

An Organizational Framework for Conceptualizing Resilience in Children

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TOPIC. *An organizational framework for conceptualizing resilience in children.*

PURPOSE. *To propose a framework based on relevant literature that clarifies, differentiates, organizes, and elaborates on pertinent factors associated with resilience in children.*

SOURCES. *Relevant literature from developmental psychology, child psychiatry, and nursing.*

CONCLUSIONS. *Salient factors affecting resilience in children originate internally or externally to the individual. Internal factors include biological and psychological factors; external factors are reflected in the nature and quality of relationships established within or outside the family group. The influence and importance of each factor, however, may vary in individual situations. The framework can guide research efforts and facilitate interventions for practice.*

Key words: *At-risk children, resilience, stress resistance*

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Resilience typically refers to the tendency to spring back, rebound, or recoil (Garmezy, 1991) and involves the capacity to respond and endure, or develop and master in spite of life stressors or adversity. Resilient individuals successfully adapt and rapidly adjust to major life events or to chronic stressors (Werner, 1990).

Recent research has pursued an understanding of resilience by focusing on self-righting tendencies driving children toward normal development under adverse circumstances. This work has identified a common core of dispositions and situations that mark resilient children and seem pivotal in their ability to modify their responses to risk, as well as to maintain a sense of control and competence in their life even when confronted with physical handicaps, a pathological family environment, or the adverse effects of poverty, war, or dislocation. These commonalities generally have been organized into three categories: personal predispositions of the child, characteristics of the family environment, and the presence of extra familial support sources (Cowen et al., 1991; Garmezy, 1991; Howard, 1996; Luthar & Zigler, 1991; Masten & Coatsworth, 1998; Rutter, 1990; Werner, 1990).

The importance of specific factors promoting resilience, however, remains in disarray, as we do not know which factor is most significant for a particular child. In addition, there is often marked variation in an individual's responses to stress, suggesting the presence of any specific factor does not always produce resilience if the person is particularly vulnerable or the adversity too great to overcome (Masten, Best, & Garmezy, 1990).

Even though several reviews on resilience (Cicchetti & Garmezy, 1993; Fonagy, Steele, Steele, & Higgett, 1994; Luthar & Zigler, 1991; Masten, 1994; Masten & Coatsworth, 1998; Polk, 1997; Wolff, 1995; Zimmerman & Arunkumar, 1994) have attempted to improve an understanding of resilience and factors affecting resilience,

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confusion remains. Some authors take a theoretical perspective (Fonagy et al., Polk), whereas others summarize the empirical literature (Cicchetti & Garmezy; Zimmerman & Arunkumar). If resilience is indeed a midrange theory (Polk) that should cross populations and phenomena, there generally seems to be a lack of consensus regarding (a) the age domain covered by the construct, (b) the circumstances where it occurs, (c) its definition, (d) its boundaries, or (e) the adaptive behaviors described. For example, subjects studied have ranged from infancy through adolescence (Murphy, 1987; Werner, 1990). Life circumstances include disadvantaged economic status (Cowen et al., 1991; Luthar, 1991), single-parent homes (Werner), chronic illness (Hauser, Vieyra, Jacobson, & Wertlieb, 1989), child abuse (Cicchetti, Rogosch, Lynch, & Holt, 1993; Mrazek & Mrazek, 1987), war (Felsman, 1989), parental psychopathology (Beardslee & Podorefsky, 1988), and parental alcoholism (Bennett, Wolin, & Reiss, 1988; Werner, 1993), as well as non-stressful, stable, middle-class homes (Block & Block, 1980; Murphy, 1987).

In addition, there are inconsistencies relative to the definition. The meaning of "resilience" often varies, becoming whatever any author might say it is. For example, Block and Block (1980) describe resilience as a personality characteristic not related to stress, whereas Rutter (1987), Garmezy (1991), and Werner (1990) refer to resilience as a characteristic of some children from at-risk environments. Others consider resilience to be absence of psychopathology in a child when parents are mentally ill (Cicchetti & Garmezy, 1993), success in meeting societal expectations or developmental tasks (Luthar & Zigler, 1991), or as characteristics enabling children to succeed contrary to predictions (Baldwin et al., 1993). Still others approach resilience from one of three perspectives: (1) a protection perspective, where stress and personality traits interact to predict adjustment; (2) a challenge perspective, where competence is enhanced by stress; or (3) a compensation perspective, where personal attributes help adjustment when stress diminishes competence (Luthar & Zigler; Zimmerman & Arunkumar, 1994). Resilience also has been conceptualized as occurring on a

continuum (Block & Block) or as the ability to restore equilibrium and adapt to life situations (Beardslee & Podorefsky, 1988). A conceptual synthesis also has been developed (Polk, 1997) that suggests resilience is a midrange theory with a four-dimensional construct, where dispositional, relational, situational, and philosophical patterns intermingle with the environment to form resilience. Frequently a "commonsense" universal definition is assumed, but when one attempts to identify specifics affecting resilience, these definitions are inadequate and confusing.

The purpose of this paper is to propose an organizational framework to clarify, differentiate, and elaborate on pertinent factors associated with the concept that includes particular personal predispositions of the child, characteristics of the child's family, and the extra familial support sources available in the community.

