particular, she examines how aspects of the person and the situation interact to influence goal pursuit, performance, psychological well-being, and interpersonal functioning. Her research has appeared in outlets such as Journal of Personality and Social Psychology, Psychological Bulletin, Personality and Social Psychology Bulletin, Journal of Research in Personality, and Self and Identity, and is funded by the National Science Foundation. Park serves on the editorial boards of Personality and Social Psychology Bulletin, Personal Relationships, and Self and Identity. She received a BS in Psychology from the University of Washington in 2000 and a PhD in Social Psychology from the University of Michigan in 2005.

Endnote

* Correspondence address: 206 Park Hall, Buffalo, NY 14260, USA. Email: lorapark@buffalo.edu

References

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of Attachment. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Allport, G. W. (1937). Personality: A Psychological Interpretation. New York: Holt.

Allport, G. W. (1961). Pattern and Growth in Personality. Oxford: Holt, Reinhart & Winston.

Amodio, D. M., Shah, J. Y., Sigelman, H., Brazy, P. C., & Harmon-Jones, E. (2004). Implicit regulatory focus associated with asymmetrical frontal cortical activity. Journal of Experimental Social Psychology, 40, 225-232.

Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and if-then contingencies of interpersonal acceptance. Journal of Personality and Social Psychology, 71, 1130-1141.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. Journal of Social and Personal Relationships, 7, 147-178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-catergory model. Journal of Personality and Social Psychology, 61, 226-244.

Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), Handbook of Social Psychology (4th edn, Vol. 2, pp. 680-740). New York: McGraw-Hill.

Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. Journal of Personality, 57, 547-579.

Beauregard, K. S., & Dunning, D. (1998). Turning up the contrast: Self-enhancement motives prompt egocentric contrast effects in social judgments. Journal of Personality and Social Psychology, 74, 606-621.

Birnbaum, G. E., Orr, I., Mikulincer, M., & Florian, V. (1997). When marriage breaks up: Does attachment style contribute to coping and mental health? Journal of Social and Personal Relationships, 14, 643-654.

Blaine, B., & Crocker, J. (1993). Self-esteem and self-serving biases in reactions to positive and negative events: An integrative review. In R. F. Baumeister (Ed.), Self-Esteem: The Puzzle of Low Self-Regard (pp. 55-85). Hillsdale, NJ: Erlbaum.

van den Boom, D. C. (1994). The influence of temperament and mothering on attachment and exploration: An experimental manipulation of sensitive responsiveness among lower-class mothers with irritable infants. Child Development, 65, 1457-1477.

