Students with Learning Disabilities: Risk Factors and Strategies for Building Resilience

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WPS
Presenter Disclosure

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I am employed by WPS, publisher of the instruments that I will highlight today.
Agenda

- Introductions
- A definition of Risk (Learning Disabilities literature)
  - Types of Risk Factors
- A definition of Resilience (Learning Disabilities literature)
  - Protective Factors
  - Building Resilience
- Assessment Options & Strategies to Promote Success
- WPS Opportunities
- Questions
Risk and Resilience Factors for students with Learning Disabilities (LD)

- **Internal factors:**
  - Self Perception, Self-Concept
  - Also
    - Depression
    - Anxiety
    - Processing (attention/working memory/executive function)

- **External factors:**
  - Teacher Feedback
  - Peer Feedback
  - Type and Severity of Learning Disability
  - Gender
  - Placement
  - Social Support and Competence
Risk Factors
Risk Factors for students with LD

- Negative or potentially negative conditions that can impede or threaten any of these areas of development:
  - Academic
  - Social
  - Behavioral

- Adverse events that increase the likelihood of negative outcomes

Keogh & Weisner, 1993
Spekman, Herman, & Vogel, 1993
Maag & Reid, 2006
Risk Factors for students with LD

- For a student with learning disabilities, the school environment can include many conditions that place the student at risk for negative experiences
  - Self-perceptions can be influenced by difficulties with both the academic and the social aspects of school
  - Difficulties at school can challenge emotional and social development
  - School experiences can erode feelings of confidence

Vaughn & Elbaum, 1999
Gans, Kenny, & Ghany, 2003
Nalavany, Carawan, & Rennick, 2011
Risk Factors for students with LDs

- Students with LDs demonstrate increased levels of depression and anxiety compared to non disabled peers
- Some students with LDs seem to be at higher risk for developing characteristics of depression and anxiety
  - Many students do not receive help (subthreshold clinically)
  - No help can lead to additional processing problems
  - ATTN, EF, WM

Montegue et al. 2008
Mugnaini, Lassi, La Malfa, & Albertini 2009
Maag & Reid, 2006
Nelson & Harwood, 2011a, 2011b
Eysenck, Derakshan, Santos, & Calvo, 2007
Risk Factors for students with LDs

- 50% of children later identified as having learning disabilities are retained in the first grade
  - Can instill a sense that things will not improve
- Students with LDs who have negative self-perceptions are likely to be:
  - strategy deficient
  - be judged as not working as hard as other students
  - have difficulty judging their own level of effort.

McKinney, Osborne, & Schulte, 1993
Brooks, 2001
Lackaye & Magalit, 2006
Meltzer et al., 2004
Risk Factors for students with LDs

- Students with LDs can gradually lose their resilience and are no longer willing to take risks
  - PBS video by Richard Lavoie
    “Last One Picked, First One Picked On”
Risk Factors for students with LDs

Negative Teacher Feedback

"Work carefully", “Be neat” comments can be perceived negatively, as if the student is not trying. Can add to feelings of inadequacy and incompetence.

Brooks, 2001
Risk Factors for students with LDs

Negative Peer Feedback

Pejorative terms “Special”, “Sped”, Dumb”, etc.

The disability and external responses to it can create significant personal disruption

Salza, 2003
Shessel & Reiff, 1999
Crawford, 2002
Risk Factors for students with LDs

Type and Severity of Learning Disability

Can influence resilience and long-term outcomes

Better to define by domain specific rather than a global term

Some types of LDs exacerbate specific risks (Nonverbal LD)

Spekman, Goldber, et al., 1993
Spekman, Herman, et al., 1993
Wong, 2003
Stanovich, 1999
Galway & Metsala, 2011
Resilience
Resilience

- Protective factors are life situations or events that enhance the chances of positive outcomes
- Ability to spring back from the negative outcomes associated with stress and risk factors
- A dynamic quality that can be nurtured
- As resilience increases, so does the student’s ability to cope with or overcome risk and adversity

Keogh & Weisner, 1993
Bender et al., 1999
Margalit, 2004
Doll & Lyon, 1998
Gender

Some have written that gender may play a role in the response of children to social failure.