Finally, researchers seldom define or differentiate resilience as a construct separate from factors or variables influencing resilience. Part of this problem may be related to difficulties inherent in how resilience is measured compared to factors actually affecting or contributing to resilience. For example, personal characteristics such as empathy, coping ability, social competence, peer relations, self-worth, mental health, cognitive competence, and locus of control have been used not only as evidence but also as definitions of resilience (Baldwin et

al., 1993; Heinzer, 1995; Howard, 1996; Polk, 1997). Children "doing well" in these characteristics are considered resilient. Clearly, there is a need for differentiating and organizing factors associated with resilience into a logical framework and developing better measures of the concept when reporting who is or is not resilient.

The purpose of this paper, therefore, is to propose an organizational framework to clarify, differentiate, and elaborate on pertinent factors associated with the concept that includes particular personal predispositions of the child, characteristics of the child's family, and the extra familial support sources available in the community, but to use a more logical and specific approach. Identification of salient factors as well as unique influences affecting the resilience of individual children is important for further refinement of predictors associated with resilience, and to facilitate intervention programs for at-risk populations.

Organizational Framework for Resilience

The factors affecting resilience in children can be organized according to whether they originate internally or externally to the individual. Both are necessary, perhaps in varying degrees, for resilience to occur. Even though these factors are important in normal development, they may become especially meaningful for resilient children. Internal factors are intrinsic, inherent, or generated from within an individual, and include biological and psychological factors. Biological factors encompass general health, genetic predisposition, temperament, and gender. Psychological factors include cognitive capacity, coping ability, and personality characteristics. Cognitive capacity can be subdivided into intelligence and cognitive style. Personality characteristics involve descriptions of traits relating to one's inherent personality (intrapersonal) and traits involving interactions with others (interpersonal); see Table 1.

External factors are extrinsic, exterior, or generated from outside an individual, and are reflected in the nature and quality of relationships established within and

Table 1. Internal Factors Affecting Resilience

Biological

- General health
- Genetic predisposition
- Temperament
- Gender

Psychological

- Cognitive capacity
 - Intelligence
 - Cognitive style
- Coping ability
- Personality characteristics
 - Intrapersonal
 - Interpersonal

Table 2. External Factors Affecting Resilience

Within the Family

- Home environment
- Parenting
- Parents
- Siblings
- Grandparents

Outside the Family

- Adults
- Peers
- School
- Church
- Day care/Preschool programs
- Youth organizations
- Healthcare/Social service agencies

outside the family group. Within the family this is reflected in the home environment, parenting practices, and particular family members as parents, siblings, and grandparents. Outside the family certain individuals (adults, peers) and community resources (school, church, day-care/preschool programs, youth organizations, healthcare/social service agencies) are important in acquiring resilience; see Table 2.

Internal Factors Affecting Resilience

Biological factors. The literature suggests that four biological factors impact resilience: general health, genetic predisposition, temperament, and gender.

1. *General health.* Resilient children are typically quite healthy. They have few childhood illnesses; a robust physique; better than average energy; and regular sleeping, eating, and elimination patterns. In addition, they are physically strong, coordinated, and enduring (Brown & Rhodes, 1991; Felsman, 1989; Heinzer, 1995; Murphy, 1987; Werner 1990).

2. *Genetic predisposition.* Family histories of resilient children note minimal occurrences of hereditary or chronic illness (Murphy, 1987; Rutter, 1987; Werner 1990). In fact, children most likely to be negatively affected by severe family strife or demonstrating less resilience have parents with a history of lifelong personality disorders (Fonagy et al., 1994; Radke-Yarrow & Brown, 1993; Rutter).

3. *Temperament.* A child's temperament may mediate adaptation to stress and change (Carey, 1990) and be important in resilience (Gordon & Song, 1994; Grizenko & Pawliuk, 1994; Rende & Plomin, 1993; Tschann, Kaiser, Chesney, Alkon, & Boyce, 1996). In fact, several authors suggest an infant's easy temperament predisposes the child to develop resilience (Block & Block, 1980; Cederblad, Dahlin, Hagnell, & Hansson, 1995; Masten, Best, & Garmezy, 1990; Smith & Prior, 1995; Werner, 1990; Wyman, Cowen, Work, & Parker, 1991).

4. *Gender.* Resilience seems to be related to gender. Generally, males are more vulnerable to all risk factors, including prenatal and birth injuries, family discord, specific educational delays (Wolff, 1995), and psychological stressors (Benard, 1991) than females. Males also are at greater risk for disruptive behavior problems when experiencing out-of-home day care (Belsky & Rovine, 1988), divorce (Hetherington, 1991), or disaster (Garmezy & Rutter, 1985). The effect of gender on resilience seems to vary, however, according to the child's age. For example, males were more vulnerable than females to caregiving deficits or biological insults during infancy and child-

hood, whereas females were more vulnerable in adolescence, especially if they bore children early in their lives (Fonagy et al., 1994; Werner, 1990).

These four distinct biological factors (general health, genetic predisposition, temperament, gender) seem to affect resilience separately. These factors are related, however, and may interact.

These four distinct biological factors (general health, genetic predisposition, temperament, gender) seem to affect resilience separately. These factors are related, however, and may interact. For example, genetic factors present at birth—such as hemophilia, cystic fibrosis, and congenital cardiac defects—directly affect general health. Some congenital abnormalities and genetic conditions (e.g., hemophilia) affect one gender more than another. Future research investigating the interaction among these factors is needed to clarify potential relationships.

