

## Personal Intelligence and Resilience

### *Recovery in the Shadow of Broken Connections*

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Imagine awakening feeling rested and healthy, clear of mind, and looking forward to the day's events. Each of us depends on our body, our relationships, and our social situations for our day-to-day functioning. The connections between our selves—our personalities—and our surrounding systems are crucial to our well-being.

Personality is the individual's master psychological system. It oversees and organizes mental subsystems, such as motives, thoughts, and self-control. Moreover, personality governs the connections between the mind on the one hand, and the body and ongoing social situations on the other. For personality to function well, it must be in tune with all the environmental systems that surround it: the brain and the body that support personality, the stream of social situations that a person encounters, and the groups to which that person belongs. Solid connections in these areas make it easier

for a person to make adjustments in overall functioning when such adaptations are needed.

Much of the time, personality juggles the psychological demands placed on it with fluency. Yet each of us also can face setbacks and struggles that require hardiness in the face of adversity. In two cases examined here, life circumstances jeopardized a person's connections to his surrounding systems:

- Hamilton Jordan, a presidential advisor, was diagnosed as a young man with the first of six cancers he would fight throughout his adult life. He describes being in tears after the first diagnosis and cradling his 2½-year-old son in his arms, grateful that his child could not fully appreciate what was happening to them (Jordan, 2001).
- Sammy, a second grader, was transferred

to an Oakland, California, school after his mother's divorce.<sup>1</sup> Sammy lost contact with his father; changed cultures, from the Southern town in which he grew up to a more urban Californian environment; and needed to make new friends and to catch up academically with his peers (Dyson, 1997).

Hamilton Jordan's diagnosis meant that his body might fail him; Sammy's transition to the new Oakland school meant that his social connections had been disconnected—at least temporarily. *Resilience* is a term psychologists use to refer to people's ability to cope with and find meaning in such stressful life events, in which individuals must respond with healthy intellectual functioning and supportive social relationships (Richardson, 2002). When our brains and bodies are healthy, when we interact well with others (and they with us), and when we—and society—maintain a reasonable psychosocial contract, we basically are functioning well. But things rarely go entirely well all the time. Most of us face disruptions in our connections over time. When these connections falter and the failure is substantial, resilience is needed to resolve the disruptions and re-integrate protective factors into our lives (Richardson, 2002; van Hoof & Raaijmakers, 2003).

This chapter focuses in particular on how personal intelligence—an ability to reason about one's own and others' personal information and personality—can promote resilience. Resilience itself is examined in two contexts: a biopsychological connection between personality and an individual's health, and a psychosocial contract between personality and an individual's social relationships. Both health and social connectedness are often stable for long periods of time. Cleavages in these connections, however, can occur unexpectedly at any time. The forms of resilience necessary for coping with disruptions to the two spheres are somewhat different. They share in common, however,

the idea that a certain degree of flexible thinking—a personal intelligence—can help in coming up with solutions.

### **Personality, Stressors, and Resilience: A Brief Background**

#### *Personality and Its Surroundings*

Resilience is needed when a person's life connections are challenged. As an individual's most global and overarching psychological system, personality is responsible for the integrated functioning of an individual's mental processes—his or her motives, self-concept, hopes and dreams, and developmental progress. Personality is most likely to function well when it has strong, healthy connections to its surrounding systems, for example, healthy connections to the body and good social interactions.

Figure 5.1 identifies an individual's personality (middle left), including the operation of a person's larger psychological systems (e.g., motives, emotions, self-concept). Underlying overall personality are the brain and other biological systems that give rise to the individual's psychological processes and capabilities. Their position is depicted beneath personality and its subsidiary psychological systems to indicate that such biological systems are "lower level," or more molecular than personality itself; yet the healthy functioning of these smaller systems is essential to a well-connected personality. Similarly, we depend on our setting—our home, our street, our school or office—to be secure places for us. "All the world's a stage," Shakespeare noted, and to that end, each person possesses some props—clothes and jewelry, a briefcase or backpack—and other items with which to play a part on that stage.

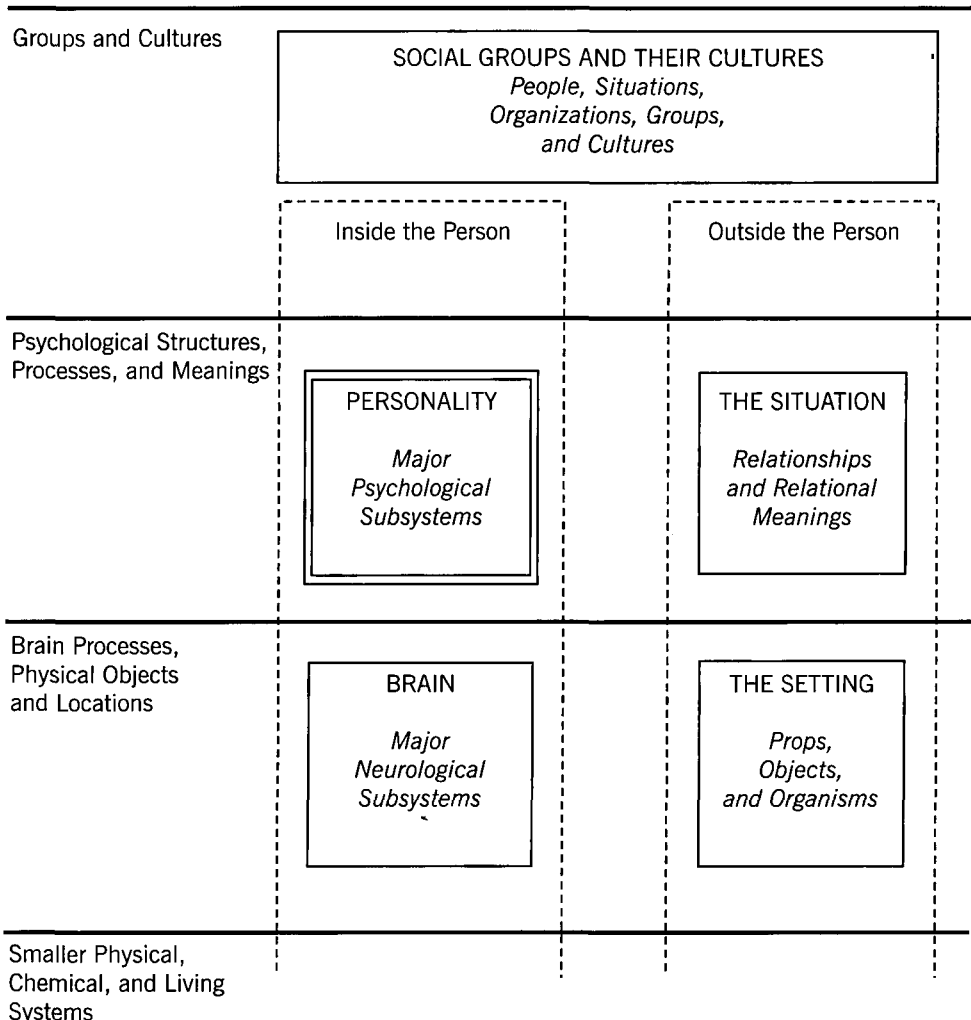
Beyond our setting, each of us depends on our smooth interaction with a series of situations so as to maintain ourselves and our well-being. These situations include, for example, doing the laundry, making plans

with a family member or friend, presenting a report to a supervisor, and the like (Figure 5.1, middle right). Personality must function fluidly in these situations; the particular situation can support and assist personality or challenge it.

