Session Overview

1. Why care about meaning-making interventions?

2. What is "meaning-making"?

3. Social psychological needs underlying adolescent meaning-making

4. How do meaning-making interventions work?

5. Why meaning-making is as important as skill-building for achieving equitable outcomes
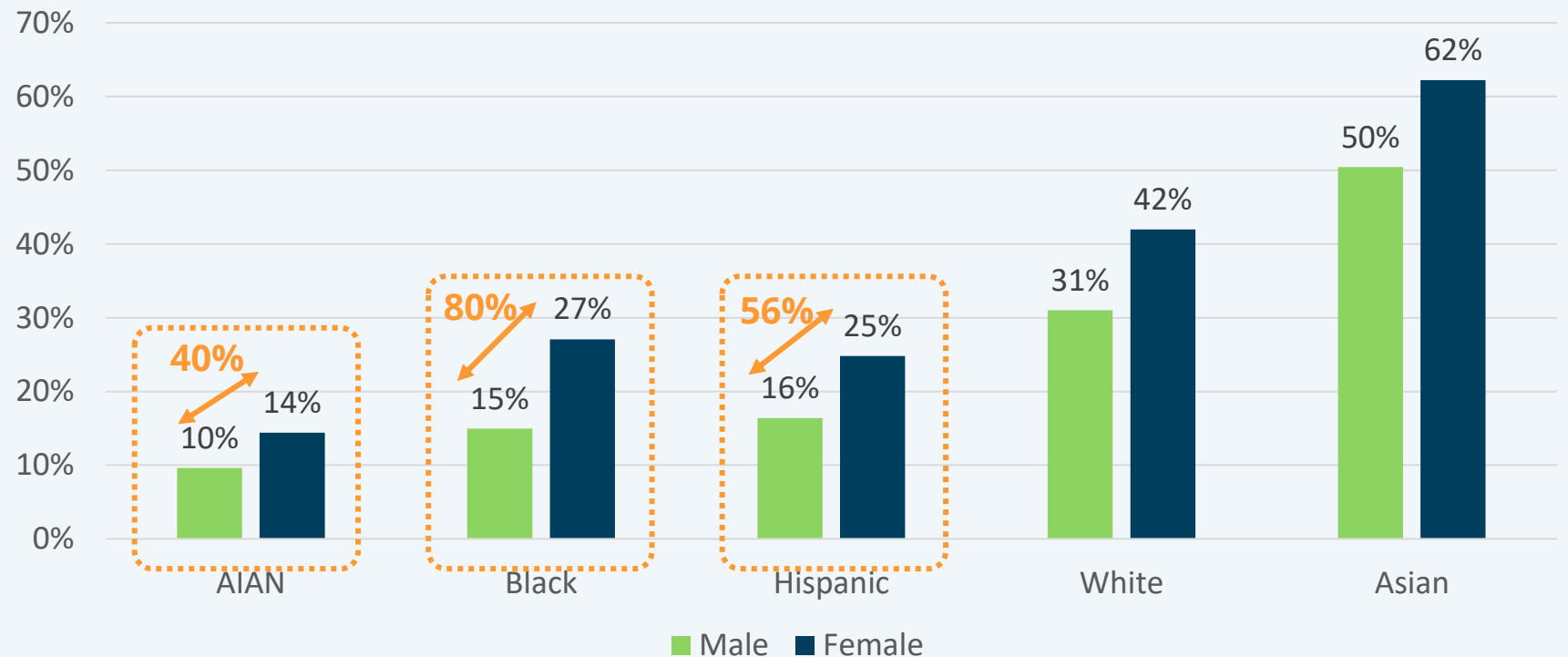
Education Mobility Gaps

College Graduation Rates

Black, Latino and American Indian youth have **low rates of college graduation** with large gender gaps for all three groups

College Graduate or Higher by Race and Gender
(All U.S. Children Born 1978-1983)

	Male	Female	Gap
AIAN	10%	14%	40%
Black	15%	27%	80%
Hispanic	16%	25%	56%
White	31%	42%	
Asian	50%	62%	

Legend: ■ Male (green) ■ Female (dark blue)

High Downward Education Mobility

Black, Latino and American Indian youth have **high rates of downward educational mobility** with sizable gender gaps

Parent(s) Graduated College, but Child Did not
(All U.S. Children Born 1978-1983)

Race	Male	Female
White	44%	31%
Black	68%	48%
Asian	37%	25%
Latino	61%	49%
AIAN	76%	67%

■ Male ■ Female
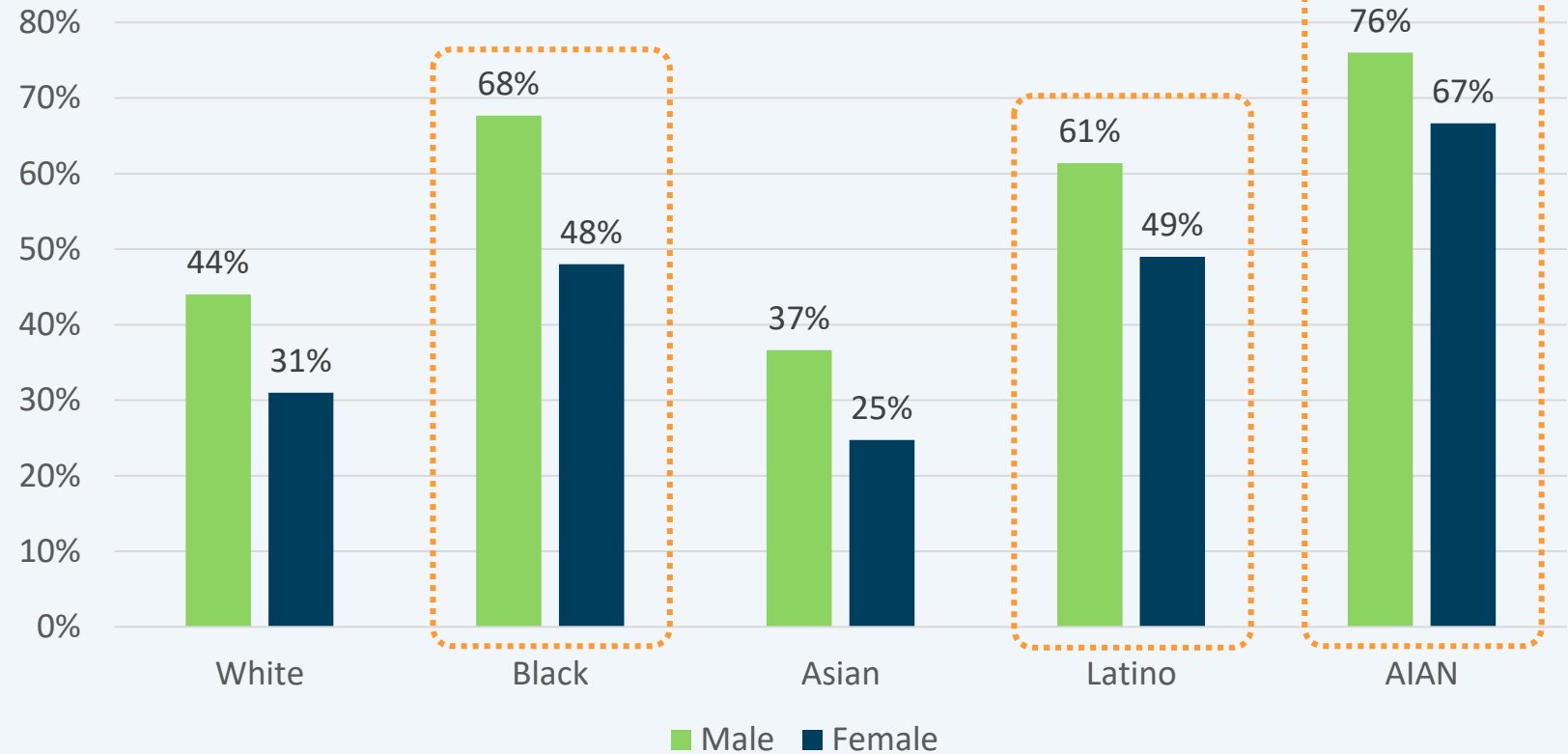
Why Care about Meaning-Making Interventions

