Journal of Adolescent Health 48 (2011) 220–228

ELSEVIER

JOURNAL OF ADOLESCENT HEALTH

www.jahonline.org

Review article

Protecting and Promoting: An Integrative Conceptual Model for Healthy Development of Adolescents

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Article history: Received December 31, 2009; Accepted August 4, 2010
Keywords: Resilience; Positive youth development; School; Assets; Risk; Protective factors

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A B S T R A C T

Resilience and positive youth development have substantial overlap and offer complementary perspectives on fostering healthy youth development. However, these two areas have not yet been fully integrated into a unified approach, one that has the potential to build on the interconnectedness of risk, protection, and assets within the ecological systems affecting adolescent development. This article draws on extant research to delineate linkages between the risk and resilience and positive youth development literatures. School-related outcomes are examined within an integrative conceptual model delineating eight developmental domains useful for future research on underlying mechanisms associated with healthy outcomes, as well as prevention and intervention efforts.

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Existing conceptual frameworks primarily examine risk and resilience and positive youth development separately and often do not adequately attend to developmental or socioecological variables [1]. Most recently, scholars have begun to recognize the complementary aspects of these frameworks and advocate for integration [2]. An important agenda for adolescent health researchers is to merge positive youth development with risk and resilience research while also taking developmental variables into account. The process of integrating these two fields into models that have both research and translational applications has direct implications for prevention and intervention [3].

Schools represent an important context for this line of integrative work and provide a setting within which research can be readily applied to practice. The integration and application of risk and resilience and positive youth development is well aligned with the mission of schools to educate youth and help foster healthy development. Moreover, schools often already function as the defacto mental health care system for youth [4–6], providing an accessible context where there are lower levels of stigma associated with addressing mental health issues [7], and comprehensive programs can simultaneously affect mental health, health, and educational outcomes [8,9]. Positive behavioral and emotional health outcomes are known to be associated with academic success [8]. Similarly, bolstering existing strengths of adolescents can lead to the reduction or resolution of mental health symptoms, better school attendance, school participation, school retention, and self-efficacy in the short-term, as well as better long-term outcomes such as gainful employment, meaningful relationships, and overall good health and well-being [10].

Defining the Terms

Before presenting an integrative conceptual model, it is important to define a variety of relevant terms. Mental health has been traditionally defined as a unitary construct to describe the absence of mental illness; however, emerging research concep-

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1054-139X/$ - see front matter Published by Elsevier Inc. on behalf of Society for Adolescent Health and Medicine.
doi:10.1016/j.jadohealth.2010.08.006

tualizes mental health as a separate construct, distinct from mental illness. In these "dual-factor" [11] or "two-factor" [12] approaches, mental illness and mental health (or wellness) are defined as separate but complementary constructs with illness and wellness on opposite sides of the spectrum [13]. In general, mental health is a fundamental component of health, given the inextricable link between the two [14,15]. Healthy development can therefore be defined as encompassing a variety of problem-free and positive outcomes for adolescents, including emotional and behavioral health, school success, health-related behaviors, and quality of life.

To better understand healthy development it is helpful to use a cultural–ecological transactional lens, taking into consideration the reciprocal interactions that occur between adolescents and specific life events, family factors, or contexts such as school, community, and societal conditions or cultural beliefs [16,17]. These contexts may provide varying levels of either risk or protection. Risk factors are defined as probability markers, social address indicators, correlates, and causes that increase the likelihood of the onset or maintenance of a problem state or pathology [17–19]. In contrast, protective factors counteract the effects of risk. Defined as "safeguards that enhance a person's ability to resist stressful life events, risks, or hazards and promote adaptation and competence," [1, p. 3] protective factors function as moderators, acting as a buffer to disorder or dysfunction, or affect the mediational chain between adversity and negative outcomes [20,21].

Conversely, the study of developmental assets, alternatively described as promotive factors, focuses on factors that have a direct path to healthy development regardless of levels of adversity [21,22]. Although the terms *protective factor* and *developmental assets* are often used interchangeably, they are distinct in that a protective factor can only operate when a risk factor is present, whereas developmental assets do not require a dialectical relationship with risk [21]. Assets refer to internal and external strengths within an individual's social ecology that are predictive of positive outcomes, including health, mental health, and education.

