A Behavioral Systems Perspective on Power and Aggression

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Attachment theory (Bowlby, 1982) has proven to be unique among psychodynamic theories in stimulating a large, coherent body of empirical research (Cassidy & Shaver, 2008). Beginning with a focus on the importance for personality development of a child’s early relationships with primary caregivers, Bowlby developed a theory of mental processes and social behavior that has affected multiple domains of psychological research, including developmental, social, and clinical psychology. The theory has been successful partly because Bowlby retained some of the most valuable contributions of prior psychoanalytic theorists (e.g., unconscious mental processes, self-protective defenses, and lasting effects of early social experiences) while adding many important insights and research findings from cognitive psychology, primate
ethology, and community psychiatry. Along the way, Bowlby made several important contributions to psychoanalytic motivation theory, as we explain in this chapter, but we are especially interested in this chapter in something he largely left out, Freud’s focus on aggression.

For various reasons, Bowlby wanted to move away from Freud’s (1961/1920) emphasis on sexual and aggressive instincts or drives. It seemed misleading to conceptualize human infants’ seeking of intimate contact with caregivers as inherently sexual (a mistake Freud may have made because he was struck early in his career by the number of his patients who had been sexually abused – or, as he called it, “seduced” – by adults). It also seemed that infant anger was a reaction to unreliable or frightening parental behavior, not a primary motivational force in its own right. In other respects, Bowlby’s emphasis on what he called behavioral systems – functional patterns of motivated behavior that evolved over evolutionary time because they contributed to human survival and successful reproduction – was laudable. It has been one of his ideas that has encouraged behavioral measurement of attachment-related phenomena (e.g., Ainsworth, Blehar, Waters, & Wall, 1978), something that earlier psychoanalytic theories did not do. The purpose of the present chapter is to begin exploring the possibility that it would be worthwhile to supplement attachment theory with a hypothesized behavioral system concerned with power, or assertive influence. When this system goes awry, one result might be dysfunctional anger and aggression.

In the following section of the chapter we briefly explain the behavioral system construct and describe some of the behavioral systems that Bowlby proposed (e.g., attachment, exploration, and caregiving). We then propose a power or assertion behavioral system and show that individual differences in the functioning of this system can be measured with self-report scales like the ones we have used in the past to measure attachment and caregiving orientations.
We describe the development of the Power Behavioral System Scale (PBSS), which measures hyperactivation and deactivation of the power behavioral system. We then show how these two tendencies relate to other measures of power, anger, and aggression as well as measures of key personality traits, attachment insecurities, subjective well-being, and social functioning. We also present preliminary evidence concerning the extent to which the new power system subscales predict individual differences in actual aggressive behavior.

*The Behavioral System Concept*

In his trilogy on attachment theory, *Attachment and Loss*, Bowlby (1973, 1980, 1982), a psychoanalyst, conceptualized personality and social development in terms of behavioral systems, a concept borrowed from ethology that Bowlby believed could usefully replace Freud’s (1961/1920) notion of sexual and aggressive, or life and death, instincts. A *behavioral system* is a species-universal neural program that governs the choice, activation, and termination of behavioral sequences in ways that Bowlby (1982) thought had increased the likelihood of survival and reproductive success in human evolutionary history. He imagined different behavioral systems that served separate functions, systems he called, for example, the attachment system, the exploration system, and the caregiving system.

Each system was viewed as having a major aim or goal – for example, attaining a sense of safety and security, curiously exploring and learning about one’s environment, and promoting others’ (especially loved ones’) safety and welfare. Each system was thought to include a repertoire of interchangeable, functionally equivalent behaviors that constitute the *primary strategy* used by the system to attain its goal (e.g., maintaining proximity to a protective attachment figure in times of need). These sets of behaviors or behavioral tendencies were thought to be “activated” automatically by stimuli or situations that made a particular goal salient.
(e.g., loud noises that signaled danger and aroused a need for protection) and were “deactivated” or “terminated” by other stimuli that signaled goal attainment.