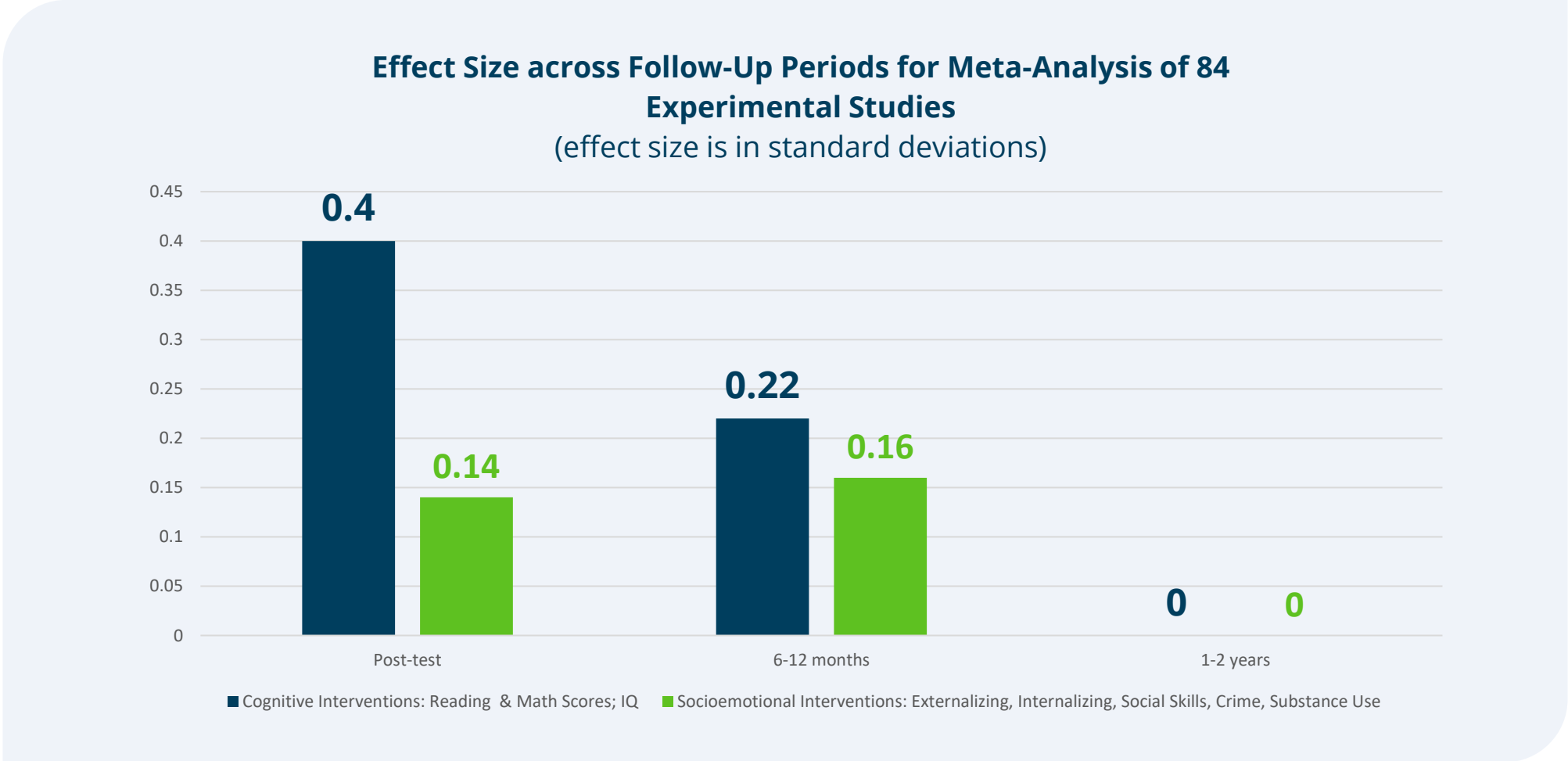# Why care about meaning-based interventions?

