








**Measuring and Strengthening Perseverance:
The Challenges and Opportunities of Working
on Noncognitive Skills**

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Search Institute, Minneapolis, MN

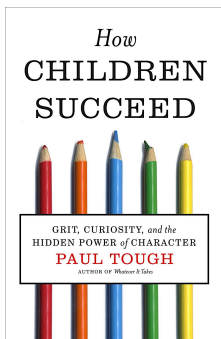


Categories of Developmental Assets


External Assets (Supports)	Internal Assets (Strengths)
 Support	 Commitment to Learning
 Empowerment	 Positive Values
 Boundaries & Expectations	 Social Competencies
 Constructive Use of Time	 Positive Identity



A Growing National Discussion

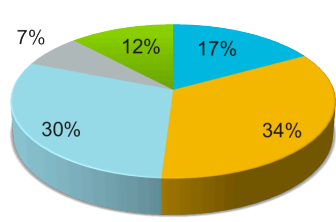


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Implications for Higher Education

Relative Strength of Predictors of College GPA



- Academic Behaviors
- High School Grades
- ACT Composite Score
- Institutional Factors
- Student Demographics

Source: ACT Issue Brief, Enhancing College and Career Readiness and Success: The Role of Academic Behaviors, 2012

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% of Employers Who Rate Skills as Very Important

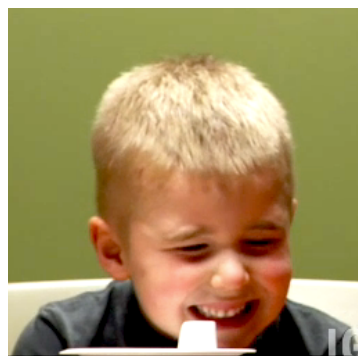
Skill	Very Important for College Grads	Very Important for High School Grads
Oral Communications	95%	70%
Teamwork/Collaboration	94%	75%
Professionalism/Work Ethic	94%	80%
Critical Thinking	92%	58%
Ethics/Social Responsibility	86%	63%
English Language	88%	62%
Mathematics	64%	30%
Science	33%	9%

Source: Casner-Lotto, J., & Barrington L. (2006) Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century workforce. New York: The Conference Board

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The Appeal of Marshmallows



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Another Kind of Readiness



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Abraham Lincoln's Advice, 1855

"Your own resolution to succeed is more important
than any other one thing."

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Some naturally persevere because...



and others persevere because...





But...

In a study of high school dropouts, 69 percent said that school had neither motivated nor inspired them



Source: Bridgeland, Dilulio, & Morison, 2006

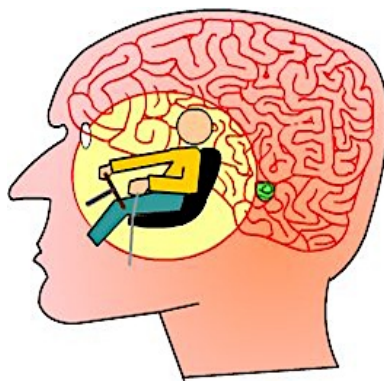
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How do we strengthen perseverance?



Breaking Down the Problem





The Perseverance Process

- | | |
|--|--------------------------------------|
| S hare Sparks | T hink About Thinking |
| T hink Forward, Act Now | O rganize Life |
| I ncrease Intelligence
with Effort | I nternalize Regulation |
| C reate a Sense of
Belonging | T ake Stock and Take
Pride |
| K eep Moving Through
Obstacles | |

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Search Institute's Definition

PERSEVERANCE

Young people's ability to achieve important goals and accomplish challenging tasks in school and in life.