- Bowlby, J. (1969/1982). Attachment and Loss: Vol. 1. Attachment. New York: Basic Books.
- Bowlby, J. (1973). Attachment and Loss: Vol. 2. Separation: Anxiety and Anger. New York: Basic Books.
- Bowlby, J. (1979). The Making and Breaking of Affectional Bonds. London: Tavistock.
- Bowlby, J. (1980). Attachment and Loss: Vol. 3. Loss: Sadness and Depression. New York: Basic Books.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. Journal of Personality and Social Psychology, 77,
- Bronfenbrenner, U. (1979). The Ecology of Human Development: Experiments by Nature and Design. London: Harvard University Press.
- Brown, J. D., & Dutton, K. A. (1995). The thrill of victory, the complexity of defeat: Self-esteem and people's emotional reactions to success and failure. Journal of Personality and Social Psychology, 68, 712-722.
- Cacioppo, J. T., & Berntson, G. G. (1994). Relationship between attitudes and evaluative space: A critical review, with emphasis on the separability of positive and negative substrates. Psychological Bulletin, 115, 401-423.
- Calogero, R. M., Park, L. E., Rahemtulla, Z. R., & Williams, K. C. D. (In press). Predicting excessive body image concerns among British university students: The unique role of appearance-based rejection sensitivity. Body Image.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. Journal of Personality and Social Psychology, 59, 538-549.
- Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relation to other defensive processes. In J. Belsky & T. Nezworski (Eds.), Clinical Implications of Attachment: Child Psychology (pp. 300-323). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cavallo, J. V., Fitzsimons, G. M., & Holmes, J. G. (2009a). Taking chances in the face of threat: Romantic risk regulation and approach motivation. Personality and Social Psychology Bulletin, 35, 737-751.
- Cavallo, J. V., Marigold, D., & Holmes, J. G. (2009b, October). When a friend in need is a friend to heed: The challenges of providing social support to low self-esteem people. Paper presented at Society for Experimental Social Psychology. Portland, ME.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: Support-seeking and caregiving processes in intimate relationships. Journal of Personality and Social Psychology, 78, 1053-1073.
- Collins, N., Feeney, L., & Brooke, C. (2000a). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. Journal of Personality and Social Psychology, 78, 1053-1073.
- Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000b). Contemporary research on parenting. The case for nature and nurture. American Psychologist, 55, 218–232.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models and relationship quality in dating couples. Journal of Personality and Social Psychology, 58, 644-663.
- Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. In K. Bartholomew & D. Perlman (Eds.), Advances in Personal Relationships, Vol. 5: Attachment Processes in Adulthood (pp. 53-90). London, UK: Jessica Kingsley.
- Cooley, C. H. (1902). Human Nature and the Social Order. New York: Charles Scribner's Sons.
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. Journal of Personality and Social Psychology, 74, 1380-1397.
- Crittenden, P. M., & Ainsworth, M. D. S. (1989). Child maltreatment and attachment theory. In D. Cicchetti & V. Carlson (Eds.), Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect (pp. 432-463). Cambridge, UK: Cambridge University Press.
- Crocker, J., Karpinski, A., Quinn, D. M., & Chase, S. (2003a). When grades determine self-worth: Consequences of contingent self-worth for male and female engineering and psychology majors. Journal of Personality and Social Psychology, 85, 507-516.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, S. (2003b). Contingencies of self-worth in college students: Theory and measurement. Journal of Personality and Social Psychology, 85, 894-908.
- Crocker, J., & Park, L. E. (2003). Seeking self-esteem: Construction, maintenance, and protection of self-worth. In M. Leary & J. Tangney (Eds.), Handbook of Self and Identity (pp. 291-313). New York: Guilford Press.
- Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. Psychological Bulletin, 130, 392-414.
- Crocker, J., Sommers, S. R., & Luhtanen, R. K. (2002). Hopes dashed and dreams fulfilled: Contingencies of selfworth and admissions to graduate school. Personality and Social Psychology Bulletin, 28, 1275-1286.
- Crocker, J., Thompson, L. L., McGraw, K. M., & Ingerman, C. (1987). Downward comparison, prejudice, and evaluations of others: Effects of self-esteem and threat. Journal of Personality and Social Psychology, 52, 907-917.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. Psychological Review, 108, 593-623.
- Derryberry, D., & Reed, M. A. (1994). Temperament and attention: Orienting toward and away from positive and negative signals. Journal of Personality and Social Psychology, 66, 1128–1139.
- Dickson, A., & Dearing, M. F. (1979). Appetitive-aversive interactions and inhibitory processes. In A. Dickson & R. A. Boakes (Eds.), Mechanisms of Learning and Motivation (pp. 203–231). Hillsdale, NJ: Erlbaum.