Others, no gender differences with risk factor of anxiety, depression, and academic self-concept.

Some studies found that for successful transition to adulthood, temperament and self-concept were more important for females, and outside sources from family and community were more important for males.

Settle & Milich, 1999
Wong, 2003
Montague et al., 2008
Nelson & Harwood, 2011a
Werner, 1993, 1999
Fostering Resilience for students with LDs

Self-Understanding and Acceptance

Self-understanding, acceptance, and a feeling of control over one’s life can be key to overcoming risk

- Setting realistic goals (but success is influenced by the accuracy of one’s self-knowledge and self perception)

Bender et al., 1999
Nalavany, Carawan, & Rennick, 2011
Fostering Resilience for students with LDs

Self-Understanding and Acceptance

- Foster an internal locus of control
- Focused, specific praise to point out strategy or action that worked instead of saying “good job”
- Explicitly point out child’s effort and link to success

Blocker & Copeland, 1994; Wyman, Cowen, Work, & Kerier, 1993
Fostering Resilience for students with LDs

Self-Understanding and Acceptance

- Counselors/therapists need to understand the effects of the LD on the child, as well as be able to distinguish between thoughts and behaviors caused by the disorder from those resulting from a reaction to the disorder
  - Such as, is the problem due to not understanding the direction or due to emotion?

Palombo, 2001
Fostering Resilience for students with LDs

Self-Understanding and Acceptance

Longitudinal study of individuals with LDs found that the most successful participants accepted their disability and could talk about their own strengths and weaknesses.

Understanding of the disability and self-awareness form protective factors that can facilitate lower levels of anxiety.

Higgins et al. 2002
Morrison & Cosden, 1997
Vogel, Hruby, & Adelman 1993
Fostering Resilience for students with LDs

Social Support

Supportive adults or mentors are able to foster trust and bolster the self-esteem of children with LDs.

Sometimes teachers can serve as protective factors by offering continual encouragement and mentorship.

Teachers can offset some risk factors by creating school climates where students can succeed (provision of positive experiences that enhance self-esteem and competence).

Bender et al., 1999
Brooks, 2001
Fostering Resilience for students with LDs

Social Support

Long-term educational benefits from positive school experiences may stem more from the student’s attitudes toward learning and the self-esteem than from what they are specifically taught in class.

Rutter, 1985
Fostering Resilience for students with LDs

Placement

Although a topic of much debate over the years, studies focused on self-concept and placement - findings have been that no one type of placement (e.g., Gen Ed, Resource) has been shown to be preferable for students with LDs.

Wiener & Tardiff, 2004
Elbaum, 2002
Elbaum & Vaughn, 2001
Fostering Resilience for students with LDs

Placement

Some studies found higher levels of depression in adolescents with LDs placed in Gen Ed environments versus students in more restrictive placements

Not as rated by students but by Guidance Counselors
Self-awareness, negative teacher & peer feedback as factors

Howard & Tryon, 2002
Fostering Resilience for students with LDs

Placement

Students with LDs need a strong support system throughout their school careers. A strong support system can help preserve self-concept and self-worth by:

• Keeping failure at a minimum
• Increasing acknowledgement of nonacademic competencies
• Emphasize learning goals over performance goals

Lerner, 2000
Fostering Resilience for students with LDs

Placement

When decisions about educational placement are being made, it is recommended that consideration of the student’s own preferences, as well as his or her academic, social, and emotional needs are considered. 

