

# Minnesota Youth Development Research Group

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- Population survey of students in grades 5, 8, 9, 11
- Three forms of the survey (5th, 8th, 9th/11th)
- 336 questions on the 9th/11th grade forms
- Optional for schools (84% of public districts in 2013)
- Administered every 3 years (2013 most recently)
- 162,034 students

- MSS is a rich database
- Data on student background provides unique access to investigate unique group differences
- Large data base that provides access to deeply investigate unique communities, and to examine variability within a single group

- Too many variables (336)
- Item-level data are less meaningful at program, system, and policy levels
- Many districts have limited capacity to work with large databases
- Student group disaggregation is promising
- Composite measures are desired

# Our Process

- Using a positive youth development framework and ecological models of development, we identify items related to research-based constructs
- Confirmatory factor analysis is employed to test model-data fit
- Items are calibrated using the Rasch family of measurement models
- Scores are estimated and transformed to support score interpretation

- Evaluating the ecological model of youth development
- Investigating components of youth development
- Contributing to the developmental skills (assets) framework research
- Investigating substantive issues related to youth development
- Investigating racial and ethnic variation

# Our Current Efforts



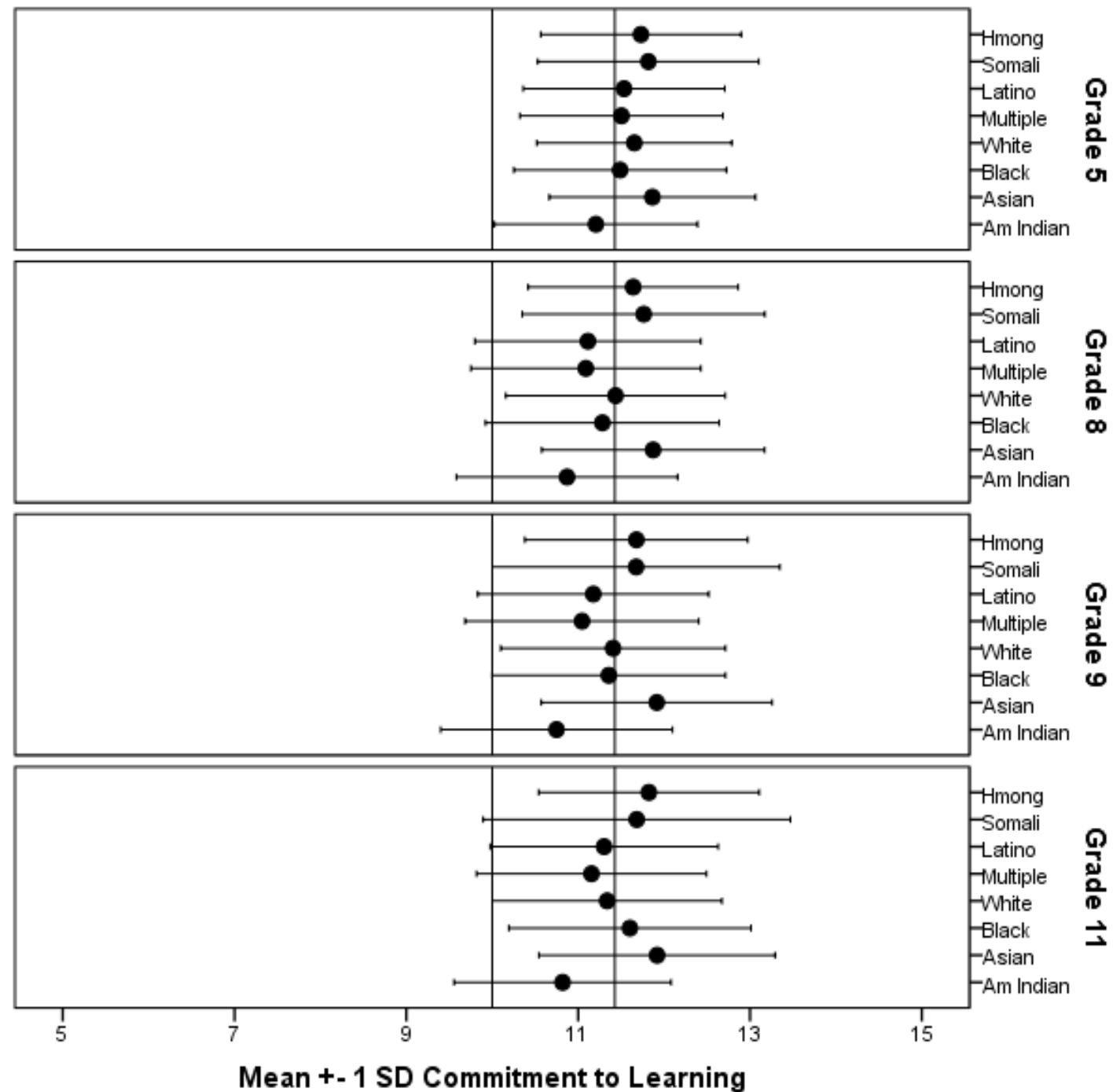
- Demonstrate how items can be used to create meaningful and useful measures to monitor school and district-wide efforts and special programs
- Respond to the efforts of Generation Next to measure aspects of social-emotional learning (providing support for the 6<sup>th</sup> goal area)
- Provide composite scores to schools regarding developmental skills, supports, and challenges

| <b>Developmental Skills</b>      | <b>Developmental Supports</b>    | <b>Developmental Challenges</b> |
|----------------------------------|----------------------------------|---------------------------------|
| <b>1. Commitment to Learning</b> | <b>1. Empowerment*</b>           | <b>1. Bullying</b>              |
| <b>2. Positive Identity*</b>     | <b>2. Supported</b>              | <b>2. Bullied</b>               |
| <b>3. Social Competence*</b>     | <b>3. Teacher/School Support</b> | <b>3. School Violence</b>       |
|                                  |                                  | <b>4. Mental Distress</b>       |
| <b>*DAP</b>                      |                                  | <b>5. Family Violence</b>       |