Finally, we all are supported by—and work to maintain—memberships in the

groups and societies of which we are a part. We are not just islands unto ourselves, but rather are members of larger communities (Figure 5.1, top). We are members of our families of origin and of new families of our own making through marriage and offspring. We form other groups as well: friends, enemies, links to our MySpace page.

MOLAR



MOLECULAR

**FIGURE 5.1.** A structural model of personality amid its neighboring systems. From Mayer (2005, Figure 1). Copyright 2005 by the American Psychological Association. Reprinted by permission.

We are citizens of a town, a state, a nation. We have political, ethnic, and religious identifications that may place us in one group or another (Deaux, Reid, Mizrahi, & Ethier, 1995). We may identify with world civilization as a whole.

The position of personality amid its surroundings, however, speaks as well to personality's vulnerabilities. A weakening or severing of any connection between personality and its surrounding systems, such as the loss of a family member (group environment), or encountering an unsafe setting can place the person at risk. In general, then, personality's coherent functioning is threatened by a failure of any of its connecting systems: by genetic defects that influence the brain, by a chronic setting of poverty, by interactions with a pathogenic boss, or by prolonged or permanent disruptions of the family and broader community. When this happens, resilience is one way in which a robust personality can cope with the problem and restore the individual's psychological functioning to health.

### ***Personality: Risk versus Resilience***

Resilience research grew from studies of at-risk children: children who experienced risks, such as divorce and parental drug abuse, that were believed to predispose them to various forms of psychopathology (e.g., Benson, 1997; Richardson, 2002). Initially, researchers focused almost entirely on using risk factors to predict children's later life outcomes. In the course of such studies, however, researchers' attention was drawn to the substantial number of children with severe risk factors, including poverty, large family size, maladaptive temperament, community disruptions, schizophrenic relatives, and so forth, who nonetheless turned out to be healthy, functioning, happy adults (Garmezy, Masten, & Tellegen, 1984; Rutter, 1985; Werner & Smith, 1992).

One key study followed 200 severely at-risk children for nearly 30 years. The children had faced perinatal stress, poverty,

daily disruptions to their routine, and severe mental health problems among their parents. Nonetheless, 72 of 200 children did very well as adults (Werner & Smith, 1992). These researchers wondered whether there existed resilience factors that counteracted the risk factors so as to promote positive outcomes, and, if so, what those resilience factors were. They began to turn their attention to the study of resilience, in addition to risk factors.

### ***Summary: The Conditions that Elicit Resilience***

Resilience, then, is revealed when an individual is stressed by having his or her unique personal connections severed or placed at risk. Such connections exist in relation to four key systems surrounding personality: the individual's (1) brain and body, (2) setting, (3) ongoing situations and interactions, and (4) social groups. This fourfold arrangement represents a model of the personality's surroundings (Mayer, 1995) and can be used to catalogue and classify various stressors.

Table 5.1 illustrates examples of stressors that can potentially disrupt connections, classified by the four systemic areas that interact with personality. For example, disruptions between personality and the brain and body accompany events such as contracting a mild virus (e.g., a cold) or, more seriously, a chronic illness (Table 5.1, column 2). Disruptions to a person's setting arise when an individual moves or suffers a small financial setback, or, more severely, experiences long-term conditions of poverty or of war (Table 5.1, column 3). Disruptions between personality and the situation involve examples such as chronic stress with one's spouse or family (Table 5.1, column 4). Finally, stressors involving group membership might include an individual's drop in status within, or expulsion from, a group (Table 5.1, column 5). In each instance, the person's level of connection is diminished as a consequence, and stress ensues. In these cases, resilience often is called for in order for the individual to recover and grow.

**TABLE 5.1. Risk Factors Catalogued According to the Areas Surrounding Personality**

		Areas surrounding personality			
		Brain and body	Setting	Situational interactions	Group memberships
<i>Examples of associated risk factors</i>					
Mild stressor	Temporary physical Injury	Financial setback	Job interview	Mild group disapproval	
Moderate stressor	Moderate injury or illness	Geographic stressor (mild flooding)	Mild public embarrassment	Loss of status within a group	
Severe stressor	Severe chronic illness	War, extreme poverty	Ongoing marital distress	Expulsion from a group	

### **Personality Factors Contributing to Resilience**

#### ***Approaches to Studying Resilience***

To date, research has roughly divided individual resilience factors into internal personality factors and factors related to the personality's surrounding systems. Among the personality factors have been social responsibility (conscientiousness), adaptability, tolerance, and achievement orientation; factors concerning the surrounding environment have included the presence of supportive caretakers and community resources, such as recreation centers (Werner & Smith, 1992). For example, Hjemdal, Friberg, Stiles, Rosenvinge, and Martinussen (2006) identified internal factors predictive of resilience, such as personal competence and social competence, and external factors, such as family cohesion and social resources. Moreover, at least some of the internal personality qualities studied today in the positive psychology movement can be regarded as a continuation and outgrowth of resilience research; such factors include gratitude, self-control, forgiveness, creativity, and faith (McCullough & Snyder, 2000; Seligman & Csikszentmihalyi, 2000).

Although one can consider each resilience factor individually, there are limits to such an approach. First, some specific resilience factors likely overlap with others in the same individual, as might be the case with forgiveness and gratitude (i.e., it seems likely that a

person who forgives would be more likely to express gratitude). Similarly, optimism and faith would likely co-occur. Still other protective factors may conflict with one another—as might conscientiousness and creativity! The idea that combinations of resilience factors might be more important than specific ones themselves has prompted a second phase of theoretical work on resilience. The process of resilience is one that involves disruption and reintegration (e.g., Flach, 1997; Richardson, Neiger, Jensen, & Kumpfer, 1990). This second phase of theoretical work asks what personality (and community) processes foster and ultimately draws together a group of especially resilient factors.

It seems clear that certain worldviews, communicated successfully by a community, may provide such resilient qualities. For example, in poor black communities in the United States, the Black Church, which emphasizes factors such as forgiveness, gratitude, optimism, and achievement, may provide an external support that weaves together such a vision for an individual (Regnerus & Elder, 2003). Yet such religious factors come in many variations; certain variations may be less helpful, and some can discourage personal growth by, for example, emphasizing a "shoot low" perspective for the individual so as to stay out of trouble (e.g., Suskind, 1998, p. 68).