Elbaum, 2002
Assessment
Piers-Harris Children’s Self-Concept Scale, Second Edition

Ellen V. Piers, Ph.D.
David S. Herzberg, Ph.D.
Overview

- Assesses Self-Concept in children ages 7 to 18 years
- 60-item self-report measure using a Yes or No format
- 2\textsuperscript{nd} grade reading level
- AutoScore Form (Third Edition coming!)
- 2 Validity Scales and 7 Self-Concept Content Scales
- T-Scores
Scales

- Validity
  - Inconsistent Responding (INC)
  - Response Bias (RES)
- Content (Domain scales)
  - Behavioral Adjustment
  - Intellectual and School Status
  - Physical Appearance and Attributes
  - Freedom from Anxiety
  - Popularity
  - Happiness and Satisfaction
  - Total
Scoring and Interpretation

- First consider the validity of responses using the inconsistency and response bias scales
- T scores (M=50, SD 10)
## Scoring and Interpretation

**T-Score ranges for TOTAL scale**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 29</td>
<td>Very Low</td>
</tr>
<tr>
<td>30-39</td>
<td>Low</td>
</tr>
<tr>
<td>40-44</td>
<td>Low Average</td>
</tr>
<tr>
<td>45-55</td>
<td>Average</td>
</tr>
<tr>
<td>56-59</td>
<td>High Average</td>
</tr>
<tr>
<td>60-69</td>
<td>High</td>
</tr>
<tr>
<td>&gt; 70</td>
<td>Very High</td>
</tr>
</tbody>
</table>
### Scoring and Interpretation

**T-Score ranges for Domain Scales**

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>T-Score Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>≤ 29</td>
</tr>
<tr>
<td>Low</td>
<td>30-39</td>
</tr>
<tr>
<td>Low Average</td>
<td>40-44</td>
</tr>
<tr>
<td>Average</td>
<td>45-55</td>
</tr>
<tr>
<td>Above Average</td>
<td>≥ 56</td>
</tr>
</tbody>
</table>
Psychometric Properties

- Standardized on a sample of 1,387 students
- **Reliability:** Internal consistency estimates
  - Total .91
  - Behavioral Adjustment .81
  - Intellectual and School Status .81
  - Physical Appearance and Attributes .75
  - Freedom From Anxiety .81
  - Popularity .74
  - Happiness and Satisfaction .77

- **Validity:** Factor analysis, divergent and convergent analyses, and clinical group analyses
Overview

- Assesses the level and nature of anxiety in children from 6 to 19 years
- 49-item self-report measure (group or individual) using a Yes or No format
- 2nd grade reading level
- Short or Long Form (Spanish available)
- Audio CD available
- AutoScore Form (soon to be added to the OES)
- 6 Scales (2 Validity and 4 Content)
- T-Scores
Scales

- **Validity**
  - Inconsistent Responding (INC)
  - Defensiveness (DEF)

- **Content**
  - Total Anxiety
  - Physiological Anxiety
  - Worry
  - Social Anxiety
Scoring and Interpretation

- First consider the validity of responses using the inconsistency and defensiveness scales
- T scores (M=50, SD 10)

<table>
<thead>
<tr>
<th>T-Score range</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>71 and higher</td>
<td>Extremely problematic</td>
</tr>
<tr>
<td>61–70</td>
<td>Moderately problematic</td>
</tr>
<tr>
<td>40–60</td>
<td>No more problematic than for most students</td>
</tr>
<tr>
<td>39 and lower</td>
<td>Less problematic than for most students</td>
</tr>
</tbody>
</table>
Psychometric Properties

- Standardized on a sample of 2,368 students from a full reference sample of 3,086 students
- **Reliability:** Chronbach’s Alfa Full Reference Sample
  - Total Anxiety .92
  - Physiological Anxiety .75
  - Worry .86
  - Social Anxiety .80
  - Defensiveness .79
  - Short Form Total Anxiety .82
- **Validity:** Factor analysis, divergent and convergent analyses, and clinical group analyses
Children’s Depression Rating Scale, Revised

