Youth Resiliency: Assessing Students' Capacity for Success at School

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As opposed to the problem-based approach of dealing with specific at-risk behaviours in secondary schools, the purpose of Resiliency Canada's self-reported Youth Resiliency: Assessing Developmental Strengths (YR:ADS) questionnaire is to provide a statistically sound and research-based approach to understanding the factors or strengths that are related to the development of adolescent resiliency. Working in collaboration with the Calgary Board of Education from a strength-based approach to understanding child and adolescent development, Resiliency Canada introduces the youth resiliency framework and presents the findings from a large urban sample of grade 7 to 9 students (N=2291). A framework for understanding the construct of resiliency that results from the investigation of intrinsic and extrinsic factors that influence the development of youth resiliency and adaptive behaviour is presented. Outcomes of this research supports both the protective-protective and challenge models of resiliency.

Overview

The study of protective factors, or the more recent attempts at conceptualizing the phenomena of individual resiliency, has been prevalent in the social science and health-related research communities for decades. Although there has been considerable research in-

terest in the concept of resilience, ambiguities regarding terminology, definitions, and the variability related to contributing factors and corresponding risk experiences continue to question the utility of the resiliency phenomena as a valid scientific construct (Luthar, Cicchetti & Becker, 2000; Masten et al., 1999; Resnick, 2000). Nevertheless, a long history of research into the factors that contribute to an understanding of the maladaptive behaviours of atypical youth generated considerable interest in identifying the forces that would lead to healthy adaptive lifestyles (Gramezy, 1991; Radke-Yarrow & Sherman, 1990; Rae-Grant et al., 1989; Rutter, 1990). Initiated by Emmy Werner's longitudinal studies in Hawaii of low socio-economic children (Werner & Smith, 1982; Werner, 1989), a systemic search for the prevalent elements of resiliency adaptation has expanded to include research into a multitude of individual characteristics and contextual settings. In particular, personal or intrinsic characteristics of resilient children have been studied to determine the importance of such qualities as self-esteem (Dumont & Provost, 1999; Masten & Gramezy, 1985; Rutter, 1987), self-efficacy (Masten & Coatsworth, 1998), and intellectual functioning (Freitas & Downey, 1998; Masten et al., 1999). Nevertheless, there was equal acknowledgement from researchers that a variety of contextually related extrinsic variables

were associated with stress resilient children and their immediate environment. As such, a major focus has been placed on youth in low socio-economic conditions (Gramezy, 1991; Werner & Smith, 1982), dysfunctional family settings (Beardlee & Podorefsky, 1988; Ferguson & Lynsky, 1996; Grossman et al., 1992; Rutter, 1987), and multifaceted constructs such as competency (Masten, Best & Gramezy, 1990) and coping skills (Dumont & Provost, 1999).

Three main areas of focus in identifying variables of influence;

- a) personal attributes,
- b) family characteristics, and
- c) other external support systems such as peers, school and the community are reported (Gramezy 1985; Masten & Gramezy, 1985; Luthar, Cicchetti & Becker, 2000; Werner & Smith, 1982).

Figure 1, outlines support for two broad sets of factors that are related to a general framework for understanding the development of resiliency. These include 1) intrinsic strengths - personality characteristics or attributes of the individual (e.g., empathy, self-esteem, self-efficacy), and 2) extrinsic strengths - interpersonal settings or environments (e.g., supportive family, positive peer influence, caring school and community environments).

As researchers strive to identify potential solutions to specific problem-based diagnoses, less effort has been placed on the cumulative effects that protective or resiliency factors may play in allowing youth to lead healthy and productive lifestyles (Scales & Leffert, 1999). As such there is concern that young people are not being provided with appropriate social support systems that promote personal development and adequate caring and supportive

Figure 1. The YR:ADS questionnaire resiliency framework and 31 developmental strengths model.

relationships with families, peers, schools and communities (Atkinson, 1987; Jessor, et. al., 1995; Kupersmidt & Coie, 1990; Wolkow & Ferguson, 2001). Particularly in large urban areas, it has become difficult to establish adequate guidance or positive opportunities for youth to receive constant and consistent nurturing of the values, beliefs and competencies they need to become independent, contributing members of society particularly during school years and beyond (Brooks-Gunn, et. al., 1993; Jessor, 1993; Scales & Leffert, 1999; Yates & Youniss, 1996).

