

## Developmental Assets Profile: Technical Summary

The *Developmental Assets Profile* (DAP) has been through extensive psychometric testing with a variety of youth populations. It has been found to be a reliable, valid, and stable measure of young people’s strengths and supports. This document provides a general overview of the data on the DAP’s psychometric properties.

Two field tests were completed before the DAP was released in 2004. Subsequent studies have affirmed the field test results. The initial two field tests were:

1. A sample of 1,300 6th through 12th grade student from a Minnesota school district completed the DAP along with Search Institute’s longer assets survey, *Profiles of Student Life: Attitudes and Behaviors* (A&B survey). A subsample of over 200 students also completed the DAP twice over a two-week interval to determine test-retest reliability.
2. A sample of 1,110 6th- through 8th-grade students in Oregon completed the DAP and A&B survey. This sample broadened geographic representation, and increased racial and ethnic diversity. This field test also included two measures of self-esteem.

**Internal Consistencies** were relatively high in the field test (MN), and averaged .81 for the eight asset category scales. Internal consistency was .95 for Internal assets, .93 for External assets, and .97 for Total assets. Internal consistency is lower for Constructive Use of Time (.59). Internal consistency might be less relevant for a scale reflecting involvement in a variety of enriching activities. Results did not vary significantly between groups.

**Test-Retest Reliability:** Two-week test-retest reliability for 6<sup>th</sup> - 12<sup>th</sup> graders (n=225) were acceptable, averaging  $r=.79$  for the eight asset categories. Test-retest reliability for the *Internal Assets Score* was  $r=.86$  and  $r=.84$  for the *External Assets Score*. Test-retest reliability for *Total Asset Score* was  $r=.87$ . Despite lower internal consistency, *Constructive Use of Time* had acceptable test-retest reliability, especially among females ( $r=.79$ ) and high school youth ( $r=.75$ ).

### Internal Consistency of DAP Scales

(MN field test; Cronbach’s coefficient alpha)

<b>TOTAL DAP SCORE</b>	<b>.97</b>		
<b>EXTERNAL ASSETS</b>	<b>.93</b>	<b>INTERNAL ASSETS</b>	<b>.95</b>
Support	.85	Commitment to Learning	.85
Empowerment	.77	Positive Values	.87
Boundaries & Expectations	.87	Social Competencies	.82
Constructive Use of Time	.59	Positive Identity	.85
<b>CONTEXTS</b>			
Personal	.87	School	.89
Social	.90	Community	.85
Family	.91		

**Concurrent Validity:** The original *Attitudes & Behaviors* (A&B) survey, which measures each of the 40 assets, has been used with more 4 million youth. It allows us to test concurrent validity of the DAP. It also measures risk behaviors, providing an opportunity to test the relationship of DAP scores with these measures. The MN pilot test yielded the following:

- **Total Asset Scores**—The correlation between the DAP *Total Asset Score* and the total number of assets derived from the A&B survey was  $r=.82$ ,  $p<.001$ , indicating very strong linear relationship. As the number of assets increased from 0 to 40, mean scores on the DAP increase systematically.
- **Levels of Assets**—Among youth with 0-10 A&B assets, the mean *Total Asset Score* was in the *Challenged* range (0-29) defined for the DAP. Youth with 11-19 assets had DAP scores in the *Vulnerable* range on average, those with 21-30 assets were in the *Adequate* range on average, and those with 31-40 assets were in the *Thriving* range on average.
- **High-risk behaviors**—Ten high-risk behavior patterns were assessed using the A&B survey. Higher scores on both the DAP and the A&B were negatively related to the risk behavior indices. Youth scoring in the *Low* range on the DAP *External Assets* scale, reported on average 3.2 and 2.8 risk behavior patterns for males and females, respectively. Youth

scoring in the *Thriving* range on the DAP External Assets scale, reported on average only 0.5 risk behavior patterns for males and 0.3 for females.

- *School Success*—Internal Assets accounted for or “explained” 18% of the variation in students’ self-reported grades.
- *Thriving*—Both females and males in the *Challenged* range on the DAP reported few thriving indicators, such as school success, affirmation of diversity, and leadership (mean = 2.2 and 2.6 for males and females respectively, out of 8). Mean number of thriving indicators increased successively for *Vulnerable*, *Adequate*, and *Thriving* ranges, with youth in the *Thriving* range reporting about 6 of 8 thriving indicators.
- *Asset Category Scales*—Convergence between the DAP Asset Category scales and corresponding asset counts from the A&B was moderately high, averaging  $r=.62$  for the entire sample. For example, the correlation between the DAP *Social Competencies* scale and number of social competence assets derived from the A&B survey was  $r=.66$ .

<b>Correlations Between Summary Scores on DAP and A&amp;B and Risk Behaviors, Thriving Indicators, and Grades</b>			
	<b>High-Risk Behavior Patterns</b>	<b>Thriving Indicators</b>	<b>Self-Reported Grades</b>
<b>DAP</b>			
Total Assets	-0.48	0.63	0.46
External Assets	-0.40	0.63	0.47
Internal Assets	-0.49	0.65	0.48
<b>A&amp;B Survey</b>			
Total Assets	-0.46	0.60	0.41
External Assets	-0.48	0.68	0.49
Internal Assets	-0.51	0.68	0.49
All correlations are significant $p<.001$ . Overall $n=1,312$ varies slightly for each analysis due to missing data.			

### Additional Reliability Tests

Since the original field test, a number of DAP studies have been completed in the United States, and more than a dozen internationally. Eight community studies were analyzed to assess internal consistency reliability, as shown below (category scores only; Cronbach’s coefficient alphas). These results reinforced the field test findings. Studies in 18 other countries with language adaptations generally have shown similarly strong psychometrics for the DAP across cultural settings.

	<b>CA</b>	<b>OH</b>	<b>TX</b>	<b>SC</b>	<b>MD</b>	<b>WI</b>	<b>OR</b>	<b>CO</b>
N =	488	219	612	355	359	567	688	454
Support	.81	.75	.81	.75	.79	.80	.79	.70
Empowerment	.69	.69	.69	.72	.73	.77	.74	.52
Boundaries & Expectations	.80	.77	.83	.79	.84	.84	.82	.73
Constructive Use of Time	.48	.51	.54	.57	.44	.56	.48	.51
Commitment to Learning	.76	.78	.82	.80	.87	.84	.80	.76
Positive Values	.78	.80	.83	.80	.84	.86	.83	.78
Social Competencies	.75	.79	.78	.72	.81	.82	.79	.71
Positive Identity	.76	.83	.79	.79	.82	.81	.81	.69

Complete information about the DAP psychometric properties is available in the technical manual from Search Institute.

### Independent Measurement Reference Guides that Highlight the *Developmental Assets Profile*

Social Development Research Group, University of Washington (2011). *Social-emotional learning assessment measures for middle school youth*. Seattle, WA: Raikes Foundation. <http://raikesfoundation.org/Documents/SELTools.pdf>

Dubois, D., Ji, P., Wilson-Ahlstrom, A., & Yohalem, N. (2011). *From soft skills to hard data: Measuring youth program outcomes*. Washington, DC: The Forum for Youth Investment. [www.forumfyi.org/files/Soft\\_Skills\\_Hard\\_Data.pdf](http://www.forumfyi.org/files/Soft_Skills_Hard_Data.pdf)