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Early Search Institute Research

Initial Measures

- 25 years ago
 - a single item on whether it is “like me” to give up when things get difficult
- 15 years ago
 - a 10-item “being persistent” scale

Still focused just on trying hard and not giving up

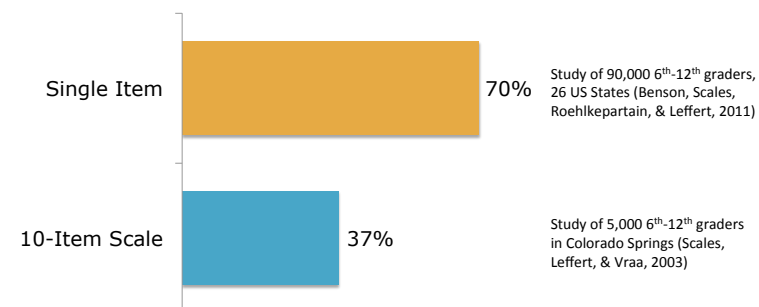
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Measures Matter

Percent Agreeing They Are Persistent

Single-Item vs. Multi-Item (But Still Uni-Dimensional)



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Influence of Other Researchers

On Search Institute's Conceptualization of Perseverance

Angela Duckworth	Grit and self-control
Carol Dweck	Growth mindset, academic tenacity
David Conley	Time management
UC Consortium on Chicago School Research	Non-cognitive factors that shape students' school performance
CASEL	Social-emotional learning
Among many others	

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Individual & Ecological Dimensions

- **"G" factor aspects:** More stable across context (akin to personality trait of conscientiousness)
- **Domain or setting/context-specific aspects:** Vary by situation

"Learning is an interplay between cognitive and non-cognitive factors ... intelligence is embedded in both the environment and in socio-cultural processes."

— Farrington et al., 2012, UC Consortium on Chicago School Research

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A Broad Umbrella Concept

- Multiple inter-related concepts that bi-directionally influence each other over time
- Cross-loading of several items from three factors:
 - Being persistent (not giving up when things get hard)
 - Taking measured, thoughtful actions
 - Delaying gratification
- Similar to Chicago Consortium conclusion about inter-relationship of non-cognitive factors such as grit, self-control, self-discipline, academic mindsets, and social skills.

SOURCE: Factor analysis of Colorado Springs data from 6th-12th graders (Scales, Leffert, & Vraa, 2003)

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SI's Dimensions of Perseverance

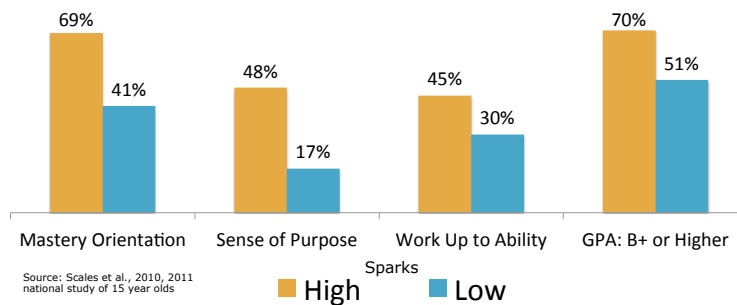
1. Inner Drives and Deepest Interests ("Sparks")
2. Vision of and Actions to Reach Future Goals
3. Growth Mindset
4. Mental Toughness
5. Support and Challenge Through Relationships

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1. Inner Drives, Deepest Interests

- Has a deep interest, talent, or “spark”
- Lets others know about their spark
- Has a desire to achieve and succeed



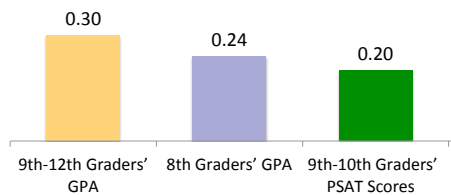
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2. Vision of/Actions to Reach Goals

- Has a positive vision of their future possibilities and goals
- Takes steps now to reach their longer-term goals, including managing their emotions and behavior

Significant Correlations of Time Management Skills with Next Year's GPA and PSAT Scores



Sample: Urban, poor, African American and Latino

Source: Study of 20,000 Dallas ISD students (Scales, Pekel, Roehlkepartain, & Syvertsen, 2014, in preparation)