Psychological factors. Three major psychological factors have been identified in the literature as affecting resilience: cognitive capacity, coping ability, and personality characteristics.

1. *Cognitive capacity.* Cognitive capacity may be subdivided into intelligence and cognitive style (the particular skills and approaches a person uses in solving problems). Even though there is little evidence high intelligence alone promotes resilience, studies of resilient children suggest a relationship. Often resilient children score higher on educational achievement and scholastic aptitude tests and have better reading, communication, and reasoning skills than at-risk children who developed

problems (Benard, 1991; Brown & Rhodes, 1991; Cederblad et al., 1995; Cicchetti et al., 1993; Rende & Plomin, 1993). The relationship between resilience and intelligence has been demonstrated in longitudinal studies (Egeland, Carlson, & Sroufe, 1993) in various ethnic groups—including Caucasians (Gjerde, Block, & Block, 1986), Asians, Polynesians (Werner, 1990), and African Americans (Taylor, 1994)—and in children living in middle-class homes (Murphy, 1987), poverty (Egeland et al.), and on the streets in large cities of Colombia (Felsman, 1989), South Africa (Donald & Swart-Kruger, 1994), and New Zealand (White, Moffitt, & Silva, 1989).

Dominant cognitive styles used by resilient children exposed to a variety of risk-producing situations demonstrated reflectiveness and impulse control (Bland, Sowa, & Callahan, 1994; Milgram & Palti, 1993). That is, when asked to respond to inquiries from a variety of individuals, these children carefully think about and phrase their answers before responding, instead of immediately replying.

2. *Coping ability.* Although effective coping ability may seem initially to be a synonym for resilience, it is a separate construct. Coping can be action oriented or intrapsychic; requires effort, concentration, and adaptation; and is viewed as a way to manage (master, reduce, minimize, tolerate) environmental and inner demands (Lazarus & Lanier, 1978; Sorensen, 1993). Although coping is viewed as a process rather than a trait or event (Sorensen), it can include behaviors used when faced with frustration, challenge, or stressors such as curiosity, perseverance, seeking comfort from another person, or protesting, and perhaps is the best external manifestation of resilience. Coping is only one of the factors affecting resilience, however, because when the stress is especially high or adversity especially strong, children typically considered resilient may not cope well and, therefore, not appear resilient. The child still may be resilient, though, since there are other factors present that may compensate for fluctuating coping ability.

Resilient children from a variety of risk-producing situations coped effectively with opportunities, frustrations, threats, and demands within the environment, while at the same time maintaining internal integrity. They were

independent and flexible, managed frustrations well, accurately chose appropriate solutions to problems, exercised good judgment or sound appraisal, were resourceful, and used active problem-oriented coping (Cederblad, Dahlin, Hagnell, & Hansson, 1994; Donald & Swart-Kruger, 1994; Heinzer, 1995; Wyman et al., 1991).

3. *Personality characteristics.* Even though resilient children studied were of various ages, from diverse situations, and experienced different risks or were involved in empirical or theoretical reports, similar characteristics were identified. Personality characteristics consistently associated with these children may be subdivided according to positive descriptions of one's self (intrapersonal characteristics) and positive descriptions of relationships with others (interpersonal characteristics).

Positive intrapersonal characteristics include good self-esteem, self-awareness, internal locus of control, optimism, motivation, and curiosity. An expanding volume of literature mentions the importance of an individual's feelings and concepts about self and the ability to deal with life challenges. Terms used to describe these feelings are self-esteem and self-efficacy (Bandura, 1979; Rutter, 1987). Evidence suggests that positive self-esteem, confidence, self-reliance, and self-efficacy are important components of resilience (Baldwin et al., 1993; Brooks, 1994; Cederblad et al., 1994; Cicchetti et al., 1993; Conrad & Hammen, 1993; Masten, 1994; Milgram & Palti, 1993; Taylor, 1994). Closely related to the concept of self-esteem are the constructs of self-awareness and self-understanding. Children with a positive self-esteem often are aware of their own strengths and weaknesses, realize their capabilities when challenged, and are independent in decision making. Resilient children know their abilities and seek help when necessary, while at the same time being autonomous and independent (Bland et al., 1994; Donald & Swart-Kruger, 1994). They also realistically accept responsibility for their own actions and function independently (Beardslee & Podorefsky, 1988).

Locus of control, the amount of perceived influence an individual has over an event, also is related to resilience and stress resistance (Cederblad et al., 1994; Cowen et al., 1992; Luthar, 1991). Resilient children and adolescents

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have an internal locus of control and project a greater degree of self-control than nonresilient children (Bland et al., 1994; Blocker & Copeland, 1994; Werner, 1993; Wyman, Cowen, Work, & Kerley, 1993). These children also believe they can influence their environment and will not be engulfed by their situation (Werner, 1990).

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Resilient children are positive (Benard, 1991; Masten, Morison, Pelligrini, & Tellegen, 1990; Wyman et al., 1993), tend to put their abilities to good use, and acknowledge their losses or limitations. For example, competent, highly stressed children had higher scores on humor generation than less competent highly stressed children (Watt, David, Ladd, & Shamos, 1995; Wolin & Wolin, 1995). Experiences are perceived constructively even if they cause pain and suffering. Many use faith to maintain a positive vision, which may give resilient children a sense of coherence and rootedness, a conviction things will work out in the end despite unfavorable odds, and believe their lives have meaning (Benard, 1991; Werner, 1990).