Are there factors within personality itself that help foster productive worldviews

as well? A number of personality psychologists and resilience researchers have believed so, but the understanding of such personal development is incomplete. There has been a split in vision among theorists about how best to frame such a determinant of personal growth. Some psychologists suggest there is an innate growth mechanism that propels a person toward positive development. This approach, which is similar to self-actualization, as proposed by Carl Rogers and Abraham Maslow, describes resilience sometimes as a "spiritual source or innate resilience" and states that "there is a force within everyone that drives them to seek self-actualization, altruism, wisdom, harmony with a spiritual source of strength" (Richardson, 2002, p. 313). These views consider growth, in essence, to be a basic psychological drive. However, a second viewpoint, which might be referred to as the *planful* perspective on resilience, views such growth as the product of a thoughtful, reasoned approach to life. It is this latter viewpoint on which we focus in discussing the role of personal intelligence as it pertains to resilient functioning.

### ***Personal Intelligence as a Factor in Resilience***

The planful perspective on resilience emphasizes not so much an innate propensity to thrive and develop as it does the ability to problem-solve about life problems in an active way that promotes personal psychological growth and maturity. The concept of psychological mindedness, dating from the 1940s, represents such a resilience factor. Psychologically minded individuals were said to possess a constellation of abilities that made them better able than others to both learn about and change themselves. In particular, these individuals wanted to understand "relationships among thoughts, feelings, and actions, with the goal of learning the meanings and causes of his experiences and behavior" (Appelbaum, 1973, p. 36). People high in such abilities were said to exhibit an interest in others and what moti-

vates them, and an orientation that included a focus on future life planning (Appelbaum, 1973; McCallum & Piper, 1997).

Years later, Block and Block (1980, p. 48) described a related concept, ego resilience, as

resourceful adaptation to changing circumstances and environmental contingencies, analysis of the "goodness of fit" between situational demands and behavioral possibility, and flexible invocation of the available repertoire of problem-solving strategies. . . .

Howard Gardner (1983) also introduced at about this time the paired concepts of intrapersonal and interpersonal intelligences, which involved a complex of abilities, including the group capacities to reason about one's feelings, oneself, and society. Epstein (1998) added to these concepts the idea of *constructive thinking*: a constellation of thought processes that involved the capacity to carry out adaptive coping and to avoid superstitious, pessimistic, and self-defeating thought. There are, in other words, a number of theories related to problem solving about the self in its context.

A more recent concept—personal intelligence—draws together many ideas from some of those earlier theoretical formulations, and applies the intelligence concept to personality and personal information (Mayer, 2008). The personal intelligence concept depends, in part, on a growing convergence across theoretical perspectives as to what the personality system is like and how it functions (Buss, 2001; Funder, 2006; Mayer, 2005; McAdams & Pals, 2006; McCrae & Costa, 1999; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). Drawing together those consensual approaches, the theory states that

personal intelligence involves the abilities: (a) to recognize personally-relevant information from introspection and from observing oneself and others, (b) to form that information into accurate models of personality, (c) to guide one's choices by using personality information

where relevant, and (d) to systematize one's goals, plans, and life stories for good outcomes. (Mayer, 2008, p. 215)

The presence of these abilities may be expressed in an individual's life in unique ways (Mayer, 2008, 2009), as we will see.

### ***Personal Intelligence Compared to Emotional and Other Intelligences***

Personal intelligence is part of a larger group of intelligences referred to as "hot" that include the social and emotional intelligences. For most of the 20th century, psychologists favored the study of "cool" (as opposed to hot) intelligences. The cool intelligences involve abstract reasoning about information that is typically general and impersonal. Verbal intelligence, for example, is concerned with word and propositional meanings; perceptual-organizational intelligence is concerned with identifying and reasoning about visual patterns. By contrast, hot intelligences concern the capacity to reason with information that is accompanied by psychic pleasure or pain (Mayer, Roberts, & Barsade, 2008). Examples of these intelligences include social intelligence, which involves reasoning about one's own and others' social situational behaviors; emotional intelligence, which involves reasoning about emotions, emotional information, and their meanings; and personal intelligence, as developed here, which concerns reasoning about personal information, one's self-concept, and life plans, among other areas.

Personal, social, and emotional intelligences are thus distinct members of the hot intelligence group; however, personal intelligence is broader than emotional intelligence. *Emotional intelligence* (EI) is defined as the capacity to reason about emotions and emotional knowledge, and to use emotions to enhance thought (Mayer et al., 2008). In contrast, *personal intelligence* (PI) addresses an individual's understanding of not only emotions, but also of his or her motives, self-concepts, dreams, imaginings, and other

internal experiences and mental models of the self and others (Mayer, 2008). PI is also different than (but complementary to) social intelligence. PI focuses on inner personal experience and personal information in oneself and others. By contrast, social intelligence is relatively outer directed and involves reasoning about situations, interactions, social skills, and the interactions among groups (Weis & Süß, 2007).

Its initial theoretical development suggests that PI, in particular, describes specific inner qualities relevant to a person's resilience. The next section of this chapter examines two individuals who needed resilience in their lives, and how PI might have contributed to each person's response to challenging circumstances.

### **Life Falls Apart and Comes Together Again: PI in Two Brief Cases**

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PI concerns problem solving about personality and personal information. Resilience, in turn, concerns dealing with situations in which a person's life connections fall apart, and the individual must cope somehow. How might PI apply? Personal intelligence concerns four areas: identifying personal information, developing self- and other-models of personality, using such information to guide choices, and systematizing one's life. These areas of PI may be relevant to resilient responding when life's connections are strained or broken.

#### ***Identifying Personal Information***

PI involves the capacity to identify accurate information about oneself based on one's own introspections and others' feedback. In regard to one's own personality this sometimes involves a certain amount of cleverness because the people surrounding us often may want to conceal or sugarcoat their complete and honest feedback to avoid hurt feelings, personal embarrassment, or unpleasant realities.

For Hamilton Jordan, a time arose during a visit to his doctor's office when, as he described it, he knew something was wrong. His doctor had sent him to the hospital for an X-ray rather than performing it himself in his office. A few hours after returning to the doctor's office from the hospital, his doctor spoke on the phone to the radiologist. Jordan (2001) recounts:

I strained to hear, but all I could make out was, "I understand, yes ... I understand."

He hung up the phone, turned away as if to avoid contact, slid the X-rays out of the large brown envelope, turned them upright one by one and lined them up on the illuminated viewer. ... "Hamilton, I hate to tell you this, but you have an abnormal chest film."

He paused to watch me as his words sank in. "This spot here is some kind of mass ... some kind of growth."

"Could it be cancerous growth?" I asked quietly.