# Learning about MN Students

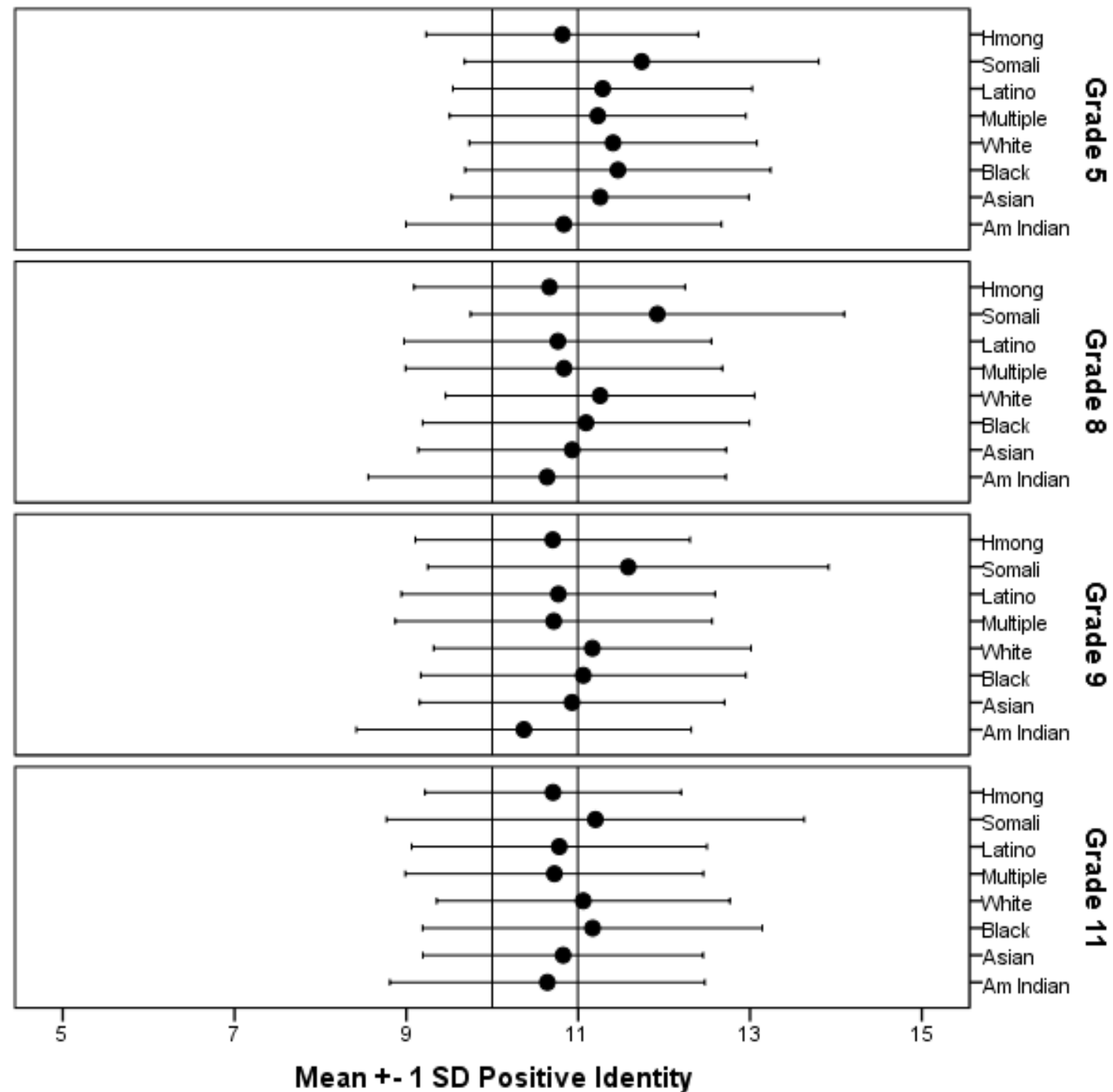
- To support interpretation, the score scale was converted to a scale that generally ranges from a low of 5 to a high of 15.
- A score of 10 is the mid-point of the scale. It describes the point at which a development skill or support goes from weak to strong or negative to positive.
- A score of 10 indicates that the skill, support, or challenge is more true for a student than not

- 10 is scale mid-point
- Second vertical bar is MN average (11.4)
- Overall HIGH CtL
- 87% report positive CtL
- CtL decreases for some from grade 5 to 8
- Student groups vary