1. **Lasting Effects**

2. **Closing Racial Gaps**

Outcomes affected by Meaning-Making Interventions

- ✓ School absences (middle and high school)
- ✓ School disciplinary referrals (middle school)
- ✓ School suspensions (middle school)
- ✓ Juvenile arrests (high school)
- ✓ Grades (middle and high school)
- ✓ High school graduation
- ✓ 4-year college enrollment
- ✓ Attending a selective college
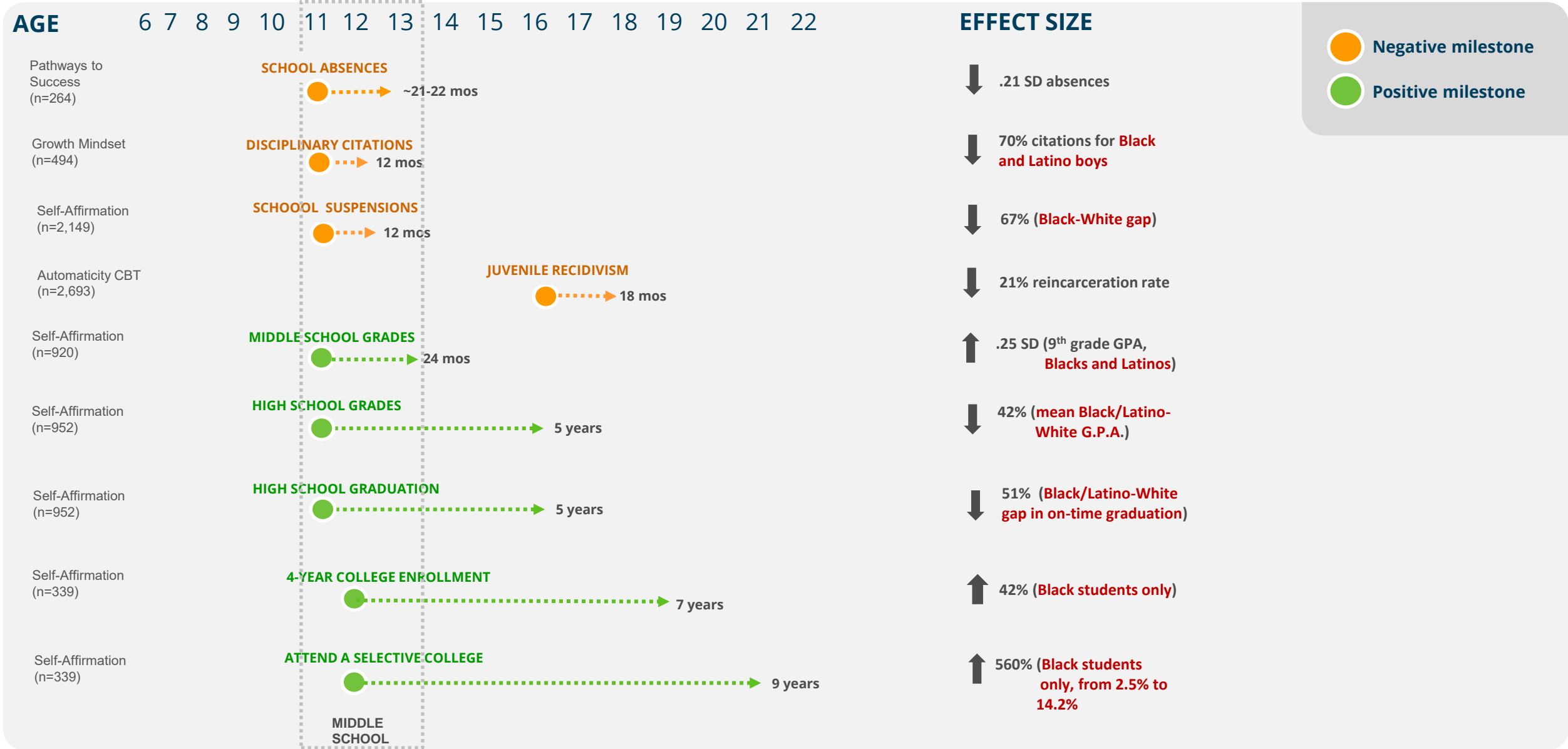- ✓ College Persistence

Persistence of Cognitive and Socioemotional Skill Intervention Effects

Effect Size across Follow-Up Periods for Meta-Analysis of 84 Experimental Studies

(effect size is in standard deviations)

Legend:
- Cognitive Interventions: Reading & Math Scores; IQ
- Socioemotional Interventions: Externalizing, Internalizing, Social Skills, Crime, Substance Use

Data values:
- Post-test: 0.4 (Cognitive), 0.14 (Socioemotional)
- 6-12 months: 0.22 (Cognitive), 0.16 (Socioemotional)
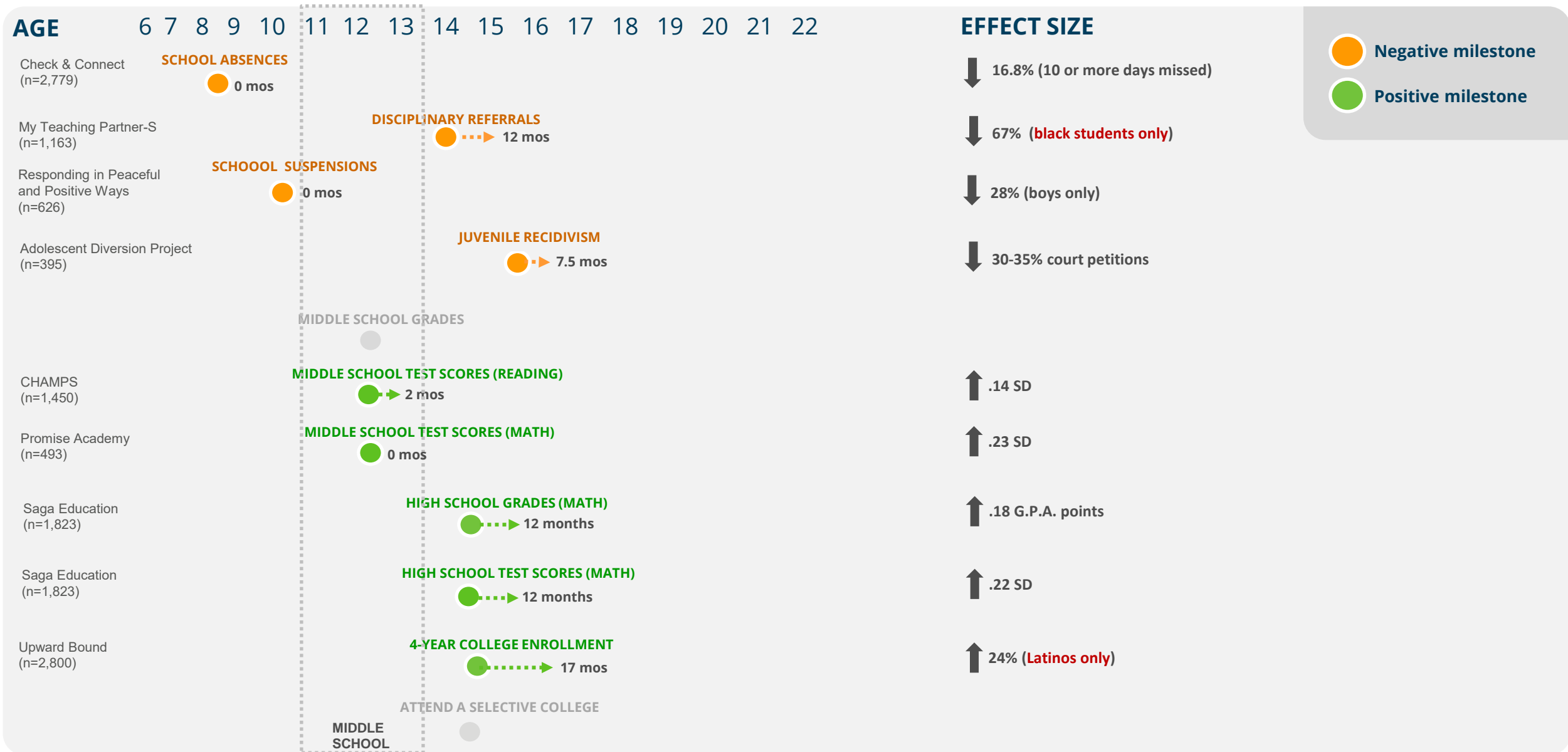- 1-2 years: 0 (Cognitive), 0 (Socioemotional)

SOURCE: Hart, E. R., Bailey, D. H., Luo, S., Sengupta, P., & Watts, T. W. (2024). Fadeout and persistence of intervention impacts on social–emotional and cognitive skills in children and adolescents: A meta-analytic review of randomized controlled trials. Psychological Bulletin, 150(10), 1207.