In addition, resilient children from a variety of backgrounds are motivated and creative (Beardslee & Podorefsky, 1988; Pianta, Egeland, & Sroufe, 1990; Wolin & Wolin, 1995). They are flexible, adaptable, open to change, and assume an active, evocative approach toward solving life's problems. These children also are self-

starters and actively involved in school or their family (Benard, 1991; Blocker & Copeland, 1994; Donald & Swart-Kruger, 1994; Masten, Best, & Garmezy, 1990).

Curiosity or inquisitiveness is a final intrapersonal characteristic identified as important in resilience. In fact, resilient children living in a variety of risk-producing situations frequently obtained extensive information about their situation in an effort to increase their understanding and insight (Felsman, 1989; Mrazek & Mrazek, 1987; Radke-Yarrow & Brown, 1993).

A person's positive interactions with others is a second group of personality characteristics identified as important for resilient children. These interpersonal characteristics include altruism, sensitivity, empathy, friendliness, being well liked by peers, and respectful.

Resilient children from a variety of risk-producing situations (parental affective disorder, alcoholism, poverty, countries at war) can take charge of family functions (managing finances and living situations) and care for their younger siblings (Beardslee & Podorefsky, 1988; Watt et al., 1995). Sometimes this altruistic caretaking behavior even extends outside the family to neighborhood youngsters or to a scapegoated child at school (Mrazek & Mrazek, 1987; Werner, 1990).

Resilient children and adolescents also are described as socially responsive, socially skilled, and cooperative (Cowen et al., 1992; Masten, Morison, et al., 1990). In fact, many have the ability from infancy to gain positive attention. As children and adolescents, they demonstrated a tolerance of individual differences and were more appreciative, nurturant, gentle, willing to listen, and socially perceptive than children and adolescents having difficulty coping with adversity (Werner, 1990).

Finally, resilient children assume a positive outlook toward authority and adults (Milgram & Palti, 1993; Werner, 1990). They readily accepted and followed decisions, rules, and recommendations of parents, teachers, and community leaders.

Even though cognitive capacity, coping ability, and personality characteristics appear to affect resilience separately, these factors also interact. For example, a person's coping ability often is affected by cognitive capac-

ity and personality characteristics. Intelligence, independence, and sensitivity to others often contribute to positive coping ability. Individuals with a reflective, flexible, and adaptable cognitive style often are motivated, cooperative, patient, and persistent.

External Factors Affecting Resilience

The external factors in the proposed organizational framework often are reflected in the nature and quality of relationships established within and outside the family group. Within the family, the home environment, parenting practices, and particular family members are important. Outside the family, certain individuals and resources available in the community are important.

Within the family. The literature suggests three factors within the family impact resilience: the home environment, parenting practices, and particular family members.

1. *Home environment.* An organized, structured home environment, without physical crowding seems to be related to resilience (Pianta et al., 1990). Children described as resilient had four or fewer siblings and were separated in age by at least 2 years from the next sibling (Werner, 1990). Achieving, lower-class African-American children had less cluttered and cleaner households, with more books available than households of nonachieving children (Garnezy, 1983).

2. *Parenting practices.* Parenting practices are reflected not only in behavioral expectations for children, but also in relationships established with children. Parental rules, limit enforcement, consistent expectations, and establishing acceptable behavioral standards are associated with resilience (Bennett et al., 1988). Parents of stress-resistant school-age children use authoritative parenting practices with consistent, inductive, age-appropriate discipline (Gribble et al., 1993; Taylor, 1994). Mothers of at-risk African-American children who did well in school were concerned about academic achievement and progress, helped with homework, recognized and reinforced the child's interests, and allowed and encouraged the youngster's choices (Garnezy, 1983).

Resilient children have parents who provided consistent nurturing, engendered trust in others, modeled competent behavior, provided opportunities for confidence building, encouraged involvement in challenging experiences, became involved in joint activities, were emotionally responsive and expressive, and used open communication patterns (Baldwin et al., 1993; Brooks, 1994; Werner, 1993; Wyman et al., 1991). These parents are characterized as patient, accepting, cohesive, well organized, compatible, having shared values, respectful of individual differences, and easy to approach (Cederblad et al., 1994; Gribble et al., 1993; Masten, Morison, et al., 1990).

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3. *Particular family members.* Most resilient children had the opportunity to establish a close bond with at least one family member who provided them with stable care and appropriate, adequate attention (Egeland et al., 1993; Herrenkohl, Herrenkohl, & Egolf, 1994; Radke-Yarrow & Brown, 1993). Often, the family member identified as most important to resilient children and adolescents was the mother (Werner, 1990). For resilient adolescent African-American males, however, the relationship they had with their father also was important (Wilson-Sadberry, Winfield, & Royster, 1991).

Compensational or supplemental nurturing from family members other than parents, including siblings, aunts, uncles, and grandparents, is associated with resilience (Werner, 1993; Wyman et al., 1991). Sibling relationships characterized by mutual warmth and protectiveness

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were especially helpful for children who survived the Holocaust (Freiberg, 1994) and in single-parent (Werner, 1990) and disharmonious homes (Jenkins & Smith, 1990). Grandparents often played a substitute caretaker role and provided a nurturing and predictable relationship for resilient children living in poverty (Werner, 1990).