Since each behavioral system presumably evolved because it increased the likelihood of coping successfully with environmental demands, it is easy to understand why its optimal functioning in today’s human beings is important for mental health, social adjustment, and a satisfying life. Consider, for example, the attachment behavioral system. It is activated by perceived threats and dangers, which cause a person to seek proximity to another person who is viewed as a “safe haven” and “secure base” (Bowlby, 1982). Successfully attaining proximity, protection, and emotional comfort from such an “attachment figure” results in what Sroufe and Waters (1977) called felt security. Moreover, following repeated experiences of successfully attaining protection and support, a person develops positive mental representations of self and others that become an inherent part of the attachment system’s operation. Hundreds of empirical studies provide compelling evidence for the benefits of attachment security in childhood and adulthood (see Grossmann, Grossmann, & Waters, 2005, and Mikulincer & Shaver, 2007, for reviews).

Bowlby (1982) believed that the strategies associated with each behavioral system undergo experience-based development. People learn to alter the parameters or settings of their behavioral systems to fit pervasive contextual demands, and in the process they form reliable expectations about available access routes and likely barriers to goal attainment. These expectations, which Bowlby (1973) called internal working models, become part of a behavioral system’s neural wiring; their systematic and prolonged effects are observable as individual differences in cognitive processes, emotional reactions, emotion-regulation strategies, and personality traits.
Changes in behavioral strategies can be characterized in terms of hyperactivation or deactivation of the relevant behavioral system (e.g., Cassidy & Kobak, 1988; Mikulincer & Shaver, 2007). Hyperactivating strategies intensify the primary strategy of the system to influence other people to respond in accordance with the system’s goals (e.g., to provide support adequate emotional support). These strategies keep a behavioral system chronically and intensely activated until its goal is achieved. They are learned in social environments that place a person on a partial reinforcement schedule for noisily and successfully persisting. (The reinforcement schedule is partial because other people’s responses to it are unreliable and unpredictable.) Unfortunately, while hyperactivation is sometimes successful, it is also accompanied by heightened agitation and distress, which often upsets interaction partners by seeming overly intrusive, demanding, and controlling.

In contrast, deactivating strategies involve down-regulation of a behavioral system to reduce the frustration and anguish of repeatedly unsuccessful efforts to attain the system’s goal. These strategies develop in the presence of people who disapprove of or punish the system’s primary strategy (e.g., crying, reaching, clinging). This disapproval or punishment suggest that one can expect better outcomes if the primary strategy of a particular behavioral system is blocked or suppressed, which unfortunately means that the system’s goal is not often fully attained. The problem with deactivating strategies is that they require a narrowing of experience and the relative absence of many of life’s rewards (e.g., shared intimacy). By suppressing what would, in other circumstances, be normal behavior, deactivating strategies prevent a person from realizing that there are other social relationships or social environments in which the system’s primary strategy would be effective.

Defining the Power or Assertion Behavioral System
In previous work (e.g., Mikulincer & Shaver, 2007; Shaver, Mikulincer, & Shemesh-Iron, in press) we have shown that stable individual differences in hyperactivation and deactivation of the attachment system and the caregiving system (both of which were proposed by Bowlby, 1982) can be measured and that they are associated in theoretically predicted ways with other psychological and behavioral processes. In the present chapter we propose, more speculatively, that human beings are born with the rudiments of a behavioral system the aim of which is to acquire and control material and social resources (e.g., food, shelter, social status, sexual mates) that contribute to survival and reproductive success. We propose further that these innate behavioral strategies, as they emerge in development, are organized by an evolved and generally adaptive power or assertion behavioral system, which for the sake of simplicity we will call the power system. This system presumably evolved because it contributes to the propagation of one’s genes in a competitive social environment. According to this fitness logic, the proliferation of a person’s genes depends on his or her ability to acquire and control precious resources and to cope effectively with people and events that threaten resource control (see Sell, Chapter 2, this volume).

In personality and social psychology, having a sense of power (analogous to “felt security” in the attachment domain) is defined as perceiving that one has control over valuable resources and outcomes within a particular situation (e.g., Keltner, Gruenfeld, & Anderson, 2003; Thibault & Kelley, 1959). Since resources are finite and people compete to acquire and control them, this definition implies that people who have a sense of power also have control over others’ access to resources and can influence their behavior. This reasoning led Keltner et al. (2003) to define power as “an individual’s relative capacity to modify others’ states by providing or withholding resources or administering punishments” (p. 265). Another implication
of this definition is that power often involves freedom and independence from others’ influence when seeking desired resources. According to Galinsky et al. (2008), “Power, it could also be said, is the capacity to be uninfluenced by others. Without power, one’s outcomes are constrained by others” (p. 1451).

