Translating Resilience Theory for Assessment and Application with Children, Adolescents, and Adults: Conceptual Issues

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Complex aspects of human functioning are not always neatly deconstructed by researchers or neatly reconstructed for intentional application. Such is the case for the construct of "resilience." Over the past 50+ years, definitions of resiliency have been numerous and research has operated at different levels of analysis, each with its own language and caveats. This complexity has made standardized use and application of the construct more difficult. According to a critical review by (Wald, Taylor, Asmundson, Jang, & Stapleton, 2006) there are several existing definitions of resilience that share in common a number of features all relating to human strengths, some type of disruption and growth, adaptive coping, and positive outcomes following exposure to adversity (e.g., Bonanno, 2004; Connor & Davidson, 2003; Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003; Masten et al., 1999; Richardson, 2002). There are also a number of distinctions made in attempts to define this construct. For example, some investigators assume that resilience is located "within the person" (e.g., Block & Block, 1980; Davidson et al., 2005). Other investigators (e.g., Friborg et al., 2003; Luthar, Cicchetti, & Becker, 2000; Masten, 2001) propose that there are multiple sources and pathways to resiliency, including social context (e.g., family, external support systems). Luthar et al. (2000) have provided clarification by distinguishing between "resilience" as a dynamic developmental process that involves the interaction of personal attributes with environmental circumstances and "resiliency" (Block & Block, 1980) as a personality characteristic of the individual.

There has been considerable divergence in the literature with regard to the definition, criteria, or standards for resiliency; whether it is a trait, process, or an outcome variable; whether it is enduring or situation specific; whether survival in the face of adversity is required and the nature of the adversity required for resiliency to be demonstrated (e.g., what is a sufficient exposure risk factor?). The following are just a few examples of definitions of resilience.

> Resilience is a dynamic process wherein individuals display positive adaptation despite experiences of significant adversity or trauma. This term does not represent a personality trait or an attribute of the individual … Rather, it is a two-dimensional construct that implies exposure to adversity and the manifestation of positive adjustment outcomes. (Luthar et al., 2000, p. 858).
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> Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. (Masten, 2001, p. 228).
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> Resilience embodies the personal qualities that enable one to thrive in the face of adversity. … Resilience is a multidimensional characteristic that varies with context, time, age, gender, and cultural origin, as well as within an individual subjected to different life circumstances. (Connor & Davidson, 2003, p. 76).

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Resilience may be briefly defined as the capacity to recover or bounce back, as is inherent in its etymological origins, wherein 'resilience' derives from the Latin words salire (to leap or jump), and resilire (to spring back). (Davidson et al., 2005, p. 43).

Psychological resilience has been characterized by the ability to bounce back from negative emotional experiences and by flexible adaptation to the changing demands of stressful experiences (Tugade & Fredrickson, 2004, p. 320).

Resilience in the face of adversity has been studied extensively by developmental psychopathologists for the past 50 years. Consistent with the definitions above this body of work has generally defined resilience as the ability to weather adversity or to bounce back from negative experience. Much of resilience research has examined the interaction of protective factors and risk in high-risk populations. As developmental research most of this work focused on children, sometimes in longitudinal studies of factors in the lives of youth that predicted positive outcomes in adulthood (Werner & Smith, 1982, 1992, 2001).

The earliest focus of this developmental work was the identification of factors that were present in the lives of those who thrived in the face of adversity as compared to those who did not (Garmezy, Masten, & Tellegen, 1984; Luthar, 1991, 2003; Masten, 2001; Rutter, Harrington, Quinton, & Pickles, 1994; Werner & Smith, 1982, 1992, 2001). Protective factors identified in previous research include personal qualities of the child that may have allowed them to cope with various types of adversity. The personal qualities identified include, intellectual ability (Baldwin et al., 1993; Brooks, 1994; Jacelon, 1997; Luthar & Zigler, 1991, 1992; Masten & Coatsworth, 1998; Rutter, 1987; Wolff, 1995; Wright & Masten, 1997), easy temperament (Jacelon, 1997; Luthar & Zigler, 1991; Rende & Plomin, 1993; Werner & Smith, 1982; Wright & Masten, 1997; Wyman, Cowen, Work, & Parker, 1991), autonomy (Jacelon, 1997; Werner & Smith, 1982), self-reliance (Polk, 1997), sociability (Brooks, 1994; Luthar & Zigler, 1991), effective coping strategies (Brooks, 1994; Luthar & Zigler, 1991), and communication skills (Werner & Smith, 1982).