The study of risk and protection, and developmental assets has given rise to two key approaches to adolescent development: resilience [20] and positive youth development [23–25], respectively. These approaches draw on the same principles, but what is different is their relative emphasis on each; resilience research has primarily examined risk and protective factors, seeking to elucidate the process of healthy development in the face of significant adversity [20,26,27], whereas positive youth development has underscored the importance of strengthening internal and external developmental assets embedded within the social ecology of an adolescent's networks and opportunities [1,23,28,29]. Each one of these approaches has historically had limitations in its point of view; risk and protection has tended to overemphasize negative outcomes and overlook positive ones, whereas the shortcomings of a developmental assets approach include neglecting to consider the role of risk in healthy outcomes and inadequately attending to negative outcomes.

On the basis of a growing abundance of empirical support, current formulations of child and adolescent mental health support a more holistic approach toward optimal development, integrating both the reduction of negative behaviors and the promotion of positive ones [3,30]. For example, there is mounting evidence that positive youth development strategies are most likely to simultaneously affect both health promotion and disease prevention [31,32]. In addition, the overlapping features of these approaches, such as an emphasis on the potential for change and plasticity in human development, and attention to ecological processes as critical factors in adolescent developmental trajectories, provide a rationale and foundation for the pursuit and continued refinement of an integrative conceptual model.

Integrative Model of Risk and Resilience and Positive Youth Development

Given the shared elements of risk and protection and positive youth development approaches [27], an integrative model attending to both research and practical applications is needed [3]. Guided by the definitions provided previously, and for the purpose of simplification, we will refer to the two pathways in the present model (Figure 1) as the "protecting" (drawn from resilience research and including risk and protection) and "promoting" (drawn from positive youth development research and including assets) pathways, both of which lead toward the broad category of healthy development. In the protecting pathway, protection moderates or buffers the relationship between risk and healthy development. In the promoting pathway, assets lead directly to healthy development but also have a reciprocal relationship with risk. In other words, assets can prevent the occurrence of risk.

The conceptual model also combines resilience and positive youth development within a cultural–ecological transactional theoretical framework. Overlapping contextual and cultural influences shape developmental domains and individual–contextual transactions over time [16,17]. Therefore, individual, family, school, community, and cultural factors have been included in this model and are thought to influence the entire system. The use of a cultural–ecological framework is important in understanding adolescent health because it requires that attention be paid to the various contexts, experiences, and opportunities afforded by interactions between adolescents and their environments and how they influence future developmental trajectories [33–35].

Integrating development into a conceptualization of adolescent health allows for research in both risk and resilience and positive youth development to provide information to each other. The present model points to eight developmental domains, seven of which are derived from those categories emphasized previously in applied research [23,25,31,36,37], and an additional eighth domain, self-regulation, which has been highlighted as exemplifying the transaction between adolescents and their social networks and ecological settings [38–41], and as a potential target area in interventions [42,43]. Drawn from previously published data on youth programs and information gathered from developmental milestones, these domains can be conceptualized in terms of formulating target areas for interventions as well as measuring key outcomes to assess healthy development. Therefore, they are depicted in a central position in Figure 1, wherein both predictors (i.e., intervention activities) and outcomes can be examined through a developmental lens. The developmental domains include the following: (1) *social*: promoting social support, bonding, and sense of belonging; (2) *emotional*: supporting self-efficacy and resilience-building; (3) *behavioral*: involving youth in prosocial activities; (4) *moral*: character-building through the fostering of prosocial norms; (5) *physiological*: building self-regulation skills; (6) *cognitive*: perspective-building by