Before conceptualizing the normative components and operations of the power behavioral system, we should distinguish power from aggression. From an evolutionary standpoint, human aggression is a “fight” mechanism (e.g., Buss & Shackelford, 1997). It presumably evolved in many animal species because it facilitates control over precious resources, which makes it natural to equate aggression with power. We would emphasize, however, that there definitely are aggressive acts whose sole purpose is to damage or destroy someone or something else and there are many cases in which one’s sense of power can be restored simply by asserting one’s position and authority. We would like to consider the possibility that the power system is not “designed” primarily to attack and destroy, but to gain, maintain, or restore one’s sense of power without necessarily damaging one’s own social ties or equanimity.

**Normative Parameters of the Power System**

We propose that the main goal of the power system is to remove threats and obstacles that interfere with a person’s sense of power. In other words, the power system seeks to maintain a stable inner sense of power and to restore this sense when one perceives that others are attempting to constrain their access to valuable resources or influence their behavior in a particular situation. This does not imply that people seek power for simply for power’s sake. Rather, following Bowlby’s (1982) contention that attachment security (felt security) provides a solid foundation for exploration, we propose that power facilitates the smooth functioning of
other behavioral systems, such as exploration, affiliation, caregiving, and sex. With a sense of power, people can more easily explore and master their environment, help and get along with other people without worrying about being influenced, exploited, or constrained, and have sex with desirable partners and produce offspring to carry one’s genes into future generations.

The proposed power behavioral system is likely to be activated in one of two kinds of situations: (a) when a person competes for access to valuable resources and (b) when other people constrain one’s access to resources or attempts to influence one’s attitudes and actions. In either case, people are motivated to protect or restore their sense of power when they appraise an event or social interaction as a threat to their power, not when they simply encounter someone who has a certain objective status or acts in a particular way. That is, the power system is not typically activated if a person detects no threat to his or her sense of power. By the same token, a person can inappropriately appraise something as a threat even in the absence of another person’s explicit signaling of competition, provocation, or superiority.

Once a person’s power system is activated (whether appropriately or not), he or she calls upon a repertoire of behaviors aimed at protecting or restoring a sense of power. This repertoire, which reflects the system’s primary strategy, includes behaviors meant to maintain what Parker (1974) called “resource-holding power” (RHP), behaviors such as asserting one’s dominance, authority, and competence to deal with the situation; expressing confidence in one’s strengths, attitudes, and opinions; deterring others from competing for or exerting control over one’s resources; and verbally or physically attacking (or threatening to attack) others until power is restored (e.g., Gilbert, 2000). Beyond these very basic strategies that can be observed in most animal species, Gilbert (1989) also proposed that humans can protect or restore their sense of power by using what he called “social attention-holding” strategies, efforts to emphasize one’s
attractiveness and social value or display one’s special talents, skills, and other positive attributes.

Activating these strategies is often accompanied by physiological arousal and, often, a feeling of anger, which in our view is an emotional signature of power-system activation. According to Lazarus (1991), the core relational theme of anger is “… a demeaning offense against me and mine” (p. 222), an assault on or threat to one’s identity or other important personal goals and possessions. Shaver, Schwartz, Kirson, and O’Connor (1987) viewed anger as a signal that control over an important resource is being threatened illegitimately and that some assertive action needs be taken to reduce or eliminate the threat, repair the damage, or prevent further assaults. In the second volume of his Attachment and Loss trilogy, Bowlby (1973) argued that anger is a protest response against a partner’s signs of unavailability, detachment, or rejection. Viewed from our conception of power, these signs indicate that one lacks the power to obtain needed resources, such as affection and support, and that one is dependent on others’ unreliable responsiveness.

