The link between resilience and peer friendship in certain high risk students is examined by describing the relationship between two measures: a measure of effective peer friendships completed by students and their parents (My Child's Friendships, B. Doll, 1993) and a second measure of resilient beliefs (Adolescent Resiliency Belief System, C. Jew and K. Green, 1995). Results from both measures are described for a population of 104 rural middle school students, all of whom were participants in an effective education program, the Wellness Project, intended to foster resilience. Results show the expected positive correlations between friendship competencies and optimistic beliefs. Students with more competent friendship qualities were also the students with optimistic beliefs about their competence in other domains. However, this relationship did not extend to parent ratings of student friendship competencies. The parent and student versions of the scale might be assessing somewhat different constructs. In addition, the correlation between the student form of the friendship survey and the resilience survey may be an artifact of their shared status as student self-report measures. Also, the reliability of both forms of the friendship scale and the resilience scale is not entirely satisfactory, so that the described relationships cannot be considered stable. (Contains 4 tables and 27 references.) (SLD)
Resilience and Peer Friendships

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Kathy Green, University of Denver

Emerging research in psychosocial resilience has established that predictable and malleable characteristics of certain high risk students appear to support their educational and personal success despite very difficult life circumstances. One of these characteristics is the students’ formation and maintenance of close peer friendships (Cowen, Wyman, Work & Parker, 1990; Rutter, 1985; Werner & Smith, 1982; Work, Cowen, Parker & Wyman, 1990). The support of peer friendships is of special interest to educators, since most students’ opportunities for socialization occur within school settings and since educators can successfully intervene to promote effective friendships (Doll, 1996).

This paper will further examine this link between resilience and peer friendships by describing the relationship between two measures: a measure of effective peer friendships (Doll, 1993) and a second measure of resilient beliefs (Jew & Green, 1995). Results from both measures will be described for a population of rural, middle-school students. The study represents the juxtaposition of two converging lines of research: one to develop a scale that identifies children with significant friendship difficulties and the second to develop a strategy for assessing the potential for resilience in high risk students. Linking these lines of inquiry has the potential of developing linked-strategies for implementing developmental risk and resilience research in school applications.

Assessing student potential for resilience

While there is no universally agreed-upon definition of resilience, the central notion of concerns the development of competence in the face of severe stress and hardship (Garmezy, Masten, & Tellegen, 1984; Rutter, 1985, 1987). Repeated findings have revealed that a significant number of children reared in the most adverse circumstances develop into competent
and productive adults (Cowen, Wyman, Work, & Iker, 1994; Kolvin, Miller, Fleeting, & Kolvin, 1988; Long & Vaillant, Werner, 1989; Werner & Smith, 1982.) If the mechanisms and processes by which this occurs could be fully understood, the potential exists to deliberately foster resilience through well-designed prevention programs.

Although early research focused on unidimensional models of resilience, most prominent researchers have come to favor a complex interactional model of resilience in which protection against later dysfunction emerges from an interaction among characteristics of the student (e.g., easy temperament, achievement oriented), caregiver (e.g., a desire to protect the child from burdensome family hardships), and environment (e.g., a high level of support from extended family, friends, and other important adults; Garmezy, 1991; Gordon & Song, 1994; Liddle, 1994; Masten, 1994; Rutter, 1985, 1987; Wang, Haertel, & Walberg, 1994).

The survey of resilience used in this study investigates a specific psychosocial mechanism underlying the child characteristics that could contribute to resilience: optimistic belief systems. In doing so the survey builds upon suggestions that neither risk nor resilience are absolute, but may fluctuate and change relative to the phenomenological understandings that individuals form when negotiating risk situations (Gordon & Song, 1994; Liddle, 1994). Thus, the measure of resiliency used in this study, Adolescent Resiliency Belief System, assesses students optimistic beliefs that they will succeed, presuming that such beliefs predispose students to use successful coping behaviors despite their maladaptive development.