Peers were mentioned as important for the resilient children living on the streets of Colombia, for resilient African-American males, and for resilient children of medically ill mothers.

Outside the family. Two factors outside the family have an impact on resilience: the nature and quality of relationships with certain individuals, and resources available in the community.

1. *Certain individuals.* Supportive adults outside the family may offer the at-risk child friendship and direction and help the child view the future as better than the present. Crucial and supportive relationships with adults outside the family include ministers, youth leaders, teachers, or adult family friends (Beardslee & Podorefsky, 1988; Benard, 1991; Conrad & Hammen, 1993; Gordon & Song, 1994; Grizenko & Pawliuk, 1994; Herrenkohl et al., 1994; Radke-Yarrow & Brown, 1993; Taylor, 1994; Watt et al., 1995; Werner, 1990; Wolin & Wolin, 1995).

Resilient children also receive acceptance and support from contemporaries, and often used peers as sounding boards and confidants (Garmezy, 1991; Radke-Yarrow & Brown, 1993; Werner, 1990). Peers were mentioned as important for the resilient children living on the streets of

Colombia (Felsman, 1989), for resilient African-American males (Taylor, 1994; Wilson-Sadberry et al., 1991), and for resilient children of medically ill mothers (Conrad & Hammen, 1993).

2. *Community resources.* The school (Freiberg, 1994; Maughan, 1988), church (Werner, 1990), day-care/preschool programs, youth organizations including after-school programs, and good healthcare/social service agencies (Grizenko & Pawliuk, 1994; Werner, 1993) also are important for resilient children and adolescents.

Schools may provide settings where at-risk children become connected with caring, supportive, competent adults (Brooks, 1994; Freiberg, 1994; Rutter, 1990). In fact, organized, nurturing, well-run schools with high morale among staff, a responsive atmosphere, and a predictable environment are more important than the school's size, pupil:teacher ratio, or quality of buildings. Successful schools use faculty input in decision making, have strong leadership and esprit de corps among staff, involve parents, have well-managed classrooms and stimulating instruction (Maughan, 1988).

Church is another important and helpful community resource for resilient children because it may reinforce parental policies and provide peer influences consonant with parental values (Baldwin, Baldwin, & Cole, 1990). Although the church's role has not been studied systematically, religion, faith in a higher power, and church membership are judged protective in diverse high-risk situations (Gordon & Song, 1994; Masten, Best, & Garmezy, 1990; Watt et al., 1995; Werner, 1990).

Finally, the scope of opportunities available in the community is important. Head Start and other day-care/preschool programs, neighborhood houses, and youth organizations, as well as access to good health care and social service agencies, are vital for resilient children from a variety of ages and risk situations (Werner, 1990).

Examination of the external factors suggests they interact. For example, relationships within the family may encourage relationships outside the family; a positive school environment may foster the development of a home environment where studying and reading are valued.

Relationship Among Factors of Resilience

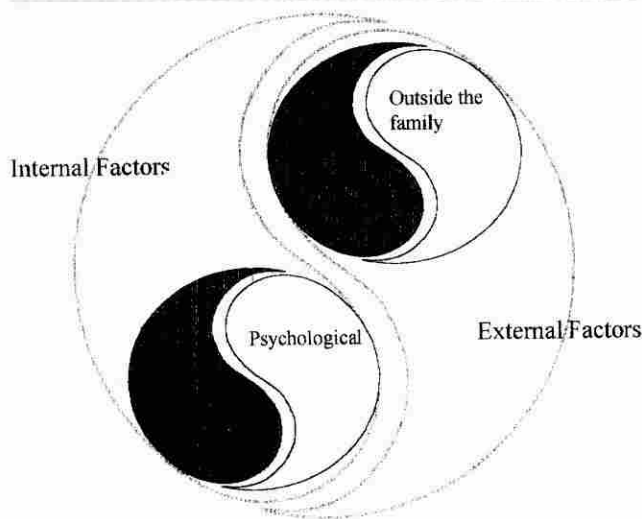
As previously discussed, an interactional or transactional relationship exists within the internal and external factors affecting resilience. We also suggest a similar relationship exists between the internal and external factors. For example, an individual's personality characteristics or gender may affect the relationships established with others from within and outside the family. Self-confidence, an easygoing nature, commitment to self, and approaching life experiences as a challenge affect relationships with others. Children with an easy temperament elicit positive caretaking behavior from parents and other adults. A concerned and empathetic parent would improve a child's general health if the child were ill and encourage the development of positive personality characteristics such as cooperation, empathy, and altruism. A warm and supportive teacher may encourage the development of positive behaviors with peers and other adults, and encourage parents to become more involved in their child's life.

Figure 1 illustrates the transaction within and between the internal and external factors, and demonstrates that both factors are necessary for resilience. Although the figure indicates an equal amount of internal and external factors, it is possible for one factor to compensate for absence of, or a deficiency in, the other factor so that resilience occurs and balance is reached. For example, some resilient children may not know supportive adults outside their family group or live in an organized, structured home environment. These children still may be resilient, especially if their parents, siblings, or peers are nurturing and supportive, or if their church or school provides positive experiences. Other resilient children may not have good general health or cognitive capacity. They still may be resilient if they have effective coping ability, positive personality characteristics, or nurturing family members or teachers.

