



Published in final edited form as:

Health Educ Behav. 2013 August ; 40(4): 381–383. doi:10.1177/1090198113493782.

Resiliency Theory: A Strengths-Based Approach to Research and Practice for Adolescent Health¹

Marc A. Zimmerman, PhD²

²School of Public Health, University of Michigan

Youth researchers often focus on cataloging risks and fixing problems. This is, of course, understandable because vulnerable youth require attention and we most certainly want to address the deleterious factors that may contribute to poor outcomes for youth. In this theme issue of *Health Education & Behavior*, Isomaa et al. (2013), for example, illustrate the value of defining high risk individuals in need of attention. These kinds of studies are necessary and useful, but they are problem-focused reference points that often translate to change strategies that emphasize amelioration. In contrast, a resiliency paradigm orients researchers and practitioner to positive factors in youth's lives that become the focus of change strategies designed to enhance strengths. Some of the studies in this theme issue focus on adolescent strengths, but do not necessarily apply a resiliency paradigm (e.g., Shneyderman & Schwartz, 2013).

Resiliency Theory provides a conceptual framework for considering a strengths-based approach to understanding child and adolescent development and informing intervention design (Fergus & Zimmerman, 2005; Zimmerman & Brenner, 2010). Resiliency theory supplies the conceptual scaffolding for studying and understanding why some youth grow up to be healthy adults in spite of risks exposure (Garmezy, 1991; Masten, et al., 2007; Rutter, 1987; Werner & Smith, 1982). Resiliency focuses attention on positive contextual, social, and individual variables that interfere or disrupt developmental trajectories from risk to problem behaviors, mental distress, and poor health outcomes. These positive contextual, social, and individual variables are called *promotive factors* (Fergus & Zimmerman, 2005), operate in opposition to risk factors, and help youth overcome negative effects of risk exposure. Fergus & Zimmerman (2005) identified two types of promotive factors: *assets and resources*. Positive factors that reside within individuals such as self-efficacy and self-esteem are defined as assets. Resources refer to factors outside individuals such as parental support, adults mentors and youth programs that provide youth with opportunities to learn and practice skills. Assets and resources provide youth with the individual and contextual attributes necessary for healthy development.

¹This analysis was supported by the National Institute on Drug Abuse Grant DA07484, the MI Youth Violence Prevention Center Grant Number 5U01CE001957-02 from the Centers for Disease Control and Prevention (CDC), and the National Center for Advancing Translational Sciences of the National Institutes of Health (NIH) under Award Number UL1TR000433. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or CDC.

Corresponding Author: Marc A. Zimmerman, PhD, Department of Health Behavior and Health Education, School of Public Health, 1415 Washington Heights, Ann Arbor, MI 48109-2029, marcz@umich.edu.

Several of the papers in this theme issue on adolescent health, although not intentionally applying a resiliency approach, include attention to promotive factors. Applying a resiliency lens to examine the papers in this issue, however, provides an opportunity to consider how we can study systematically adolescent health using a strengths-based approach. Steele et al.'s (2013) study focuses on an individual asset, self-efficacy, that is associated consistently with positive health related outcomes. Their SE-HEPA scale focuses on confidence in making the correct choices for healthy eating and physical activity can be used to evaluate programs designed to develop a youth asset that may be help youth make healthy behavioral choices. Similarly, the analysis of intrapersonal factors associated with sex risk behavior by Shneyderman & Schwartz (2013) included a measure of birth control self-efficacy. Their study provides empirical evidence that health education programs that focus on enhancing this individual asset may be effective for encouraging healthy sexual behavior.

Several of the articles in this theme issue also focus on resources associated with positive youth development outcomes and that can help youth overcome risk. Families are consistently identified as a vital resource for healthy youth development for a variety of health outcomes (Caldwell et al., 2004). The Steering Teens Safe study provides an example of the role parents can play as a key resource for youth learning how to drive (Ramirez et al., 2013). Ramirez et al. exploit the potential of positive influences of parents as a key resource for improving driving skills among their teenage children just learning how to drive. Malcolm et al. (2013) study the positive effects of family functioning on condom use among Latino youth. The study by Shneyderman & Schwartz (2013) also included family factors such as parent-child relationship quality. Promotive resources also include programs that provide youth with opportunities to learn and practice skills. Springer et al. (2013) describe the CATCH program for middle school youth which can be conceptualized as a promotive resource for youth because it focuses on helping youth develop the knowledge, confidence, and skills for engaging in the positive behaviors of healthy eating and physical activity.