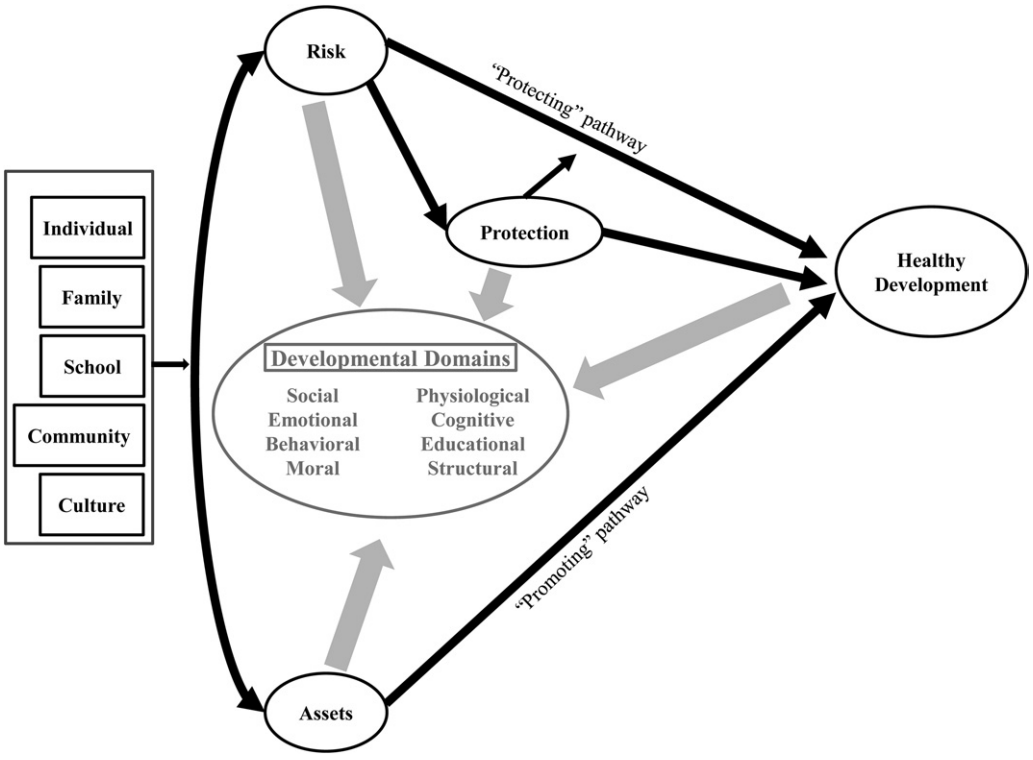

Figure 1. Integrative model of pathways toward healthy development.

supporting youth to develop a broader awareness of meaning (e.g., their spiritual beliefs, or their hopes for their futures) in their lives; (7) *educational*: competence-building through activities that provide youth with new skills; and (8) *structural*: ensuring structure and safety [44]. We contend that these eight developmental domains can best be conceptualized by using a holistic approach. In terms of considering the school context, these domains can be targeted in school-based prevention and intervention activities for adolescents, and can also be used as categories for school-related outcomes such as school readiness, motivation, agency, and academic achievement, discussed in the following paragraphs.

Foundational principles

To further this discourse on integrative efforts towards a better understanding of healthy development, we offer five foundational principles that incorporate and build on current formulations:

1. There are a minimum of two main pathways toward healthy development: (a) the protecting pathway, which, when risk is mediated or buffered by protection, support, or intervention, leads to positive outcome; and (b) the promoting pathway, by which assets lead directly to healthy development. The idea that risk is not simply the opposite of protection, nor is it the converse of assets, is a fundamental starting point toward better understanding of the multiple levels of reciprocal influences and interactions leading to healthy development. Guerra and Bradshaw [30] stated that "an either- or approach does little to address the reality of daily life—communities that want to embrace the talent and strengths of all youth also must address the very real problems of some youth that interfere with their own development as well as the lives of others" (p. 5). An integrative approach has the potential to be more comprehensive, practical, and effective in addressing these real "daily life" problems.
2. Risk and protection are contextual and engage in multiple levels of reciprocal interactions, thereby leading to continual change and development over time [45]. Werner's [46] 32-year longitudinal follow-up study refined the understanding of resilience, drawing the conclusion that resilience is relative and can vary over time and also on the basis of different life circumstances. Nonetheless, although resilience research has emerged within and has been an influential part of developmental psychopathology [47], it has surprisingly remained relatively undeveloped as a subject of study, and therefore many questions need to be further explored, including the following: What actually develops when specific assets come to the forefront? Do they exist at a certain point and then get refined, or do they wax and wane over time? What cognitive abilities are necessary to establish them? Do the assets change form as a person matures? What capacities are necessary for new assets to evolve? What inputs are necessary from the family and the community to support different assets at different phases of life?
3. Protecting and promoting pathways are part of interacting systems of social ecology [17]. The transactional–ecological model of human development posits that human development is driven by the transactions between self, agency, and environmental influences [48]. Interventions need to attend to multiple levels of an adolescent's social ecology and not just rely on building individual assets in isolation.