Implications for Nursing Practice

This organizational framework provides a starting point for exploring constructs that are important to un-

Figure 1. Relationship Among Factors of Resilience



derstand and clarify in children and can guide future intervention efforts, as nurses assist clients to reach optimal health and development. There is no doubt that investigations using this organizational framework are needed. Children today are required to endure stressors unknown to previous generations because of cultural changes and societal pressures. Helping children develop resilience as they cope with these increasingly common stressors and changes should be of interest to all nurses involved directly with children and their families. This is especially true given nursing's focus on health promotion, wellness, and factors that influence health and healthy behavior. In addition, nurses are prepared to test and use the framework in practice because of their emphasis on the transactional nature of relationships, their knowledge of human behavior, and their understanding of the importance of viewing individuals in the context of their environments.

Using the framework in practice may help nurses organize and plan thoughtful intervention efforts for normal

and at-risk children by targeting specific resources or characteristics needing development or strengthening. For example, certain children need assistance in developing particular personality characteristics such as good self-esteem, positiveness, motivation, cooperation, sensitivity, altruism, effective coping abilities, or cognitive capacities. Other children may need assistance in improving general health. A third group of children may need assistance in developing positive, caring, and supportive relationships within and outside the family. This framework may help nurses develop an individual approach for a particular child that will enhance those variables closely associated with resilience and that need development.

Children today are required to endure stressors unknown to previous generations because of cultural changes and societal pressures. Helping children develop resilience as they cope with these increasingly common stressors and changes should be of interest to all nurses involved directly with children and their families.

Although we are just beginning to understand the complex nature of resilience, the proposed framework can be useful in research because it identifies and defines interactions internal and external to the individual, even though it appears to be a yin-yang, nonlinear model. Since nurses are uniquely able to evaluate all factors identified as affecting resilience, examining the relation-

ship between resilience and the identified components and determining their importance in specific children is critical. For example, the framework suggests several internal and external factors affect resilience. Actually identifying and measuring these factors—such as gender, general health, temperament, coping ability, personality characteristics, and relationships with others—and then evaluating potential relationships by using a variety of qualitative and quantitative methods can help determine not only the strength and direction of the relationship but also if one or more variables are the best predictor of resilience in children.

As research continues and intervention programs based on this research develop, questions regarding resilience will be addressed in varied and new ways. Factors affecting resilience will be further clarified, and our understanding of the factors will increase. Contributions not only can advance conceptualization of resilience and encourage examination of the relationship and interactions among variables, but also can help nurses determine how each variable uniquely contributes to resilience. For example, if particular personality characteristics, coping abilities, or relationships with others were found consistently to predict resilience, assistance in developing these factors in interventions would help all children meet the challenges of their everyday existence and attain optimal development. Indeed, constant efforts to synthesize and apply theory to research and then to practice are essential if we are to help children.

Conclusion

Resilience refers to the capacity to respond, endure, and/or develop and master in spite of experienced life stressors. The central concern regarding resilience is not whether it exists, but identifying factors or variables contributing to resilience. The major intent of this paper has been to organize factors described in the literature as related to resilience. The proposed framework also demonstrates the relationship between these factors.

The components identified emerge as recurrent themes in diverse studies from a variety of cultural,

racial, ethnic, and socioeconomic groups. The influence and importance of each component may vary, interact differently, and operate directly or indirectly over time in a particular child's situation. Individual factors and influences are important in developing resilience. Their impact should be viewed as collective and interactional, however, since little empirical evidence suggests a significant percentage of the variance in predicting resilience can be accounted for by any one variable alone.