- DiLalla, L. F., Kagan, J., & Reznick, J. S. (1994). Genetic etiology of behavioral inhibition among 2-year-old children. Infant Behavior & Development, 17, 405-412.
- Dion, K. K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. Journal of Personality and Social Psychology, 24, 285-290.
- Dodgson, P. G., & Wood, J. V. (1998). Self-esteem and the cognitive accessibility of strengths and weaknesses after failure. Journal of Personality and Social Psychology, 75, 178–197.
- Donnellan, B. M., Burt, S. A., Levendosky, A. A., & Klump, K. L. (2008). Genes, personality, and attachment in adults: A multivariate behavioral genetic analysis. Personality and Social Psychology Bulletin, 34, 3-16.
- Downey, G., & Feldman, S. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personal*ity and Social Psychology, 70, 1327-1343.
- Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. Journal of Personality and Social Psychology, 75, 545-560.
- Downey, G., Khouri, H., & Feldman, S. (1997). Early interpersonal trauma and adult adjustment: The mediational role of rejection sensitivity. In D. Cicchetti & S. Toth (Eds.), Rochester Symposium in Developmental Psychopathology, Volume VIII: The Effects of Trauma on the Developmental Process (pp. 85-114). Rochester, NY: University of Rochester Press.
- Downey, G., Mougios, V., Ayduk, A., London, B., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system. Psychological Science, 10, 668-673.
- Downey, G., & Romero-Canyas, R. (2005). Processing dynamics of rejection sensitivity. In K. Williams, J. Forgas & W. von Hippel (Eds.), The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying. New York: Psychological Press, pp. 131-153.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. Educational Psychologist, 34, 169-189.
- Elliot, A. J. (2008). Approach and avoidance motivation. In A. Elliot (Ed.), Handbook of Approach and Avoidance Motivation (pp. 3-14). New York: Psychology Press.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. Journal of Personality and Social Psychology, 72, 218-232.
- Elliot, A. J., Gable, S. L., & Mapes, R. R. (2006). Approach and avoidance motivation in the social domain. Personality and Social Psychology Bulletin, 32, 378-391.
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. Journal of Personality and Social Psychology, 76, 628-644.
- Elliot, A. J., & Sheldon, K. M. (1997). Avoidance achievement motivation: A personal goals analysis. *Journal of* Personality and Social Psychology, 73, 171–185.
- Elliot, A. J., & Sheldon, K. M. (1998). Avoidance personal goals and the personality-illness relationship. Journal of Personality and Social Psychology, 75, 1282-1299.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperament and goals. Journal of Personality and Social Psychology, 82, 804-818.
- Elliot, A. J., & Thrash, T. M. (In press). Approach and avoidance temperament as basic dimensions of personality. Journal of Personality.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. Journal of Personality and Social Psychology, 58, 281-291.
- 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.
- Fraley, R. C., & Shaver, P. R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. Journal of Personality and Social Psychology, 75, 1198-1212.
- Gable, S. L. (2006). Approach and avoidance social motives and goals. Journal of Personality, 74, 175-222.
- Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, NJ: Prentice-Hall.
- Gray, J. A. (1987). The Psychology of Fear and Stress (2nd edn). New York: Cambridge University Press.
- Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. Cognition and Emotion, 4, 269-288.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. Journal of Personality and Social Psychology, 67, 430-445.
- Harmon-Jones, E., & Allen, J. B. (1997). Behavioral activation sensitivity and resting frontal EEG symmetry: Covariation of putative indicators related to risk for mood disorders. Journal of Abnormal Psychology, 106, 159-163.
- Harmon-Jones, E., Lueck, L., Fearn, M., & Harmon-Jones, C. (2006). The effect of personal relevance and approach-related action expectation on relative left frontal cortical activity. Psychological Science, 17, 434-440.
- Hart, D., Atkins, R., & Tursi, N. (2006). Origins and developmental influences on self-esteem. In M. H. Kernis (Ed.), Self-Esteem: Issues and Answers (pp. 157-162). New York: Psychology Press.
- Harter, S. (1990). Causes, correlates, and the functional role of global self-worth: A life-span perspective. In R. Sternberg & J. Kollogian (Eds.), Competence Considered (pp. 67–98). New Haven, CT: Yale University Press.
- Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. In R. F. Baumeister (Ed.), Self-Esteem: The Puzzle of low Self-Regard (pp. 87-116). New York: Plenum.