Elva O. Poznanski, M.D.
Hartmut B. Mokros, Ph.D.
Overview

- Assesses depression and can be used to monitor treatment response in children ages 6 to 12 years
- Brief rating scale based on a semi-structured interview
- Responses rated on a 7 point scale
- 17 Symptom areas
- T-Score for Summary Score
- Comparison across 17 areas from parent vs child
<table>
<thead>
<tr>
<th>Scales</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired Schoolwork</td>
<td>Low Self-Esteem</td>
</tr>
<tr>
<td>Difficulty Having Fun</td>
<td>Depressed Feelings</td>
</tr>
<tr>
<td>Social Withdrawal</td>
<td>Morbid Ideation</td>
</tr>
<tr>
<td>Appetite Disturbance</td>
<td>Suicidal Ideation</td>
</tr>
<tr>
<td>Sleep Disturbance</td>
<td>Excessive Weeping</td>
</tr>
<tr>
<td>Excessive Fatigue</td>
<td>Depressed Facial Affect</td>
</tr>
<tr>
<td>Physical Complaints</td>
<td>Listless Speech</td>
</tr>
<tr>
<td>Irritability</td>
<td>Hypoactivity</td>
</tr>
<tr>
<td>Excessive Guilt</td>
<td></td>
</tr>
</tbody>
</table>
School Motivation and Learning Strategies Inventory (SMALSI)

Kathy Chatham Stroud, Ph.D.
Cecil R. Reynolds, Ph.D.
Overview

- Assesses student strengths and liabilities related to:
  - Motivation, Learning Strategies, Study Habits
- Three forms (Child 8-12 yrs., Teen 13-18 yrs., College)
- Self-report measure (group or individual) using a Likert format (Never, Sometimes, Often, Almost Always)
- 3rd grade reading level (approximately 30 minutes)
- Group or Individual administration
- Audio CD available (child and teen forms)
- AutoScore Form or WPS Online Evaluation System
Focuses on Strategies

- SMALSI is a measure of how children and adolescents describe their own learning, study, and test-taking strategies; their level of academic motivation; and any symptoms of test anxiety that they experience.

- Important for schools to evaluate student strengths and weaknesses in the development of effective learning strategies so that students with needs can be given particular attention. (Typical curriculum does not always include routine instruction in these areas.)
Focuses on Strategies

The School Motivation and Learning Strategies Inventory (SMALSI) lets you identify and address these and other problems before students become discouraged, fail classes, or drop out of school.
Scales

- **Validity**
  - Inconsistent Responding

- **Strengths**
  - Study Strategies
  - Note-Taking/Listening Skills
  - Reading/Comprehension Strategies
  - Writing/Research Skills
  - Test-Taking Strategies
  - Organizational Technique
  - Time Management
  - Time Management/Organizational Techniques

- **Liabilities**
  - Low Academic Motivation
  - Test Anxiety
  - Concentration/Attention Difficulties
Scoring and Interpretation

- First consider the validity of responses using the Inconsistent Responding Index (INC) - see guidelines
- Scales: T scores (M=50, SD 10)

### Suggested Qualitative Descriptors

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Strength Scales</th>
<th>Liabilities Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td>71 and higher</td>
<td>Extremely well developed</td>
<td>Extremely Problematic</td>
</tr>
<tr>
<td>61-70</td>
<td>Very well developed</td>
<td>Moderately Problematic</td>
</tr>
<tr>
<td>40-60</td>
<td>Average in development</td>
<td>No more problematic than for most students</td>
</tr>
<tr>
<td>30-29</td>
<td>Below average in development</td>
<td>Less problematic than for most students</td>
</tr>
<tr>
<td>29 and lower</td>
<td>Inadequately developed</td>
<td>Minimally problematic</td>
</tr>
</tbody>
</table>
Psychometric Properties

- **Child Form:** 8-12 years Standardized on a sample of 1,821 students
- **Reliability:** Chronbach’s Alfa Child Form
  - Study Strategies .77
  - Note-Taking/Listening Skills .81
  - Reading/Comprehension Strategies .79
  - Writing/Research Skills .69
  - Test-Taking Strategies .76
  - Time Management/Organizational Techniques .77
  - Low Academic Motivation .83
  - Test Anxiety .89
  - Concentration/Attention Difficulties .85
- **Validity:** Correlations with BASC, TX Assessment of Knowledge & Skills
Psychometric Properties