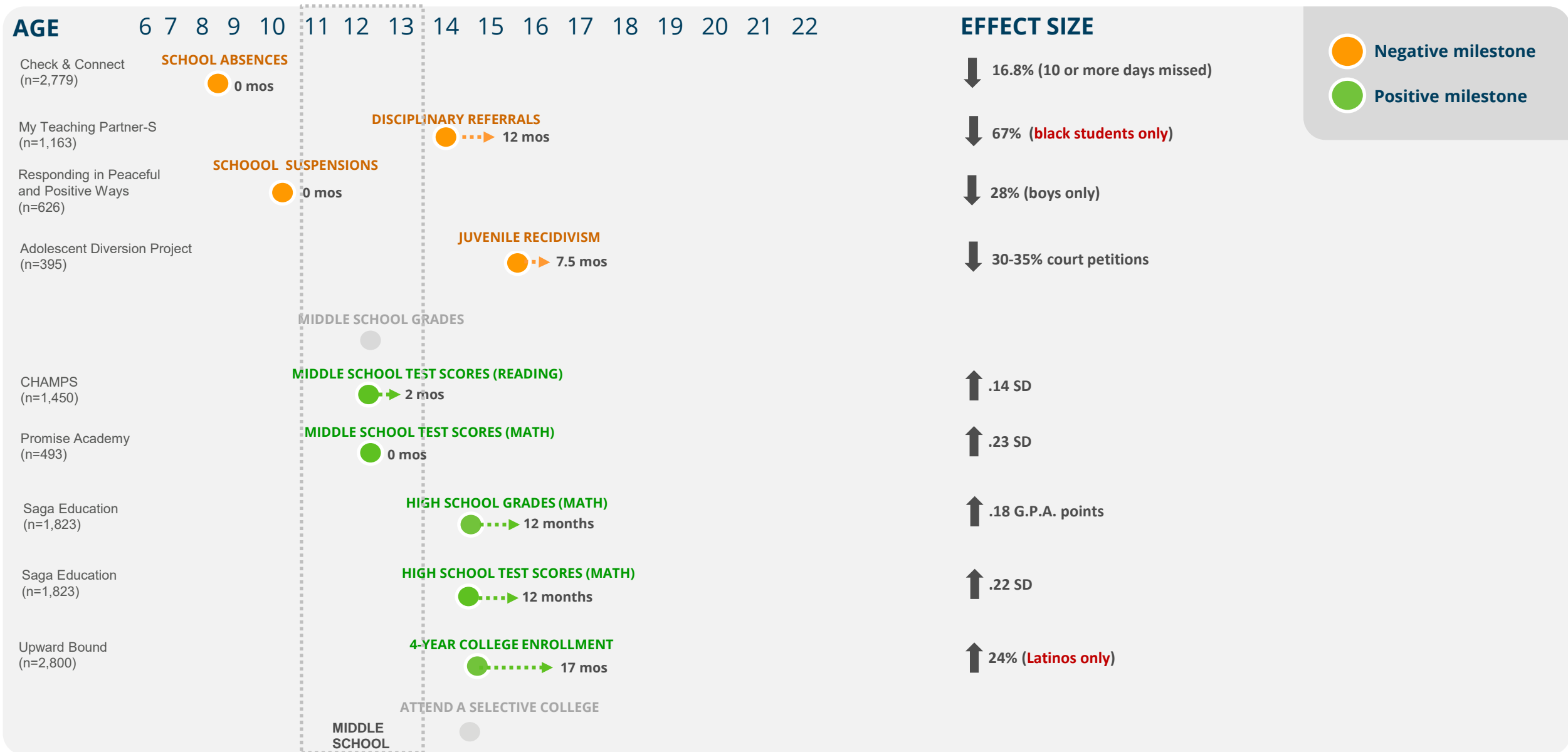# Effect Persistence for Meaning-Based Interventions: Key Milestones

AGE 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

EFFECT SIZE

- Negative milestone
- Positive milestone

Pathways to Success (n=264)
SCHOOL ABSENCES — ~21-22 mos
↓ .21 SD absences

Growth Mindset (n=494)
DISCIPLINARY CITATIONS — 12 mos
↓ 70% citations for **Black and Latino boys**

Self-Affirmation (n=2,149)
SCHOOOL SUSPENSIONS — 12 mcs
↓ 67% (**Black-White gap**)

Automaticity CBT (n=2,693)
JUVENILE RECIDIVISM — 18 mos
↓ 21% reincarceration rate

Self-Affirmation (n=920)
MIDDLE SCHOOL GRADES — 24 mos
↑ .25 SD (9th grade GPA, **Blacks and Latinos**)

Self-Affirmation (n=952)
HIGH SCHOOL GRADES — 5 years
↓ 42% (**mean Black/Latino-White G.P.A.**)

Self-Affirmation (n=952)
HIGH SCHOOL GRADUATION — 5 years
↓ 51% (**Black/Latino-White gap in on-time graduation**)

Self-Affirmation (n=339)
4-YEAR COLLEGE ENROLLMENT — 7 years
↑ 42% (**Black students only**)

Self-Affirmation (n=339)
ATTEND A SELECTIVE COLLEGE — 9 years
↑ 560% (**Black students only, from 2.5% to 14.2%**)

MIDDLE SCHOOL

Arnold Chandler (2021) *Striving and Thriving: Closing Racial Mobility Gaps Across Generations*

*Method: Studies with the longest follow-up duration and sample size of at least 200 participants for milestone

Effect Persistence for Academic, SEL, or Other Interventions: Key Milestones

AGE 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

EFFECT SIZE

Negative milestone
Positive milestone

Check & Connect (n=2,779) — **SCHOOL ABSENCES** — 0 mos — ↓ 16.8% (10 or more days missed)

My Teaching Partner-S (n=1,163) — **DISCIPLINARY REFERRALS** — 12 mos — ↓ 67% (black students only)

Responding in Peaceful and Positive Ways (n=626) — **SCHOOOL SUSPENSIONS** — 0 mos — ↓ 28% (boys only)

Adolescent Diversion Project (n=395) — **JUVENILE RECIDIVISM** — 7.5 mos — ↓ 30-35% court petitions

MIDDLE SCHOOL GRADES

CHAMPS (n=1,450) — **MIDDLE SCHOOL TEST SCORES (READING)** — 2 mos — ↑ .14 SD

Promise Academy (n=493) — **MIDDLE SCHOOL TEST SCORES (MATH)** — 0 mos — ↑ .23 SD

Saga Education (n=1,823) — **HIGH SCHOOL GRADES (MATH)** — 12 months — ↑ .18 G.P.A. points

Saga Education (n=1,823) — **HIGH SCHOOL TEST SCORES (MATH)** — 12 months — ↑ .22 SD

Upward Bound (n=2,800) — **4-YEAR COLLEGE ENROLLMENT** — 17 mos — ↑ 24% (Latinos only)

ATTEND A SELECTIVE COLLEGE

MIDDLE SCHOOL

SOURCE: Arnold Chandler (2021) *Striving and Thriving: Closing Racial Mobility Gaps Across Generations*