While many of the studies highlighted in this issue focus on promotive factors, they do not explicitly apply an analytic framework guided by resiliency theory. Resiliency theory includes several models that describe how promotive factors may counteract, protect against or inoculate youth from the negative effects of risks (Masten et al., 2007; Luthar, 2006). These models guide data analytic strategies and can inform the design of intervention by defining strategies to enhance promotive factors. The compensatory and protective models of resiliency are the two most commonly studied in the research literature (Fergus & Zimmerman, 2005; Garmezy et al., 1984; Masten, et al., 2007). A third model has limited empirical support, but also provides an explanation for how youth may overcome the adverse consequences of risks.

In the *compensatory model*, promotive factors neutralize risk exposure in a counteractive fashion. Thus, compensatory factors have an opposite effect on a developmental outcome (e.g., healthy eating, violence) than risks. This is a direct and independent effect from risks. Thus, compensatory factors contribute additively to the prediction of outcomes and are simply entered in a regression analysis after risks are accounted for in the equation. Parental support, for example, was found to compensate for risks associated with fighting and being around violent adults (Zimmerman, et al., 1998). In this study, parent support predicted less

violent behavior among their adolescent children and this effect was independent and in the opposite direction of the risks.

The *protective factor model* suggests that promotive assets or resources modify the relationship between a risk another promotive factor and outcomes. Two possible protective models are risk-protective and protective-protective. Risk-protective models indicate that promotive factors operate to moderate or reduce the association between risks and negative outcomes. Protective-protective models operate to enhance the effects of either promotive factor alone for predicting an outcome. Protective models are tested using interaction effects in regression or multi-group analysis in structural equation modeling. Hurd and Zimmerman (2010) provide an example of a risk-protective model in their study of adolescent mothers. They found that natural mentors helped protect adolescent mothers from the negative effects of stress on their mental health. A study of self-esteem and cultural identity among Native American youth provides an example of a protective-protective model (Zimmerman et al., 1995). They found that self-esteem increased the negative association between cultural identity and alcohol use in an interaction effect in a regression analysis.

Rutter (1987) also introduced the *challenge model* of resiliency. This model operates as inoculation whereby exposure to modest levels of risk actually help youth overcome subsequent exposures that make them vulnerable to negative outcomes. It is vital, however, that the initial risk exposure must be challenging enough to help youth develop the coping mechanisms to overcome its effects, but not too taxing as to overwhelm any effort to cope. Interpersonal conflict that is resolved amicably, for example, can help youth learn how to overcome social tensions to avoid a violent response in some later more heated social disagreement that may involve others (e.g., a gang fight).

Resiliency theory provides a useful framework for considering how promotive factors may operate for encouraging positive youth development. It is not an adolescent trait that can be measured by a self-report questionnaire (Fergus & Zimmerman, 2005). Rather, resiliency models posit relationships and processes, and concomitant analytic strategies for testing them. Although many researchers study resiliency by examining single risks and promotive factors, a burgeoning area of research focuses on the cumulative effects of multiple promotive factors across ecological domains (e.g., individual, family, community) to more accurately reflect the complex nature of influences on adolescent development (Ostaszewski & Zimmerman, 2006; Stoddard et al., 2012).

Researchers often study positive factors in youths' lives and evaluate interventions designed to enhance promotive factors for health adolescent development, as many of the papers in this theme issue illustrate. Application of resiliency theory, however, provides a conceptual framework and a unifying theme that can guide researchers and practitioners interested in studying and enhancing assets and resources. A unifying theme like resiliency theory is useful for public health education because it helps to develop a common language and analytic approach that cuts across the specific issue or domain being studied to build knowledge and inform practice using a strength-based paradigm. Research that applies a resilience framework will have common characteristics that can be replicated across

populations and contexts, and contribute more broadly to our understanding of the processes by which youth overcome adversity and develop into healthy adults despite risk exposure.