When the power system, like other behavioral systems, works properly, it contributes greatly to one’s subjective well-being and social adaptation (Keltner et al., 2003). Moreover, it encourages what Higgins (1998) called a promotion focus – a motivational orientation that facilitates goal pursuit and realization of aspirations – because powerful people expect positive outcomes from their efforts and relatively little interference from others. Research shows that people with a sense of power devote attention to rewards and goal pursuit, have more frequent positive emotions, and experience fewer threat-related thoughts and emotions (for reviews, see Keltner et al., 2003, and Mikulincer & Shaver, Chapter 14, this volume).

*Individual Differences in the Activation and Functioning of the Power System*
Although we assume that everyone is born with the potential to develop a stable sense of power, the functioning of the power system can be impaired by experiencing repeated failures to obtain desired outcomes, remove threats, and overcome obstacles. Such failures may result from physical illnesses that prevent the effective use of the power system’s primary strategies. They may also result from social arrangements that preclude or constrain competition; frustrate attempts to acquire needed resources; severely punish assertiveness, anger, aggression, or other resource-holding power strategies; or demand submission or self-abasement. Such conditions may arouse serious doubts about one’s power and influence, anxiety about asserting oneself, and loss of confidence in one’s abilities to maintain or restore power when power is desirable.

As with the other behavioral systems, failures of the power system can result in one or both of two nonoptimal (secondary) power strategies: hyperactivation or deactivation of the power system. Hyperactivated power-oriented behavior involves a substantial increase in efforts to restore a sense of power despite adverse circumstances and doubts and anxieties that arise when one experiences repeated and unpredictable failures. Hyperactivation is fueled by two motives: an excessive urge to gain power and an extreme fear of failure in the use of resource-holding power strategies. This combination results in chronic activation of the power system, even when there is no imminent threat or actual damage to one’s power; an indiscriminate urge to assert power over others; frequent anger and hostility toward others (who are viewed as potential rivals); and a proclivity to attack others following minimal or ambiguous signs of competition or provocation. In an extreme form, it can lead to flagrant vindictiveness and destructive, even murderous behavior. Hyperactivation is also characterized by a tendency to misinterpret social situations as threatening or hostile (i.e., a hostile attribution bias; see Dodge, Chapter XX, this volume).
Deactivation, in contrast, involves terminating or “shutting off” the power system, thereby giving up on the possibility of using the system’s primary strategies to defend against threats and damages to one’s sense of power. Deactivation is evident in submissiveness, self-abasement, and the absence of resource-holding power strategies, even in the presence of clear-cut, explicit assault or provocation, to the point of suffering substantial physical or psychological harm as a result. Deactivation also involves a tendency to avoid situations that call for activation of the power system and assertion of one’s rights and opinions: competitions, arguments, disputes, and interpersonal conflicts. It is important to note, however, that such deactivation does not necessarily involve reduced sensitivity to threats. In fact, powerless people are often highly sensitive to threat-related cues, prone to ruminate about threats, and experience negative emotions because of perceived threats and injustices (see Keltner et al., 2003, for a review). In other words, deactivation is not a peaceful or calm state; it is characterized by a blend of worries, doubts, and defenses against the pain and frustration of “losing” or dodging “a fight.”

A review of self-report measures of beliefs, attitudes, and feelings related to power and aggression led us to conclude that no instrument had been explicitly designed to assess the two nonoptimal power strategies – activation and deactivation. We did gain insights from examining existing scales, however. We concluded, for example, that Buss and Perry’s (1992) Aggression Questionnaire, which assesses several aspects of trait aggression (e.g., physical aggression, verbal aggression), taps hyperactivated power – an extreme and chronic proclivity to engage in hostile aggression. This scale, however, does not distinguish people with an optimally functioning power system from those who deactivate their power system, because neither kind of person typically relies on hostile aggression as a way to deal with competitions, arguments, or conflicts. Similarly, low scores on the Rathus’s (1973) Assertiveness Questionnaire might
indicate power-system deactivation. However, this scale fails to distinguish people with an optimally functioning power system from those who hyperactivate the system, because both groups are capable of asserting opinions (although often by different means).