Another group of protective factors identified in previous research pertained to the child's social environment, including family. Included in this group of factors are family warmth, cohesion, structure, emotional support, positive styles of attachment, and a close bond with *at least one* caregiver (Baldwin et al., 1993; Brooks, 1994; Cowen & Work, 1988; Garmezy, 1991; Gribble et al., 1993; Luthar & Zigler, 1991; Luthar & Zelazo, 2003; Masten & Coatsworth, 1998; Rutter, 1987; Werner & Smith, 1982; Wolff, 1995; Wright & Masten, 1997; Wyman et al., 1991, 1992).

Environmental protective factors outside the immediate family have been identified and include positive school experiences (Brooks, 1994; Rutter, 1987; Werner & Smith, 1982; Wright & Masten, 1997), good peer relations (Cowen & Work, 1988; Jacelon, 1997; Werner & Smith, 1982; Wright & Masten, 1997), and positive relationships with other adults (Brooks, 1994; Conrad & Hammen, 1993; Garmezy, 1991; Werner, 1997; Wright & Masten, 1997).

Examining the evolution of the construct and study of resilience, Masten and Wright (2009) describe four waves of research undergone primarily by developmental researchers that approached the study of this construct from different perspectives across time (Masten, 2007; Wright & Masten, 1997). The first wave focused on description, defining and measuring resilience, and in the identification of differences between those who did well and poorly in the context of adversity or risk of various kinds. This first wave of research revealed consistency in qualities of people, relationships, and resources that predicted resilience, and these potential protective factors were found to be robust in later research.

The second wave moved beyond description of the factors or variables associated with resilience to a focus on processes, the "how" questions, aiming to identify and understand specific processes that might lead to resilience. These studies led to new labels for processes as protective, moderating, compensatory, etc. Two of the most basic models described compensatory and moderating influences of explanatory factors. In compensatory models, factors that neutralize or counterbalance exposure to risk or stress have

direct, independent, and positive effects on the outcome of interest, regardless of risk level. These compensatory factors have been termed *assets*, *resources*, and *promotive factors* in the literature. Good intelligence or an outgoing personality might be considered assets or resources that are helpful regardless of exposure to adversity. In protective or "moderating effect" models, a theoretical factor or process has effects that vary depending on the level of risk. A classic "protective factor" shows stronger effects at higher levels of risk. Access to a strong support system might be considered protective in that its protective influence is more noticeable in the face of adversity.

The third wave began with efforts to test ideas about resilience processes through intervention designed to promote resilience such as the promotion of positive parenting as advocated by Brooks and Goldstein (2001). Brooks and Goldstein translated basic principles of promoting a healthy mindset in children and disseminated this information to professionals, teachers and parents in a variety of venues. Beth Doll employed an ecological model of resilience by creating the ClassMaps system for helping teachers modify the educational experience to enhance resilience in the classroom environment.

The fourth wave of resilience includes discussion of genes, neurobehavioral development, and statistics for a better understanding of the complex processes that led to resilience (Masten, 2007). These studies often focus at a more molecular level examining how processes may interact at the biological level. Some of this work has led to concepts of "differential susceptibility" and "sensitivity to context" to explore the possibility that some children are more susceptible or sensitive to the influence of positive or negative contexts.

Although the study of early development is often viewed as the intellectual home of the construct, "resilience" has also been described as an aspect of adult personality. Block's conception of ego-resiliency in adults was distinct from the developmental conceptions of resilience that focused on bouncing back in the face of adversity. Block conceived of "Ego-resiliency" as a meta-level personality trait associated with the conception of "ego" as a complex integrative mechanism. The basic process underlying ego-resiliency according to Block may be described as flexibility in the control of emotion. According to Block, ego-resiliency is the ability to adapt ones level of emotion control temporarily up or down as circumstances dictate (Block, 2002; Block & Block, 1980). The related assumption is that this flexibility in controlling emotion is a relatively enduring trait which impacts a variety of other abilities including but not limited to survival in the face of adversity. As a result of this adaptive flexibility, individuals with a high level of resiliency are more likely to experience positive affect, and have higher levels of self confidence and better psychological adjustment than individuals with a low level of resiliency (Block & Kremen, 1996). When confronted by stressful circumstances, individuals with a low level of resiliency may act in a stiff and perseverative manner or chaotically and diffusely, and in either case, the resulting behavior is likely to be maladaptive (Block & Kremen, 1996).

