

Talented Students and Resilient At-Risk Students: Similarities and Differences

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Abstract

This study compared academically talented students ($n = 23$) who were not at risk for school failure and resilient at-risk students ($n = 27$) on risk factors and protective/promotive factors. Participants' risk status was determined by student assignment. The academically talented students were attending a summer program at a major research university and the at-risk students were graduates of a continuation high school for students who had had numerous infractions at regular high schools. As expected, the two groups differed on risk factors and on factors related to academic status. However, the groups did not differ on psychosocial variables related to positive functioning, suggesting that some of the factors that act as protective factors in at-risk youth may serve as promotive factors in gifted and talented youth.

Students who are at-risk for school failure and students who are identified as gifted and talented often experience schools in very different ways, and these two groups seldom operate in the same sphere in school settings. Similarly, these two groups are rarely compared in the research literature. However, I have argued that resilient at-risk youth may share certain psychosocial characteristics with academically talented youth (Worrell, Latto, & Perlinki, 1999). Using the language of the risk-resiliency paradigm, these psychosocial characteristics act as protective factors for youth who are at risk, but serve as promotive factors for youth who are not at risk. In other words, the same characteristics that lead to outstanding performance in talented youth who are not at risk promote resilience in youth who are at risk. In this study, I compared academically talented students to resilient at-risk students on a variety of risk and protective/promotive factors.

In brief, the risk-resiliency paradigm originated in the clinical literature on coping with stress and negative life events (see Garnezy, 1987; Rutter, 1987; Werner, 1989, 1990). Researchers in this field distinguish among risk factors and protective factors. Risk factors are "biological or psychosocial hazards that increase the likelihood of a negative developmental outcome" (Werner, 1990, p. 97), whereas protective factors are individual and environmental characteristics that "ameliorate or buffer a person's response to constitutional risk factors or stressful life events" (Werner, 1990, p. 98). Vulnerability increases or decreases with the number of risk and protective factors that affect an individual, and an individual who is at-risk but does not succumb is described as resilient.

Only a few studies have compared academically talented students and at-risk students on risk and protective/promotive factors. Worrell (1997a) compared 24 academically talented students attending a talent development program and 17 resilient at-risk students attending an alternative high school. He reported that the

at-risk students differed from the academically talented group on eight of nine risk factors. The at-risk group had significantly lower GPAs, greater involvement in problem behaviors, lower rates of participation in extracurricular activities, and more frequent confrontations with parents. However, the groups did not differ on several factors, such as rates of receiving help from teachers and relatives, numbers of close friends, and global self-esteem. The only variables that the at-risk and talented groups differed on were academically focused ones, including scholastic competence and self-ratings of competence as students, with the academically talented students obtaining higher scores. These findings are in keeping with Hoge and Renzulli's (1993) finding that the only consistent difference on self-concept variables between gifted and non-gifted students is on academic self-concept.

Worrell et al. (1999) compared students in a continuation high school ($n = 33$), an after-school mentoring program ($n = 20$), and a summer program for the academically talented ($n = 50$). Both the continuation school and the mentoring program students were at-risk for dropping out. These researchers reported that the three groups did not differ on global self-esteem. However, the students in the mentoring and talent development programs obtained significantly higher scores on the Measure of Perceived Life Chances (Jessor, Donovan, & Costa, 1990) than the students at the continuation school. Worrell et al. suggested that the similarity between the mentoring program students and the talented students had to do with the former's resilience—they chose to be in the mentoring program, which was not mandatory, perhaps in part because they had high hopes for the future, as did the talented students.

Both the Worrell (1997a) and the Worrell et al. (1999) studies were conducted in urban areas. Worrell, Gibbons, Starks, and Nicosia (2003) reported similar findings in a sample of

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(Worrell, continued)

students from rural Montana. In this study, 79 honor students were compared to 33 at-risk graduates (resilient) and 31 at-risk dropouts. As before, the honor students reported fewer risk factors (e.g., truancy, problem behaviors) than the two at-risk groups, but did not differ from the at-risk graduates on perceived school climate, supportive adults in school, and supportive teachers.