There are also scales that measure a sense of power or dominance (e.g., Gough, 1964), but they fail to distinguish between people who hyperactivate or deactivate their power systems, because both groups suffer from doubts and worries about the extent to which they have power over resources. One measure that taps constructs similar to the ones we are proposing here is the Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). It includes two subscales that describe forms of hyperactivation – overly autocratic (e.g., “I try to control other people too much”) and overly competitive (e.g., “I fight with other people too much”), and two subscales that describes forms of deactivation – overly subassertive (e.g., “It is hard for me to be assertive with another person”) and overly exploitable (e.g., “I let other people take advantage of me too much”). Despite these useful near-approximations to the measures we were seeking, we decided to create a new measure that, like the Experiences in Close Relationships Inventory (ECR; Brennan, Clark, & Shaver, 1998) used to measure insecure attachment and the Caregiving System Scale (CSS; Shaver et al., in press), would be specifically designed to assess hyperactivating and deactivating power strategies. (These scales are all part of an overall effort to create a theory and set of measures to cover all major human behavioral systems related to social behavior.) Here, we present data from the first stage of this research program – the construction of a self-report Power Behavioral System Scale (PBSS) to assess individual differences in hyperactivation and deactivation of the power system.

Assessing Hyperactivation and Deactivation of the Power System
In the first stage of scale development, we constructed a pool of 50 items that might index the two secondary power-system strategies. In writing the items we attempted to capture the various cognitive, emotional, motivational, and behavioral aspects of hyperactivated and deactivated power strategies described in the present chapter. For example, the 25 items designed to assess hyperactivation focused on the urgent and exaggerated need for power and control over resources and other people, frequent bouts of anger and aggression, and anxieties and worries about being defeated in competitions and disputes. The 25 items designed to assess deactivation of the system focused on uneasiness with competitions and disputes, attempts to avoid behavioral assertions of power and authority, escape from competitions and disputes, and deemphasizing one’s own feelings and needs during interpersonal conflicts.

The items do not refer to a specific situation or relationship partner, but rather to one’s typical motives, thoughts, feelings, and behaviors during competitions and disputes. The instructions ask respondents to think about situations in which they have a disagreement or conflict with another person or group of people and to rate (on a 7-point scale) the extent to which each item is or is not self-descriptive. In sum, the PBSS measures a person’s global orientation to power rather than the exertion of power in a particular situation or relationship, although the items could easily be adapted to assess domain-specific or partner-specific power strategies, as is sometimes done with the ECR when measuring attachment insecurities.

Factor Structure

Our initial 50-item scale was administered to a sample of 292 Israeli undergraduates (185 women and 88 men). Item and factor analyses indicated that the items did assess the two secondary power-system strategies: hyperactivating and deactivated. Based on these analyses, we chose the 14 most representative items from each factor (i.e., the ones that loaded highest on
the intended factor and lowest on the other factor), keeping in mind our goal of representing various aspects of hyperactivation and deactivation. We then administered the new 28-item scale to 362 Israeli undergraduates (211 women and 151 men) and conducted a new factor analysis. As expected, the analysis yielded the intended two factors, which accounted for 52% of the variance. The 14 deactivation items loaded higher than .40 on the first factor (28% of explained variance). Here are examples of these items: “I tend to relinquish important goals if their attainment requires confronting other people,” “I tend to avoid attacking, even if it’s a matter of self-defense,” “I’d rather let others win an argument, even when I know I’m right,” “I’d rather not show people I’m angry, even when my anger is justified.” The 14 hyperactivation items loaded higher than .40 on the second factor (24%). The following are examples: “I feel anxious in situations where I have little control over other people and their actions,” “In an argument or disagreement, my strong desire to fight back makes it difficult for me to consider other possible responses,” “It’s hard for me to stop arguing, even when the other person has conceded,” “When somebody hurts me, I’m flooded with thoughts of revenge.” Cronbach alphas were .85 for the hyperactivation items and .90 for deactivation items. (Similar results were obtained in a replication study at the University of California, Davis.)

As intended, the correlation between the hyperactivation and deactivation scores was not statistically significant, \( r(360) = .07 \). That is, hyperactivation and deactivation are orthogonal strategies, and the two scales form a two-dimensional space in which different power orientations can be represented. The region representing optimal functioning of the power system is defined by low scores on both hyperactivation and deactivation; the region of hyperactivation is defined by high scores on hyperactivation and low scores on deactivation; the region of deactivation is defined by high scores on deactivation and low scores on hyperactivation; and the
region of ambivalent or disorganized functioning of the system is defined by high scores on both dimensions.