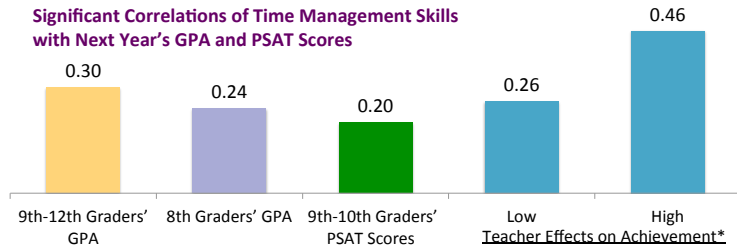
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* Nye, Konstantopoulos, & Hedges, 2004

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3. Growth Mindset

- Believes they can get smarter
- Believes in their competence and that they can achieve success through hard work
- Is open to challenges
- Is focused on improving her or his personal "bests"

Significant Developmental Asset Correlates of Being Persistent, Across 6 Racial/Ethnic Groups

All 6	Self-Efficacy
4 of 6	Time in Youth Programs
3 of 6	Achievement Motivation
2 of 6	School Engagement
1 of 6	Integrity, Sense of Purpose, Positive View of Future

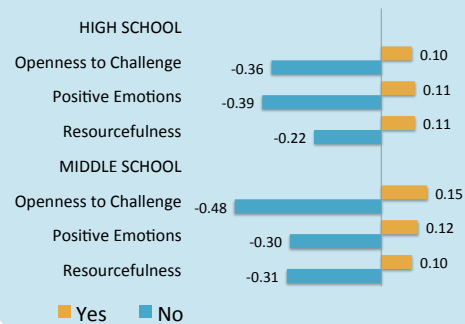
Study of 6,000 6th-12th grade youth from 213 U.S. communities (Scales, Benson, Leffert, & Blyth, 2000)

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4. Mental Toughness

- Is determined
- Feels she or he can overcome adversity
- Stays emotionally positive and optimistic despite setbacks and disappointments
- Accepts mistakes as part of growing and learning

Significant Differences in Mean High Grades, by Aspects of Mental Toughness

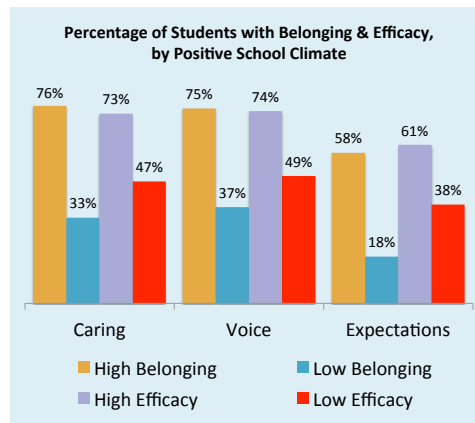


Source: Unpublished 2014 analyses from study of 1,172 9th-12th graders and 1,359 6th-8th graders in Ohio school district (Benson & Scales, 2009)

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5. Support, Challenge Through Relationships

- **Specific** peer and adult support for striving
- **General** peer and adult . . .
 - Express care
 - Challenge growth
 - Provide support
 - Share power
 - Expand possibilities



Scales & Benson (2007)

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PYD Framework for Perseverance

Multiple Dimensions, Multiple Settings

“The mechanisms through which teachers can lead students to exhibit greater perseverance and better academic behaviors in their classes are through attention to academic mindsets and development of students’ metacognitive and self-regulatory skills, rather than trying to change their innate tendency to persevere.”

“The research evidence to date suggests that trying to change noncognitive factors at the individual level in isolation from context may not be effective in the long term.”