Other theorists have identified traits in adults that overlap with the notion of "resilience." One such construct was that of "hardiness" defined and studied by Kobasa and others (Kobasa, 1979; Maddi, 2002). Hardiness as defined by Kobasa was characterized by three general assumptions about self and the world (Kobasa, 1979, 1982; Maddi, 2002, 2005). These include (a) a sense of control over one's life (e.g., believing that life experiences are predictable and that one has some influence in outcomes through one's efforts); (b) commitment and seeing life activities as important (e.g., believing that you can find meaning in, and learn from, whatever happens, whether events be negative or positive); and (c) viewing change as a challenge (e.g., believing that change, positive or negative, is an expected part of life and that stressful life experiences are opportunities).

A related construct was coined by Albert Bandura "Self-Efficacy," (1997). The construct of perceived self-efficacy is the belief that one can perform novel or difficult tasks and attain desired outcomes, as spelled out in Bandura's Social Cognitive Theory (Bandura, 1997). This "can do"-cognition reflects a sense of control

over one's environment and an optimistic belief of being able to alter challenging environmental demands by means of one's own behavior. Hence, it represents a self-confident view of one's capability to deal with certain stressors in life. Although not conceptually the same as resiliency, self-efficacy may be viewed as a resource component of resiliency with or without the presence of adversity.

The importance of sense of meaning in adult resilience was highlighted in the life and work of Victor Frankl (1979). According to Frankl, one's sense of meaning can facilitate resiliency in adults in a number of ways. A sense of meaning in the context of religion, or other belief system can act as a buffer to negative affect in the face of adversity by allowing the individual to pray and thus find support in God, or understand within the context of a belief system. The belief that one still has choice in the face of adversity can provide strength as illustrated by Victor Frankl's *Man's Search for Meaning*, (1979).

Findings of earlier phases of developmental research of resilience as well as constructs such as "ego-resiliency" seemed to imply that resilient individuals are extraordinary and that this quality is not accessible to everyone. Later research or phase two suggested that resilience was largely a product of a complex interaction of factors in which the individual's environment played a significant part. Along with this shift in emphasis came a questioning of whether "resilience" is extraordinary. The emergence of resilience as "ordinary magic" by Masten identified the process as characteristic of normal development and not applicable in adverse circumstances only (Masten, 2001; Masten & Powell, 2003). Masten (2001) suggested that fundamental systems, already identified as characteristic of human functioning, have great adaptive significance across diverse stressors and threatening situations. This shift in emphasis had significant implications. The "ordinary magic" framework suggested by Masten extends application of resilience theory to a broader range of individuals in varied contexts.

Masten and Wright (2009) expanding this thinking to consideration of resilience as protective systems important across the lifespan. These include attachment relationships and social support; intelligence or problem-solving skills; self-regulation skills involved in directing or inhibiting attention, emotion, and action; agency, mastery motivation, and self-efficacy; *meaning making* (constructing meaning and a sense of coherence in life); and cultural traditions, particularly as engaged through religion. This shift of frameworks is accompanied by the possibility that resilience may be modified through interventions with individuals and the life circumstances in which they find themselves.

In more recent times examination of resilience in adults has crossed paths with the study of "positive psychology." Martin Seligman (2000) has written on the need for developing a systematic science of positive psychology to offset the prevailing focus on pathology. He points out that the major strides in prevention have come from a perspective of systematically building competency, not on correcting weakness. Seligman's approach, based in cognitive theory, is to provide structured interventions designed to build resilient attitudes that will then buffer against symptoms of depression.

Also in recent times, clinicians have expressed a need for a further shift toward clinical application. Goldstein and Brooks (2005) and Brooks and Goldstein (2001) have called for a clinical psychology of resiliency. These authors focus on the interaction between the child and the child's social environment. Goldstein has written on the importance of the mindset of a resilient parent in raising a child with a resiliency mindset and the importance of teaching parents how to identify and foster these qualities. These authors focus on changing the family and academic environments to be more supportive of the child's resiliency.

Controversy Over Usefulness of the Resilience/Resiliency Construct

In light of the definitional diversity, research complexity and evolution of the resilience construct described above, those with a more rigorous bent have challenged the utility and conceptual integrity of the construct (Kaplan, 1999, 2005).

Kaplan (1999) concluded that resilience is a once useful construct whose time has passed. He concluded that conceptualizations of resilience as a trait did not pass scrutiny in that there were no common defining features across all instances of resilience. Kaplan defined resilience as an aberration—a failure in the predictive model, causes for which being infinite (Kaplan, 1999). Kaplan suggests that resilience is not a phenomenon per se, but rather a conceptual tool in the development of increasingly refined predictive models. These criticisms, although perhaps understandable from the perspective of a researcher and statistician, may leave practitioners without working tools to use while the refined predictive models are being worked out. Similar criticisms have been made of the other similarly complex constructs of *hardiness*, *sense of meaning,* and *ego-resiliency* mentioned above.