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References

- Baldwin, A.L., Baldwin, C., & Cole, R.E. (1990). Stress-resistant families and stress-resistant children. In J. Rolf, A.S. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 257–360). New York: Cambridge University Press.
- Baldwin, A.L., Baldwin, C.P., Kasser, T., Zax, M., Sameroff, A., & Seifer, R. (1993). Contextual risk and resiliency during late adolescence. *Development and Psychopathology, 5*, 741–761.
- Bandura, A. (1979). Self efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.
- Beardslee, W.R., & Podorefsky, M.A. (1988). Resilient adolescents whose parents have serious affective and other psychiatric disorders: Importance of self-understanding and relationships. *American Journal of Psychiatry, 145*, 63–69.
- Belsky, J., & Rovine, M. (1988). Nonmaternal care in the first year of life and the security of infant-parent attachment. *Child Development, 59*, 157–167.
- Benard, B. (1991). *Fostering resiliency in kids: Protective factors in the family, school and community*. Portland, OR: Northwest Regional Educational Laboratory.
- Bennett, L., Wolin, S., & Reiss, D. (1988). Cognitive, behavioral, and emotional problems among school-age children of alcoholic parents. *American Journal of Psychiatry, 14*, 185–190.
- Bland, L., Sowa, C., & Callahan, C. (1994, December). An overview of resilience in gifted children. *Roeper Review, 17*, 77–80.
- Block, J., & 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. Minnesota symposia on child psychology* (Vol. 13, pp. 39–101). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Blocker, S., & Copeland, S. (1994, April-May). Determinants of resilience in high-stressed youth. *High-School Journal, 77*, 286–293.
- Brooks, R. (1994). Children at risk: Fostering resilience and hope. *American Journal of Orthopsychiatry, 64*, 545–553.
- Brown, W.K., & Rhodes, W.A. (1991). Factors that promote invulnerability and resilience in at-risk children. In W.K. Brown & W.A. Rhodes (Eds.), *Why some children succeed despite the odds* (pp. 171–177). New York: Praeger.
- Carey, W. (1990). Temperament risk factors in children: A conference report. *Journal of Developmental Behavioral Pediatrics, 11*, 28–34.
- Cederblad, M., Dahlin, L., Hagnell, O., & Hansson, K. (1994). Salutogenic childhood factors reported by middle-aged individuals: Followup of the children from the Lundy study from families experiencing three or more childhood psychiatric risk factors. *European Archives of Psychiatry and Clinical Neuroscience, 244*, 1–11.
- Cederblad, M., Dahlin, L., Hagnell, O., & Hansson, K. (1995). Intelligence and temperament as protective factors for mental health: A cross-sectional and prospective epidemiological study. *European Archives of Psychiatry and Clinical Neuroscience, 245*, 11–19.
- Cicchetti, D., & Garmezy, N. (Eds.). (1993). Milestones in the development of resilience. *Development and Psychopathology, 5*, 497–761.
- Cicchetti, D., Rogosch, F.A., Lynch, M., & Holt, K.D. (1993). Resilience in maltreated children: Processes leading to adaptive outcome. *Development and Psychopathology, 5*, 629–647.
- Conrad, M., & Hammen, C. (1993). Protective and resource factors in high- and low-risk children: A comparison of children with unipolar, bipolar, medically ill, and normal mothers. *Development and Psychopathology, 5*, 629–647.
- Cowen, E.L., Work, W.C., Hightower, A.D., Wyman, P.A., Parker, G.R., & Lotyczewski, B.S. (1991). Toward the development of a measure of perceived self efficacy in children. *Journal of Clinical Child Psychology, 20*, 169–178.
- Cowen, E.L., Work, W.C., Wyman, P.A., Parker, G.R., Wannan, M., & Gribble, P. (1992). Test comparisons among stress-affected, stress-resilient, and nonclassified fourth- through sixth-grade urban children. *Journal of Community Psychology, 20*, 200–214.
- Donald, D., & Swart-Kruger, J. (1994). The South African street child: Developmental implications. *South African Journal of Psychology, 24*, 169–174.
- Egeland, B., Carlson, E., & Sroufe, L.A. (1993). Resilience as process. *Development and Psychopathology, 5*, 517–528.

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- Felsman, J.K. (1989). Risk and resiliency in childhood: The lives of street children. In T.F. Dugan & R. Coles (Eds.), *The child in our times: Studies in the development of resiliency* (pp. 56–80). New York: Brunner/Mazel.
- Fonagy, P., Steele, M., Steele, H., & Higgett, A. (1994). The Emanuel Miller Memorial Lecture 1992: The theory and practice of resilience. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 35, 231–257.
- Freiberg, H.J. (1994). In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 151–166). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Garmezy, N. (1983). Stressors of childhood. In N. Garmezy & M. Rutter (Eds.), *Stress, coping and development in children* (pp. 43–84). New York: McGraw-Hill.
- Garmezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatric Annals*, 20, 459–466.
- Garmezy, N., & Rutter, M. (1985). Acute reactions to stress. In M. Rutter & L. Hersov (Eds.), *Child and adolescent psychiatry: Modern approaches* (2nd ed., pp. 152–176). Oxford: Blackwell Scientific.
- Gjerde, P., Block, J., & Block, J. (1986). Egocentrism and ego-resiliency: Personality characteristics associated with perspective-taking from early childhood to adolescence. *Journal of Personality and Social Psychology*, 51, 423–434.
- Gordon, E.W., & Song, L.D. (1994). Variations in the experience of resilience. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 27–44). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gribble, P.A., Cowen, E.L., Wyman, P.A., Work, W.C., Wannan, M., & Raouf, A. (1993). Parent and child views of parent-child relationship qualities and resilient outcomes among urban children. *Journal of Child Psychology and Psychiatry*, 34, 507–519.
- Grizenko, N., & Pawliuk, N. (1994). Risk and protective factors for disruptive behavior disorders in children. *American Journal of Orthopsychiatry*, 64, 534–544.
- Hauser, S.T., Vieyra, M.A.B., Jacobson, A.M., & Wertlieb, D. (1989). Family aspects of vulnerability and resilience in adolescence: A theoretical perspective. In T.F. Dugan & R. Coles (Eds.), *The child in our times: Studies in the development of resiliency* (pp. 109–133). New York: Brunner/Mazel.
- Heinzer, M. (1995). Loss of a parent in childhood: Attachment and coping in a model of adolescent resilience. *Holistic Nursing Practice*, 9, 27–37.
- Herrenkohl, E., Herrenkohl, R., & Egolf, B. (1994). Resilient early school-age children from maltreating homes: Outcomes in late adolescence. *American Journal of Orthopsychiatry*, 64, 301–309.
- Hetherington, E.M., (1991). The role of individual differences and family relationships in children coping with divorce and remarriage. In P.A. Cowen & M. Hetherington (Eds.), *Family transitions* (pp. 1–65). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Howard, D. (1996). Searching for resilience among African-American youth exposed to community violence: Theoretical issues. *Journal of Adolescent Health*, 18, 254–262.
- Jenkins, J.M., & Smith, M.A. (1990). Factors protecting children living in disharmonious homes: Maternal reports. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 60–69.
- Lazarus, R., & Lanier, R. (1978). Stress-related transactions between person and environment. In L.A. Pervin & M. Lewis (Eds.), *Perspectives in interactional psychology* (pp. 287–327). New York: Plenum Press.
- Luthar, S. (1991). Vulnerability and resilience: A study of high risk adolescents. *Child Development*, 62, 599–616.
- Luthar, S., & Zigler, E. (1991). Vulnerability and competence: A review of research on resilience in childhood. *American Journal of Orthopsychiatry*, 61, 6–22.
- Masten, A., & Coatsworth, J. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53, 205–220.
- Masten, A.S. (1994). Resilience in individual development: Successful adaptation. In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 3–26). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Masten, A.S., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425–444.
- Masten, A.S., Morison, P., Pelligrini, D., & Tellegen, A. (1990). Competence under stress: Risk and protective factors. In J. Rolf, A.S. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 236–256). New York: Cambridge University Press.
- Maughan, B. (1988). School experiences as risk protective factors. In M. Rutter (Ed.), *Studies of psychosocial risk: The power of longitudinal data* (pp. 200–220). London: Cambridge University Press.
- Milgram, N.A., & Palti, G. (1993). Psychosocial characteristics of resilient children. *Journal of Research in Personality*, 27, 207–221.
- Mrazek, P.J., & Mrazek, D.A. (1987). Resilience in child maltreatment victims: A conceptual exploration. *Child Abuse and Neglect*, 11, 357–366.
- Murphy, L.B. (1987). Further reflections on resilience. In E.J. Anthony & B. Cohler (Eds.), *The invulnerable child* (pp. 84–105). New York: Guilford Press.
- Pianta, R.C., Egeland, B., & Sroufe, L.A. (1990). Maternal stress and children's development: Prediction of school outcomes and identification of protective factors. In J. Rolf, A.S. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 215–235). New York: Cambridge University Press.
- Polk, L.V. (1997). Toward a middle-range theory of resilience. *Advances in Nursing Science*, 1(3), 1–13.