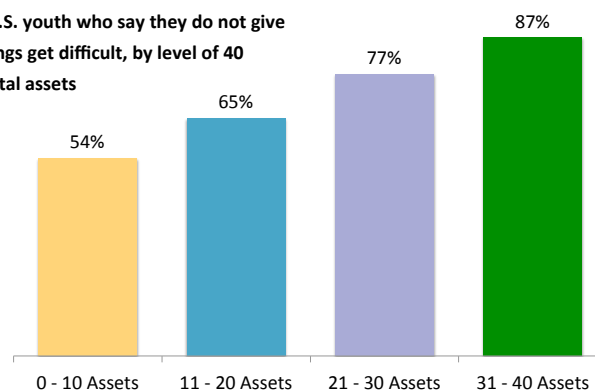
— Farrington et al., 2012

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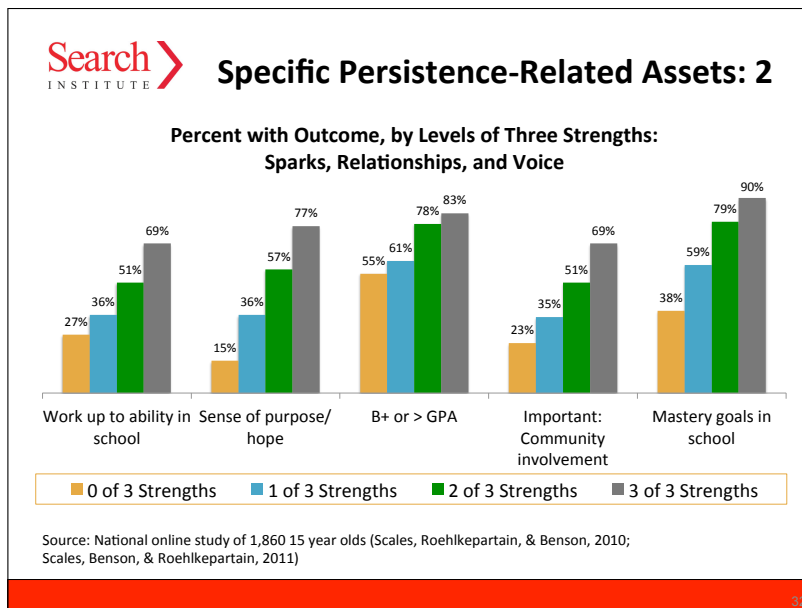
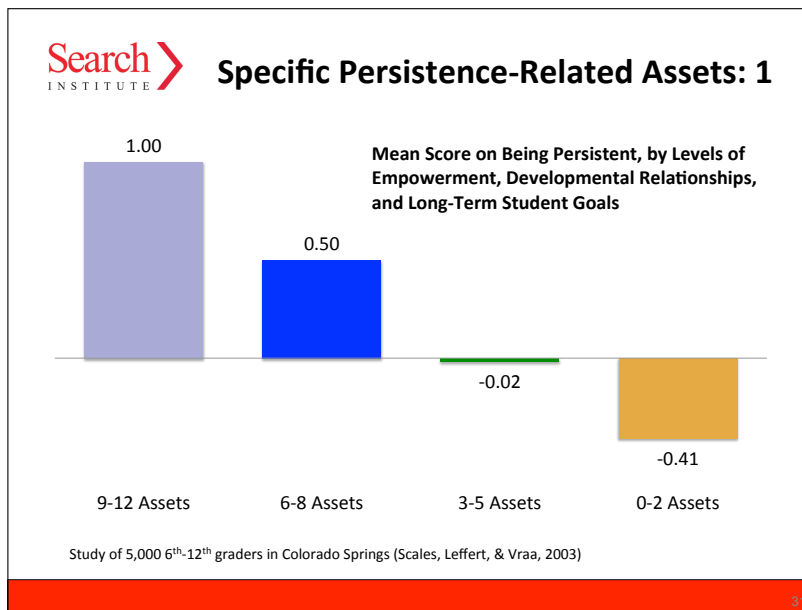
Assets & Perseverance