4. Cultural definitions of what constitute risk, protection, or assets vary. Although some research has allowed for participants to define for themselves, within their own cultural context, what constitutes strengths and adversities, this issue remains a substantial challenge for intervention approaches [49]. Studies have pointed out that demographic variables (e.g., ethnicity, socioeconomic status, education, occupation) are related to differing experiences of resilience [27].
5. Optimal programs need to be multifactorial, multisystem, and multilevel [50], encompassing multiple levels of reciprocal influences and interactions. Recognizing the interconnectedness within these systems could potentially lead to more successful outcomes for youth.

In the past decade, an emphasis on how to foster healthy development has increased. Nonetheless, many experts assert that additional research is required on the mechanisms underlying risk, protection, and assets, while also attending to transactional patterns in development [27,51]. To fully describe and exemplify youth development and the processes entailed by it, neither resilience nor positive youth development is sufficient as a separate construct. However, both approaches have developed complementary perspectives and have substantial overlap including their joint focus on interventions that affect multiple domains, affect the "whole youth" as opposed to a single problem-focused method, and recognize the importance of both social and environmental effects on development [2]. Although they are certainly not comprehensive, these five foundational principles offer some insight into key considerations for this integrative work.

Transactional development: eight key domains

We use a transactional developmental framework to describe the domains that can be derived from the areas targeted in successful school-based programs [23,25,31,36,37], leading to a host of positive school-related outcomes (Table 1). Adolescence is often viewed as a developmental period shaped by transformative challenges, in which both possibilities of opportunity and risk are heightened. A transactional framework attends to the nonlinear process whereby individual factors correlate and mediate with cultural–ecological factors, and ultimately lead to emotional, behavioral, and health outcomes [66,67]. Transactional development occurs dynamically; distal factors, such as risk, protection, and assets, eventuate in proximal processes (i.e., developmental achievements) over time, leading to positive and negative outcomes [17,68,69]. Important developmental achievements that need to be considered arise within social, emotional, behavioral, moral, physiological, cognitive, educational, and structural domains. Each domain corresponds to a continuum between risk on one end, and protection or promotion on the other. For illustrative purposes, instead of an all-encompassing review, each domain has been discussed briefly further.

The *social domain* is characterized by a continuum between alienation and a sense of belonging. Developmentally, sense of belonging and connectedness gain importance during adolescence, as adolescents begin to search for group membership and expansion of social networks [70]. Moreover, social alienation can be particularly significant for adolescents who experience distance from their ethnic/racial or cultural group [71,72], or who struggle with the navigation and demands of bi- or multicultural ethnic identities [73]. Overall, a sense of belonging plays an important role in supporting healthy development in academic, behavioral, and psychological domains. It is significantly related to positive outcomes across the age span, including school readiness, motivation, academic achievement, and life satisfaction [53,54,74], and is inversely related to negative outcomes such as school absenteeism [74], risk behaviors, and conduct problems [75]. Correspondingly, a sense of alienation and negative perceptions of support from school, peers, and parents have been related to a variety of negative outcomes in adolescents, including depression and school problems [70]. In fact, adolescents who drop-out of school often report lack of concern from the teacher and sense of school alienation as one of the

Table 1
Indicators of risk and protection within eight developmental domains and examples of school-related outcomes

Developmental domain	Attributes of positive youth development programs[a]	Risk	Protection	Examples of school-related outcomes
Social	Social support, bonding, and sense of belonging	Alienation	Sense of belonging	School readiness, motivation, academic achievement, and life satisfaction [53,54]
Emotional	Self-efficacy and resilience-building	Helplessness	Self-efficacy	Academic success [55] and effective learning strategies [56]
Behavioral	Prosocial activities	Antisocial behaviors	Prosocial behaviors	Life satisfaction and positive affect [57]
Moral	Character-building	Delinquent values	Prosocial values	Academic achievement [58–60]
Physiological	Self-regulation[b]	Dysregulation	Regulation	School readiness [42], self-perceptions of academic competence [61], and academic success in early school years [62]
Cognitive	Perspective-building	Hopelessness	Hope	Future orientation, agency, planning, and goal-directed behaviors [63]
Educational	Competence-building	Disengagement	Engagement	School performance, and mediating the relationship between academic and school climate and grade point average [64]
Structural	Structure and safety	Unsupervised	Monitored	Academic achievement [65]