In two of the studies, resilience was inferred. For example, Worrell (1997a) inferred resilience on the basis of teacher report, and Worrell et al. (1999) hypothesized that the mentoring program students were resilient based on their similarity on perceived life chances to the talented students. In the Worrell et al. (2003) study, the resilient students were high school graduates, but that study is limited by a retrospective design, as the resilient group had already graduated when the data were collected. In the current study, academically talented youth are compared to at-risk youth using a prospective design. It was hypothesized that resilient at-risk youth would report significantly more risk factors than a talented group, and that the talented group would report significantly higher levels of academic self-concept and achievement.

However, the groups were not expected to differ on psychosocial variables related to an optimistic future or to perception of school climate. Variables related to the future were of particular importance in this study as several of these have been found to be related to resilience, including perceived life chances (Jessor et al., 1990; Worrell et al., 1999), hope (Snyder et al., 1996; Worrell & Hale, 2001), and possible selves (Nurius & Markus, 1986; Osyerman & Markus, 1990a, 1990b).

Method

Participants

The participants consisted of 50 adolescents attending schools in the San Francisco Bay Area. Twenty-seven students were graduates of a continuation school for students who had had been re-assigned to the continuation school from their home schools, as they had gotten into trouble on many occasions. Despite this assignment, the students had graduated from the continuation school and were considered resilient. These students were 52% male and ranged in age from 16 to 20. They came from a variety of ethnic backgrounds, including Asian American (11.5%), African American (23.1%), Chicano/Latino (38.5%), White (18.5%), and American Indian (7.4%). Seventy-seven percent of them were born in the US and had English as a first language. Mothers were present in most of their households (89%), but fathers were present in only about half of the households (52%). Forty percent of this group reported working more than four hours a week. Nineteen percent of fathers and 7% of mothers of this group had college degrees.

The other 23 students were attending a competitive summer program for academically talented youth at a major research university. They came from a variety of schools in the greater Bay Area and were accepted into the program on the

basis of teacher recommendations, standardized test scores, interests, and GPA. Thirty-six percent of these students were male and they ranged in age from 14 to 18. Ethnic groups represented included Asian American (54.5%), African American (13.6%), Chicano/Latino (9.1%), and White (22.7%). The majority (70%) were born in the United States and 65% had English as a first language. Mothers were present in all of these students' households and fathers were present in the majority of households (82.6%). Twenty-eight percent of this group reported working more than four hours a week. Mean ages and GPAs for both groups can be found in Table 1. Seventy percent of fathers and 74% of mothers of this group had college degrees.

Measures

Data were collected on several variables. Academic variables included self-reported GPA, a single item rating the importance of attending college on a 4-point scale, and the five-item scholastic competence subscale from the Self-Perception Profile for Adolescents (SPPA) (Harter, 1988). SPPA items are rated on a 4-point Likert scale and the instrument has been used in many studies. Scholastic competence scores have yielded adequate reliability and validity estimates in previous research (e.g., Harter, 1988; Harter, Whitesell, & Junkin, 1998; Worrell, 1997b, 2000a). Risk factors included number of days truant, number of middle and high schools attended, and engagement in negative behaviors based on a 13-item composite. Behaviors on the composite included getting into trouble with the police, smoking in school, shoplifting, damaging school property, and obtaining items by threatening other students, and were rated on a 5-point Likert scale. Scores on this composite are reliable and have been found to distinguish among risk groups in previous research (e.g., Worrell & Hale, 2001).