REFERENCES

- Caldwell CH, Sellers RM, Bernat DH, Zimmerman MA. Racial identity, parental support, and alcohol use in a sample of academically at-risk African American high school students. *American Journal of Community Psychology*. 2004; 34:71–82. [PubMed: 15495795]
- Fergus S, Zimmerman MA. Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review Public Health*. 2005; 26:399–419.
- Garmezy N. Resilience and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*. 1991; 34:416–430.
- Garmezy N, Masten AS, Tellegen A. The study of stress and competence in children: A building block for developmental psychopathology. *Child Development*. 1984; 55:97–111. [PubMed: 6705637]
- Hurd NM, Zimmerman MA. Natural mentoring relationships among adolescent mothers: A study of resilience. *Journal of Research on Adolescence*. 2010; 20:789–809. [PubMed: 20938486]
- Isomaa R, Väänänen J-M, Fröjd S, Kaltiala-Heino R, Marttunen M. How low is low? Low self-esteem as an indicator of internalizing psychopathology in adolescence. *Health Education & Behavior*. 2013; 40:392–399. [PubMed: 22872582]
- Luthar, SS. Resilience in development: A synthesis of research across five decades. In: Cicchetti, D.; Cohen, DJ., editors. *Developmental psychopathology* (2nd ed.): Vol. 3. Risk, disorder, and adaptation. Hoboken, NJ: Wiley; 2006. p. 739-795.
- Malcolm S, Huang S, Cordova D, Freitas D, Arzon M, Jimenez GL, Prado G. Predicting condom use attitudes, norms, and control beliefs in Hispanic problem behavior youth: The effects of family functioning and parent–adolescent communication about sex on condom use. *Health Education & Behavior*. 2013; 40:384–391. [PubMed: 22561377]
- Masten, AS.; Cutuli, JJ.; Herbers, JE.; Reed, JM-G. Resilience in development. In: Lopez, SJ.; Snyder, CR., editors. *The Oxford handbook of positive psychology*. Oxford, England: Oxford University Press; 2007. p. 117-131.
- Ostaszewski K, Zimmerman MA. The effects of cumulative risks and promotive factors on urban adolescent alcohol and other drug use: A longitudinal study of resiliency. *American Journal of Community Psychology*. 2006; 38:237–249. [PubMed: 17004127]
- Ramirez M, Yang J, Young T, Roth L, Garinger A, Snetselaar L, Peek-Asa C. Implementation evaluation of *Steering Teens Safe*: Engaging parents to deliver a new parent-based teen driving intervention to their teens. *Health Education & Behavior*. 2013; 40:426–434. [PubMed: 23041706]
- Rutter M. Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*. 1987; 57:316–331. [PubMed: 3303954]
- Shneyderman Y, Schwartz SJ. Contextual and intrapersonal predictors of adolescent risky sexual behavior and outcomes. *Health Education & Behavior*. 2013; 40:400–414. [PubMed: 22885188]
- Springer AE, Kelder SH, Byrd-Williams CE, Pasch KE, Ranjit N, Delk JE, Hoelscher DM. Promoting energy-balance behaviors among ethnically diverse adolescents: Overview and baseline findings of the Central Texas CATCH Middle School Project. *Health Education & Behavior*. 2012 Advance online publication. doi:10.1177/1090198112459516.
- Steele MM, Burns LG, Whitaker BN. Reliability and validity of the SE-HEPA: Examining physical activity– and healthy eating–specific self-efficacy among a sample of preadolescents. *Health Education & Behavior*. 2013; 40:355–361. [PubMed: 23041703]
- Stoddard SA, Zimmerman MA, Bauermeister JA. A longitudinal analysis of cumulative risks, cumulative promotive factors, and adolescent violent behavior. *Journal of Research on Adolescence*. 2012; 2:542–555. doi:10.1111/j.1532-7795.2012.00786.x. [PubMed: 23049231]
- Werner, EE.; Smith, S. *Vulnerable but not invincible: A study of resilient children*. New York, NY: McGraw-Hill; 1982.

- Zimmerman, MA.; Brenner, AB. Resilience in adolescence: Overcoming neighborhood disadvantage. In: Reich, J.; Zautra, AJ.; Hall, JS., editors. Handbook of adult resilience. New York, NY: Guilford Press; 2010. p. 283-308.
- Zimmerman, MA.; Ramirez, J.; Washienko, KM.; Walter, B.; Dyer, S. Enculturation hypothesis: Exploring direct and protective effects among Native American youth. In: McCubbin, HI.; Thompson, EA.; Thompson, AI., editors. Resiliency in Ethnic Minority Families, Volume I: Native and Immigrant American Families. Madison: University of Wisconsin; 1995. p. 199-220.
- Zimmerman, MA.; Steinman, KJ.; Rowe, KJ. Violence among urban African American adolescents: The protective effects of parental support. In: Arriaga, XB.; Oskamp, S., editors. Addressing community problems: Psychological research and interventions. Thousand Oaks, CA: Sage; 1998. p. 78-103.