- **Teen Form:** 13-18 years Standardized on a sample of 1,100 students
- **Reliability:** Chronbach’s Alfa **Teen Form**
  - Study Strategies .86
  - Note-Taking/Listening Skills .86
  - Reading/Comprehension Strategies .82
  - Writing/Research Skills .77
  - Test-Taking Strategies .84
  - Organizational Techniques .79
  - Time Management .81
  - Low Academic Motivation .83
  - Test Anxiety .91
  - Concentration/Attention Difficulties .88
- **Validity:** Correlations with BASC, TX Assessment of Knowledge & Skills
ALSO
WPS distributes for other publishers

- Executive Function, Attention, Memory
  - BRIEF 2
  - CEFI
  - CAS 2
  - WRAML 2
  - ChAMP
  - TOVA
  - Wisconsin Cart Sorting Test
  - Comprehensive Train-Making Test
ALSO

WPS distributes for other publishers

- Depression and Self-Concept
  - Children’s Depression Inventory, 2nd Edition
  - Reynolds Adolescent Depression Scale
  - Multiscore Depression Inventory for Children
  - Tennessee Self-Concept Scale, 2nd Edition
WPS® Online Evaluation System™
WPS Online Evaluation System: SMALSI

- Child and Teen Record Forms in your packet
- Free samples of scoring credits for the OES available
- Contact me @ arogers@wpspublish.com if you would like to sample the system.
Intervention
Intervention/Strategies for Success

- Academic Achievement is a protective factor.
  - Teaching students with LDs strategies to succeed increases the probability of success

- Providing instruction in social-emotional skills, including self-awareness is equally important to academic instruction

Goldstein and Brooks, 2013
The SMALSI Intervention Manual
Strategies for Academic Success

- **Section I:**
  An Introduction to Learning Strategies

**Chapter 1:** An Introduction to Learning Strategies:
Assessment and Development

**Chapter 2.** The Research Evidence From the Education Sciences: How Teaching Learning and Study Strategies Enhances Learning
The SMALSI Intervention Manual
Strategies for Academic Success

Section II:
Strategies for Developing Learning Strengths

7 Chapters—one for each SMALSI Strength Scale
Chapter 3. Teaching Study Strategies

- The SMALSI and Study Strategies
- What Are the Best Study Strategies?
- Teaching the Best Study Strategies
- Teaching Students to Improve Their Concentration When Studying
- Teaching Students to Improve Memorization
- Teaching Students to Develop Associations With Prior Learning
- Teaching Students to Use Self-Talk During Study
- Teaching Students to Use Concept Maps
- Teaching Students to Use Multiple Sources of Information
- Summary
The SMALSI Intervention Manual
Strategies for Academic Success

Section III:
Strategies for Overcoming Academic Liabilities

3 Chapters—one for each SMALSI Liabilities Scale
Chapter 12. Enhancing Low Academic Motivation

- The SMALSI and Academic Motivation
- What Are the Best Academic Motivation Strategies?
- Teaching the Best Academic Motivation Strategies
- Teaching Students to Set Goals and Increase Self-Determinism
- Teaching Students About Choice and Preference
- Teaching Students About Participation and Involvement
- Teaching Students to Understand Situated Motivation and the Impact of the Environment
- Teaching Students to Unlearn a History of Failure by Setting Up Success
- Summary
The SMALSI Intervention Manual
Strategies for Academic Success

Supplemental Information

- Appendix A: Web Sites With Supplemental Information on Improving Learning and Study Strategies
- Appendix B: Reproducible Figures
- References
Opportunities with WPS
Data Collection with WPS

- Always looking for a “pool” of data collectors
- Earn money / materials by collecting data on children, adolescents, and adults for new and assessments being revised
- You earn money and the participants you recruit and test also receive monetary incentives
- Contact: study@wpspublish.com
- Current projects: Developmental Profile, 4th Edition; Sensory Processing Measure, 2nd Edition; Risk & Resilience Scales
- Standardization Data Needed: typically developing individuals ages 0–90
- Clinical groups needed: ASD, ADHD, Conduct Disorder, Trauma, Learning disabilities, eating disorder, suicide risk, motor impairment, developmental delay, sensory integration/processing disorders, traumatic brain injury
For further information, please contact me directly:

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