*Stability over Time and Across Reporters and Measure Type*

In a new sample of 97 Israeli undergraduates, we administered the PBSS twice, in sessions separated by 4 months, and found adequate test-retest reliability (.74 and .79, respectively, for the hyperactivation and deactivation scales). For another sample of 82 Israeli undergraduates, we asked two relatives, friends, or romantic partners of each participant to use the PBSS items to describe the participant. Significant correlations were found between self-reports and partner-reports regarding both the hyperactivation and deactivation dimensions, with \( r \)s ranging from .46 to .54. Correlations between the two observers’ ratings were also significant: .37 for hyperactivation and .59 for deactivation. These findings imply that the PBSS measures, in part, behavioral tendencies that can be observed by relationship partners.

In an additional sample of 60 Israeli undergraduates, we conducted a two-session study to see whether PBSS scores are related to people’s open-ended accounts of their experiences during conflicts. In the first session, participants completed the PBSS; in the second session, they recalled three instances of having an argument, conflict, or fight with one or more other people, and described what happened in each case. Two judges, blind to participants’ scores on the PBSS scale but familiar with our conception of power orientations, read each participant’s narratives and rated (on a 7-point scale) the extent to which signs of hyperactivation and deactivation appeared in each narrative. There were significant associations between these ratings and participants’ PBSS scores, \( r(58) = .46, p < .01 \) for deactivation, and \( r(58) = .34, p < .01 \) for hyperactivation. Thus, a person’s self-reports on the PBSS are valid indicators of his or her
thoughts, feelings, and behaviors during arguments, disagreements, and fights, at least as reflected in narratives about these experiences.

*Convergent Validity*

In eight additional samples of Israeli undergraduates (with *Ns* ranging from 120 to 178), we examined the convergent validity of the PBSS scores. First, we examined associations between the PBSS and preexisting self-report measures tapping various aspects of aggression – the Aggression Questionnaire (Buss & Perry, 1992), a measure of Violence Risk (Plutchik & Van Praag, 1990), and the Abuse within Intimate Relationships Scale (Borjesson, Aarons, & Dunn, 2003). The hyperactivation score was associated with reports of physical aggression, verbal aggression, anger, and hostility, risk for violent behavior, and abusive behavior in intimate relationship, with *rs* ranging from .27 to .46, all *ps* < .01. The deactivation score was not significantly associated with these measures. As expected, aggressive, violent, and abusive behaviors can be viewed as manifestations of hyperactivated power, but they do not differentiate between people scoring low or high on the deactivation dimension. Stated differently, aggression and violence are not default strategies for gaining power but seem to develop from repeated failure to control resources that eventually results in hyperactivation of the power system.

Second, we examined associations between the PBSS and preexisting self-report measures of various aspects of anger arousal and expression – the Anger Expression Scale (Spielberger, Jacobs, Russell, & Crane, 1985), the Trait subscale of the State-Trait Anger Scale (Spielberger, 1983), the Multidimensional Anger Inventory (Siegel, 1986), and the Anger Rumination Scale (Sukhodolsky, Golub, & Cronwell, 2001). In line with our theoretical analysis, hyperactivation was associated with trait anger, anger externalization, anger arousal, hostile outlook, rumination on anger-related thoughts, and problems in controlling anger expression,
with \( rs \) ranging from .31 to .58, all \( ps < .01 \). The deactivation score was not significantly associated with most of these signs of anger, with the exception of a positive association with anger internalization, \( r(176) = .37, p < .05 \). This finding suggests that an angry state of mind is still active despite deactivation of the power system and that anger-related feelings are directed toward the self rather than other people.