*Method: Studies with the longest follow-up duration and sample size of at least 200 participants for milestone

10

Effect Persistence for Meaning-Based Interventions: Key Milestones

AGE 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

EFFECT SIZE

Legend:
- 🟠 Negative milestone
- 🟢 Positive milestone

Intervention	Milestone	Persistence	Effect Size
Pathways to Success (n=264)	SCHOOL ABSENCES	~21-22 mos	⬆ .21 SD absences
Growth Mindset (n=494)	DISCIPLINARY CITATIONS	12 mos	⬇ 70% citations for **Black and Latino boys**
Self-Affirmation (n=2,149)	SCHOOOL SUSPENSIONS	12 mos	⬇ 67% (**Black-White gap**)
Automaticity CBT (n=2,693)	JUVENILE RECIDIVISM	18 mos	⬇ 21% reincarceration rate
Self-Affirmation (n=920)	MIDDLE SCHOOL GRADES	24 mos	⬆ .25 SD (9th grade GPA, **Blacks and Latinos**)
Self-Affirmation (n=952)	HIGH SCHOOL GRADES	5 years	⬇ 42% (**mean Black/Latino-White G.P.A.**)
Self-Affirmation (n=952)	HIGH SCHOOL GRADUATION	5 years	⬇ 51% (**Black/Latino-White gap in on-time graduation**)
Self-Affirmation (n=339)	4-YEAR COLLEGE ENROLLMENT	7 years	⬆ 42% (**Black students only**)
Self-Affirmation (n=339)	ATTEND A SELECTIVE COLLEGE	9 years	⬆ 560% (**Black students only, from 2.5% to 14.2%**)

MIDDLE SCHOOL

Arnold Chandler (2021) *Striving and Thriving: Closing Racial Mobility Gaps Across Generations*

*Method: Studies with the longest follow-up duration and sample size of at least 200 participants for milestone

Effect Persistence for Academic, SEL, or Other Interventions: Key Milestones

AGE 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

EFFECT SIZE

- 🟠 **Negative milestone**
- 🟢 **Positive milestone**

Check & Connect (n=2,779) — **SCHOOL ABSENCES** 🟠 0 mos — ↓ 16.8% (10 or more days missed)

My Teaching Partner-S (n=1,163) — **DISCIPLINARY REFERRALS** 🟠 ┄▶ 12 mos — ↓ 67% (black students only)

Responding in Peaceful and Positive Ways (n=626) — **SCHOOOL SUSPENSIONS** 🟠 0 mos — ↓ 28% (boys only)

Adolescent Diversion Project (n=395) — **JUVENILE RECIDIVISM** 🟠 ┄▶ 7.5 mos — ↓ 30-35% court petitions

MIDDLE SCHOOL GRADES ⚪

CHAMPS (n=1,450) — **MIDDLE SCHOOL TEST SCORES (READING)** 🟢 ┄▶ 2 mos — ↑ .14 SD

Promise Academy (n=493) — **MIDDLE SCHOOL TEST SCORES (MATH)** 🟢 0 mos — ↑ .23 SD

Saga Education (n=1,823) — **HIGH SCHOOL GRADES (MATH)** 🟢 ┄▶ 12 months — ↑ .18 G.P.A. points

Saga Education (n=1,823) — **HIGH SCHOOL TEST SCORES (MATH)** 🟢 ┄▶ 12 months — ↑ .22 SD

Upward Bound (n=2,800) — **4-YEAR COLLEGE ENROLLMENT** 🟢 ┄▶ 17 mos — ↑ 24% (Latinos only)

ATTEND A SELECTIVE COLLEGE ⚪

MIDDLE SCHOOL

*Method: Studies with the longest follow-up duration and sample size of at least 200 participants for milestone

What is Meaning-Making

Are Puzzles Racist?

Puzzle Example

Figure 3: Example of a task similar to those used in Raven's Progressive Matrices.

Stereotype Threat Study

- Experimental study that included 59 African American students and 83 white students enrolled in a college psychology class

- Low threat condition: "**The task you will be working on is a series of puzzles. Please take the puzzles seriously. When you are finished working on the puzzles, we would like to ask you some questions about the puzzles and get your thoughts and reactions about them**"

- High threat condition: "**The task you will be working on is an IQ test. Like the SAT and ACT, this test is frequently used to measure individuals' intelligence and ability.**"

See Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). Less is sometimes more: Goal content matters. Journal of educational psychology, 96(4), 755.

Are Puzzles Racist?
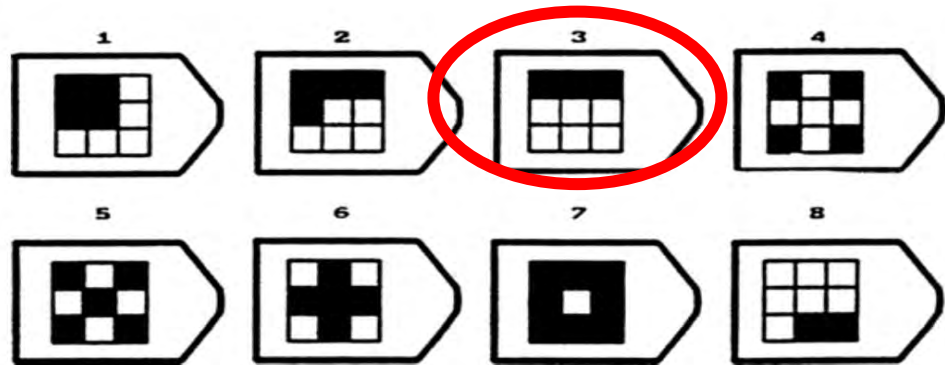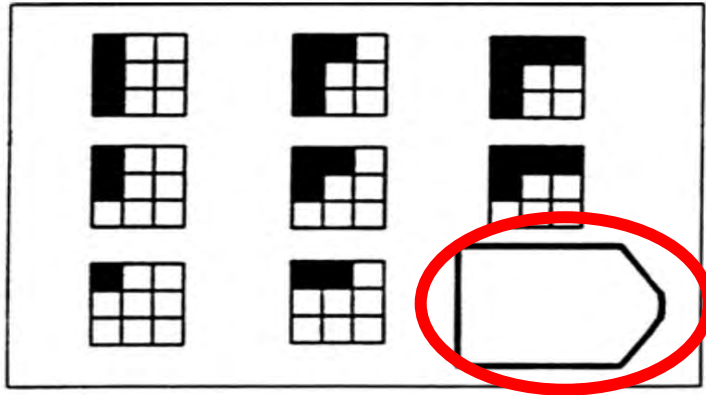
Puzzle Example

Figure 3: Example of a task similar to those used in Raven's Progressive Matrices.

Study Findings:

- In the high threat, or "IQ Test", condition: Black students scores were **25% lower** than white student scores.

- In the low threat, or "puzzles", condition: Black students scored **the same** as white students.

- The cause for the difference between the two groups when the IQ test language is used is called "**stereotype threat**": the fear that we might confirm negative stereotypes about our group.

See Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). Less is sometimes more: Goal content matters. Journal of educational psychology, 96(4), 755.