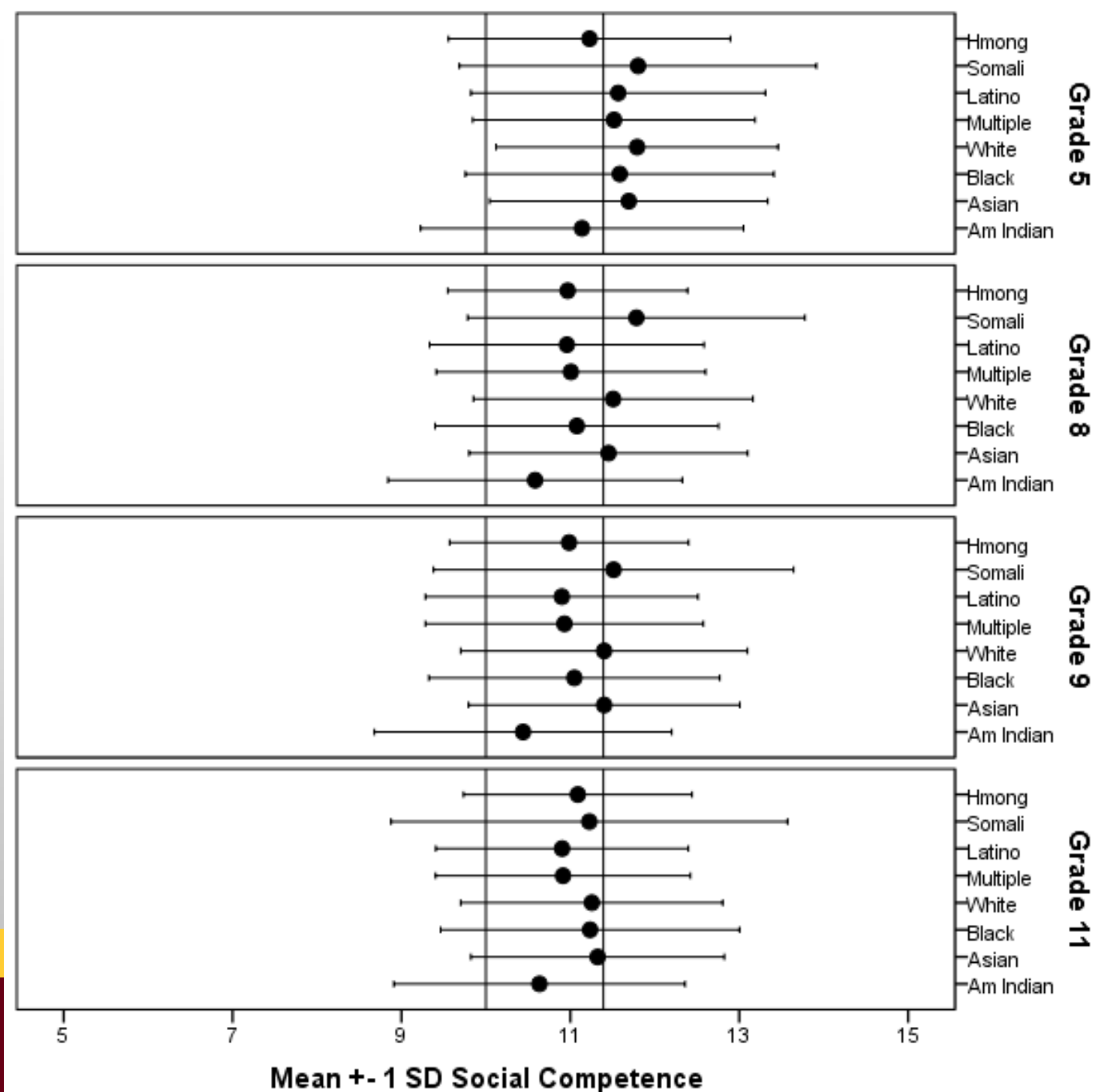
**Commit to Learning**

- Overall, PI is moderate to high overall (11.1)
- 79% report positive PI
- PI decreases for most from grade 5 to 8
- Student groups vary



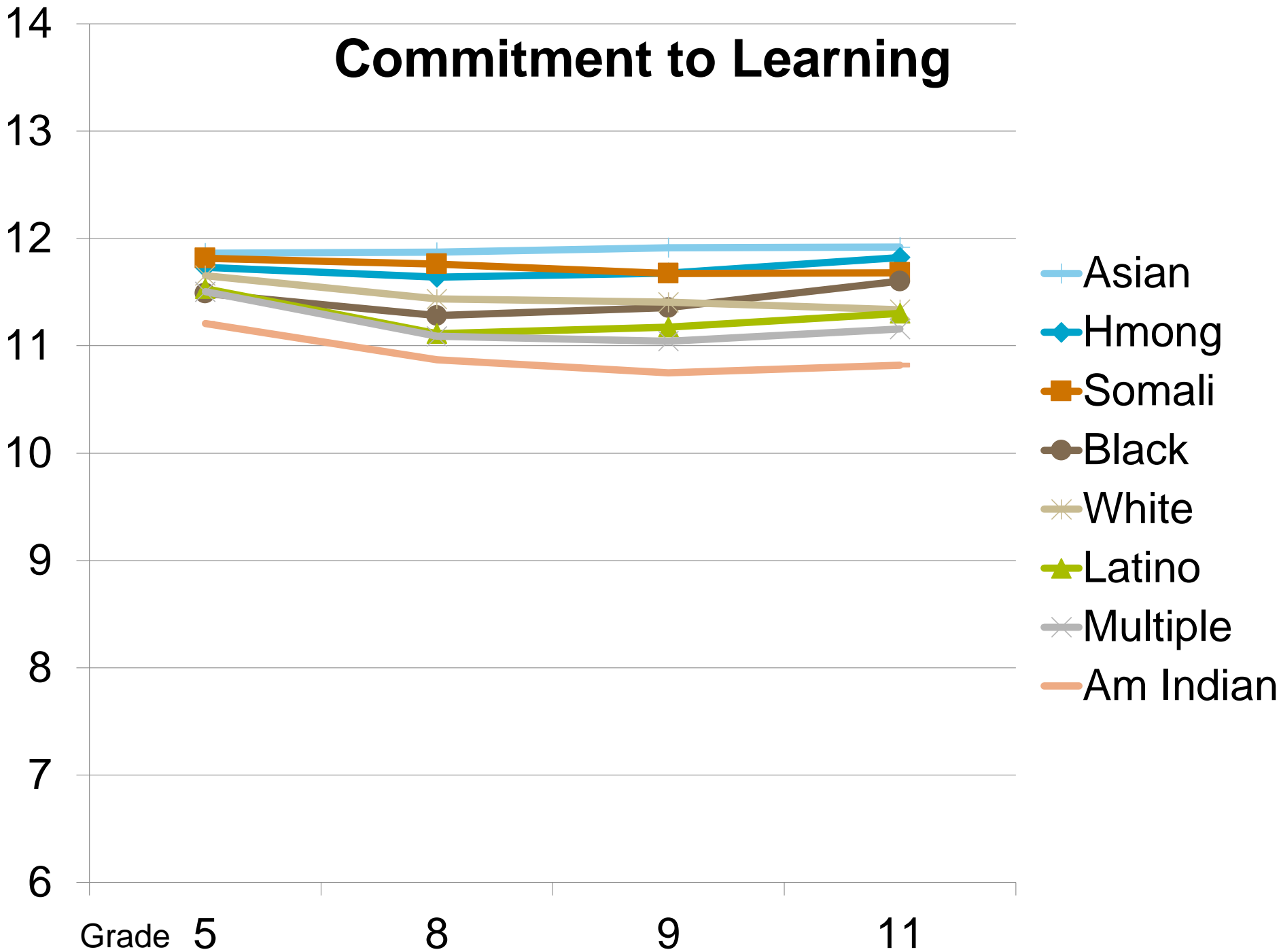
**Positive Identity**

- Overall, SC is moderate to high
- 85% report positive SC
- SC decreases for most from grade 5 to 8
- Student groups vary