Three protective/promotive factors were assessed: (1) expecting a good job by age 30, (2) hope in the future, and (3) a perceived school climate composite based on the 20-item Instructional Climate Inventory-Student Form (ICI-S; Braskamp & Maehr, 1988). ICI-S scores are reliable and yield a single factor (Worrell, 2000b). Moreover, the total score discriminates among schools (Krug, 1989). Global self-esteem was also assessed as a general measure that should not be related to risk status. This was measured using the Rosenberg (1965) Self-Concept Scale (RSES), a 10-item unidimensional measure with well-established psychometric properties (e.g., Worrell, 2000a). Reliability estimates for the composites in this study are reported in Table 1 by risk group.

Procedure

After receiving informed consent from parents and students, participants completed a packet of questionnaires which had all of the measures included in their classrooms. They were paid \$10 for participation and were debriefed about the purpose of the study upon completion. The study was approved by the Committee for Protection of Human Subjects at the University of California, Berkeley.

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Results and Discussion

Results of this study are presented in Table 1. As can be seen, the composites generally had reliable scores with the exception of scholastic competence in the at-risk group, which was lower than desired. Independent t-tests were used to compare the groups, with the alpha set at .004 to control for Type I error. As hypothesized, the at-risk group, although resilient, reported significantly more risk than the talented students, and the talented students reported higher scores on variables related to academics. Moreover, all of these differences yielded large effect sizes based on Cohen's *d*. Although Thompson (2002) argued that effect sizes should be corrected, particularly with small sample sizes, Roberts and Henson (2002, p. 251) pointed out that *d* is "in fact not biased in terms of practical differences." Also as hypothesized, on the protective/promotive factors, the two groups did not differ significantly and the effect sizes for the differences were small.

These findings have several implications. First, they provide support for the contention that students who are identified as gifted and talented are not likely to differ from non-talented students except on variables specifically related to their domain of talent. In this study, these were academic variables and risk behaviors associated with poor academic functioning. It is important to keep this in mind, as there are major cottage industries developing that are premised on the uniqueness of students who have been classified as gifted and talented.

Second, there is a growing literature on underachievement in gifted and talented students (see Moon, 2004). However, underachievement is almost always defined by comparing academic performance (e.g., GPA) to potential as indicated by some measure of intellectual functioning. Renzulli's (1978, 1986) definition of giftedness suggests that psychosocial characteristics may play an important role in the achievement of gifted students. Although he highlights task commitment in the definition, there are many other variables that are related to high academic attainment,

including self-efficacy (Shaunessy, Suldo, Hardesty, & Shaffer, 2006), self-regulation (Zimmerman & Martinez-Pons, 1990), motivation, and future time perspective (Simons, Vansteenkiste, Lens, & Lacante, 2004). This study's findings suggest that some of these variables act as protective factors in youth who are at-risk. It is not unreasonable to hypothesize that the lack of these factors may be related to academic underachievement in gifted and talented youth. The increased focus on positive psychology has resulted in several constructs purportedly related to optimal functioning in academic and other environments (e.g., Seligman, 1995; Snyder et al., 1996).

A third implication relates to the issue of perceived school climate. There is considerable literature which suggests that a major contributing factor to school dropout is the school itself, including the policies that it enforces and the nature of the interactions that school personnel have with students (Battistich & Hom, 1997; Kagan, 1990). Worrell and Hale (2001) found that, retrospectively, students reported a negative school climate. However, prospective reports in that study indicated that perceptions of school climate measured when resilient and vulnerable at-risk youth were still in school did not differ. The results of this study complement that finding by showing that resilient at-risk students did not differ in their perception of school climate from students who were not at risk, and indeed academically talented. Taken together, these studies suggest that perceived school climate is probably the result of a person-environment interaction, rather than something that only the school contributes to.

In conclusion, the results of this study revealed several things. First, academically talented students have fewer risk factors for school failure than at-risk students. Second, resilient at-risk students are similar to academically talented students on several variables that have been identified as protective/promotive factors such as hope in the future. Although the study is limited by sample size and the generalizability of the results, the findings, alongside other studies of this type suggest that studies examining these two extreme populations may contribute to our understanding of both groups of students, and may provide some insight into gifted and talented students who are not living up to their academic potential. ♦

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