Strengths that Matter: An Empirical Investigation of Elementary School Students
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Abstract
This poster presents the findings from a study of current practice that reveal a discrepancy between the theory and the scientifically-validated application of the strength-based perspective. This study aims to operationalize within-child strengths to determine which characteristics best discriminate between typically developing children and those children referred for social, emotional, or behavioral concerns, and which strengths are most useful in planning for children’s well-being.

Background
The President’s New Freedom Commission on Mental Health moves the mental health system from a focus on eliminating symptoms to a focus on the consumer’s strengths and ability to cope with life’s challenges, facilitate recovery, and build resilience. The Commission defines resilience as “the personal and community qualities that enable us to rebound from adversity, trauma, tragedy, threats, and other stresses — and to go on with life with a sense of mastery, competence, and hope.” A recent revision to the Individuals with Disabilities Education Improvement Act (IDEA) requires that strengths be considered in the development of an Individualized Education Plan (IEP), positive behavior supports be used in school settings, and that a greater emphasis be placed on prevention services. Schools spending this money on prevention services are required to use scientifically based behavioral and academic interventions that make use of technologically sound assessments. The advantages of strength-based practice have been articulated, and by mandate strength-based practice has been adopted. But is the field ready to use strengths in a scientifically and technologically sound manner?

Study 1: Qualitative Analysis of Current Practices
Forty client files were randomly selected in March of 2003 from three different mental health service programs, including a wrap-around program for children with developmental disabilities, a special education day treatment program for children with social skills deficits and affective disorders, and a residential treatment setting for boys with oppositional defiant and conduct disorders. Upon reviewing each child’s current and previous treatment plans, psychiatric assessments, psychological assessments, educational reviews, and individualized education plans, a combined 329 statements of strengths were found. Many statements of strengths could be potential assets to treatment. However, there were numerous statements that were irrelevant to the client’s mental health, inappropriate, or even potential treatment concerns.

Study 2: Development of Assessment Items
Based on the results of Study 1, a thorough review of the literature and a series of focus groups with multi-disciplinary professional teams were conducted to determine what strengths are theorized to promote well-being. After generating a list of 765 uniquely phrased potential within-child protective factors, we collapsed similar content, operationalized the items, and devised an empirical study to determine the degree of clinical utility which exists for the hypothesized characteristics.

Methods
A contrasted group study was used to empirically investigate the relationship between the identified strengths and social-emotional well-being. Parents and teachers provided ratings of the observed frequency of 156 positive behaviors in children who had either already been identified as having significant social and emotional problems (n=86) or who had not been so identified (n=322). The criteria used to determine an “identified” child included anything from a referral to the office for aggressive or violent behavior or to a mental health professional regarding emotional/behavioral problems during the academic year to the presence of a psychiatric diagnosis or the provision of special education services for emotional/behavioral problems. The rating scale used a 5-point Likert scale ranging from “never” to “very frequently” to indicate how often the teacher/parent observed the 156 positive behaviors over the past four weeks. Informants were also given the opportunity to indicate that the item was unclear, or that they felt the item did not apply to the child being rated.

Results
A multi-stage data analysis plan was used to reduce the initial pool of 156 potential strengths to a more manageable, useful, reliable, and valid pool of strengths.

**Step 1:** Those items that that were frequently marked as unclear, does not apply, or left blank were eliminated.

**Step 2:** The mean scores did not differ significantly between the community and referred sample for seven items, and thirty items were not separated by at least half a standard deviation (d ≥ .50). These items were eliminated. Examples of these items include, “participate in after school or community activities,” “show talent in athletics, the arts, or in a technical/mechanical area,” and “engage in cultural activities or traditions.”

**Step 3:** A few items were eliminated based on the corrected item-total correlations.

**Step 4:** We then correlated item raw scores with the student’s age, gender, and race. To avoid strengths that seemed biased across these dimensions, 10 additional items were eliminated.

**Step 5:** As a final step, redundant or very similar items were eliminated. These five steps winnowed the pool of potential strengths from 156 items to 81 items.

### Examples of Items Eliminated:

<table>
<thead>
<tr>
<th>Unclear Items</th>
<th>Items Marked as Does not Apply</th>
<th>Items Left Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Look for deeper meaning in daily routines</td>
<td>• Participate in religious activities</td>
<td>• Use a religious or spiritual belief to describe higher actions or situations</td>
</tr>
<tr>
<td>• Delay gratification</td>
<td>• Recycle or do something to help environment</td>
<td>• Express himself/herself through writing</td>
</tr>
</tbody>
</table>

**Aggregating Data:**

To increase the utility of the 81 individual strengths found to correlate with the social-emotional health of children, investigators tried various methods of scale creation that could guide assessment and intervention practices.

- Exploratory item factor analysis (principal components extraction with varimax rotation) of the final 81 items, revealed an initial component accounting for approximately 48% of the total variance with the remaining components adding less than an additional 13%.
- Alternatively, items were conceptually grouped in a means that would most readily support to prevention and treatment efforts.
- The consensus reached by six individuals after 40 hours of careful deliberation resulted in eight scales with very high internal consistency:

### Internal Consistency of Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>Total Items</th>
<th>Alpha</th>
<th>Item Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>12</td>
<td>.94</td>
<td>Compliment or congratulate somebody</td>
</tr>
<tr>
<td>Sociability</td>
<td>12</td>
<td>.93</td>
<td>Cooperate with peers or siblings</td>
</tr>
<tr>
<td>Self-Identity</td>
<td>11</td>
<td>.90</td>
<td>Give an opinion when asked</td>
</tr>
<tr>
<td>Initiative</td>
<td>12</td>
<td>.91</td>
<td>Ask to take on additional work or responsibilities</td>
</tr>
<tr>
<td>Active Learner</td>
<td>10</td>
<td>.93</td>
<td>Look forward to classes or activities at school</td>
</tr>
<tr>
<td>Positive Outlook</td>
<td>10</td>
<td>.90</td>
<td>Take steps to achieve goals</td>
</tr>
<tr>
<td>Self-Control</td>
<td>14</td>
<td>.92</td>
<td>Handle his/her belongings with care</td>
</tr>
<tr>
<td>Adaptability</td>
<td>11</td>
<td>.91</td>
<td>Accept another choice when his/her first choice was unavailable</td>
</tr>
</tbody>
</table>

**Discussion and Conclusions**

This study advances our knowledge of within-child strengths in many ways.

- It provides a comprehensive review of our existing knowledge about within-child strengths.
- It investigates which of these 156 operationalized potential strengths have contextual validity to both parent and teachers, identifying a robust set of student strengths that are related to social and emotional development.
- It explores which strengths differentiate between students already identified with significant emotional and behavioral disorders and those without.
- Interestingly, some of the strengths that are widely recognized in the literature as protective didn’t differentiate between children who had been referred and non-referred through this study. This was most strikingly the case for items related to religion/spirituality (i.e. look for deeper meaning in daily activities).

**Future Directions and Next Steps:**

Further studies will scrutinize this 81 item-set through a larger and even more diverse sample of student behavior and will explore how the strengths lend themselves to intervention planning and progress monitoring. The Devereux Elementary Student Strengths Assessment (DESSA), an assessment tool that will be published in the fall of 2006, will use this data to help identify at-risk students and guide intervention, find the strengths of students with disabilities, to evaluate the effectiveness of social programming, and to promote the healthy social and emotional development of all children.