Healthy Youth Development as a Model for Youth Health Promotion

A Review

ROBERT WM. BLUM, M.D., M.P.H., Ph.D.

Risk and resilience as a conceptual model has captured the imagination of researchers and program planners over the past decade. The concept assumes that stress is a universal experience; success in life is less determined by the stress experienced and more related to the resources available to address the stress. Likewise, it assumes that negative life events are not rare experiences; neither do such experiences inexorably lead to a life of deprivation. Rather, resiliency research questions why some who are reared under adverse circumstances appear to live healthy and productive lives while others do not appear to overcome the adversities experienced in early life. Garmezy (1) defined resilience as “the capacity to recover and maintain adaptive behavior after insult.” Those who are resilient are flexible. They are not invincible (2) or invulnerable (3). Resilience is not a trait (4) that some have and others do not; rather, it represents an interaction between the individual and the environment. Resilience implies resistance to threat, but it is a graded phenomenon. Cumulative risk can defeat the most resilient individual. Rutter (4) noted that resilience is interactive with risk; it is developmental in nature, stemming from biology and experiences earlier in life and protective factors may operate in different ways at different stages of development (e.g., parental protectiveness in infancy is highly protective, but in adolescence comparable parental oversight may impede healthy development).

Link Between Stress, Resilience, and Development

The developmental research of the 1970s and 1980s explored discrete aspects of adolescent development: physiological, cognitive, social, and moral. There was a search to identify universal markers of development; however, it has become increasingly clear through the work of Bandura (5), Harter (6), and others that development does not occur independent of environment. Rather, it represents the adaptation of the individual to the environments in which he or she lives. Within such an interactive model, Sameroff and Chandler (7) noted that not only does the individual adapt to the environment, but the environment positively or adversely impacts development. So, too, organic damage (e.g., brain trauma, severe chronic illness) can impede the physiologic “self-righting” tendency (7).

Bandura (5) also reinforced the interactive process of competence, resilience, and development. He observed that behavior is shaped by rewards and punishments that occur in specific social milieus reflecting social values (5). In addition, imitation of others influences both behavior and self-identity. Thus, social learning is central to self-efficacy.

The social milieu is also central to the development of an internalized locus of control. Specifically,
a person comes to see himself or herself as powerful (e.g., having an impact on the environment and/or those around) through behaviors that elicit or fail to elicit response from the environment. Without environmental response, there is no feedback, no acknowledgment of the individual, and no experience of having an impact. It is through interactions with the environment and the associated feedback that children receive that they come to realize that they can affect their environment. Such is an internal locus of control. As shown in Table 1, an internal locus of control is a key protective factor found in resilient young people.

Sameroff et al. (8), Bandura (5), and others viewed the process of development not as the inevitable unfolding of predetermined characteristics, but more as a social construction in which the self develops through an ongoing interaction between the individual and the social contexts and social groups with whom the individual interacts (9). It is this interaction that led Goffman (10) to observe that culture influences adolescent development through shaping identity, self-perception, and the public presentation of self. Such are the forces that influence, for example, adolescent dress and language, which in turn influence one’s perception of self.

The link between resilience and development rests in both being interactive processes (11) that endure over time in the context of supportive environments. From a developmental perspective, resilience is the capacity to successfully undertake the work of each successive developmental stage (12).

Grotberg (13) used Erikson’s stages (14) to show how the acquisition and completion of tasks at each stage in development are closely linked with resilience. She noted the three major sources of resilience to be an external facilitative environment, intrapsychic strengths, and internal coping skills. These are the same elements necessary for developmentally appropriate stage achievement. For example, an environment of unconditional love is necessary for a child to achieve Erikson’s stage of autonomy. The consequence is a sense of being valued, which results in positive self-esteem (15). Positive self-esteem is a characteristic of resilience which Grotberg (13) noted leads in turn to empathy (recognizing emotion, perspective and role taking, and emotional responsiveness) and prosocial behaviors (helping, sharing, generosity, and sympathy). Prosocial behavior is one of the hallmarks of the resilient individual, but what is prosocial varies dramatically depending on community norms.