During the past decade, research has shown that policies and programs for youth that focus on preventing specific youth behaviour problems (e.g., vandalism, drug abuse) generally are unable to report any long-term benefits (Benson, et. al., 1998; Brown & Horowitz, 1993; Hawkins, Catalano & Miller, 1992; Herman-Stahl & Petersen, 1996; Scales, 1990; Windle, 1992). With the expectations of heightened resilience strengths in youth, various efforts have shifted towards the development of a resiliency framework and model that would

have implications for determining social and psychological well-being in children and adolescents (Cowen & Work, 1988). Concurrently, practitioners in the fields of social work, education and psychology have adopted the concept of youth resiliency as it pertains to identifying potential services and prevention programs in community (Bartle, et. al., 2002; Cameron & Cadell, 1999; Grizenko & Fisher, 1992; Wolkow & Ferguson, 2001). From an applied research perspective, the focus on a comprehensive framework for understanding the development

of youth resiliency has enabled school districts and community stakeholders to focus on a strength-based approach to addressing child and youth developmental issues (Blyth & Leffert, 1995; Scales & Leffert, 1999).

Models of Resiliency

Not until recently has the concept of resiliency been presented as a viable scientific construct (Brook et. al., 1990; Garmezy, Masten & Tellegen, 1984; Masten et. al., 1988; Moran & Eckenrode, 1992; Rutter, 1985; Wolin & Wolin, 1995). The ability to overcome and thrive despite exposure to stress-related or adversarial situations is a reflection of the individual's resiliency profile. As such, there are currently four models of resiliency proposed (Holligter-Wagner, Foshee & Jackson, 2001): 1) the *compensatory model* states that each risk and protective factor combine cumulatively to have an independent and direct influence on the predicted outcomes; 2) the *risk-protective model* emphasizes the presence or absence of the protective factor in predicting the relationship that will exist between risk and outcome; 3) the *protective-protective model* expands on the interactive risk-protective model by positing that the risk and outcome relationship decreases with each protective factor present; and 4) the *challenge model* purports a curvilinear relationship between the risk factor and predicted outcome. In this model, low levels of risk act as learning experiences that encourage the development of coping strategies and actually may weaken problem behaviour outcomes initially (Hawkins, Catalano & Miller, 1992; Rutter, 1985, 1987). With increased risk levels, however, the problem behaviour escalates in an almost exponential or curvilinear relationship indicating the diminishing returns that come from

having very few or no protective factors in an individual's resiliency profile.

Assessing Developmental Strengths and the Youth Resiliency Profile

The YR: ADS questionnaire is designed to allow for the flexibility of use in various applied and scientific based research studies. In particular, the instrument consists of three separate sections: 1) 94 items are used to measure the 10 factors or 31 development strengths subscales associated with the resiliency framework (see Figure 1), 2) several items are used to measure frequencies that are considered to reflect potentially negative- (e.g., substance abuse, antisocial behaviour,...) and positive-related behaviours (e.g., success in school, values diversity, maintains good health, exhibits leadership,...), and 3) various demographic questions are included to identify various independent or extraneous variables (e.g., school/community, gender, age, grade, family setting, language, mother's/father's level of education). The ability to manipulate the demographic and behavioural indicators has been attractive to other researchers interested in studying the relationships between the resiliency framework and the specificity of other conditions (e.g., gambling, youth gangs) or concepts (e.g., attachment, self-concept). Using a dichotomous split to generate an individual resiliency profile summary, a sum total number of strengths out of a possible 31 were tabulated for each youth.

Findings

The summary of findings presented here represent data derived from the first large-scale administration of the YR: ADS questionnaire conducted in 5 junior high schools in the Calgary

Board of Education. The 2291 completed questionnaires came from culturally diverse junior high schools with populations that range between 347 to 567 students. There was a fairly even distribution between males (N=1121, 48.9%) and females (N=1170, 51.1%), and by grade levels; grade 7 (N=712, 31.1%), grade 8 (N=790, 34.5%) and grade 9 (N=789, 34.4%).

In general, the majority of youth indicated that they had a relatively large number of the resiliency factors, with the average youth 'having' 21 out of a possible 31 developmental strengths. In total, 81% reported having a "caring family", 67% had "positive peer relationships", 81% believe their school has "high expectations", and 88% have high "self-efficacy." Only 31% of the total, however, indicating they have a "caring neighbourhood" and 34% believing that the "community values youth." By grade this downward trend becomes even more apparent. The percentage of youth in grade 7 who indicate they have strengths like "adult relationships" or "community values youth" drops from 45% to 28% and 42% to 26% by grade 9 respectively.