How do stereotype threat effects occur?

When our identities are threatened by a stereotype, our bodies respond at an unconscious level beyond our awareness

- Our minds race

- Heart rate increases

- Blood pressure rises

- Physiological signs of anxiety start to appear

- Our cognitive load is re-directed to rumination or worry about confirming the stereotype

- Activity in the part of the brain we use to solve cognitive problems is decreased and activity in the part of the brain associated with vigilance to threats in our social context increases

SOURCE: Steele, C. M. (2011). Whistling Vivaldi: How stereotypes affect us and what we can do. WW Norton & Company.

What is Meaning-Making?

1. **Two types**

> **Situational:** subjective interpretations in situations

> **Global:** identity, life narrative, purpose in life

2. **Situational: People's interpretation of themselves and their circumstances**

3. **Racists messages are in the water in which youth swim and they stigmatize their identities. They become unconsciously internalized.**

Examples of negative meanings:

- I'm viewed through the lens of a negative stereotype

- People like me don't belong here

- People here think I'm stupid

- I can't learn this, I'm not smart enough

- People like me don't succeed at this

Negative Stereotype Meanings Suppress Latent Ability

Walton & Spencer (2009). "**Latent ability: Grades and test scores systematically underestimate the intellectual ability of negatively stereotyped students**."

Based on a meta-analysis (study of studies) of ~16,000 students, they find that stereotype threat **suppresses the test scores and grades** of threatened students by around **1/5 of a standard deviation (d=.17)**.

The average size of an RCT-evaluated intervention on Math or English test scores is **d=.05 and d=.07 respectively** (Fryer, 2017)

Social Psychological Needs Underlying Meaning-Making

1. To stand on their own
To feel autonomous from adult control.

Autonomy
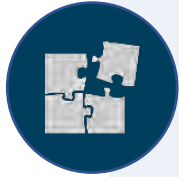
2. To fit in
To gain acceptance from socially valued peers ("to belong")

Belonging

3. To enhance the self
To think well of themselves—to think they are adequate, moral, competent and coherent.

Self-Integrity

4. To make a difference
To develop an identity as a person who can make a meaningful contribution to the world

Purpose

Autonomy

Capitalizing on the need for autonomy

Autonomy-enhancing instruction
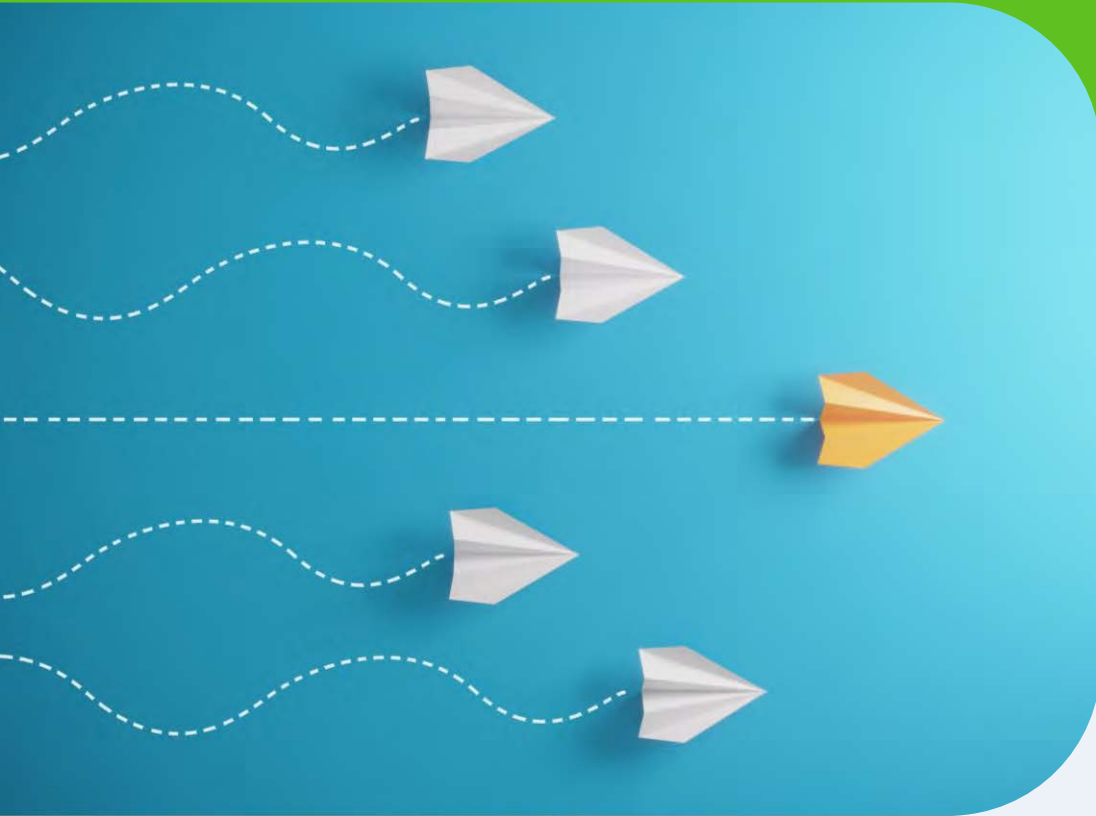
People often respond poorly to goals that feel forced upon them.

Introducing a class lesson with **"autonomy-supportive" language** like "**you can**" and "**if you choose**" led to **greater motivation and learning among high school and college students** than language like "you should" and "you'd better"

See Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). Less is sometimes more: Goal content matters. Journal of educational psychology, 96(4), 755.

Belonging

Capitalizing on the need to belong

The Social Belonging Intervention

The Social Belonging intervention was **delivered over two 30–60-minute class sessions**.

The intervention is **portrayed as a collaborative endeavor where middle school students are being asked to help future students**. The intervention is not presented as designed to help them.

The intervention includes :

1. It **explains that it's normal for students to initially feel out of place as they transition into middle school**. Such feelings don't signify that they don't belong. In fact, **over time, most students typically feel integrated and comfortable in the new environment**

2. **Diverse stories from older students** are provided that showcase the main intervention message that feelings of non-belonging are temporary

3. **For the benefit of future students, students are asked to convey the messages in their own words using their own experiences**. They are told that these insights might be shared with upcoming students to help set realistic expectations of what starting a new school is like.

Has **reduced school absences, school disciplinary citations, improved middle and high school grades, and physical health up to 7 years later**

See Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). Less is sometimes more: Goal content matters. Journal of educational psychology, 96(4), 755.

Capitalizing on the need to **belong**

Changing institutional messages to avoid conveying non-belonging

A study involved **revising letters a college sent to students notifying them of their placement on academic probation**

The **new letters explicitly affirmed the college's belief that reasonable challenges (not inherent deficiencies) cause students' struggles and it is confident that students can meet those challenge with appropriate supports**.

This mitigated students' feelings of shame and stigma, **increased the likelihood they reached out promptly to advisors, and raised the percentage who returned to good standing a year later from 26% to 43%.**

Walton, G. M., & Brady, S. T. (2020). "Bad" things reconsidered. In Applications of social psychology (pp. 58-81). Routledge.