So, too, for the adolescent, opportunities to contribute to the social good of family or community, “required helpfulness,” to use Rachman’s term (16), contribute to resilience. Blum et al. (17) found chores

<table>
<thead>
<tr>
<th>Table 1. Components of risk and resiliency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors</strong></td>
</tr>
<tr>
<td>Dispositional (personal characteristics)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Family</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>External</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
and responsibilities at home to be key discriminators between those with disabilities who functioned well and those who did not. Rutter (18) showed that experiences of required helpfulness were important to developing an internal locus of control, which is a crucial element (at least in western cultures) to resilience.

Origins of the Concept of Risk
Over the past 2 decades, we have come to use two very different concepts in a nearly interchangeable manner. Specifically, we talk about the “at-risk” teenager while concurrently talking about adolescent risk-taking behaviors. Within a risk and resilience framework, risk factors refer less to outcome behaviors and more to factors that limit the likelihood of successful development, whereas risk-taking focus on the behaviors themselves. In the health sector, the principles of epidemiology flow from the concept of risk.

Implicit in this notion is the search for predispositional qualities, potentiating factors, and protective factors. But what fundamentally constitutes a risk? Rutter (4) suggested that nonshared environmental influences tend to have a greater effect than shared ones. While as a generalization this may be true, it is also clear that the same event affects people in very different ways depending on age, sex, culture, cognitive capacities, and developmental stage. Thus, it is erroneous to assume that an event is universally perceived as stressful and that if it is, it has the same impact on everyone who experiences it.

Stress: The Subjective Experience of Risk
If risk consists of events and mechanisms that diminish the likelihood of successful development, then stress is the personal interpretation and subjective experience of risk. Cofer and Appley defined stress as “a state where well-being (or integrity) of an individual is endangered and he must devote all his energy to its protection” (19).

What makes an event stressful is its capacity to change an individual’s usual activity. Stress demands a response. The extent of the response, as well as the extent of the experience of stress, lies predominantly in the subjective meaning given the event rather than in its objective reality (20). Antonovsky (20) identified four stages in response to a problem:

1. Problem confrontation;
2. Tension: the inner response to problem confrontation;
3. Tension management: the speed with which problems are confronted and resolved; and
4. Stress: the state in which energy is consumed in dealing with problems above the energy required for a resolution.

As the stages of stress have become better understood, so, too, have the factors that buffer and exacerbate stress become clearer, including compensatory factors (factors that counterbalance stressful events; an example would be ego strength); protective factors (factors that are interactive with stress such as social skills); and vulnerability processes (traits that increase vulnerability to stress).

It is clear that stress is a real phenomenon that is heavily influenced by the meanings the individual ascribes to an event. There are factors that moderate and others that exacerbate the impact of stress, physiologically, emotionally, and functionally.

Issues in the Measurement of Risk and Resilience
Risk, stress, and resilience are all multidimensional concepts. How one measures each will significantly influence findings and research results. Measurement of risk has included global measures, stress measures, and life events scales. Global measures include dimensions such as poverty, which was used by Werner and Smith in their study of the children of Kauai (21). As Gore and Eckenrode (22) noted, however, there are a number of problems in using a measure such as poverty.

First, the meaning of the experience (e.g., growing up in poverty) is often not taken into account; as Patterson and Blum (23) noted, it is the cognitive meaning ascribed to the event or experience more than the experience itself that determines risk. Global measures do not allow for variations in meaning. A second problem with global measures is that they are highly intercorrelated within any cultural situation. Thus, for example, in the United States, race, poverty, family disruption, chronic illness, and parental mental illness (all known risk factors) are highly intercorrelated. It is very difficult to disaggregate these variables to weigh the relative risk each contributes to the overall set of risk factors. Finally, global measures of risk are problematic for the clinician, because there is little we can do to affect such factors.

Stress measures have been used as an alternative to global measures but stress itself is multidimensional. Luthar (24) argued that if it is considered to be the subjective interpretation of risk, it becomes important to obtain multiple ratings of perceived stress.
(e.g., self, teacher, peer, and/or parent). Gore and Eckenrode (22) noted that stress tends to be viewed as a situational variable and that it is essential to measure it in context so as to understand the psychological significance and social demands of the stressors. Context is not limited to the social environment within which one lives. Part of the context is the developmental capacities of the individual experiencing the event or situation for cognitive capacity, social maturation, perspective-taking capacity, and other developmental dimensions influencing perceptions of the situation experienced.