Some have claimed that in spite of conceptual complexity, the phenomenon of resilience has too much heuristic power to be abandoned, (Luthar et al., 2000). Elias, Parker, and Rosenblatt (2005) propose the use of working definitions of resilience/resiliency that satisfy two criteria; (1) does the definition add value to existing constructs in understanding circumstances; (2) does the definition inform the design of interventions. Kaplan in his 2005 review conceded that concepts are not by their nature true or false but may be evaluated with regard to their usefulness.

Assessment Challenge

If we suggest that working definitions of resilience that pass utility criteria are of value, we are then left with the question of assessment. How do we assess the presence or absence of resiliency? Early researchers employed absence of pathology in the face of adversity as their essential yardstick that resilience was present. However, the understanding that resilience is a product of complex interactions of personal attributes and environmental circumstances, mediated by internal mechanisms, has presented additional assessment challenges to developmental researchers (Luthar et al., 2000). Kaplan (1999) has pointed

out the difficulty of achieving statistically significant interaction effects. Kaplan asks "Can one ever adequately account for sufficient amounts of predictive variance from retroactive assessment?"

Studies from a developmental perspective have been longitudinal and have tried to capture contextual aspects of resilience specific to the group and sets of circumstances. Assessment of resilience in children has often focused on *assets* defined as the achievement of positive outcomes such as reaching developmental milestones. This approach has been useful in longitudinal studies in which researchers could examine risk and protective factors retrospectively from the numerous pieces of information carefully gathered about study participants (Werner & Smith, 1982, 1992).

These studies have employed extensive batteries of preexisting tests, along with measures of achievement, to assess personal resiliency. Research has used different measures across studies and across populations, making it difficult to compare across studies and across groups. The research-based tools employed in previous research have often been impractical for widespread use in the schools and communities because they are too labor intensive, expensive, or focused on presence or absence of psychiatric symptoms. In addition, identification of assets and developmental milestones occurs after the fact and are not useful in prevention of negative outcome. This leaves the identification of risk conditions regardless of individual differences as the source of preventive identification. Consequently, the lack of a screening tool has resulted in difficulty in assessing the need for and choice of preventive intervention strategies.

Assessment tools have been developed in an attempt to tap resilience/resiliency. These tools have most commonly been constructed for adults, each focusing on different aspects of the construct. These instruments have undergone some scrutiny. For example, some critics claim that resilience/resiliency cannot be assessed in the absence of adversity. Ahern, Kiehl, Sole, and Byers (2006) reviewed some instruments that were designed to measure resilience. They

focused on six measures, and the range of constructs measured included "protective factors that support resiliency," "successful stress-coping ability," "central protective resources of health adjustment," "resilient coping behavior," and "resilience as a positive personality characteristic that enhances individual adaptation" (p. 110). These authors concluded that rather than specifically assessing resilience as the ability to bounce back, resist illness, adapt to stress, or thrive in the face of adversity, previous measures have generally assessed protective factors or resources that involve personal characteristics and coping styles. These authors thus suggest that assessment has not captured the process of resilience or bouncing back from adversity.

It should be noted that assessment tools for resilience/resiliency are more prevalent for adults than for children although much of the research on resilience has emerged from the study of early development. There are many reasons for this circumstance. First, developmental psychologists are keenly aware of the reliance of children on their parents and environmental circumstances. Therefore focusing on the child could run the risk of blaming the child for failure to thrive in the face of adverse circumstances. Similarly, focus on the child might run the risk of assuming that a "resiliency child" is invulnerable and therefore would not need special attention in the face of adversity. One might argue that in an effort to protect the child from blame, there has been a dismissal of the child's personal experience that would ultimately be the mediating process between protective factors and good outcomes.

Definition and assessment problems notwithstanding, there has in the past few years been a plethora of self-help books and interventions published that have not been systematically linked to sound core developmental constructs. These interventions are not often tested for effectiveness. Some interventions that are found to be effective are explained on the basis that they increase resiliency while this implied mediating process is not documented. Thus there is a disconnection between the complex theory and body of research on resiliency and the abundant self-help products employing this term.

In summary, there is a need in the field for construct clarification for practical application and evaluation. Furthermore links between constructs, assessments, interventions and outcomes need to be made more transparent and hence more easily understood and applied. The intention of this volume is to describe diverse efforts at translating resilience theory for assessment and application with children, adolescents, and adults. It is the mission of the volume to allow the readers to make their own judgments on the soundness, practicality and usefulness of these constructs and related assessments, informed by exposure to diverse perspectives on the topic.

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