- Harter, S. (1999). The Construction of the Self: A Developmental Perspective. New York: Guilford Press.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, **52**, 511–524.
- Heatherton, T. F., & Vohs, K. D. (2000). Interpersonal evaluations following threat to self. Journal of Personality and Social Psychology, 78, 725–736.
- Heimpel, S. A., Elliot, A. J., & Wood, J. V. (2006). Basic personality dispositions, self-esteem, and personal goals: An approach-avoidance analysis. *Journal of Personality*, **74**, 1293–1319.
- Heimpel, S. A., Wood, J. V., Marshall, M. A., & Brown, J. D. (2002). Do people with low self-esteem really want to feel better? Self-esteem differences in motivation to repair negative moods. Journal of Personality and Social Psychology, 82, 128-147.
- Henig, R. M. (2009, October 4). The anxious mind. The New York Times Magazine.
- Higgins, E. T. (1997). Beyond pleasure and pain. American Psychologist, 52, 1280-1300.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. Advances in Experimental Social Psychology, 30, 1-46.
- James, W. (1890). The Principles of Psychology (Vol. 1). Cambridge, MA: Harvard University Press.
- Jordan, C. H., Spencer, S. J., & Zanna, M. P. (2005). Types of high self-esteem and prejudice: How implicit selfesteem relates to ethnic discrimination against high explicit self-esteem individuals. Personality and Social Psychology Bulletin, 31, 693-702.
- Jordan, C. H., Spencer, S. J., Zanna, M. P., Hoshino-Brown, E., & Correll, J. (2003). Secure and defensive selfesteem. Journal of Personality and Social Psychology, 85, 385-405.
- Kagan, J. (1994). Temperament and the reactions to unfamiliarity. Child Development, 68, 139-143.
- Kendler, K. S., Gardner, C. O., & Prescott, C. A. (1998). A population-based twin study of self esteem and gender. Psychological Medicine, 28, 1403–1409.
- Kernis, M. H., Brockner, J., & Frankel, B. S. (1989). Self-esteem and reactions to failure: The mediating role of overgeneralization. Journal of Personality and Social Psychology, 57, 707-714.
- Kernis, M. H., Cornell, D. P., Sun, C., Berry, A., & Harlow, T. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. Journal of Personality and Social Psychology, 65, 1190-1204.
- Leary, M. R. (1999). Making sense of self-esteem. Current Directions in Psychological Science, 8, 32-35.
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. Zanna (Ed.), Advances in Experimental Social Psychology (Vol. 32, pp. 1-62). San Diego, CA: Academic Press.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. Journal of Personality and Social Psychology, 68, 518-530.
- LeDoux, J. E. (1995). Emotion: Clues from the brain. Annual Review of Psychology, 46, 209-235.
- Lee, C. L., & Bates, J. E. (1985). Mother-child interaction at age two years and perceived difficult temperament. Society for Research in Child Development, 56, 1314–1325.
- Levy, K. N., Blatt, S. J., & Shaver, P. R. (1998). Attachment styles and parental representations. Journal of Personality and Social Psychology, **74**, 407–419.
- Lewin, K. (1935). A Dynamic Theory of Personality. New York: Mc-Graw Hill.
- London, B., Downey, G., Bonica, C., & Paltin, I. (2007). Social causes and consequences of rejection sensitivity in adolescents. Journal of Research in Adolescence, 17, 481-506.
- Major, B., Spencer, S., Schmader, T., Wolfe, C., & Crocker, J. (1998). Coping with negative stereotypes about intellectual performance: The role of psychological disengagement. Personality and Social Psychology Bulletin, 24, 34-50.
- McGregor, I., Gailliot, M. T., Vasquez, N., & Nash, K. A. (2007). Ideological and personal zeal reactions to threat among people with high self-esteem: Motivated promotion focus. Personality and Social Psychology Bulletin, 33, 1587-1599.
- McGregor, I., & Marigold, D. C. (2003). Defensive zeal and the uncertain self: What makes you so sure? Journal of Personality and Social Psychology, 85, 838-852.
- McGregor, I., Nail, P. R., Marigold, D. C., & Kang, S.-J. (2005). Defensive pride and consensus: Strength in imaginary numbers. Journal of Personality and Social Psychology, 89, 978–996.
- McGregor, I., Nash, K. A., & Inzlicht, M. (2009). Threat, high self-esteem, and reactive approach motivation: Electroencephalographic evidence. Journal of Experimental Social Psychology, 45, 1003–1007.
- McGuire, S., Manke, B., Saudino, K. J., Reiss, D., Hetherington, E. M., & Plomin, R. (1999). Perceived competence and self-worth during adolescence: A longitudinal behavioral genetic study. Child Development, 70, 1283-1296.
- Mead, G. H. (1934). Mind, Self, and Identity: From the Standpoint of a Social Behaviorist. Oxford: University of Chicago Press.
- Mendoza-Denton, R., Downey, G., Purdie, V., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African-American students' college experience. Journal of Personality and Social Psychology, **83**, 896–918.
- Mikulincer, M., & Florian, V. (1995). Appraisal and coping with a real-life stressful situation: The contribution of attachment styles. Personality and Social Psychology Bulletin, 21, 408-416.

- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and post-traumatic psychological distress: The impact of the Gulf war in Israel. Journal of Personality and Social Psychology, 64, 817-826.
- Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness: The accessibility and architecture of affective memories. Journal of Personality and Social Psychology, 68, 917-925.
- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. Journal of Personality and Social Psychology, 81, 97-115.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.), Advances in Experimental Social Psychology (pp. 53-152). New York: Academic Press.
- Miller, N. (1944). Experimental studies of conflict. In J. Mc. V. Hunt (Ed.), Personality and the Behavioral Disorders (Vol. 1, pp. 431-465). New York: Ronald Press.
- Murray, S. L., Holmes, J. G., & Collins, N. L. (2006). Optimizing assurance: The risk regulation system in relationships. Psychological Bulletin, 132, 641-666.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. Journal of Personality and Social Psychology, 78, 478-498.
- Murray, S. L., Holmes, J. G., MacDonald, G., & Ellsworth, P. C. (1998). Through the looking glass darkly? When self-doubt turns into relationship insecurities. Journal of Personality and Social Psychology, 75, 1459-1480.
- Murray, S. L., Rose, P., Bellavia, G. M., Holmes, J. G., & Kusche, A. G. (2002). When rejection stings: How selfesteem constrains relationship-enhancement processes. Journal of Personality and Social Psychology, 83, 556-573.
- Neiss, M. B., Sedikides, C., & Stevenson, J. (2002). Self-esteem: A behavioral genetic perspective. European Journal of Personality, 16, 351-367.
- Park, L. E. (2007). Appearance-based rejection sensitivity: Implications for mental and physical health, affect, and motivation. Personality and Social Psychology Bulletin, 33, 490-504.
- Park, L. E., Calogero, R. M., Harwin, M. J., & DiRaddo, A. (2009a). Predicting interest in cosmetic surgery: Interactive effects of appearance-based rejection sensitivity and negative appearance comments. Body Image, 6, 186–193.
- Park, L. E., Calogero, R. M., Young, A. F., & DiRaddo, A. (In press). Appearance-based rejection sensitivity predicts body dysmorphic disorder symptoms and cosmetic surgery acceptance. Journal of Social and Clinical Psychology.
- Park, L. E., & Crocker, J. (February, 2003). Thinking of me: Contingent self-worth and failure. Poster presented at the Annual Meeting of the Society for Personality and Social Psychology. Los Angeles, CA.
- Park, L. E., Crocker, J., & Kiefer, A. K. (2007). Contingencies of self-worth, academic failure, and goal pursuit. Personality and Social Psychology Bulletin, 33, 1503–1517.
- Park, L. E., Crocker, J., & Mickelson, K. D. (2004). Attachment styles and contingencies of self-worth. Personality and Social Psychology Bulletin, 30, 1243-1254.
- Park, L. E., Crocker, J., & Vohs, K. D. (2006). Contingencies of self-worth and self-validation goals: Implications for close relationships. In K. D. Vohs & E. J. Finkel (Eds.), Self and Relationships: Connecting Intrapersonal and Interpersonal Processes (pp. 84-103). New York: Guilford Press.
- Park, L. E., DiRaddo, A., & Calogero, R. (2009b). Sociocultural influence and appearance-based rejection sensitivity among college students. Psychology of Women Quarterly, 33, 108-119.
- Park, L. E., & Harwin, M. J. (In press). Visible vs. non-visible rejection: Consequences of appearance-based rejection sensitivity. Journal of Research in Personality.
- Park, L. E., & Maner, J. K. (2009). Does self-threat promote social connection? The role of self-esteem and contingencies of self-worth. Journal of Personality and Social Psychology, 96, 203-217.
- Park, L. E., & Pinkus, R. T. (2009). Interpersonal effects of appearance-based rejection sensitivity. Journal of Research in Personality, **43**, 602-612.
- Pelham, B. W. (1995). Self-investment and self-esteem: Evidence for a Jamesian model of self-worth. Journal of Personality and Social Psychology, 69, 1141-1150.
- Posner, M. I., Rothbart, M. K., & Sheese, B. E. (2007). Attention genes. Developmental Science, 10, 24-29.
- Rholes, S. W., & Simpson, J. A. (2004). Attachment theory: basic concepts and contemporary questions. In S. W. Rholes & J. A. Simpson (Eds.), Adult Attachment: Theory, Research, and Clinical Implications (pp. 3-17). New York, NY: The Guilford Press.
- Rothbart, M. K. (2007). Temperament, development, and personality. Current Directions in Psychological Science, 16, 207-212.
- Rothbart, M. K., & Ahadi, S. A. (1994). Special issue: Personality and psychopathology. Journal of Abnormal Psychology, 103, 55-66.
- Rothbart, M. K., Ahadi, S. A., & Evans, S. A. (2000). Temperament and personality: Origins and outcomes. Journal of Personality and Social Psychology, 78, 122-135.
- Rothbart, M. K., & Derryberry, D. (1981). Development of individual differences in temperament. In M. E. Lamb & A. Brown (Eds.), Advances in Developmental Psychology (Vol. 1, pp. 37-86). Hillsdale, NJ: Erlbaum.
- Sameroff, A. J., & Chandler, M. J. (1975). Reproductive risk and the continuum of caretaker casualty. In F. D. Horowitz (Ed.), Review of Child Development Research, Vol. 4. Chicago, IL: University of Chicago Press, pp. 187–244.