"Yes," he said slowly, picking his words carefully. (p. 5)

Jordan's story includes an evocative personal account of his own altered feelings and awareness in response to the news. His ability to access his own internal mental states is a key part of personal intelligence. Jordan recounts:

I was stunned and just sat there, staring at the film. I felt like someone had suddenly pulled a plug and all the energy and feeling was flowing from my body. I had a surreal sense of standing apart from this bizarre scene and watching myself sitting in the examination room, talking with my doctor friend, asking predictable questions. (pp. 4-5)

Jordan's medical diagnosis represented an attenuation of his psychobiological connection—a breach between mind and body. However, perhaps due to his PI, his resilience response began with a detailed awareness of his situation.

Another part of PI involves seeking accurate information about oneself. Jordan sought accurate medical information and

guidance from the start. When a physician told him there existed a reasonably effective treatment option for his condition, Jordan asked, "Reasonably [effective], doctor? What does that mean?" And after the doctor replied somewhat indirectly, Jordan persisted, exclaiming to the doctor, "Just quantify it for me!" Receiving yet another unsatisfactory response, Jordan insisted further that he wanted a precise, accurate answer. It was then the doctor told him his chance of surviving for 5 years was about 25% (Jordan, 2001, pp. 3-4). The pursuit of accurate feedback also is a key part of PI.

Although not everyone may be able to be this assertive (and not everyone may wish for this level of accurate information at the moment of hearing such news), accurate knowledge can be life-preserving. Although optimism generally predicts good health outcomes, the distortions of unrealistic optimism can be dangerous in medical and behavioral health contexts. Smokers, for example, who are unrealistically optimistic about their health status are less likely than other smokers to plan to stop smoking (Dillard, McCaul, & Klein, 2006). Similarly, students who are unrealistically optimistic about their health problems learn less about disease prevention and are less motivated to exercise (Davidson & Prkachin, 1997).

Jordan's monitoring of information also allowed for the correct evaluation of erroneous reports concerning his medical condition. A dramatic but amusing example of this occurred as he sat in his hospital room with his mother and sister, awaiting his diagnosis. A picture of him appeared on a local TV channel, and when he turned up the volume, he heard, "CBS has learned that former Carter aide Hamilton Jordan ... has been diagnosed with inoperable lung cancer" (Jordan, 2001, p. 2). After a moment of panic he realized that if his doctor (with whom he had just spoken) did not yet know what he had, CBS News probably did not know either. Such successful, quick, and accurate filtering of information reduced Jor-

dan's stress and no doubt contributed to his resilience over time.

### *Developing Models of the Self and Others*

A second area of PI involves developing accurate models of the self and others. The question "Who am I?" is one of the big questions of antiquity and of the modern day, of psychology and of personality as well (Mayer, 2007). To answer this question, each individual must develop an identity, or multiple identities (to fit specific contexts). This can be a lifelong project of discerning and filtering ideas of who one is, who one is not, and who one wants to be.

Identification occurs when an individual aspires to be the kind of person he or she perceives another as being, and alters his or her personality accordingly (Block & Turula, 1963). People often identify with admired others, and watching how such admired others behave may provide clues as to how to cope with new demands, reflecting an individual's capacity to adapt (Sanford, 1955). In healthy instances, individuals who are more identified are more resilient to environmental changes because they have internalized some of the strengths of admired others (Block & Turula, 1963).

Historically, many theorists believed that identity is crystallized in adolescence. Today, however, identity development is believed to begin before and to continue well beyond adolescence (Cramer, 2004; van Hoof & Raaijmakers, 2003). In this lifespan approach, the act of identification involves a person taking on as one's own another's values, attitudes, and behaviors, and integrating them to enhance his or her psychological security. To the extent that the target of identification has lived well, this integration can provide useful guidance during difficult times (van Hoof & Raaijmakers, 2003).

Personal identifications are a bit different from social identifications with peer groups, which are usually established along demographic or membership characteristics (e.g., socioeconomic status, activities/inter-

ests, vocations, political affiliations, ethnic/religious groups, stigmatized groups, etc.; Deaux et al., 1995). Personal identifications more clearly involve an internal comparison and a judgment of the individual's possible selves (Block & Turula, 1963; Petrocelli & Smith, 2005). Group identifications, by contrast, involve assimilation and the perception of homogeneity—the subordination rather than the refining of the unique individual (De Cremer, 2004; Deaux et al., 1995). Although the process of developing a group identity is essential for establishing belongingness and social support, for some of the same reasons it cannot replace a strong and definitive personal identity. For example, in some instances, threats to one's personal identity are considered more dangerous to an individual than threats to his or her group identity (Gaertner, Sedikides, & Graetz, 1999). This seems to make sense both logically and evolutionarily; a focused attack on an individual has more immediate relevance to that person's survival than does a more diffuse attack on a larger group, to which any member(s) could conceivably respond on behalf of the group or the embattled individual. It must therefore be of surpassing importance to protect the people, values, and attitudes with which we identify individually because we alone are accountable when those values and attitudes are put to the test, as in the case of stressful life events that require resilient coping.

It is the richness of one's own self-depiction—through self-knowledge, creativity, and traits such as openness to experience—that predicts the fullness of one's identification with others (Clancy & Dollinger, 1993; Dollinger & Clancy, 1993). Even the person's use of consumer goods can play a role beyond the product's immediate usefulness in signifying the development of personal identification; particularly emblematic are things such as clothes, music choice, favorite TV shows, and slang (Rattansi & Phoenix, 1997).

The identification process begins as children start to understand some of the ele-

ments of personality, such as general typologies of individuals both real and fictional, then gradually shape them into more realistic images of themselves and understandings of others. These childhood images of personality can include imaginary beings, as well as real ones. Whether real or imagined, these characters help to teach us the existence of individual differences and the different forms personality can take. Understanding the possibilities of such individual differences can help a person develop a more accurate and useful identity. A good sense of identity, in turn, promotes successes in maintaining personal achievements, such as one's marriage and occupational satisfaction (Pals, 1999).

#### *Resilience and Personal Identification with PI: The Case of Sammy*

One young child's experience illustrates how resilience and learning about personality-relevant information can grow together. Sammy began the second grade in a new school. He knew no one and was enrolled well after the official beginning of classes. He needed an imaginative world at least for a while to provide some stability in a world full of real disruptions. Sammy's mother recently had brought him, along with two younger daughters, to his new neighborhood in Oakland, California, following her divorce. The transition severed Sammy's connections to his father, to his old school and his friends there, and to his earlier community in the Deep South. He was isolated now in the new school, and needed to establish some new kind of life.

Parents and/or caretakers are the first figures with whom a child tends to identify, followed by other close, admired persons. Cramer (2004) suggests that separation from or loss of a parent may be a catalyst for insecurity, confusion, and anxiety. Facing such isolation, Sammy had to find a source of identification that would allow him some security and the ability to forge new connections with his classmates. He accomplished

this through his fondness for the superhero characters the children all knew from the mass media. By identifying with these popular characters, Sammy not only found an effective coping mechanism for himself but was also able to make new friends by sharing experiences with them through imaginative play with popular fictional characters.