Another contextual variable is whether the individual experiencing the stressor is alone or part of a cohort experiencing the same event. As a collective experience, the stressor may unify a group and bring about the best of human characteristics; however, as an event or situation uniquely experienced, it constitutes a significant risk factor (25).

Antonovsky (20) measured stress as striving: the tension created by the gap between aspirations and perceived reality. He characterized striving as existing along four essential dimensions: material and nonmaterial (e.g., security, respect), family (e.g., number of children, relationship with spouse), and personal characteristics (e.g., respect, honesty, attractiveness).

Stressful life events represent a third approach to measuring risk. As Kellum (26) noted, however, one problem with life events scales is that most are theoretical. As a consequence, it is not clear which constructs are being described. In addition, the meaning ascribed to a stressful life event varies depending on contexts such as developmental stage, culture, and environments in which the young person lives. It is rare for life events scales to account for these contextual issues in weighing a specific life event. Likewise, such life events measures tend not to account for factors such as gender and socialization as they affect reactions (21). A final limitation of this measure of risk is that implicit in studying life events is the assumption that each is unique. Rather, life events are frequently intercorrelated and one (e.g., parental divorce) may in fact represent an entire set of events.

Another life stress measure, as Luthar and Zigler (27) suggested, is hassles, which are described as the stressors of everyday life. While less momentous than divorce or relocation, the authors argued that these are the mediators between life events and health.

Critical life events are another such measure. Anthony and Koupernik (28) suggested that changes are highly correlated with emotional stress. For adolescents there are perhaps five key life events which may have an overarchingly significant risk (29) that need to be taken into account in any assessment of critical transitions: school change (e.g., from elementary to junior high school), pubertal changes, onset of dating, neighborhood change, and family disruption.

Resilience is at least as complex a construct as risk, at times conceptualized as composed of protective or buffering factors (21). As with risk, resilience has been evaluated through studying a range of dispositional, familial, and environmental variables. However, there has yet to be developed a multidimensional assessment scale of resilience. As a consequence, most studies are cross-sectional and explore only one or two dimensions of resiliency. Cross-sectional analyses of resiliency factors fall short, because they cannot determine the direct and indirect effects of factors such as social supports and self-esteem.

To sort out what is operational requires longitudinal research. These are important issues for understanding the relationships among and between resiliency factors. They will (or at least should) influence interventions.

There are seemingly as many outcome measures in risk and resiliency research as there are studies, each reflecting the unique perspective of the research. These include mental health and psychopathology (30); functional capacity (the ability to carry out social roles such as school, work, and marriage) (1,2); social competence (the success of a person in achieving his or her aspirations) (30,31,32); behavior problems (33); pregnancy, drug abuse, and school failure; and what Schorr (34) called “the rotten outcomes” of adolescence.

The outcome measure selected reflects social (or at least researcher) values and will determine the protective factors associated with positive outcomes. For example, if social competence is selected, there may be a bias for females, who are socialized to internalize problems and persist with social roles maintenance, thus appearing to be more resilient than if a mental health measure were used. Likewise, if problem behaviors are used, there is a whole set of proximal risk factors (e.g., access to weapons in the case of interpersonal violence) that need to be considered in the equation. Thus, findings are significantly influenced by how terms are defined and constructs measured. We may consider a three-dimensional grid within which to view specific resiliency research studies and program evaluation (Figure 1).
Factors Associated With Risk and Resilience

Despite the conceptual and measurements issues, there have been a number of consistent findings across a wide variety of studies that have explored risk and protective factors in the following environmental situations: poverty, abusive families, alcoholic families, homelessness, chronic illness/disability, teen mother, and juvenile delinquency. Table 1 summarizes the most consistent of those findings.

Developing Interventions Based on a Risk and Resilience Model

The construct of resilience is closely linked with prevention in that knowledge of what places an individual or group at risk for a certain negative outcome, and of factors that might buffer such a risk, could possibly enable us to develop programs that enhance resilience and minimize risk.