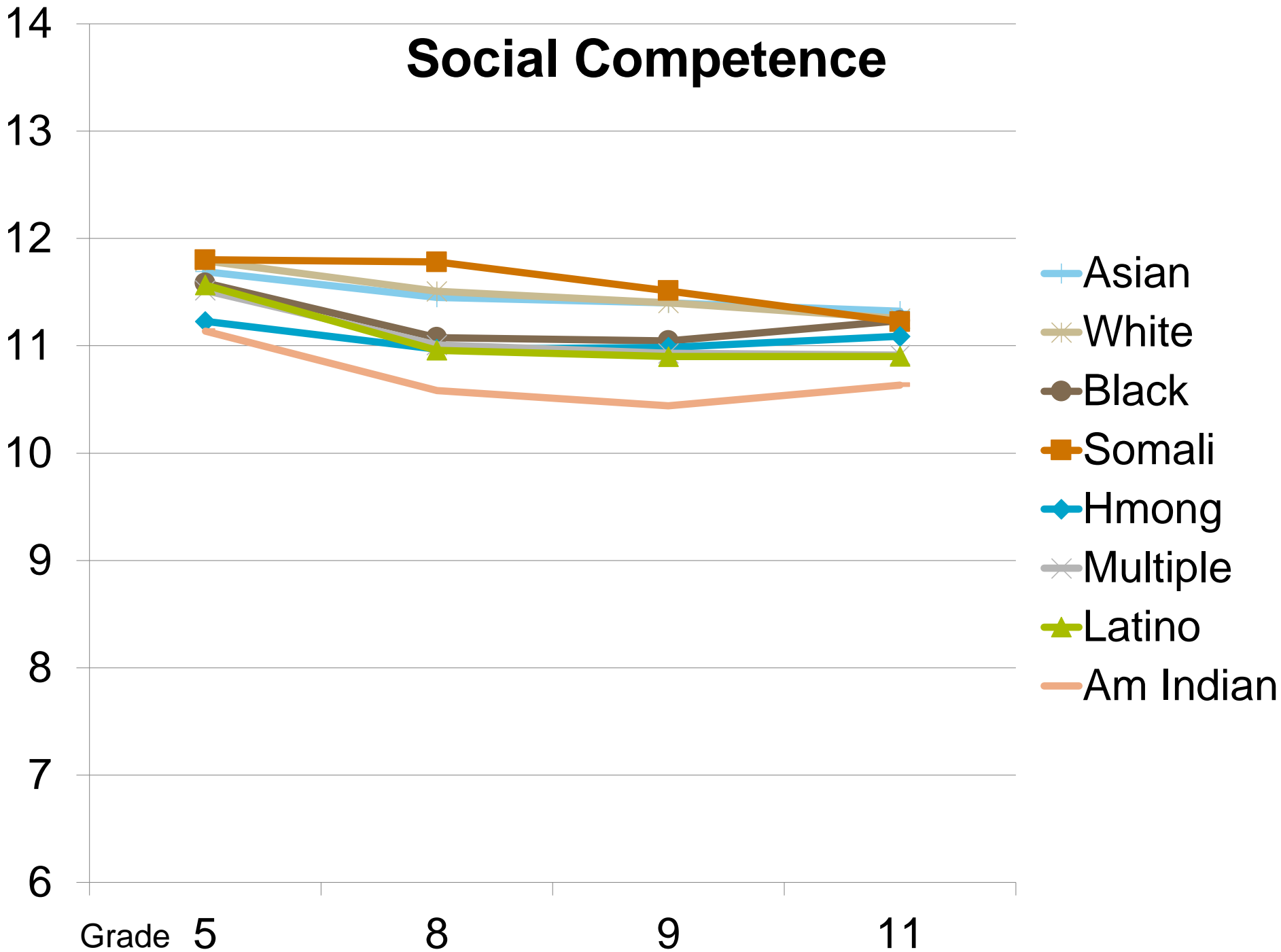
# Social Competence

# Commitment to Learning

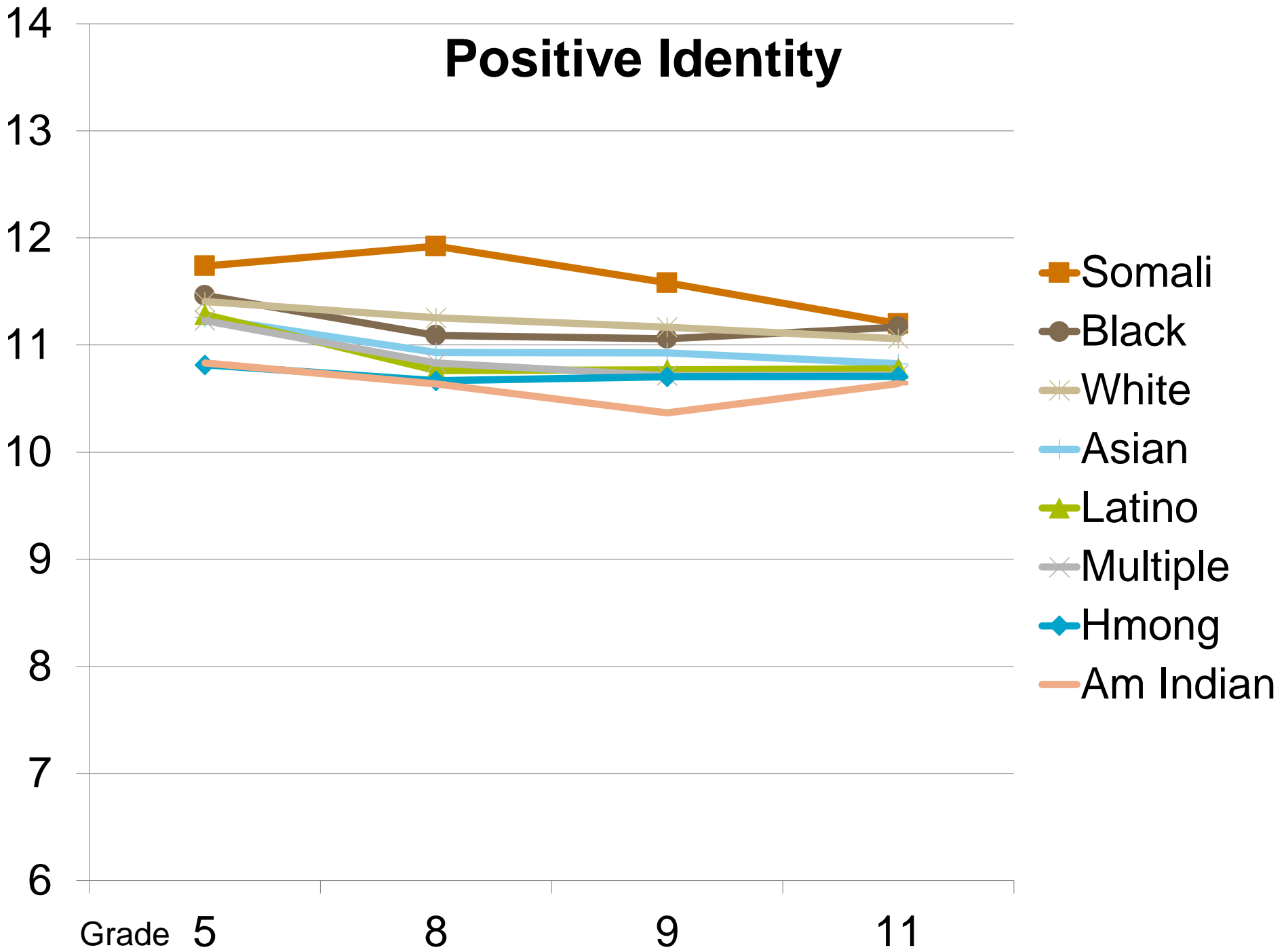




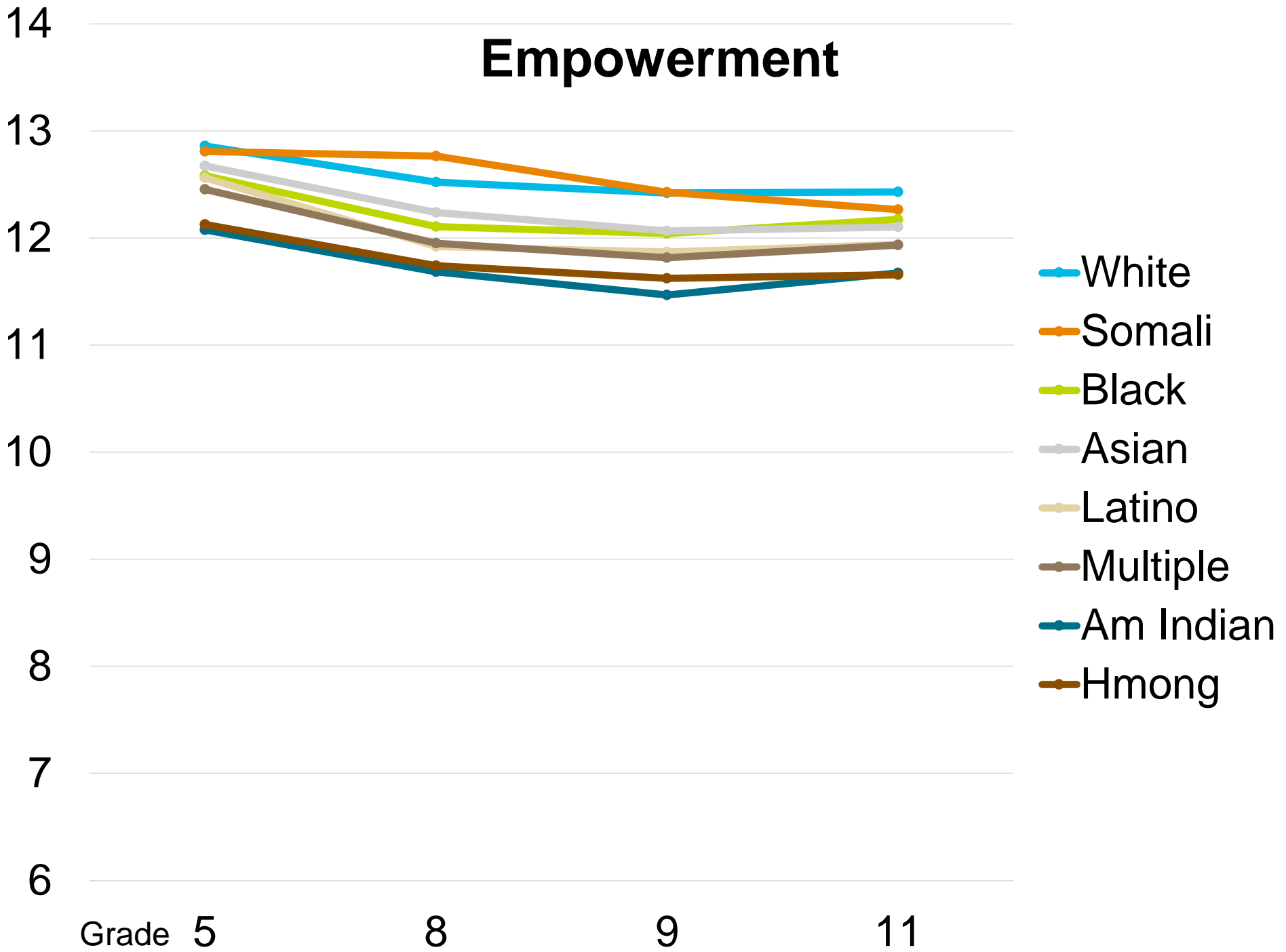