[a] Derived from Benson's [37] developmental assets, Catalano, et al's [31] key constructs of positive youth development programs, Eccles and Gootman's [36] research on community-based programs promoting positive development, and Lerner's [52] "five C's" (competence, confidence, connection, character, and caring) and summarized in Kia-Keating [44] in terms of theoretic and research support for the ideal attributes of effective strength-based interventions for youth.

[b] Although the model by Catalano et al [31] addresses emotional competence within a competence-building framework including social, cognitive, and behavioral competence (and with regards to competence, the other models mainly focus on skill-building and the constructive use of time), the models of positive youth development have yet to focus directly on self-regulation; however, it was added to the present framework given its importance in the broader literature on youth and mental health.

major reasons for their academic failure [76]. Sense of belonging has been identified as a mediator between school climate and early adolescent conduct problems [75], and between student motivation and achievement among ethnically diverse adolescents [77].

The *emotional domain* is characterized by a sense of helplessness on one end of the continuum, and self-efficacy on the other. Self-efficacy refers to an adolescent's belief in his or her own ability to perform tasks successfully toward a desired outcome. It has important implications for adolescent affect and behaviors [78]. High self-efficacy is negatively associated with aggressive behavior [58] and psychological distress [79], and positively associated with engagement in prosocial behavior [80]. More specifically, academic self-efficacy (i.e., the perceived confidence in one's ability to attain academic goals) is a critical factor in predicting academic motivation, learning, and achievement [55,81].

The *behavioral domain* denotes a range of antisocial and prosocial behaviors or altruistic actions for which no compensation is expected [82]. Prosocial behaviors have been linked to many positive outcomes for youth, including increased receptivity to school and community service [83], life satisfaction, and positive affect [57]. In addition, prosocial behaviors are inversely related to problem outcomes such as substance abuse [83]. Similarly, prosocial values correspond to the *moral domain*. Sociomoral competency, otherwise referred to as character, encompasses a range of psychological characteristics that enable individuals to put moral values, reasoning, and identity into action [84] and has been posited as an important facet of positive psychology [85]. In adolescents, these strengths are related to fewer internalizing and externalizing problems, as well as greater academic achievement [58–60].

The *physiological domain* signifies the importance of regulation in adolescent development as a key characteristic of the transaction between adolescents and their ecological contexts [38–41]. Emotion-related self-regulation has been defined as the process of managing internal feeling states, including physiological, attentional, motivational, and behavioral aspects related to emotion, to achieve adaptation or other individual goals [86]. During puberty, marked structural and functional neural changes occur, particularly in the social information processing network, which include the affective and cognitive regulation nodes [87,88]. The reorganization and development of these neural structures place adolescents at a heightened vulnerability for emotional dysregulation and distress, manifesting in anxiety disorders and related outcomes such as school dropout and comorbid depression [87,89]. Regulation is related to overall adolescent adjustment and competence [90,91]. It has demonstrated usefulness as a key indicator of school readiness [42]. In fact, self-regulation of emotions is linked to academic success in early school years [62]. Youth with greater self-regulation skills are more likely to be able to cope with adversities and achieve social and academic goals, including peer acceptance and academic success [91–94]. Longitudinal research demonstrates that emotion regulation in middle stages of childhood is predictive of adolescent risk-taking behaviors [95]. Emotion regulation has an inverse relationship with externalizing behavior problems [96], and dysregulation has been linked to lower grade point average, school problem behavior, and self-perceptions of academic competence [61]. There is some research to support that school-based programs can enhance the capacity of an adolescent for emotion regulation [42,43].

For the purposes of this model, the *cognitive domain* refers to a continuum of hope. Hope is conceptualized to include an individual's future orientation, agency, planning, and goal-directed behaviors [63]. Hope has been related to life satisfaction, academic achievement, and adaptive functioning among school-going youth [97]. In fact, promoting academic achievement among elementary school-going children has been associated with decreased problem outcomes such as depression [98]. On a related note, the importance of school engagement for positive health outcomes has been well documented, and is represented by the *educational domain* [99,100]. Engaging children and adolescents in school includes increasing their investment, their participation, and the value they place on learning [101]. School engagement mediates the link between academic and school climate, and grade point average [64].