For applied purposes in school-based settings, the developmental strengths have been presented in comprehensive reports to various community stakeholders (i.e., community members, school personnel, service sector representatives) as dichotomous variables. Of particular concern to community stakeholders are the low values obtained for all four community strengths measures. In generating a report that would best meet the communication needs of school and community members, data is presented in anonymous, aggregated percentages that reflect whether the youth "have" or

"don't have" the particular strength. The use of the dichotomous reporting format in the main text by percentages has allowed for an easy interpretation of youth developmental strengths by sex, grade and total sample. Comparing the continuous distributions arrived at for items on each subscale, youth in this study were defined as having the strength if their combine score is less than 2.50 on a 1 (strongly agree) to 5 (strongly disagree) point scale. The benefit of this approach is that the face validity of an individual's response is not lost by the establishment of an arbitrary line, for example, at the mean or a standard deviation point from the sample data.

From the aggregated sample data presented in this article (N=2291),

- 5% have 0 – 5 strengths,
- 6% have 6 – 10
- 11% have 11 – 15
- 18% have 16 – 20
- 28% have 21 – 26
- and 32% have 26 – 31

The two extreme developmental strengths categories each have 6 possible options (e.g., 0, 1, 2, 3, 4, and 5) while the four middle categories have 5 (e.g., 6, 7, 8, 9, and 10).

The relationship between the six developmental strength categories to the percentage of youth that engage frequently in two or more of twelve high risk behaviour patterns as measured by the YR:ADS questionnaire is shown in Figure 2. When this is compared with self-reported problem behaviour outcomes, the findings support the additive influence of developmental strengths as purported by the protective-protective model of resiliency. Although males (32.2 %, N = 1121) appear to be more likely

than females (24.2 %, N = 1170) to engage in two or more high risk behaviour patterns, on average, both demonstrate the importance of having developmental strengths to restraint from at-risk behaviours.

A similar linear relationship is also found for total positive behaviours in that an increase in developmental strength category reflects a corresponding increase in the percentage of youth that engage in more constructive behaviour patterns. When the risk behaviour patterns are examined separately, there appears to be considerable variation between the two extreme developmental strength categories (i.e., percentage of youth in the 0 – 5 DS and the 26 – 31 DS categories) and the percentage of youth that engage in problem behaviours habitually.

Although it is not clear as to whether or not the enhancement

of coping ability is reflected in low levels of risk, the findings for a number of risk behaviour indicators (e.g., alcohol consumption, used of tobacco, skipping school,...) support a curvilinear relationship between incident of risk exposure and problem behaviour as a function of the protective factors that exist in the aggregated youth resiliency profiles.

Building Inter-Collaborative Capacity Through a Strength-Based Approach

The additive effect of both intrinsic and extrinsic strengths have shown that youth with strong resiliency profiles are able to cope with adversity more effectively than those that experience few if any of the developmental strengths. This becomes apparent when developmental strength categories are compared with individual behaviour patterns to support both the additive effects

Figure 2. The effect of Sex x Developmental Strengths on engagement in two or more high risk behaviours (N=2291).

of a general protective-protective and behavior specific challenge models of resiliency. In particular, the findings consistently show that youth with strong resiliency profiles tend to participate in more positive or constructive activities and are less likely to engage in risk taking behaviours. In particular, there is clearly support for a comprehensive framework that looks at the role of strengths in promoting the development of youth resiliency. It also suggests a strength-based approach that can be used by educators, parents, students and members of the community to promote the development of resiliency through inter-collaborative strategies that address the needs of youth in their particular school. As such, the developmental strengths that contribute to resiliency exist within the individual and through the situational and relational experiences related to family, peers, school and community.

Resiliency Canada's primary goal is to provide an understanding through applied and scientific research of why some children and adolescents are more resilient than others in the face of adversity. Based on this research, and the literature on resiliency and adolescent development, the *developmental strengths* model identifies the resiliency factors that encourage and enhance the well-being and development of all youth in our communities. What is most attractive about the YR:ADS questionnaire to the school district and the community representatives that worked with the schools are that the results focused on a comprehensive, strength-based approach to understanding youth development. In particular, the extrinsically and intrinsically defined developmental strengths model provides a theoretical and holistic framework for under-

standing the importance of youth resiliency.

Working from this strength-based model of understanding youth development, we emphasize the positive aspects of individual differences in understanding what extrinsic and intrinsic strengths contribute to optimal child and adolescent development and school success.*

**This work was sponsored through the United Way of Calgary by the Calgary Children's Initiative, and involved the collaborative efforts of a number of other representatives from non-profit agencies (i.e., Aspen Family and Community Services, Boys and Girls Club, Communities in Action for Children and Youth, and the YMCA), municipal organizations (i.e., City of Calgary, Calgary Health Region), and the tremendous support of educators from the Calgary Board of Education.*

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Assessing Children's Spelling

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