# Social Competence



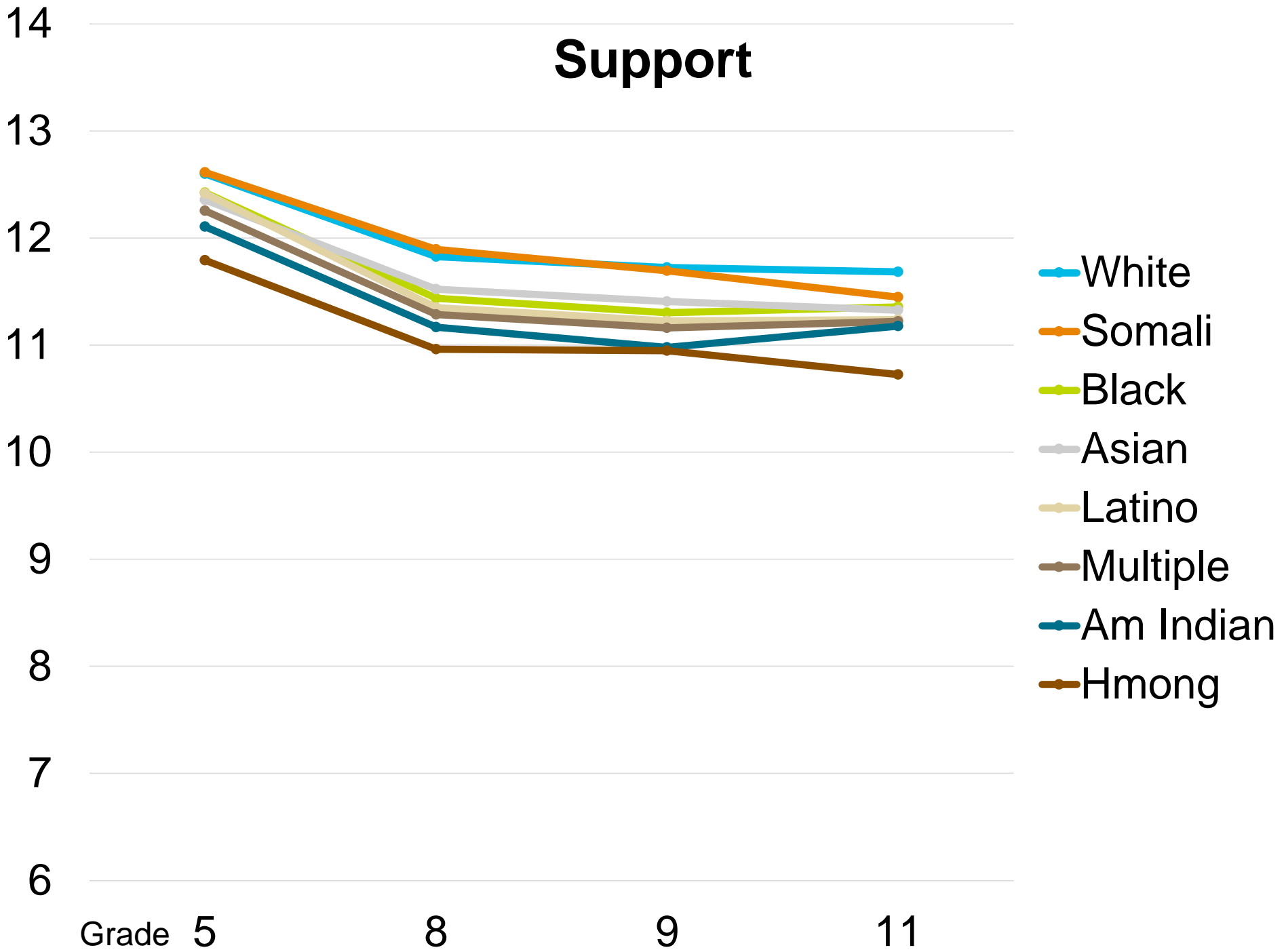
# Positive Identity



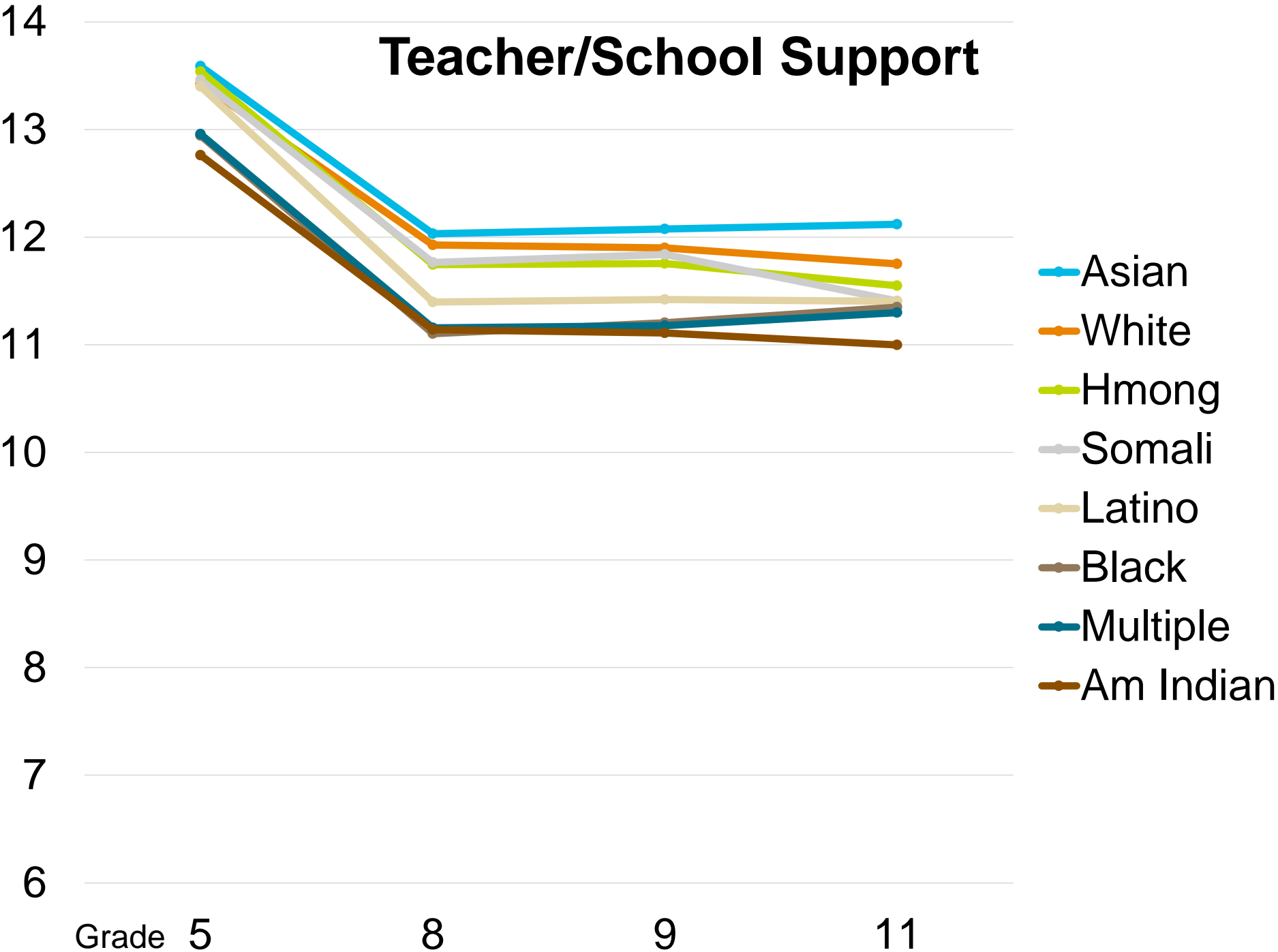
# Empowerment



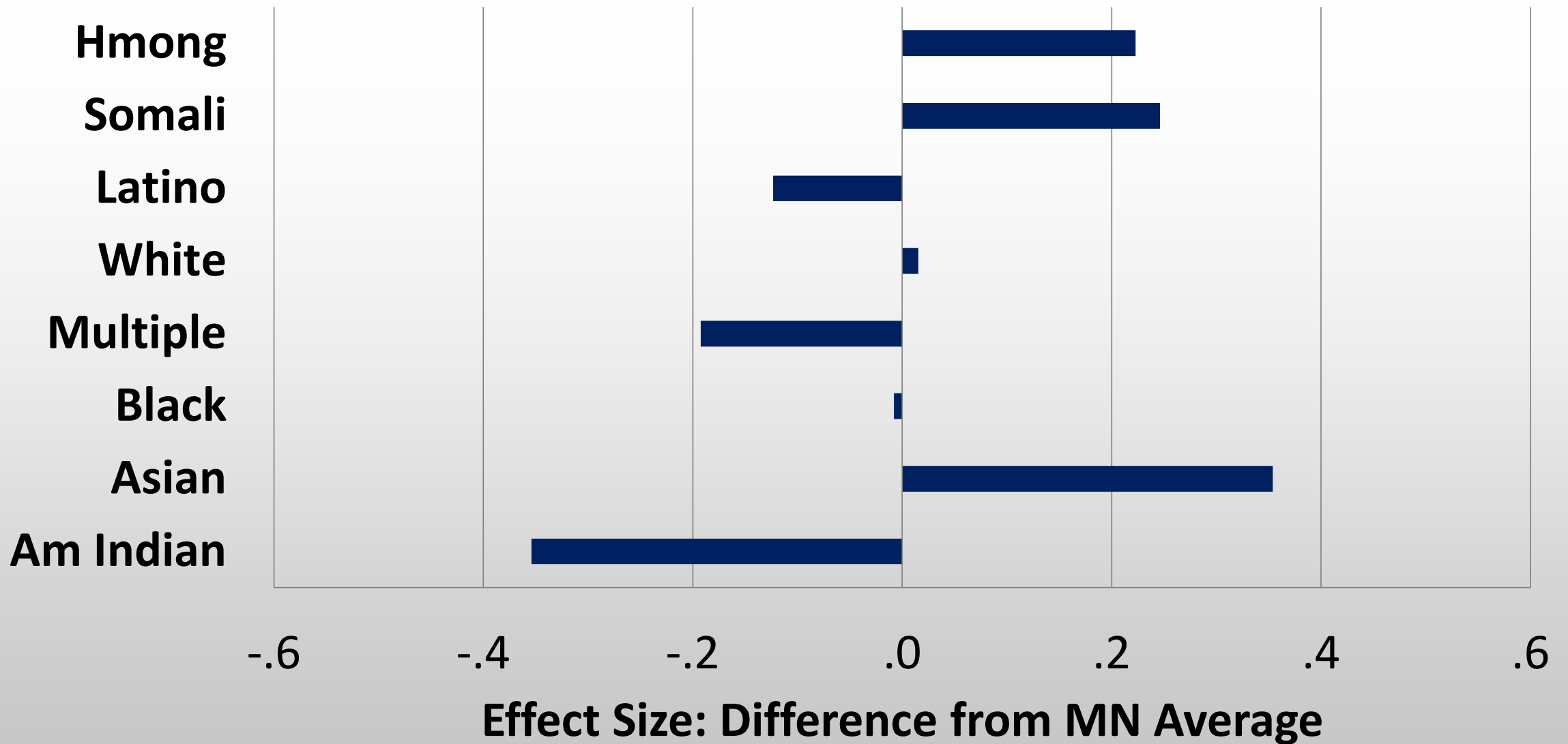
# Support



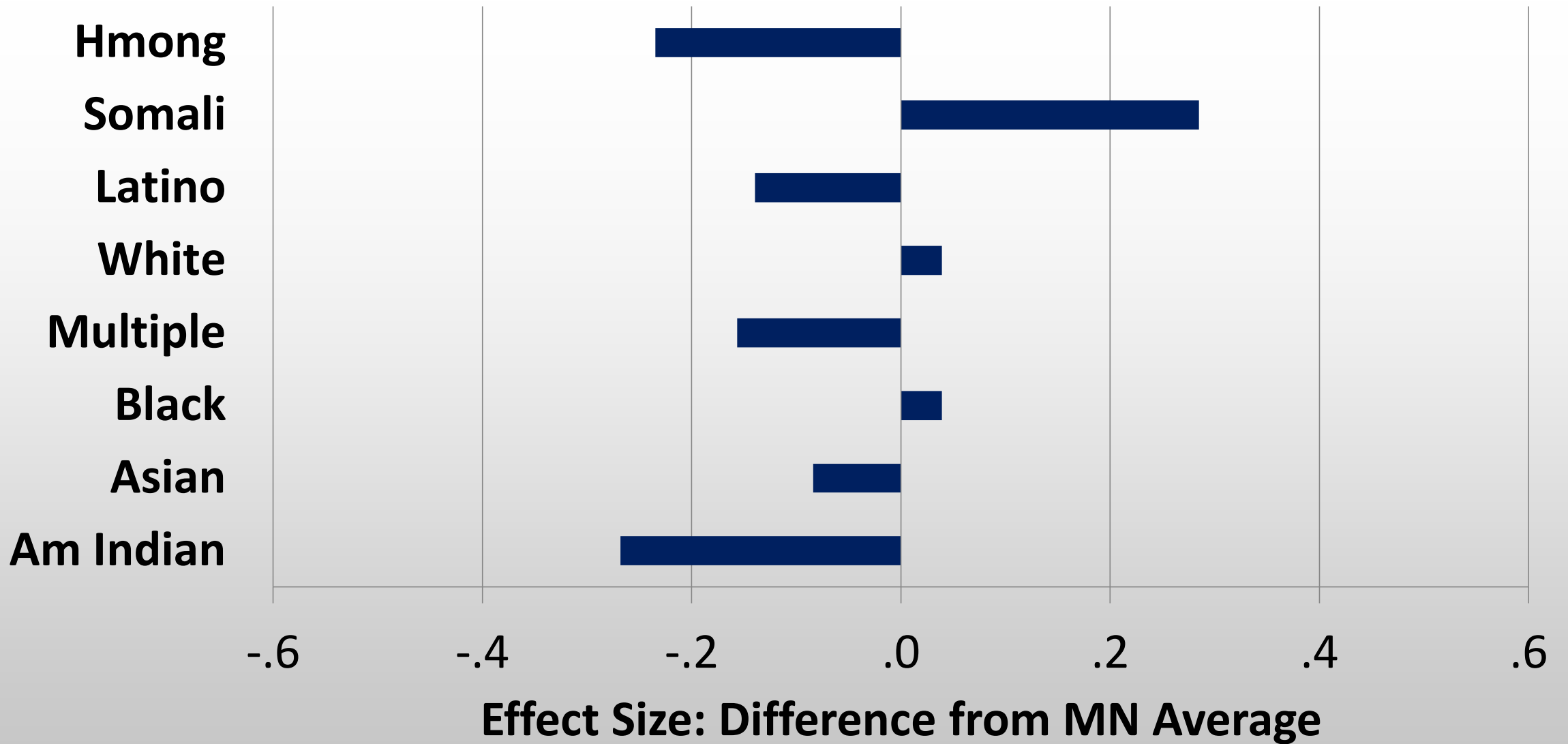
# Teacher/School Support



- Disparities are defined in the next few slides as group differences from the State Average Score
- Each bar represents the number of standard deviations difference between youth in each group and the state average.
- We generally interpret these differences as being very small when 0.2 or less, small when 0.2—0.4, moderate when 0.4—0.6, and large when 0.6 or more.

