Psychometric Support for the Devereux Adult Resilience Survey (DARS)

*Amanda Ball, Professional Psychology Trainee, 2008-2009
Mary Mackrain, Early Childhood Mental Health Consultant*

*Introduction*

Authored by Mary Mackrain, the Devereux Adult Resilience Survey (DARS) is a 23-item reflective checklist that provides adults with information about their personal strengths. The information can be used to help individuals build on these strengths, such as creativity and setting limits, so that they can better cope with adversity and the stresses of daily life.

Statistical analysis shows that the DARS is an excellent tool for providing adults with an opportunity to gain valuable insights, particularly in these four areas:

1. **Relationships**: The mutual, long-lasting back-and-forth bond we have with another person in our lives.
2. **Internal Beliefs**: The feelings and thoughts we have about ourselves and our lives, and how effective we think we are at taking action in life.
3. **Initiative**: The ability to make positive choices and decisions and act upon them.
4. **Self-Control**: The ability to experience a range of feelings, and express them using the words and actions society considers appropriate.

The purpose of the DARS is not to compare individual’s scores to the population, but to give adults, more specifically teachers, parents and caregivers of young children the opportunity to become aware of personal strengths and areas of need. Upon completion of the Devereux Adult Resilience Survey, individuals are encouraged to use the *Building Your Bounce: Simple Strategies for a Resilient You* Reflective Journal. This journal provides suggested strategies for strengthening adults’ protective factors shown to support resilience.

*Development of the DARS*

The DARS items are based on information from a thorough literature review of adult resilience, national focus groups with adults who care for and work on behalf of young children (families, home visitors, infant mental health specialists, early care and education providers) and conversations with national experts. The focus groups and conversations with national experts focused on gathering information related to 1) what behaviors adults felt were important to help them bounce back in life as well as, 2)
what behavior adults need to provide nurturing, quality care to young children. What resulted was a set of 23 items across four domains, relationships, initiative, internal beliefs and self-control. Literature and information from focus groups and experts in this field, support the importance of these protective factors in supporting adult resilience.

**Psychometric Support**
A research study investigated the reliability and validity of the DARS by correlating participants’ scores on the DARS with their respective scores on the Connor-Davidson Resilience Scale (CD-RISC), a resilience scale that is supported by the literature (Connor & Davidson, 2003). The researchers were given permission by the CD-RISC authors to use their scale for this purpose. This study also investigated the reliability of the DARS as a whole, as well as its subscales: relationships, internal beliefs, initiative, and self-control.

**Method**
The DARS and the CD-RISC were both completed on-line. An email invitation, which included a link to the two scales, was sent to the Devereux employee database and the Devereux Early Childhood Initiative (DECI) contact database. The DECI contact database has over 2,000 early childhood members nationwide. The email briefly described the study so that the participants knew beforehand what their involvement would entail. In order to control for practice effects, half of the participants (51.6%) received a survey with the DARS presented first, and half (48.4%) received a survey with the CD-RISC presented first.

**Participants**
There were 721 participants in the DARS study. This sample population has a distribution similar to the U.S. Census Bureau 2007 population data in regards to race, ethnicity, and age. In regards to gender, more females participated in the study than males.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Race</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>White</td>
</tr>
<tr>
<td>15.1%</td>
<td>84.9%</td>
<td>83.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
</tr>
<tr>
<td>6%</td>
</tr>
</tbody>
</table>

**Research Questions and Results**
1. *Does the DARS measure behaviors related to resilience?*

Yes, previously published research shows that the CD-RISC does measure behavior related to resilience. This study shows that scores on the DARS are similar to scores on the CD-RISC
(Spearman rho=.582, \( p=0.000 \)). Therefore, this study supports that the two scales measure similar behaviors related to resilience.

2. Do specific scales on the DARS correlate with specific factors (scales) on the CD-RISC?

No, all of the DARS scales (relationships, internal beliefs, initiative, self-control) correlate the highest with CD-RISC’s factor 4 which relates to a sense of control. However, there is a slightly lower, but significant correlation between many of the CD-RISC factors and DARS scales. These other factors are personal competence, intuition and coping with stress, secure relationships, and spiritual influences. These results show that in general, the two scales correlate with each other.

3. Is the DARS a reliable measure?

One important aspect of reliability is internal consistency. This is a measure of the degree to which the items on a scale like the DARS measure the same concept. The DARS has high internal consistency. (Cronbach’s alpha for the full scale was \( \alpha=0.762 \)).

4. Did the above statistical analyses differ for men and women?

No, when the analyses were done with only women, the internal consistency scores and other correlations did not change significantly. In addition, the average scores for males (\( M_{DARS}=39.4, s_{DARS}=4.2, M_{CDRISC}=79.2, s_{CDRISC}=11.2 \)) and females (\( M_{DARS}=39.7, s_{DARS}=4.1, M_{CDRISC}=78.5, s_{CDRISC}=11.0 \)) were very similar for both assessments and did not differ significantly (\( t_{DARS}(719)=-0.561, p_{DARS}=0.58, t_{CDRISC}(719)=0.602, p_{CDRISC}=0.55 \)).

5. Why should we use a tool like the DARS?

The purpose of the DARS is for adults to be able to reflect on their own lives—it is a simple way to become aware of personal strengths and areas of need. It is also especially geared toward those who work in the early childhood field, including Devereux Early Childhood Assessment Program (DECA), the Devereux Early Childhood Assessment Program for Infants and toddlers (DECA-I/T) and the Devereux School Age Assessment (DESSA) users. The DARS has a companion guide titled, Bouncing Back: Simple Strategies for a Resilient You, which helps adults develop the strengths that the DARS identifies.

Conclusions

This statistical analysis shows that the DARS is a reliable and valid tool that can be used by adults to nurture their own personal strengths, thereby supporting resilience, the ability to bounce back from life challenges. Young children need responsible, loving care and adults who are able to care for themselves are better able to support the needs of children within their care.

References