Psychologists often distinguish between *inner-focused coping* (changes in the self) and *surround-focused* or *behavioral coping*, which focuses on making changes in the environment (Folkman & Lazarus, 1980). Lacking the power to influence his environment, Sammy's initial identification with superheroes can be considered inner-focused coping—changes to his inner personality. One of Sammy's chief means of inner coping was to replace his real-but-lost connections to his friends and his father with connections to imaginary beings—specifically, to the superheroes of the X-Men and Ninja Turtles stories (Dyson, 1997). Although inner coping usually is hidden, in this case, a group of educators and psychologists observed Sammy and charted the progress in his school writing and conversations.

#### *Commentary on PI and Sammy's Coping Strategies*

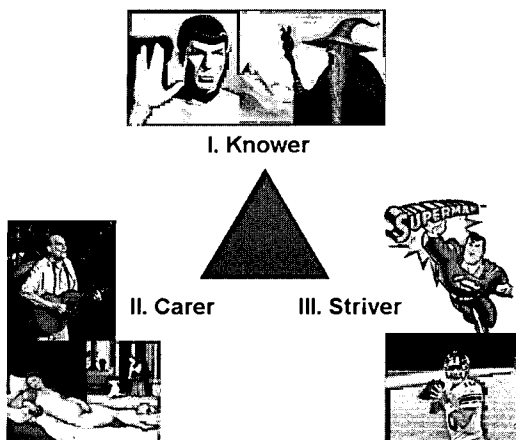
Sammy's choice of thinking about and imagining superheroes was unlikely to have been accidental or haphazard. People distinguish between types of characters and tend to resonate quite differently to different sorts of actors. For example, one series of research studies indicates that people are drawn to one of five or so key types of archetypal characters in the popular media that permeate our lives. These archetypes include the Knower (which includes magician- and sage-like characters), the Carer (which includes lovers and caregivers), the Striver (which includes heroes), the Conflictor (which includes outlaws and shadow figures), and the Everyperson (persons like the rest of us) (Faber & Mayer, 2009).

The hero—the character with which Sammy resonated—belongs to the Striver

group. These archetypes exist to triumph within their world—to carry out difficult and heroic tasks to overcome challenges and defeat threats, to achieve great things, and to become an inspiration to those that follow. Such Striver figures are very attractive to children who acutely perceive injustices and often suffer from their own powerlessness to repair them. Thus, playing superhero Strivers allows children an outlet for dealing with their powerlessness. A person's resonance with the Striver, in particular, can be distinguished from his or her responsiveness to other characters (e.g., Knowers or Carers), even across different representations of archetypal themes, such as those portrayed in film, art, and music (Faber & Mayer, 2009). Figure 5.2 shows examples of Knower, Carer, and Striver archetypes, each spanning two forms of media. Examples of the Knower embody a general archetypal character who values knowledge, wisdom, or aesthetic beauty. People who resonate favor-

ably toward such prototypical characters are likely to identify with them in their real lives, as well as with what they represent: Many of them may feel drawn to become artists, doctors, or teachers. Other archetype clusters, such as the Carer (lower left) and Striver (lower right), also have their own distinctive characteristics, and the people who gravitate toward them are likewise apt to adopt those characteristics (Faber & Mayer, 2009).

Although these identifications likely are more or less automatic in young children, identification can be viewed as an active process by which personality changes (Sanford, 1955). Those with demonstrable PI can effectively reason about such objects of identification and learn about personality from them. When children are under stress, they may rely on these imaginative identifications as a strategy to create attachments when others cannot be found. In her study of children who write about superheroes, Dyson (1997) remarked that many children use superheroes



**FIGURE 5.2.** Clockwise from top left: Knower images: Mr. Spock and Gandalf the Wizard (created by D. E. Phillips); Striver images: Superman and Eli Manning (photo by W. K. Hunter); Carer images: *Venus of Urbino* (painted by Titian) and James Taylor (photo by P. Keleher). All images used under license from creative commons; downloaded April 24, 2009, from [creativecommons.org/about/licenses](http://creativecommons.org/about/licenses).

to achieve a sense of personhood and social belonging, of control and agency in a shared world. In making use of these symbols, children could assume identities within stories that revealed dominant ideological assumptions about relations between people—between boys and girls, adults and children, between people of varied heritages physical demeanors, and societal powers. These stories reflected the immediate values and interests of some children. (p. 2)

### *Use of Self-Models to Guide Choices*

People with higher PI (relative to those lower in it) may be better able to use their knowledge of characters and characterization to fit within an environment. In Sammy's case, his interest and knowledge of superheroes began to interest other students in his class. Socioanalytic theorists talk about how social roles—including imaginary roles such as superheroes—help define relationship interactions among children (Hogan, 1982).

In Sammy's case, some of his peers became interested in playing superhero roles with him. Sammy used his ability to characterize superheroes to write increasingly sophisticated stories that he and his peers could enact. His new friends relied on Sammy's understanding of how such superheroes (and supervillains) interacted. On an occasion when Sammy failed to produce a story, his classmates were sorely disappointed. An observer recorded the child "Margaret" narrating one of Sammy's more disappointing stories ("Once upon a time there was X-Men, the bad guys, and they tried to destroy X-Men.") The observer recorded the following:

*(The children [both boys and girls] begin to play out a mock battle, but, after a few minutes, they stop and stare at each other. ... Sammy's stories are always very long—but not this time, for some reason. The children sit down, grumbling about the short story.)*

SAMMY: Ms. S. said we have 5 minutes and I couldn't finish it. I'll finish it tomorrow. Maybe we could play outside. ... Maybe at recess if I finish we could play X-Men. (Dyson, 1997, p. 63)

Sammy's uncharacteristic failure to produce a story in this instance reflected how important his storytelling had been in establishing connections among the children. Sammy effectively used his knowledge of personality-related information to entertain himself and his peers—to create friendship opportunities, to guide himself, and to fit into the world in a way tailored to meet his needs at that time in his development after the loss of earlier relationships. Moreover, he was able to change what had begun as inner coping through the use of personal fantasy to coping aimed at creating a new social group.

A similar (although more adult) form of coping occurred for Hamilton Jordan. Biopsychological challenges often first demand a considerable degree of inner coping. What makes such illnesses as Jordan's so insidious is that their course is only partially (if at all) under one's control. PI here focuses on acceptance and coping, as well as a special

awareness of what is important. In respect to inner coping, Jordan employed a number of ways of framing and reframing the challenges he faced. As is the case for others who face such challenging stress, the consequences can be bracing:

A life threatening disease like cancer is a strange blessing that casts our life and purpose in sharp relief. ... I never want to forget the raw fear of cancer and the prospect of death. Because if I am ever able to simply block out those memories and set my emotions aside, I will lose the ironic blessing, the sense of purpose and focus that cancer has given my own life. (Jordan, 2001, p. 216)

This is, however, a resilient response; others understandably react to such news with a sense of isolation, discouragement, and despair. The personality attributes (and life context) that determine one's response go far beyond PI itself, and also include issues such as one's emotional disposition, prior experiences with illness, and the specific impact of the illness itself on one's health and well-being. Still, Jordan's resilient response was not isolated. When discussing such responses, Jordan's friend who was battling a brain tumor told him, "There is no such thing as a bad day!" (Jordan, 2001, p. 216).