Some strategies (e.g., life skills training) are person centered; resilience is system centered. The social development model builds upon the life skills approach, but it both acknowledges the need for opportunities for involvement in each unit within which the individual lives (e.g., school, family, community) and provides reinforcements from each unit valuing the newly acquired skills. The concept of required helpfulness captures the notion that those who contribute to the social good (e.g., of family or community) through successful completion of obligations are recognized for their contributions. The key elements for resiliency-based programming can be summarized in the people, contributions, activities, place (PCAP) model. (Figure 2).

Jessor and Jessor (33), Schorr (34), and Little (35) are among those who have extensively analyzed youth programs to identify the key elements for success. The following represents a synthesis of their findings as applied to the PCAP model. Resiliency-based programs are built upon communitywide, intersectoral collaborations that are not bounded by traditional agency roles or administrative constraints; are focused on enhancing competence in young people at least as much as reducing a given risk behavior or undesirable outcome; see youth as part of the solution, not just the focus of the problem; start early in the life of young people; are intensive, continuous and developmentally appropriate; have staff who are collaborative, interdisciplinary, and not overly professionalized; are willing to do what it takes to be successful; and values young people. These dimensions of resiliency-based programming are echoed in Little’s “4 C’s” (35):

- Competence in areas that improve the quality of a child or youth’s life, such as literacy, employability, interpersonal, vocational and academic skills, and a sense of being able to contribute to his or her community;
- Connection of youth to others through caring relationships manifest in mentoring, tutoring, leadership, and community service opportunities;
- Character through values that give meaning and direction to youth, such as individual responsibility, honesty, community service, responsible decision-making, and integrity in relationships; and
- Confidence-building experiments to give hope, self-esteem, and a sense of success in setting and meeting goals.

Such an adolescent development- or resiliency-based approach differs from risk-reduction in a number of important ways. Risk-reduction is interested in reducing the outcome (e.g., adolescent pregnancy), while resiliency-based strategies build on individual strengths and aim at addressing those factors that predispose an individual to one or multiple risks. Thus, for example, a pregnancy prevention program may strive to develop resistance skills among adolescents who may be at risk for early onset of sexual activity and unprotected intercourse, while an adolescent development program may focus on issues related to school failure (highly correlated with teen pregnancy), vocational options, and adult mentorship, with the goal of improving life outcomes for adolescents and, in doing so, reducing unwanted pregnancy. Risk-reduction approaches, whether targeted at delinquency, drugs, or pregnancy, do not
appear to work (35–37). Rather, in Kirby’s extensive analysis of teen pregnancy, he concluded that the only programs that appear to make a sustained difference are those that enhance adolescent development (38).

**Youth Programs Built Upon a Resiliency Model**

**Cascade Passagen (38)**

Cascade Passagen began as a program for juvenile prostitutes in Recife, Brazil. The center does not define its participants by their behavior, nor does it try to fix them, but rather taps the inherent energy and skill of young people through dance, music, and performance.

Involving close to 50 adolescent females (some as young as 11 or 12 years of age), the center’s director recruited dance instructors and musicians to volunteer their time and skill to develop a precision dance troupe that has had the opportunity to perform throughout Brazil. Interwoven with dance is education, health services, social skills building, and a physical environment that provides a safe haven for these young women to live. The goal is only partly prostitution-prevention; far more important, it is competency development.

**Ginew/Golden Eagle Program (39)**

The Ginew/Golden Eagle Program is an American Indian–led comprehensive community-based youth development program for youth ages 5–18 years. Its mission is “to help American Indian youth strengthen and develop skills which will give them the knowledge to make healthy life choices and help them live healthy lifestyles.” The program seeks to build resiliency in its participants by developing knowledge and skills that will improve physical, cognitive, emotional, and cultural/spiritual well-being. Programming includes a weekly evening meal in family groups of six to eight young people with an adult leader; traditional Native activities that reinforce spirituality and cultural values; academic tutoring; regular parent meetings and activities; a resiliency and health promotion curriculum; and weekly support groups such as Beautiful Native Ladies, designed for 15–18-year-old females, to cover issues of sexuality, substance use, personal protection, teamwork, and leadership.