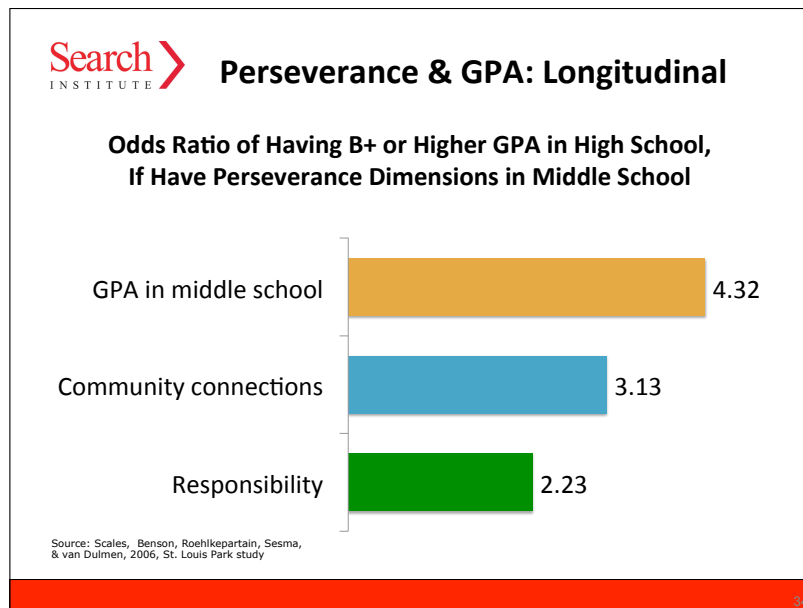
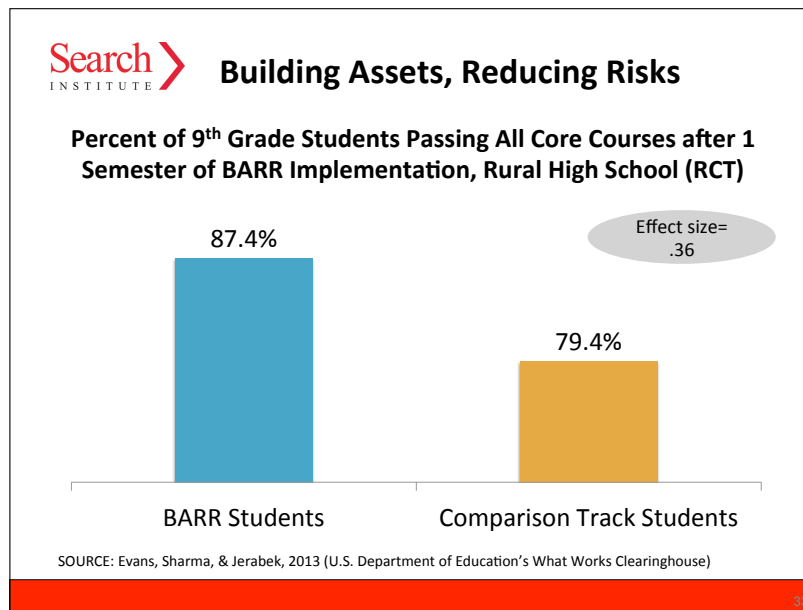
Percent of U.S. youth who say they do not give up when things get difficult, by level of 40 developmental assets



Source: 2010 aggregate survey of nearly 90,000 6th-12th graders (Benson, Scales, Roehlkepartain, & Leffert, 2011)

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SI's Dimensions of Perseverance

1. Inner Drives and Deepest Interests ("Sparks")
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- ☐ Pilot testing and revision in rest of 2014
- ☐ Beyond Measurement: The Perseverance Process
- ☐ Survey and supports available by January, 2015

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Perseverance Survey & Workshops

- To participate in the pilot administration of Search Institute's new Perseverance Survey, please contact Justin Roskopf at justinr@search-institute.org or at 612-692-5510 or 800-888-7828, extension 510.
- To participate in a Perseverance Process workshop conducted by Kent Pekel, please contact Mary Shrader at marys@search-institute.org or at 612-692-5526 or 800-888-7828, extension 526.

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Thank you and good luck on the road to non-cognitive
Nirvana.