With inner coping may come new ways to view oneself. Jordan developed an alternative identity as a successfully coping cancer patient—successful in the sense of having survived multiple cancers for a considerable time. He used that new sense of identity as a springboard for various life choices during his illnesses. Dorothy Jordan, Hamilton's wife and a pediatric oncology nurse, had begun a nonprofit camp called Camp Sunshine for children with cancer. Hamilton was drawn into the project because of his connection to his wife and his own bouts with cancer (Jordan, 2001). Again, in this instance, his own experiences with cancer and his acceptance of it indicated how using accurate self-knowledge—including one's evolving identity as a cancer patient and

cancer survivor—can help to establish a new set of positive connections to the surrounding social world. It appears likely that others sense when an individual is using positive coping and are drawn to such successful individuals, both to learn how to do the same for themselves, and because such successes make the individual a better companion.

### *Systematizing Goals, Plans, and Life Stories*

The fourth part of PI involves the ability to systematize one's goals, plans, and life stories in a meaningful fashion. When there are challenges in one's environment, as happens after a loss, people often have to rethink their life stories and what they mean. Reasoning about their autobiographies also helps individuals define themselves more generally (Bluck, Alea, Habermas, & Rubin, 2005; Pillemer, 2003). As people recall their life experiences, they have the more general opportunity to systematize their goals, plans, and autobiographical stories to create a personal sense of coherency and meaning from their lives (Erikson, 1963; Frankl, 1963; McAdams, 2006).

People recall events to see whether their "beliefs or values have changed" and to understand "who I am now" (Bluck et al., 2005, p. 104), as well as to find meaning in their pursuits and life stories. This meaning typically involves a sense of generating something to help the next generation, be it rearing a family or producing work to assist other people (Erikson, 1963). In a review of motivational research on writers (both professional and otherwise), Kellogg (1994, p. 103) emphasized the contributions of not only general intelligence but also of the meaning making that writing brings with it. According to Kellogg, making meaning defines our species, and writing provides a means for such meaning making. These observations suggest that a key contribution of the study of actors and writers (for this purpose) is to highlight their capacity to empathize with different characters, their tendency to observe carefully the mannerisms and

expressions of others, and their willingness to use writing, for example, as a method of meaning making in their lives.

Meaning making is an ongoing life process, and there is no reason to believe that it does not start early in life. Sammy's superhero stories were written at a second-grade level: His meaning making regarded the forces of good versus evil and the hero's capacity to triumph, and the relationships he built more generally plainly involved some elementary systematizing of his life needs at that time. Moreover, his interests and goals, which in part included superheroes, were organized to promote his social relationships. A similar process, but at a more sophisticated adult level, occurred for Hamilton Jordan. Jordan's authoring of his memoir is itself representative of his organizing and systematizing the information of his life.

## **Discussion**

### *Connections and Resilience*

To be resilient, a person must maintain productive interactions with his or her biological and social surroundings: his or her own body and its health, on the one hand, and the surrounding setting, situations, and societies, on the other. Making connections and maintaining good interactions may depend in part on PI, which comprises four abilities: (1) to recognize personality-relevant information accurately, (2) to form models of one's own and others' personalities, (3) to guide one's choices with such information, and (4) to systematize one's goals, plans, and life story for good outcomes (Mayer, 2008).

The need for resilience arises when there is a break in one or more key connections between an individual and his or her surrounding systems—a decline in health in the biological sphere, or a disconnection in interpersonal relations. In this chapter, we examined resilience in response to such disconnections in relation to both health and social interactions. Two cases illustrated such in-

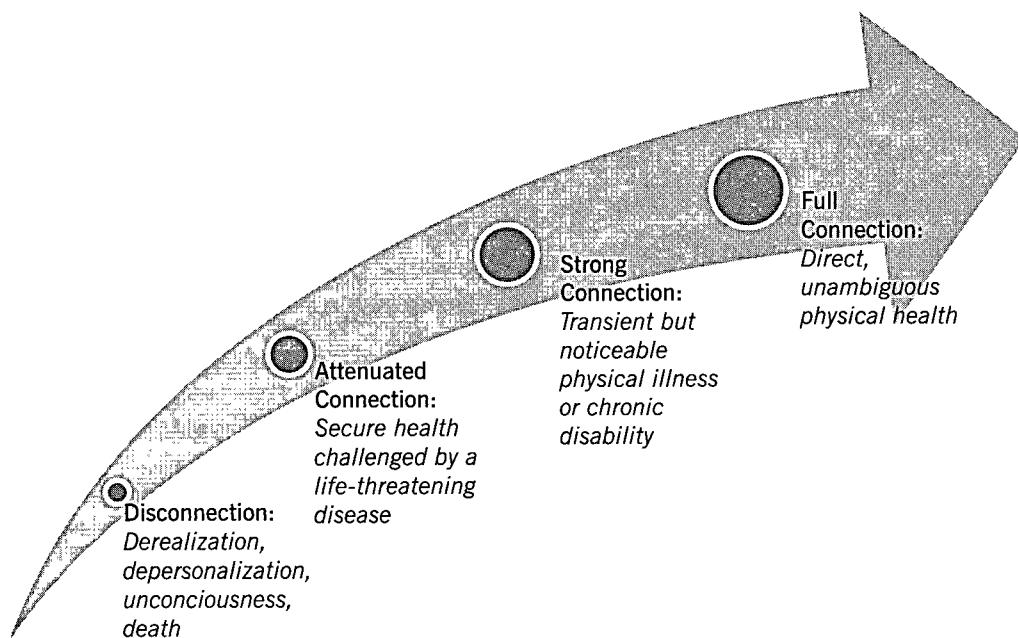
errupted connections: The first involved Hamilton Jordan's struggles with cancer, and the second, the young boy Sammy, who had begun school in a new community after his mother's divorce. In each case, resilience involved moving from a state of lesser connection to one of greater connection.

These movements are illustrated in Figures 5.3 and 5.4. Figure 5.3 illustrates the potential movement from a broken connection—an extreme threat to health—back to full health. Figure 5.4 represents the potential movement from extreme social isolation back to social integration. Personality can survive and thrive without going all the way back to a fully connected relationship either to health or to social interactions; the successful movement and satisfaction with one's progress toward those goals, however, represents resilience. Each individual area of PI can contribute to such a journey toward reconnection.