- Radke-Yarrow, M., & Brown, E. (1993). Resilience and vulnerability in children of multiple-risk families. *Development and Psychopathology, 5*, 581–592.
- Rende, R., & Plomin, P. (1993). Families at risk for psychopathology: Who becomes affected and why? *Development and Psychopathology, 5*, 529–540.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57*, 316–331.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A.S. Masten, D. Cicchetti, K. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181–215). New York: Cambridge University Press.
- Smith, J., & Prior, M. (1995). Temperament and stress resilience in school-age children: A within-families study. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 168–179.
- Sorensen, E. (1993). *Children's stress and coping: A family perspective*. New York: Guilford Press.
- Taylor, R.D. (1994). In M.C. Wang & E.W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 119–130). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Tscham, J., Kaiser, P., Chesney, M., Alkon, A., & Boyce, T. (1996). Resilience and vulnerability among preschool children: Family functioning, temperament, and behavior problems. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 184–192.
- Watt, N., David, J., Ladd, K., & Shamos, S. (1995). The life course of psychological resilience: A phenomenological perspective on deflecting life's slings and arrows. *Journal of Primary Prevention, 14*, 209–245.
- Werner, E.E. (1990). Protective factors and individual resilience. In S.J. Meisels & J.P. Shonkoff (Eds.), *Handbook of early intervention: Theory, practice and analysis* (pp. 97–116). Cambridge, England: Cambridge University Press.
- Werner, E.E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai longitudinal study. *Development and Psychopathology, 5*, 503–515.
- White, J.L., Moffitt, T.E., & Silva, P.A. (1989). A prospective replication of protective effects of IQ in subjects at high risk for juvenile delinquency. *Journal of Consulting and Clinical Psychology, 57*, 719–724.
- Wilson-Sadberry, K.R., Winfield, L.F., & Royster, D.A. (1991). Resilience and persistence of African-American males in post secondary enrollment. *Education and Urban Society, 2*(1), 87–102.
- Wolff, S. (1995). The concept of resilience. *Australian and New Zealand Journal of Psychiatry, 29*, 565–574.
- Wolin, S., & Wolin, S. (1995). Resilience among youth growing up in substance-abusing families. *Pediatric Clinics of North America, 42*, 415–429.
- Wyman, P.A., Cowen, E.L., Work, W.C., & Parker, G.R. (1991). Developmental and family milieu correlates of resilience in urban children who have experienced major life stress. *American Journal of Community Psychology, 19*, 405–426.
- Wyman, P.A., Cowen, E.L., Work, W.C., & Kerley, J.H. (1993). The role of children's future expectations in self-system functioning and adjustment to life stress: A prospective study of urban at-risk children. *Development and Psychopathology, 5*, 649–661.
- Zimmerman, M.A., & Arunkumar, R. (1994). Resilience research: Implications for schools and policy. *Social policy report; Society for Research in Child Development, 8*, 1–17.

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