**Arts of Living Institute for High-Risk Pregnant Adolescents (40)**

This program is based in Chicago and has the goal of reducing school dropouts and the negative financial and psychosocial consequences associated with early
pregnancy; to decrease complications of pregnancy and infant mortality; and to reduce repeat pregnancy and improve life opportunities through education and counseling. Clearly, this represents a much broader set of objectives than the traditional pregnancy prevention program. It targets its efforts at those who are at highest risk—those who have been pregnant. The program exemplifies comprehensive services provided to school-age pregnant women, including schooling, health education, prenatal care, parenting skills, academic education, family support groups, and emotional counseling. The services are designed to help the teenage mother cope with the crisis of pregnancy in a facilitative way and to assist her to develop an effective mothering relationship with her child, if she chooses to keep her infant.

The institute provides nonresidential comprehensive social, educational, and health services to any pregnant adolescent up to 1 year after delivery, free of charge. Repeat pregnancy is 22% below average rate, infant mortality 18% below, and dropout rate 57% below national averages for teen mothers (40). Even more important, those who complete the program have a sense of personal competency that they can achieve something beyond parenthood in their lives.

Success is attributed, among other things, to developing a network of community-based linkages and referrals, advocacy at all levels, building visibility and acceptance in the community, and the multiservice approach.

 Sistema de Promocion del Adolescente Aplicable a Sistemas Escolarizados (41)

This program, based in Mexico, has the objective of encouraging overall development of adolescents with particular attention to individuality, creativity, and socialization. The school-based project is targeted at those between the ages of 12 and 18 years. It makes socioemotional development and personal relationships priority concerns in its program to promote overall personal well-being.

Through a system of tutorials, young people are provided with the necessary experiences to discover different values and means of communication, develop self-esteem, promote individuality and creativity, and at the same time learn to develop healthy, communicative relationships. The program is intended, in addition, to enhance academic performance, but nonacademic activities, artistic, creative, or technical, are encouraged and valued, allowing young people an avenue for personal expression. As with other resiliency-based programs, the goal here is less focused on specific behaviors and more oriented to skill development, especially interpersonal skills that will allow young people to succeed.

Conclusion

The World Health Organization (42) described health as not merely the absence of illness, but a positive sense of well-being. Similarly, resilience is not merely the absence of risk, adversity, or stress. As we have come to understand that the major causes of ill health among adolescents around the world are social and behavioral, not infectious in etiology, our paradigms have shifted in health care from illness treatment to disease prevention, from disease management to health promotion.

Grounded in the traditions of epidemiology, resiliency research provides us a clear picture of the mechanisms which predispose young people to risk and those that buffer or protect. The fact that many exposed to severe risk factors function well later in life may lead some to question the need to provide state or community-level resources to improve the outcomes for those at risk. America, in particular, is enamored with the Horatio Alger myth that having been born into poverty, one can pull himself up by his (or her) bootstraps to succeed in life. We have seen in this review that the human organism is amazingly resilient, leading some to describe a “self-righting” mechanism (4). What we have also seen, however, is that one does not do it alone; instead, it is in the context of family and community that resilience-like development occurs.

Rather than viewing the findings from resiliency research as a rationale for inaction, we should use them to redouble our efforts. The good news is that for those reared in adversity, the outcomes are not necessarily bleak; however, it is likewise clear that, as the African proverb states, “it takes a community to rear a child.”

Without such social investments, the outcomes are bleak. For some, resources are found in family, relatives, and neighbors. For others, it is through the formal institutions of school, church, and counselors that support is found. If we choose not to support our young people, the outcomes are clear, because risk factors do predict risk behaviors, and we will be left to pick up the pieces. We have a choice, but it is not a choice between action and inaction. Rather, it is a choice, as Hawkins and Catalano (37) noted, of whether we operate an ambulance at the bottom of
the cliff to pick up the children that fall, or whether we climb the cliff and build a fence around it.

This article was developed under the auspices of UNICEF and supported in part by the Maternal and Child Health Bureau, Grants MCJ 000985-15.

References