Third, we examined associations between the PBSS and preexisting self-report measures of power, dominance, and assertiveness – the Assertive Behavior Scale (Rathus, 1973), the Dominance Scale of the California Psychological Inventory (Gough, 1960), the Dominance and Abasement Scales of the Personality Research Form (Jackson, 1984), and the Dominance and Submissiveness Scales of the Revised Interpersonal Adjective Scales (Wiggins, Trapnell, & Phillips, 1988). As expected, both hyperactivation and deactivation were associated with lower scores on scales measuring feelings of dominance and power (\( rs \) ranging from -.33 to -.42, all \( ps < .01 \)), implying that these orientations may be alternative ways of coping with lack of power. In addition, deactivation but not hyperactivation was associated with measures of submissiveness, self-abasement, and lack of assertiveness, with \( rs \) ranging from .30 to .65, all \( ps < .01 \). These findings indicate that people who score high on deactivation of the power system suppress their own needs and desires while deferring to others.

Fourth, we examined associations between the PBSS and preexisting self-report measures of interpersonal conflicts and others’ transgressions and provocations; the Styles of Handling Interpersonal Conflict Scale (Rahim, 1983), the Transgression-Related Interpersonal Motivations Inventory–Revised (McCullough & Hoyt, 2002), the Driving Vengeance Scale (Wiesenthal, Dwight, & Patrick, 2000), and the Aggressive Provocation Questionnaire (O’Connor, Archer, & Wu, 2001). As expected, hyperactivation was associated with more aggressive and conflict-
escalating behavior during conflicts, greater vengeance and less forgiveness following others’
transgressions, and higher levels of anger, aggression, and violence in response to driving-related
and other provocations, with \( r_s \) ranging from .29 to .51, all \( p < .01 \). Correlations for the
deactivation scale were also compatible with our theoretical analysis: Deactivation was
associated with avoidance and giving up during interpersonal conflicts, a tendency to withdraw
in response to interpersonal transgressions, and higher levels of internalized anger, avoidance,
and surrender in response to provocations, with \( r_s \) ranging from .22 to .56, all \( p < .01 \).

**Discriminant and Construct Validity**

In the eight participant samples we also considered the discriminant and construct
validity of the PBSS scores. Participants completed the Crowne-Marlowe Social Desirability
Scale (Crowne & Marlowe, 1964), the Big-Five Inventory (John & Srivastava, 1999), the
BIS/BAS scale (Carver & White, 1994), and the Experiences in Close Relationships Inventory
(ECR; Brennan et al., 1998). The two PBSS scores were not associated with social desirability,
\( r_s < .05 \), but they were correlated in theoretically expected ways with other personality
constructs. Hyperactivation was associated with emotional instability (neuroticism), social
avoidance and unpleasantness (low agreeableness), and both attachment anxiety and avoidance,
with \( r_s \) ranging from .26 to .54, \( p < .01 \). Deactivation was significantly associated with
introversion and lack of interest in seeking rewards or being excited (low BAS scores) and high
levels of neuroticism, agreeableness, and attachment anxiety, with \( r_s \) ranging from .22 to .37, all
\( p < .01 \). These correlations were only moderate in size, suggesting that the PBSS scores are not
simply redundant with attachment insecurities or with broad personality traits. That is, we
believe that the PBSS measures something unique to the power system that is not measured
precisely by the other scales.
Whereas people who deactivate the power system tend to be introverted but agreeable, those who hyperactivate the system tend to be quarrelsome and social unpleasant. However, despite these differences, people scoring high on either hyperactivation or deactivation of the power system share emotional instability (neuroticism) and worries about being loved, accepted, and esteemed by others (anxious attachment). That is, even the external façade of agreeableness, submissiveness, and passivity that characterize power deactivation tend to be accompanied by inner emotionality, including attachment-related anxieties.