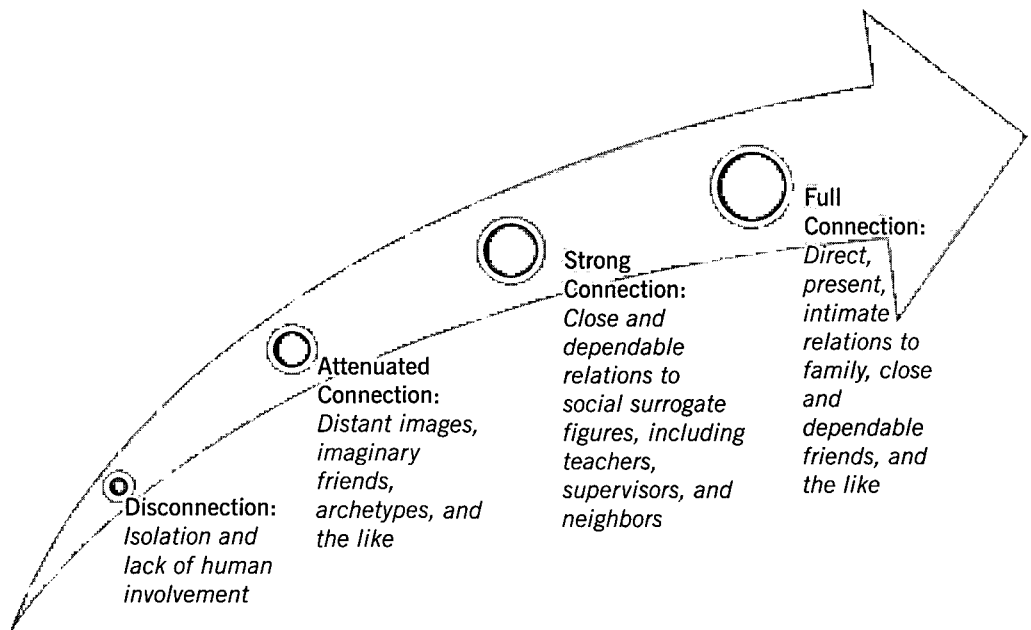
The first area of PI—recognizing personality-relevant information—involves the capacity to accurately perceive and filter information

about personality. It is important to identifying the relevant challenges and opportunities during times of personal adversity that may call for resilience. The more accessible and undistorted the information, the better off the individual may be.

Second, PI helps individuals form accurate mental models of themselves and others. Personal losses often involve separations from important others in one's life, due to events such as divorce, illness, war, or death. In this chapter we focused in particular on models of respected, admired, and even idealized others that may accompany such losses. Such role identifications represent models of others that can provide a compensatory relationship at a distance for personal losses, and in this way bring out one's strengths in adversity. This in turn is likely to lead to better developmental outcomes: For example, highly identified individuals experience higher levels of work success, community and political involvement, and family/marital success than others (Cramer, 2004). Even if someone experiences upheaval and



**FIGURE 5.3.** The range of connectedness between personality and underlying biological health.



**FIGURE 5.4.** The range of connectedness between personality and interactions with others.

separation from a significant caretaker—as Sammy did in leaving behind his father—an internalization of a role model’s values keeps that person psychologically present in the observer’s mind. Identifying with another person (whether real or imagined) in this way provides the individual with a veritable guiding spirit—the archetypal embodiment of one’s own personal ideal self. This process is made possible by forming highly accurate models of the self and others.

Third, PI helps to guide an individual’s choices when encountering difficult situations—a process that is key to resilient coping. Understanding the context of a problem—even implicitly—helps the person frame the situation appropriately and allows him or her to take on the needed role to resolve the problem successfully. The realization that his superhero stories meant as much to his peers as they did to him allowed Sammy to draw on the general appeal of the X-Men and the Ninja Turtles to forge new connections with the children at his new school. It was his awareness of the situation

and his implicit self-knowledge that allowed Sammy to know what had to be done if he wanted to cope socially and emotionally with his initial isolation. Similarly, Hamilton Jordan’s struggles with cancer allowed him a new willingness to help others with the same disease and to give them strength and support. In so giving, he was rewarded in return by the new connections he made in life.

Fourth, PI helps with systematizing goals and plans for future functioning; it allows the individual to construct a better life story. A mature person with high PI is likely not only to be able to recognize relevant problems and cope with them but also to construct meaning from the ordeal. For example, Hamilton Jordan was able to synthesize these aspects of his situation through his own PI, and in composing his memoirs (Jordan, 2001), he provided others in similar circumstances an inspirational blueprint: a blow-by-blow account of how they, too, might cope with such adversity. This systematizing goes beyond the perception of personality-relevant

information, beyond forming models of oneself and others, and beyond making choices. The ability to form a coherent story involves capacities to discover a possible significance in events; to identify the productive aspects of one's own (and others') actions, and ultimately to be satisfied with some sort of personal growth.

### **Future Research in PI and Resilience**

At present, research into PI is just beginning. The outline of an empirically informed theory of PI has been established (Mayer, 2008, 2009). Typically, the next stage in establishing the concept is the development of relevant measurement instruments. The "gold standard" for measurement in intelligence involves ability testing (Mayer et al., 2008), and this will likely be the case for PI as it has been for other intelligences, both cool and hot. People higher in PI, for example, ought to be better able than others to understand which traits are most likely to co-occur in a person. For instance, individuals high in PI should be able to recognize that a person's innovative qualities imply that he or she is more likely to be tolerant, relative to others, than to be loyal. Some preliminary data collected along these lines present an encouraging picture regarding the existence of PI.

If PI exists as hypothesized and is a factor that contributes to an individual's resilience, then it may provide a buffer against personal risks and impaired connections with one's surroundings. Like most personality variables that have not yet been extensively studied, the degree to which PI is heritable or influenced by environmental factors is unknown. Most people are likely to possess a sufficient amount of PI (or other compensatory intelligences) to be able to acquire new learning in the area of personality. It is likely, therefore, that teaching people about personal information, personality in general, its functions, and how to systematize plans and goals could provide a buffering effect against some forms of risk. It is likely that some educational programs in coping

with risk—for example, coping with medical disease or social loss—already do this. Developing curricula based more explicitly on a theory of PI may improve the coherence of such teachings and render the programs based on those teachings more effective. These are, however, speculations, until more is known.

Empirical research is still needed to determine whether, for example, people with highly accurate and informed self-knowledge make better use of such knowledge than others to repair and maintain their personal connections. For example, experimental groups might be administered mild stressors of varying personal relevance to see how people with relatively accurate or inaccurate self-models respond. Or, as another example, resilient and nonresilient choices might be assessed through behavioral studies. Even existing stories and personal narratives of difficult life situations could be coded for self-knowledge and compared to similar, nonstressful life stories. Such future research may make clearer the potential contributions of PI to an individual's response to and recovery from significant life stresses.

