Academic Mindsets and Behaviors, Prior Achievement, and the Transition to Middle School

**THERE IS A CYCLICAL RELATIONSHIP BETWEEN ACADEMIC MINDSETS AND BEHAVIORS AND ACADEMIC SUCCESS**

An ever-growing body of evidence suggests that students’ academic mindsets can have a powerful impact on student engagement and outcomes in school. Scholars have argued there is a recursive cycle in which students’ academic mindsets affect their academic behaviors. These academic behaviors affect their success in school, which in turn affects students’ academic mindsets, restarting the cycle.¹ This cycle can be positive and lead to improved academic outcomes, or can be negative and undermine students’ engagement and success.

¹ Farrington et al. (2012); Snipes, Fancsali, & Stoker (2012); Yeager & Walton (2011).

https://ies.ed.gov/ncee/edlabs/regions/west/
Key Terms

**Academic mindsets:** subset of psychosocial factors including (but not limited to):
- **growth mindset:** the extent to which students believe that their academic ability is malleable and that their performance can be improved through effort
- **performance avoidance:** the extent to which students fear embarrassment and failure and are therefore reluctant to participate in educational and classroom activities (negatively related to growth mindset)

**Academic behaviors:** participation in activities that support school success (e.g., doing homework, coming prepared for class, completing required readings).

**Positive academic mindsets:** a composite index representing simultaneously higher levels of growth mindset and academic behaviors and lower levels of performance avoidance:
- high = 75th percentile
- median = 50th percentile
- low = 25th percentile.

**Psychosocial factors:** the intersection of psychological and social factors, including students’ beliefs about themselves and their relationship to school and learning.

**TRANSITIONS TO MIDDLE SCHOOL**

Many students experience difficulties, including a decline in GPA, as they make the transition to middle school. This is particularly true for Black and Latinx students and students with lower levels of prior academic achievement. Psychosocial interventions often have an impact by reversing or avoiding this decline.

**Grade 5 Academic Achievement and the Transition to Middle School in Clark County School District**

![Graph showing transition outcomes](https://ies.ed.gov/ncee/edlabs/regions/west/)


2 Based on the distribution measures developed from self-reports collected among grade 6 students from the 2017/18 Clark County School District (CCSD) student survey.


4 Blackwell, Trzesniewski, & Dweck (2007); Borman (2017); Borman, Grigg, & Hanselman (2016); Borman et al. (2019); Walton & Cohen (2011); Yeager & Walton (2011).

5 Based on the distribution of average ELA and math Smarter Balanced Assessment Consortium (SBAC) scores among grade 5 students in the CCSD during the 2016/17 school year.

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REL WEST STUDY FINDINGS: ACADEMIC MINDSETS AND BEHAVIORS, AMONG STUDENTS WITH LOWER LEVELS OF ACHIEVEMENT, PREDICT ACADEMIC PERFORMANCE

REL West examined Clark County School District student administrative and survey records data from the 2016/17 and 2017/18 school years and estimated the extent to which self-reported academic mindsets and behavior from the spring of grade 5 predicted whether students made a successful transition to middle school (earned a GPA of 2.0 or greater). **Among students with achievement below the district median, their academic mindsets and behaviors strongly predicted whether or not they had a GPA below 2.0.** However, among students with higher levels of achievement, no such relationship was found.

**Relationship between grade 5 student academic mindsets and behaviors and first semester grade 6 GPA**

These findings suggest that for students with lower levels of prior achievement, their beliefs regarding their ability to learn and improve academically are strong predictors of the success with which they make the transition to middle school and that these beliefs matter much less for students with higher levels of achievement. Among students with low levels of achievement, these factors have a strong relationship with grade 6 success, regardless of race or ethnicity. However, because Black, Latinx, and Indigenous students are more likely to be among those with relatively low levels of grade 5 achievement, these findings still have important implications for strategies intended to improve racial and ethnic equity.

https://ies.ed.gov/ncee/edlabs/regions/west/
Suggestions for supporting students’ academic mindsets and behaviors

- Schools and districts should collect data on academic mindsets and behaviors and use the data to further their understanding of students’ experiences and to develop strategies for supporting successful transitions to middle school.
- Efforts to support positive academic mindsets/behaviors should be a part of strategies supporting the middle school transition.
- Such efforts may reduce disparities in success between Black, Latinx, Indigenous, and English Learners and their White, English-speaking counterparts.
- Such efforts should be implemented subtly and not stigmatize or overtly target students or student groups.\(^6\)
- Sufficient instructional quality is necessary to maximize the impact of psychosocial approaches.\(^7\) Schools and districts should continue to attend to instructional quality and provide students with the skills they need to succeed.
- Evidence suggests a school culture that reinforces a growth mindset is important in order to maximize the effects of some psychosocial interventions.\(^8\) Schools and districts should consider strategies to increase teacher modeling of a growth mindset perspective.

Interventions with Strong Evidence

A number of rigorously tested psychosocial interventions have been found to improve academic outcomes.\(^9\)

**Belonging Intervention:** a series of writing exercises focused on responding to student vignettes reinforcing the commonality of challenges experienced during the middle school transition, and acknowledging that students tend to overcome those challenges, and that the adults in the school really care about the students.

**Empathic Instruction/Discipline:** short teacher-focused, interactive training (90 minutes) in which teachers reflect on their disciplinary practices and think through strategies for validating the perspectives (not the behavior) of students experiencing disciplinary challenges.

**Growth Mindset Intervention:** a short (less than one hour) online growth mindset intervention which teaches that intellectual abilities can be developed.

**Self-Affirmation:** a set of 2–4 brief written exercises in which students are provided an opportunity to affirm values and aspects of their identity that do not relate to school performance.

**Wise, Critical Feedback:** supports teachers in refining the manner in which they provide feedback in order to emphasize their belief in students’ potential to succeed.

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\(^6\) Yeager & Walton (2011).

\(^7\) Snipes, Fancsali, & Stoker (2012); Yeager & Walton (2011).

\(^8\) Yeager & Walton (2011); Yeager et al. (2019).

\(^9\) Borman et al. (2019); Okonofua et al. (2016); Yeager et al. (2019); Borman (2017); Yeager et al. (2014); Yeager & Walton (2011).
REFERENCES


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