Finally, the *structural domain* refers to a continuum of adult supervision and monitoring provided to adolescents. High levels of parental monitoring are correlated with lower levels of adolescent depression and delinquency [102,103] and higher academic achievement [65]. The benefits of parental monitoring have been found irrespective of whether the parents are physically present (i.e., may be provided through phone calls) [104], suggesting that parents' awareness of their adolescent's "whereabouts, activities, and friends" is the important component of monitoring [105, p. 66].

Although the aforementioned summary focused on school-related outcomes, important health outcomes, such as drug, alcohol, and tobacco use, injury and violence, sexual risk-taking, suicide, poor diet, and sedentary lifestyles, are also known to be related to these developmental domains [106]. For example, parental monitoring and involvement (*structural domain*), family communication, school engagement (*educational domain*), and hope (*cognitive domain*) increase the likelihood of adolescent positive health behaviors [107]. Self-efficacy (*emotional domain*) has been found to act as a mediator between parental monitoring and adolescent alcohol use [108]. Emotion regulation (*physiological domain*) also has critical implications for adolescent health, affecting related behaviors such as judgment, decision-making, sensation-seeking, and risk-taking [88,109], as well as directly predicting specific health outcomes such as sexual risk-taking [110]. Numerous studies have examined protective factors affecting adolescent sexual and reproductive health behaviors. Markham et al [111] conducted a thorough review of research examining connectedness (*social domain*) on adolescent sexual and reproductive health, concluding that both family and school connectedness act as protective factors. In addition, their review identified 61 studies examining parental monitoring (*structural domain*), the findings of which illustrated the important role that such structural support could provide in influencing positive adolescent health behaviors. On the basis of two comprehensive literature reviews, empirical findings from 32 studies examining future time perspective [112] and 131 studies examining prosocial norms [113] demonstrated that both hope (*cognitive domain*) and prosocial norms (*moral domain*) can function as significant protective factors in adolescent health outcomes such as early sexual debut and pregnancy. Therefore, it is clear that a transactional developmental framework and usage of these eight developmental domains are valuable and generalizable to a broad array of adolescent outcomes related to overall health and well-being.

Discussion

Despite some progress, applied research integrating resilience and positive youth development is still in its nascent stage. An integrative approach to risk and resilience and positive youth development provides a necessary and more comprehensive approach toward understanding healthy development. Research on resilience and positive youth development can together help elucidate the development of appropriate and effective interventions for adolescents. Of fundamental importance is grounding these efforts by using a developmental lens, and examining the underlying mechanisms related to protection and promotion within an ecological framework to provide a comprehensive model.

Contextualizing youth within their socioecological contexts includes attending to family, school, and community, areas that have received considerably less attention as compared with individual factors [114]. Taking into consideration the socioecological theory wherein an adolescent is nested within multiple interacting systems, the ability to create a "resilient" or "positively developed" youth is largely dependent on the various contextual characteristics in which the adolescent participates. In addition to individual characteristics (e.g., language competence, intellectual ability, high sense of self-efficacy), there are contextual characteristics including both family-related (e.g., effective parenting, relationship with caregiver, access to positive relationships, and guidance from other extended family members) and school- or community-related (e.g., relationships with positive adult models, connections with prosocial organizations, high quality schools) characteristics that are hallmarks of resilient youth [46,115].

Practical implications

Doll and Lyon [115] contend that it is "essential for schools and communities to align themselves in partnerships to foster resilience and capacity-building among high-risk students. Neither system has the resources to singlehandedly interrupt recurrent cycles of risk" (p. 360). Creating partnerships between schools, families, and communities is an increasingly popular approach suited to fostering healthy development within a developmental and ecological framework. This approach considers the direct, indirect, and reciprocal interactions and the interrelated relationships that occur between the school, family, and community [116]. Furthermore, this approach is sensitive to the cultural and situational variables that are present within the various communities where partnerships are established. The effectiveness of efforts to promote healthy development will be maximized when all contexts within which the child develops are addressed.