### **Note**

1. Sammy's real name and other identifying details were changed from the original case in Dyson (1997).

### **References**

- Appelbaum, S. A. (1973). Psychological-mindedness: Word, concept and essence. *International Journal of Psycho-Analysis*, *54*, 35-46.
- Benson, P. I. (1997). *All kids are our kids*. Minneapolis, MN: Search Institute.
- Block, J., & Turula, E. (1963). Identification, ego control, and adjustment. *Child Development*, *34*, 945-953.
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Development of cognition, affect, and social relations*:

- The Minnesota Symposia on Child Psychology* (Vol. 13, pp. 39–101). Hillsdale, NJ: Erlbaum.
- Bluck, S., Alea, N., Habermas, T., & Rubin, D. C. (2005). A tale of three functions: The self-reported uses of autobiographical memory. *Social Cognition, 23*, 91–117.
- Buss, D. M. (2001). Human nature and culture: An evolutionary psychological perspective. *Journal of Personality, 69*, 955–978.
- Clancy, S. M., & Dollinger, S. J. (1993). Identity, self, and personality: I. Identity status and the five-factor model of personality. *Journal of Research on Adolescence, 3*, 227–245.
- Cramer, P. (2004). Identity change in adulthood: The contribution of defense mechanisms and life experiences. *Journal of Research in Personality, 38*, 280–316.
- Davidson, K., & Prkachin, K. (1997). Optimism and unrealistic optimism have an interacting impact on health-promoting behavior and knowledge changes. *Personality and Social Psychology Bulletin, 23*, 617–625.
- Deaux, K., Reid, A., Mizrahi, K., & Ethier, K. A. (1995). Parameters of social identity. *Journal of Personality and Social Psychology, 68*, 280–291.
- De Cremer, D. (2004). The closer we are, the more we are alike: The effect of self-other merging on depersonalized self-perception. *Current Psychology, 22*, 316–325.
- Dillard, A. J., McCaul, K. D., & Klein, W. M. P. (2006). Unrealistic optimism in smokers: Implications for smoking myth endorsement and self-protective motivation. *Journal of Health Communication, 11*(Suppl. 1), 93–102.
- Dollinger, S. J., & Clancy, S. M. (1993). Identity, self, and personality: II. Glimpses through the autophotographic eye. *Journal of Personality and Social Psychology, 64*, 1064–1071.
- Dyson, A. H. (1997). *Writing superheroes*. New York: Teachers College Press.
- Epstein, S. (1998). *Constructive thinking: The key to emotional intelligence*. New York: Praeger.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton.
- Faber, M. A., & Mayer, J. D. (2009). Resonance to archetypes in media: There's some accounting for taste. *Journal of Research in Personality, 43*, 307–322.
- Flach, F. F. (1997). *Resilience: How to bounce back when the going gets tough*. New York: Hatherleigh Press.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219–239.
- Frankl, V. E. (1963). *Man's search for meaning: An introduction to logotherapy*. Oxford, UK: Washington Square Press.
- Funder, D. C. (2006). Towards a resolution of the personality triad: Persons, situations, and behaviors. *Journal of Research in Personality, 40*, 21–34.
- Gaertner, L., Sedikides, C., & Graetz, K. (1999). In search of self-definition: Motivational primacy of the individual self, motivational primacy of the collective self, or contextual primacy? *Journal of Personality and Social Psychology, 76*, 5–18.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Garnezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development, 55*, 97–111.
- Hjemdal, O., Friborg, O., Stiles, T. C., Rosenvinge, J. H., & Martinussen, M. (2006). A new scale for adolescent resilience: Grasping the central protective resources behind healthy development. *Measurement and Evaluation in Counseling and Development, 39*, 84–96.
- Hogan, R. (1982). A socioanalytic theory of personality. In M. M. Page (Ed.), *Nebraska Symposium on Motivation* (pp. 55–89). Lincoln: University of Nebraska Press.
- Jordan, H. (2001). *No such thing as a bad day*. Atlanta, GA: Longstreet Press.
- Kellogg, R. T. (1994). *The psychology of writing*. New York: Oxford University Press.
- Mayer, J. D. (1995). The system-topics framework and the structural arrangement of systems within and around personality. *Journal of Personality, 63*, 459–493.
- Mayer, J. D. (2005). A tale of two visions: Can a new view of personality help integrate psychology? *American Psychologist, 60*, 294–307.
- Mayer, J. D. (2007). Big questions of personality psychology. *Imagination, Cognition and Personality, 27*, 3–26.
- Mayer, J. D. (2008). Personal intelligence. *Imagination, Cognition and Personality, 27*, 209–232.
- Mayer, J. D. (2009). Personal intelligence ex-

- pressed: A theoretical analysis. *Review of General Psychology*, 13, 46–58.
- Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology*, 59, 507–536.
- McAdams, D. P. (2006). *The redemptive self: Stories Americans live by*. New York: Oxford University Press.
- McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61, 204–217.
- McCallum, M., & Piper, W. E. (Eds.). (1997). *Psychological mindedness: A contemporary understanding*. Mahwah, NJ: Erlbaum.
- McCrae, R. R., & Costa, P. T., Jr. (1999). A five-factor theory of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed.). New York: Guilford Press.
- McCullough, M. E., & Snyder, C. R. (2000). Classical sources of human strength: Revisiting an old home and building a new one. *Journal of Social and Clinical Psychology*, 19, 1–10.
- Pals, J. L. (1999). Identity consolidation in early adulthood: Relations with ego-resiliency, the context of marriage, and personality change. *Journal of Personality*, 67, 295–329.
- Petrocelli, J. V., & Smith, E. R. (2005). Who I am, who we are, and why: Links between emotions and causal attributions for self- and group discrepancies. *Personality and Social Psychology Bulletin*, 31, 1628–1642.
- Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guiding power of the specific episode. *Memory*, 11, 193–202.
- Rattansi, A., & Phoenix, A. (1997). Rethinking youth identities: Modernist and postmodernist frameworks. *Identity*, 5, 97–123.
- Regnerus, M. D., & Elder, G. H. (2003). Staying on track in school: Religious influences in high- and low-risk settings. *Journal for the Scientific Study of Religion*, 42, 633–649.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58, 307–321.
- Richardson, G. E., Neiger, B., Jensen, S., & Kumpfer, K. (1990). The resiliency model. *Health Education*, 21, 33–39.
- Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2, 313–345.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 98–111.
- Sanford, N. (1955). The dynamics of identification. *Psychological Review*, 62, 106–118.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology. *American Psychologist*, 55, 5–14.
- Suskind, R. (1998). *A hope in the unseen: An American odyssey from the inner city to the Ivy League*. New York: Broadway Books.
- van Hoof, A., & Raaijmakers, Q. A. (2003). The search for the structure of identity formation. *Identity*, 3, 271–289.
- Weis, S., & Süß, H.-M. (2007). Reviving the search for social intelligence—a multitrait-multimethod study of its structure and construct validity. *Personality and Individual Differences*, 42, 3–14.
- Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.