In the eight samples, we also examined the extent to which hyper- and de-activated forms of power are associated with regulatory deficits and social skill deficits. Power hyperactivation was associated with deficits in emotion-regulation, self-regulation, and social skills. The deficits were reflected in lower scores on scales measuring self-control (Tangney, Baumeister, & Boone, 2004), negative mood regulation (Catanzaro & Mearns, 1990), and social skills (Buhrmester, Furman, Wittenberg, & Reis, 1988), with \( r \)s ranging from -.38 to -.55, all \( ps < .01 \). In addition, hyperactivation was associated with the rumination subscale of Trapnell and Campbell’s (1994) Rumination-Reflection Scale, \( r(118) = .43, p < .01 \). As expected, hyperactivation was also correlated with two of the interpersonal problems measured by Horowitz et al.’s (1988) Inventory of Interpersonal Problems (IIP): being overly autocratic and overly competitive, with \( r \)s of .44 and .47, \( ps < .01 \). Although deactivation was not associated with problems in self-control, it was associated with lower scores on negative mood regulation and social skills, with \( r \)s ranging from -.42 to -.50, all \( ps < .01 \). As expected, deactivation was also associated with two kinds of IIP interpersonal problems: being overly subassertive and overly exploitable, with \( r \)s of .58 and .52, \( ps < .01 \).
Taken together, these correlations imply that people who either hyperactivate or deactivate their power system have a difficult time regulating their negative emotions and lack the social skills that promote effective social interactions. However, whereas those who hyperactivate the power system have problems with self-control and difficulties in being overly aggressive and competitive, those who deactivate the system have problems related to subassertiveness.

**Beneficial Correlates of Optimal Functioning of the Power System**

In conceptualizing the power system, we assumed that optimal functioning of the system would enhance a person’s sense of mastery, increase self-esteem, and add to the meaning of life. If hyperactivation and deactivation interfere with optimal system functioning, our scales should be inversely correlated with measures of positive psychological states. In assessments of the eight participant samples, we included measures of self-esteem (Rosenberg, 1979), self-mastery (Pearlin, Menaghan, Lieberman, & Mullan, 1981), sense of coherence (Antonovsky, 1993), optimism (Scheier & Carver, 1985), and psychological well-being (Veit & Ware, 1983). As expected, both hyperactivation and deactivation were associated with lower self-esteem, mastery, coherence, optimism, and psychological well-being, with $r$s ranging from -.23 to -.46 for hyperactivation and from -.22 to -.48 for deactivation, all $p$s < .01.

**Predicting Actual Behavior**

In an additional study, we gathered preliminary data examining the predictive validity of the PBSS with respect to actual behavior during a couple conflict in the laboratory. Both members of 100 young Israeli heterosexual couples who had been dating for less than 5 months completed the PBSS, the ECR, and the Big Five Inventory, and then were invited to a laboratory session in which they were asked to discuss a major unresolved problem in their relationship.
The couple was videotaped while discussing this problem. Two independent judges who were unaware of participants’ scores on the other measures rated the extent to which each member of the couple displayed signs of anger, hostility, and distress, and the extent to which they attacked their partner (using subtle or overt put-downs, sarcasm, criticism, or contempt), deferred submissively to their partner (submissive verbal and non-verbal behavior), and reached a joint solution of the problem.

As expected, participants who scored higher on power hyperactivation were rated by judges as displaying more anger, hostility, and distress, and as executing more attacks on their partner, with $r$s ranging from .33 to .46, $p$s < .01. In contrast, participants who scored higher on power deactivation were rated by judges as displaying more distress, but not anger or hostility, and more submissive behavior, with $r$s of .49 and .42, $p$s < .01. In addition, both hyperactivation and deactivation scores were associated with problems in finding a solution to the relationship problem, with $r$s of -.32 and -.27, $p$s < .01. Importantly, these associations were unique to the PBSS and were not explained by attachment insecurities or the Big Five personality trait scores. These findings indicate that conflict resolution between members of dating couples is impeded by either deactivation or hyperactivation of the power system.

Conclusions
The new concepts of hyperactivation and deactivation of the hypothesized power behavioral system fit well with the rest of attachment theory and seem, to us at least, to make increased sense of many of the power, aggression, and anger measures that were already available in the literature. Our new power-system scales, while still preliminary, seem promising in efficiently assessing power system hyperactivation and deactivation as orthogonal dimensions. As is the case in the attachment and caregiving domains outlined by attachment theory, both
hyperactivation and deactivation, which are viewed as secondary strategies that come into play when a system’s primary strategy fails to work in key early relationships, are associated with nonoptimal outcomes in adult relationships. The new concepts and scales fit well in our overall conception of social motivation based on the behavioral-system construct. Their addition to adult attachment theory may allow us to recover an important component of Freud’s psychoanalytic theory that was deemphasized and almost omitted from Bowlby’s theory.

References