There are several studies suggesting that partnerships benefit students (e.g., higher achievement test scores and grades, positive attitudes toward school, completion of more homework on weekends), families (e.g., greater parental involvement, improved family functioning, more supportive of their child, more positive views about school), schools (e.g., increase in student attendance, decrease in suspensions and disruptive behavior, increase in teacher satisfaction and morale), and communities (e.g., decrease in community violence, increase in neighborhood safety) [116,117]. There is evidence that combining resources from families, communities, and schools leads to a greater chance of effectiveness in positive youth development programs [31].

Given the importance of integrated developmental target areas to school-related outcomes, translation of these research areas into school-based practice is crucial. However, although the school environment seems suitable for mental health reform, it is not without its own set of barriers, including an overemphasis on providing direct services to those students who are at the highest level of risk [118] and a narrow scope in identifying and measuring risk factors and problems to the relative neglect of protection, promotion, and healthy outcomes [119]. A restricted focus on interventions for only those students who are at the highest levels of need results in a very limited reach. A public health or three-tiered model includes *universal or primary prevention* approaches in which services are provided to all youth through a school- or district-wide implementation; *targeted or secondary prevention* approaches in which services are provided to youth who are deemed at-risk; and *intensive or tertiary prevention* approaches where services are targeted for youth demonstrating the greatest level of need or impairment [120]. A renewed and sustained attention to this model of service delivery is critical toward providing all adolescents with adequate support for developing into healthy and happy adults who give a valuable contribution to society.

Implications for future research

Although the work of integration has already begun, there are many areas that warrant further investigation. For example, it remains unclear whether there are typical patterns of resilience development; namely, whether these pathways are marked by individual differences and biographical trajectories, and whether there are critical periods that provide opportune times for building resources within particular developmental or socioecological domains. The developmental domains in the current model were chosen because they align with existing research focused on school-based interventions and outcomes [23,25,31,36,37]. Therefore, they provide the groundwork for further dialogue that is needed to refine these categories, identifying and defining these developmental domains using the most up-to-date empirical findings. Other aspects of the current integrative model are also preliminary. For example, the degree of overlap between developmental assets and protective factors is still unclear [3]. Furthermore, the extent to which prevention and positive youth development programming complement or influence each other, such as whether the process of building developmental assets is associated with reductions in unfavorable outcomes, needs further exploration [3].

It is also important to take into account variations in culture, context, gender, and ethnicity [3]. Moreover, cultural contexts are essential to considerations regarding access, implementation, and acceptability of youth intervention strategies. The need for comprehensive mental health services that are culturally competent, developmentally appropriate, ecologically focused, and evidence-based is imperative [121].

Other areas for further research include a call for more research on biological indices that may underlie positive outcomes [27,122]; examining constructs such as neural plasticity and affective neuroscience [88,123]; more qualitative studies, which take an in-depth look at phenomenological experiences of risk and resilience and positive youth development [27]; and feasibility studies to find ways to overcome the challenges of implementation within schools. Such information would not only help inform an integrative model so that it may be most efficacious,

but it would also further inform policies governing what is to be included in school curriculum, and health and mental health services in schools.

The progress that has been made toward understanding healthy development is partly reflected by national and state policies which have paid increased attention to variables associated with positive, healthy developmental trajectories, and the use of asset-based approaches for the assessment and treatment of children. For example, children's system of care initiatives [124] and the California Mental Health Services Act (2005) emphasize the use of a strength-based approach for treatment. Additionally, the Strength-based School Counseling movement emphasizes the importance of providing services to all students on the basis of their personal strengths and environments which will facilitate positive development [125].

Although there are still a variety of unanswered questions, the field is steadily moving forward. The need to integrate risk and resilience and positive youth development is becoming increasingly clear and the importance of applying this knowledge to school-based practice, using a comprehensive approach is apparent. The value of providing services within the schools is known. There is a well-documented need to take developmental, cultural, relational, institutional, and various ecologies into consideration. The shift that is occurring in schools, among other contexts—from a medical, deficit-based approach toward a more strength-based emphasis—has broad implications for both research and practice, advancing the field of adolescent research and serving to positively affect youth and families through changes made at the school, community, and policy levels.

Acknowledgments

The authors gratefully acknowledge Drs. Michael Furlong and Nancy Guerra for providing valuable feedback for this article.

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