Identifying students with significant peer friendship difficulties

There is considerable disagreement over how to select out children without friends for special assistance and intervention. The simplest strategies for describing children’s friendships are nomination procedures that ask students to list classmates whom they prefer to play with or
have as friends. A peer friendship is identified whenever two students include each other on their preferred lists (Asher, 1995). Those children for whom no friendships are identified may be targeted for intervention. However the use of such procedures has been discouraged in school practice because they require that students evaluate the likability of classmates (Bell-Dolan, Foster, & Sikora, 1989), violate school norms prohibiting derogatory comments about classmates (Deno, Mirkin, Robinson, & Evans, 1980), and show limited correspondance with observations of social behaviors (Rubin, Hymel, LeMare & Rowden, 1989). Use of teacher ratings for identifying friendlessness has been attempted but with less success. Correlations between teachers' ratings of social competence and peers nominations are typically significant but very modest (Deno, Mirkin, Robinson & Evans, 1980; Dodge, 1989; French & Waas, 1985). Indeed, one study showed that if it would have been necessary to fully evaluate 65% of the class with teacher ratings in order to identify 95% of the children rarely chosen as friends (French & Waas, 1985b). Finally, observations of children's rate of interactions have frequently been criticized for both misidentifying too many children with adequate friendships and failing to identify children without friends (Asher, Markell & Hymel, 1981). Instead, Dodge (1989) suggests that effective observations would need to focus on the quality of children's peer interactions.

Two strategies for identifying friendlessness in children have been more promising. Asher and Wheeler (1985) report some success in asking students with friendship difficulties to self-refer using a measure of loneliness. Using a parent questionnaire, Doll (1993) was able to distinguish between children with and without friendship difficulties based on the severity but not prevalence of friendship problems reported by parents. The modest success of both surveys may have been due to their emphasis on qualitative aspects of the children's relationships. Consequently, this
study extends the Doll (1993) study by using the parent survey (My Children's Friendships) and a student self-report version of that survey to describe qualitative aspects of student friendships.

Method

Subjects. Subjects were 104 seventh-grade students of a rural, Western school district, including 24 twelve-year-olds, 65 thirteen-year-olds, 14 fourteen-year-olds and 1 fifteen-year-old. They included 59 male and 44 female students. Students represented all participants in the school district’s Wellness Project, an affective education program intended to foster educational resilience in seventh grade students. Although parents had the option of excluding their child from participating in the study, none had done so resulting in a 100% participation rate. Parent surveys were requested from parents of all 104 students and were returned by 43, for a 41% return rate.

Measures. The measure of resilience used was the Adolescent Resiliency Belief System, a 21-item measure adapted from earlier work by Jew (1991) and based upon the earlier work of Mrazek and Mrazek (1987). Items on the scale describe positive, optimistic beliefs that students endorse by responding on a six point scale where 6 represents the positive “strongly agree” end point and 1 represents the negative “strongly disagree” end point. Total scores are computed by summing across all 21 items. Higher total scores reflect strong, positive optimistic beliefs while very low total scores reflect a rejection of optimistic beliefs. Earlier and longer versions of the scale demonstrated internal consistency reliabilities ranging from .83 to .92.

Peer friendships were evaluated by parents using the My Child's Friendships scale (Doll, 1993) and by students using a self-report adaptation of the same scale titled My Friendships. On both forms of the scale, the 20 items describe the four kinds of friendship competencies: frequent social interactions, an ability to overlook minor disruptions with friends, frequent pro-
social behavior towards peers, and an ability to resolve or overlook peer conflict. Parents or students themselves endorsed the items as like or not like the student by choosing one of three responses: “Very much like” (scored as 2), “Somewhat like” (scored as 1) or “Not at all like” (scored as 0). Higher scores on the scale reflected more and more positive friendship competencies while very low scores reflect an absence of these competencies and a need for assistance with peer friendships. Earlier research established that the Parent Form of the survey showed adequate internal consistency of .77 and differentiated successfully between students having and not having serious friendship difficulties (Doll, 1993).

**Procedures.** Student surveys were completed in a single March 1997 class-period as part of students’ Wellness Project activities. Parent surveys were sent home with students and were returned to school by the students. Of the 104 parent surveys requested, 43 were returned to school for a 41% return rate.