Self-Integrity
(Enhancing the Self)

Capitalizing on the need for competence

The Self-Affirmation Intervention

- The Self-Affirmation intervention uses the values writing task to help students **reflect on and articulate core personal values**, countering negative stereotypes.

- Has been administered between 1 to 9 sessions lasting around 60 minutes across studies.

- **Students select and write about values that resonate with them**, bolstering their sense of self-worth.

- **Example values** include athletic ability, being good at art, creativity, independence, living in the moment, membership in social group, music, politics, etc.

- Has **reduced school suspensions, improved middle and high school grades, increased high school graduation, and improved college enrollment**

Capitalizing on the need for competence

Promoting growth mindsets

The cultural belief that intelligence is fixed—that you either have it, or you don't—can lead people to attribute academic setbacks to a lack of ability.

Growth-mindset interventions convey, that intelligence can grow with effort, good strategies, and help from others

This has been shown to reduce disciplinary citations and raise middle school grades especially for struggling students for whom the meaning of academic setbacks is most pressing.

See Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., Matos, L., & Lacante, M. (2004). Less is sometimes more: Goal content matters. Journal of educational psychology, 96(4), 755.

Capitalizing on the need for enhancing the self

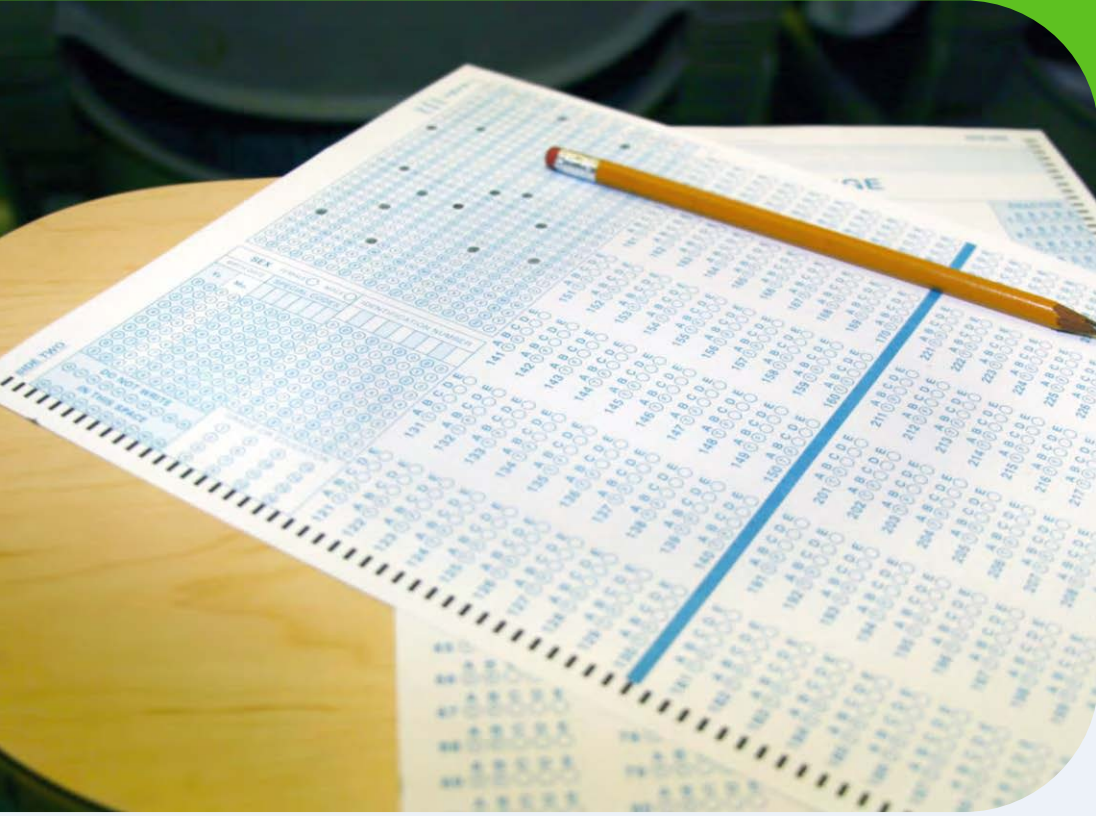## Using Theory of Personality interventions to help bullied students

Being bullied in school is a threatening experience, yet it is **especially harmful if students think that this is a permanent state or identity**.

Drawing on growth-mindset of intelligence interventions, **theory-of-personality interventions encourage the belief that people can change and thus that bullies need not always be bullies and victims need not always be victims**.

In **one study**, this **message lowered stress, reduced physical illness, and raised grades among ninth grade students over 8 months**.

Yeager, D. S., Johnson, R., Spitzer, B. J., Trzesniewski, K. H., Powers, J., & Dweck, C. S. (2014). The far-reaching effects of believing people can change: implicit theories of personality shape stress, health, and achievement during adolescence. Journal of personality and social psychology, 106(6), 867.

Capitalizing on the need for competence

Reducing the risk of triggering Stereotype Threat

Writing one's race or gender on a test can **trigger stereotype threat**.

One study **moved questions regarding race and gender to the end of an AP Calculus test**.

This **raised the percentage of girls who received AP credit from 32% to 38%, with the greatest benefits for African American girls**.

Danaher, K., & Crandall, C. S. (2008). Stereotype threat in applied settings re-examined. Journal of Applied Social Psychology, 38(6), 1639–1655.

Capitalizing on the need for self-coherence

Pathways to Success & Becoming a Man (BAM)

- **Adolescents strive to act consistently with their identities.**

- **Pathways to Success** is an intervention that has **middle school students imagine their future possible self and develop a plan for getting to that person while overcoming obstacles**. The intervention **reduced school absences and improved grades**.

- **Becoming a Man (BAM)**asks **9th grade males of color to identify their core values, whatever they would like them to be**. When **youth are engaged in behaviors that are inconsistent with those values, their counselors simply as them whether their actions were "in integrity" with their values**. BAM **reduced juvenile delinquency and boosted high school graduation**.

For Pathways to Success see Oyserman, D., Bybee, D., & Terry, K. (2006). Possible selves and academic outcomes: How and when possible selves impel action. Journal of personality and social psychology, 91(1), 188. For Becoming a Man see Heller, S. B., Shah, A. K., Guryan, J., Ludwig, J., Mullainathan, S., & Pollack, H. A. (2017). Thinking, fast and slow? Some field experiments to reduce crime and dropout in Chicago. The Quarterly Journal of Economics, 132(1), 1-54.

How do Meaning-Making Interventions Work:
Alter Meaning

How do Meaning-Making Interventions Work?