- Schmeichel, B. J., Gailliot, M. T., Filardo, E.-A., McGregor, I., Gitter, S., & Baumeister, R. F. (2009). Terror management theory and self-esteem revisited: The roles of implicit and explicit self-esteem in mortality salience effects. Journal of Personality and Social Psychology, 96, 1077-1087.
- Schneirla, T. C. (1959). An evolutionary and developmental theory of biphasic processes underlying approach and withdrawal. In M. Jones (Ed.), Nebraska Symposium on Motivation (pp. 1-42). Lincoln, NE: University of Nebraska Press.
- Sherman, D. A. K., Nelson, L. D., & Steele, C. M. (2000). Do messages about health risks threaten the self? Increasing the acceptance of threatening health messages via self-affirmation. Personality and Social Psychology Bulletin, 26, 1046-1058.
- Shrauger, J. S., & Lund, A. (1975). Self-evaluation and reactions to evaluations from others. Journal of Personality, **43**, 94–108.
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. Journal of Personality and Social Psychology, 59, 971-981.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. Journal of Personality and Social Psychology, 62, 434-446.
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. Journal of Personality and Social Psychology, 71, 899-914.
- Sommer, K. L. (2001). Coping with rejection: Ego-defensive strategies, self-esteem, and interpersonal relationships. In M. Leary (Ed.), Interpersonal Rejection (pp. 167-188). New York: Oxford University Press.
- Sommer, K. L., Williams, K. D., Ciarocco, N. J., & Baumeister, R. F. (2001). When silence speaks louder than words: Explorations into the interpersonal and intrapsychic consequences of social ostracism. Basic and Applied Social Psychology, 23, 227–245.
- Spencer, S. J., Josephs, R. A., & Steele, C. M. (1993). Low self-esteem: The uphill struggle for self-integrity. In R. F. Baumeister (Ed.), Self-Esteem: The Puzzle of low Self-Regard (pp. 21-36). New York: Plenum Press.
- Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. Development and Psychopathology, 11, 1-13.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape the intellectual identities and performance of women and African Americans. American Psychologist, 52, 613-629.
- Sutton, S. K., & Davidson, R. J. (1997). Prefrontal brain asymmetry: A biological substrate of the behavioral approach and inhibition systems. Psychological Science, 8, 204–210.
- Swann, W. B. Jr, Chang-Schneider, C., & McClarty, K. L. (2007). Do people's self-views matter? Self-concept and self-esteem in everyday life. American Psychologist, 62, 84–94.
- Swann, W. B. Jr, Griffin, J. J., Predmore, S. C., & Gaines, B. (1987). The cognitive-affective crossfire: When selfconsistency confronts self-enhancement. Journal of Personality and Social Psychology, 52, 881-889.
- Swann, W. B. Jr, Hixon, J. G., & De La Ronde, C. (1992). Embracing the bitter truth: Negative self-concepts and marital commitment. Psychological Science, 3, 118–121.
- Tice, D. M. (1991). Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. Journal of Personality and Social Psychology, 60, 711-725.
- Tooby, J., & Cosmides, L. (1990). The past explains the present: Emotional adaptations and the structure of ancestral environments. Ethology and Sociobiology, 11, 375-424.
- Vohs, K. D., & Heatherton, T. F. (2001). Self-esteem and threats to self: Implications for self-construals and interpersonal perceptions. Journal of Personality and Social Psychology, 81, 1103-1118.
- Wood, J. V., Perunovic, W. Q. E., & Lee, J. W. (2009). Positive self-statements: Power for some, peril for others. Psychological Science, 29, 860-866.