**Results**

Means and standard deviations for *My Friendships* are reported in Table 1. Results show that students generally rated themselves very positively on the friendship items, with the mean rating for all four subscales falling midway between “Somewhat like” and “Very much like” the positive friendship characteristics. Similarly, means and

<table>
<thead>
<tr>
<th>My Friendships Scales and Subscales</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict</td>
<td>1.52</td>
<td>.31</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.54</td>
<td>.27</td>
</tr>
<tr>
<td>Worry</td>
<td>1.33</td>
<td>.24</td>
</tr>
<tr>
<td>Acceptance</td>
<td>1.59</td>
<td>.25</td>
</tr>
<tr>
<td>Total</td>
<td>26.85</td>
<td>4.77</td>
</tr>
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</table>
Table 2: Means and Standard Deviations for My Children’s Friendships

<table>
<thead>
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<th>My Children’s Friendships Scales and Subscales</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict</td>
<td>1.56</td>
<td>.32</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.58</td>
<td>.28</td>
</tr>
<tr>
<td>Worry</td>
<td>1.15</td>
<td>.41</td>
</tr>
<tr>
<td>Acceptance</td>
<td>1.42</td>
<td>.41</td>
</tr>
<tr>
<td>Total</td>
<td>28.42</td>
<td>5.36</td>
</tr>
</tbody>
</table>

standard deviations for the parent form of the scale, My Children’s Friendships (reported in Table 2) show a similar pattern, with means for all four subscales falling midway between 1 and 2.

Alpha coefficients for both the parent and student form of the friendship scale are reported in Table 3, and show the full scale internal consistencies to be roughly equivalent to those determined in earlier research (Doll, 1993).

<table>
<thead>
<tr>
<th>Student: My Friendship Subscale</th>
<th>Alpha</th>
<th>Parent: My Child’s Friendships Subscale</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict</td>
<td>.51</td>
<td>Conflict</td>
<td>.53</td>
</tr>
<tr>
<td>Empathy</td>
<td>.54</td>
<td>Empathy</td>
<td>.58</td>
</tr>
<tr>
<td>Worry</td>
<td>.44</td>
<td>Worry</td>
<td>.45</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.42</td>
<td>Acceptance</td>
<td>.54</td>
</tr>
<tr>
<td>TOTAL</td>
<td>.72</td>
<td>TOTAL</td>
<td>.75</td>
</tr>
</tbody>
</table>

with full-scale scores only. Correlation between the parent and student form of the friendship scale was a very modest .33 (p<.01). Results suggest that parents and the students generally agreed about the occurrence of conflict and student prosocial behaviors, but did not rate student over-sensitivity and infrequent social interactions similarly.
Means and standard deviations for students’ scores on the Resilience scale are reported in Table 4. Results show that the average student endorsement of the optimistic beliefs fell between “Slightly Agree” and “Moderately Agree.”

Correlations between the student form of the Friendship scales and the Resiliency Survey was .53 (p < .001), while the correlation between the parent form of the Friendship scale and the Resiliency Survey was lower and nonsignificant (r = .29; p > .05). This may be an artifact of the fact that both the student form and the Resiliency survey are student self-report measures, whereas the parent form reflected an alternative set of judgements.

Discussion

Results of this preliminary study show the expected positive correlations between friendship competencies and optimistic beliefs. Those students with more competent friendship qualities were also the students with optimistic beliefs about their competence in other domains. However, the relationship did not extend to parent-ratings of student friendship competencies. There are several reasons why this might be the case. First, parent and student versions of the friendship scale might be assessing somewhat different constructs. Reports from the two raters were not highly correlated, suggesting that information available to students and their parents evaluating friendships may differ in some respects. Second, the correlation between the student form of the friendship survey and the Resilience survey may be an artifact of their shared status.
as student self-report measures rather than any inherent relationship between friendship competence and resilience. Third, the reliability of both forms of the Friendship scale and of the Resilience scale is not altogether satisfactory, such that the described relationships among all three scales cannot be considered stable.

As a logical next step, efforts need to be made to refine all three scales to enhance their internal consistency. Additional evidence is needed to describe the test-retest properties of the scales, reflecting their consistency over time. Finally, all three scales need additional evaluation relative to their construct validity. Linking both surveys to a larger model of risk and resilience can enhance their utility as screening measures for school applications.

References:


**Title:** Resiliency and Peer Friendships

**Author(s):** Beth Doll, Cynthia Jess, Kathy Green

**Corporate Source:** A paper presented at the 1998 Annual Meeting of the American Educational Research Association

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