A. Situation-Centric: Fixed Change in Situations
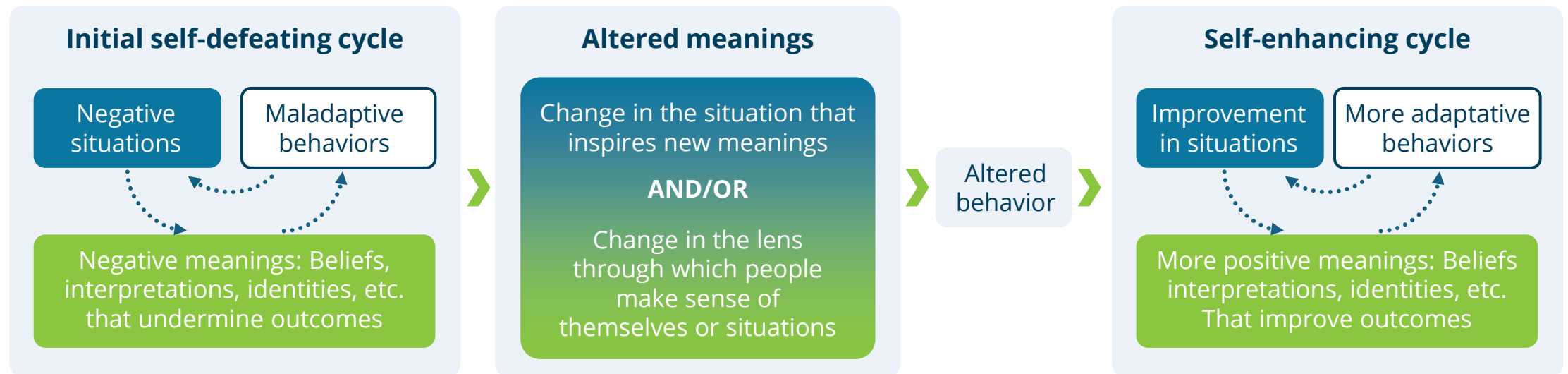
A negative initial situation

A permanently improved situation (greater opportunities. resources, or incentives; or structures that promote better decisions, behaviors and outcomes within that context)

B. Person-Centric: Fixed Change in Persons

Initial poor qualities of the person (lack of skills, poor character, etc.)

Permanently improved qualities of people (greater skills or better character that facilitates better functioning in diverse settings)

B. Meaning-Making Interventions: Recursive Change in Persons and Situations

Initial self-defeating cycle

Negative situations

Maladaptive behaviors

Negative meanings: Beliefs, interpretations, identities, etc. that undermine outcomes

Altered meanings

Change in the situation that inspires new meanings

AND/OR

Change in the lens through which people make sense of themselves or situations

Altered behavior

Self-enhancing cycle

Improvement in situations

More adaptive behaviors

More positive meanings: Beliefs interpretations, identities, etc. That improve outcomes

See Walton, G. M., & Wilson, T. D. (2018). Wise interventions: Psychological remedies for social and personal problems. Psychological review, 125(5), 617.

Meaning-Making is as Important as Skill-Building and Systems Change

Shifting the Paradigm: Meaning-Making should sit alongside Skill-Building and Systems Change efforts

There are two broad approaches to improving life course outcomes for young people:

- **Skill-building or person-centric** approaches that **attribute poor outcomes to a deficiency or lack of capacity in people and assume that the best way to improve outcomes is to build this capacity**. These capacities may include **cognitive skills, socioemotional skills, self-control**, etc.

- **Systems reforms or "situation-centric"** approaches that assume that **for people to flourish they need to be in situations that help them succeed rather than hinder them**. This might involve **better resourced schools, better training teachers, different pedagogical practices, higher opportunity neighborhoods, lower community violence, less punitive systems**, etc.

However, alongside these two approaches we must add Meaning-Making intervention. **Every event—from a change in a situation to an effort to build skills—is subject to interpretation, and the meaning people draw can increase or decrease the effectiveness of reforms**. **Every skill-building program or policy carries a message.**

See Walton, G. M., & Wilson, T. D. (2018). Wise interventions: Psychological remedies for social and personal problems. Psychological review, 125(5), 617.

Reasons to Embrace a Shifted Paradigm

Meaning-making interventions are particularly effective for youth of color. They close gaps.

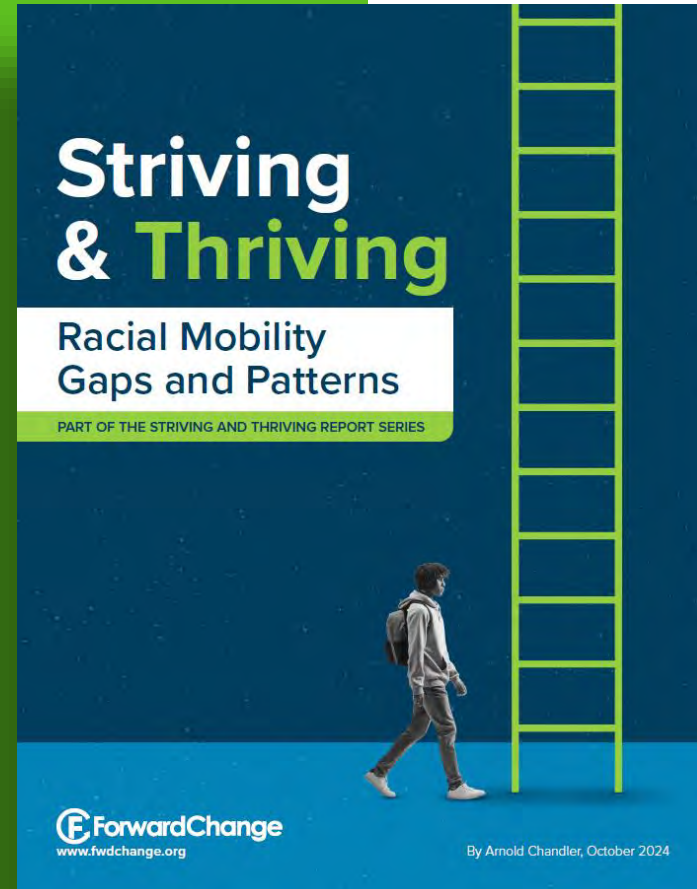They respond to key psychological needs: to belong, autonomy, self-integrity, purpose

They show lasting effects that reflect a shift in life trajectory, not a temporary improvement.

They seek to respond to the whole person. Not just their abilities, but what deeply motivates them.

Check out the new report in the Striving and Thriving series

Striving and Thriving: Racial Mobility Gaps and Patterns

Blacks, Latinos, and American Indians are much less likely to enjoy upward intergenerational mobility and much more likely to be trapped within or fall into lower income brackets, lower levels of educational attainment, and poorer health. This report summarizes the state of the evidence of racial mobility gaps and patterns.

Scan to read

Striving & Thriving

Racial Mobility Gaps and Patterns

PART OF THE STRIVING AND THRIVING REPORT SERIES

ForwardChange
www.fwdchange.org

By Arnold Chandler, October 2024

ForwardChange

Contact

Arnold Chandler
arnoldc@fwdchange.org

About Forward Change

Forward Change exists to advance racial, gender, and economic justice. We are a research, social change strategy and advocacy organization. We help foundations, government and nonprofits in the development and implementation of holistic strategies to address major equity challenges, informed by extensive research and substantive knowledge.