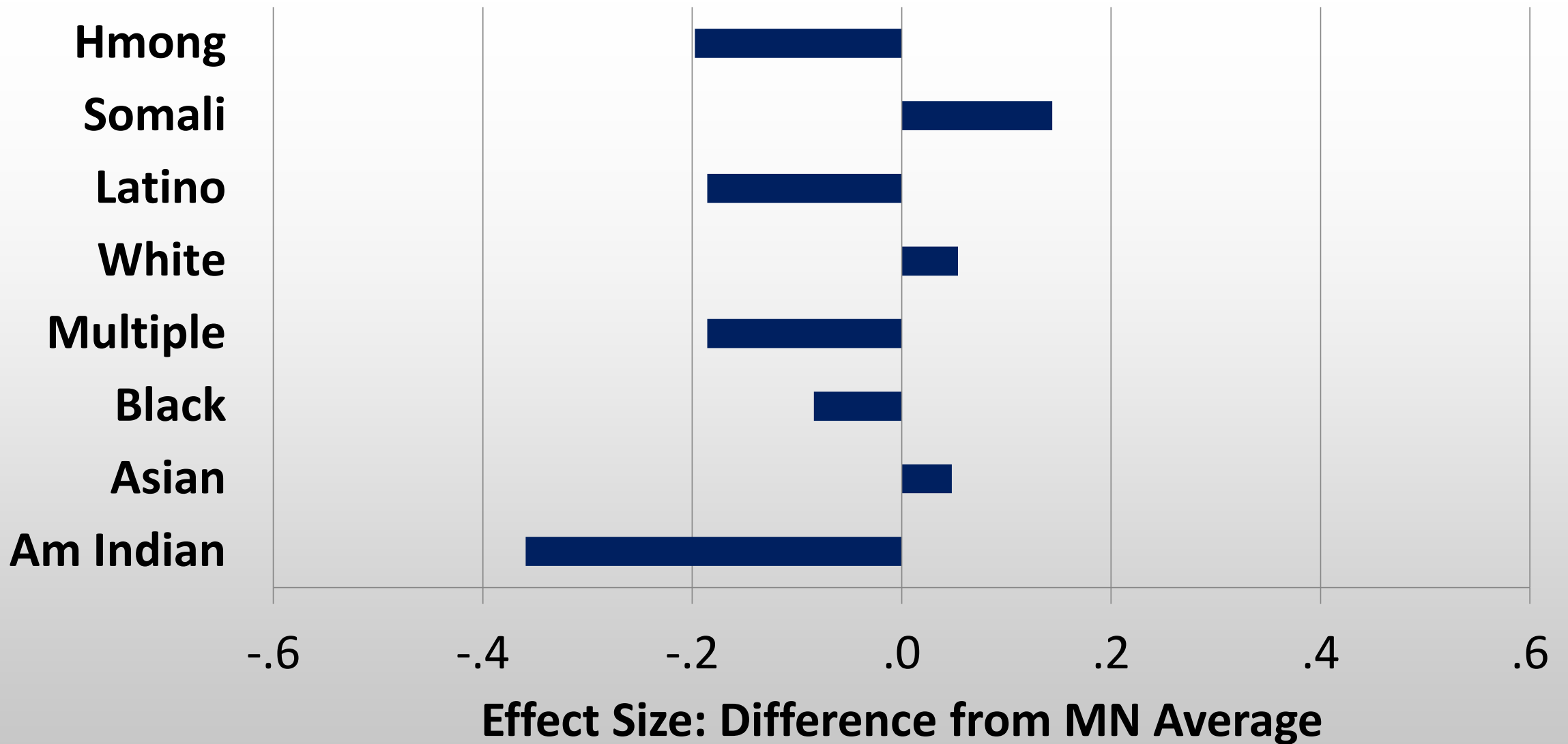


# Disparities in Commitment to Learning

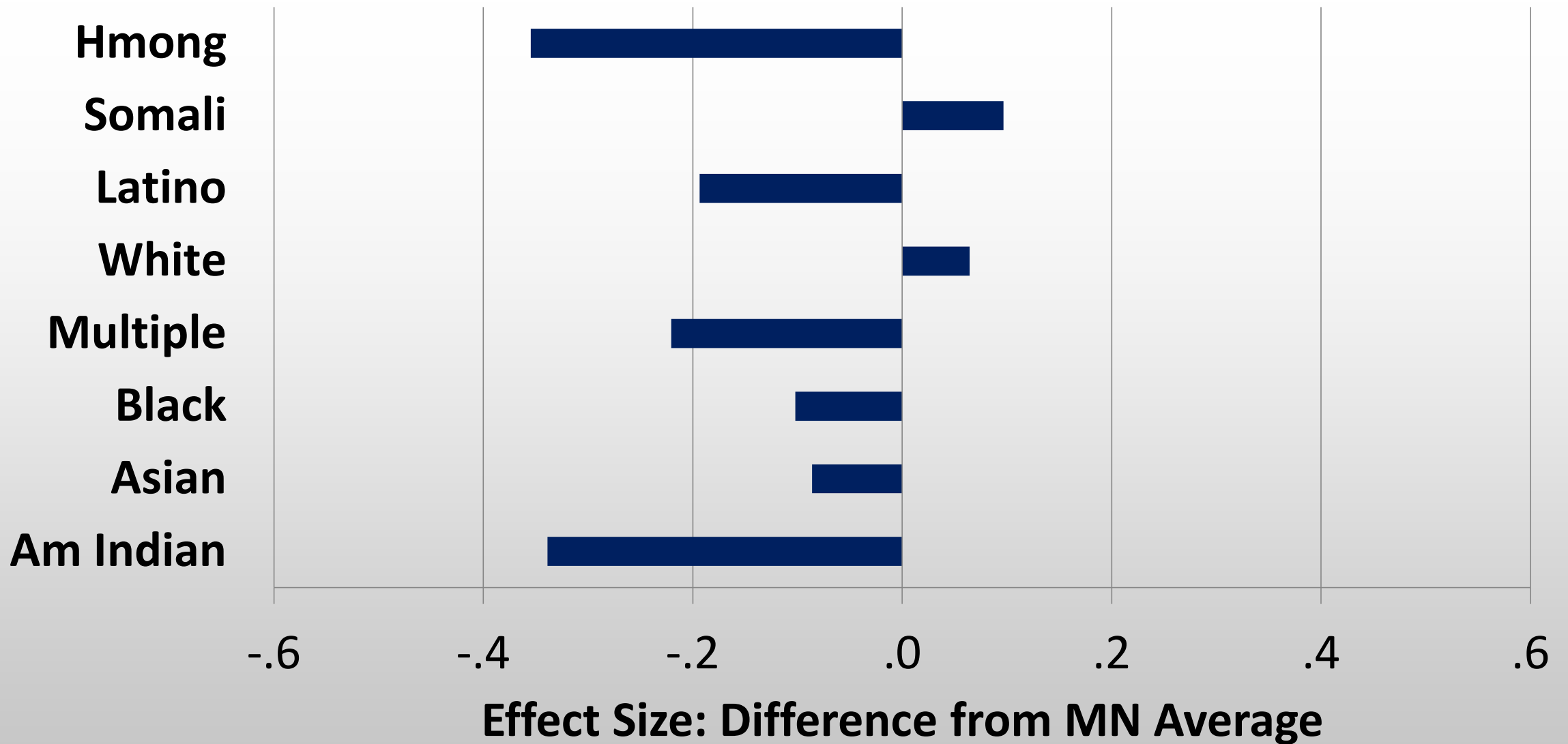


# Disparities in Positive Identity

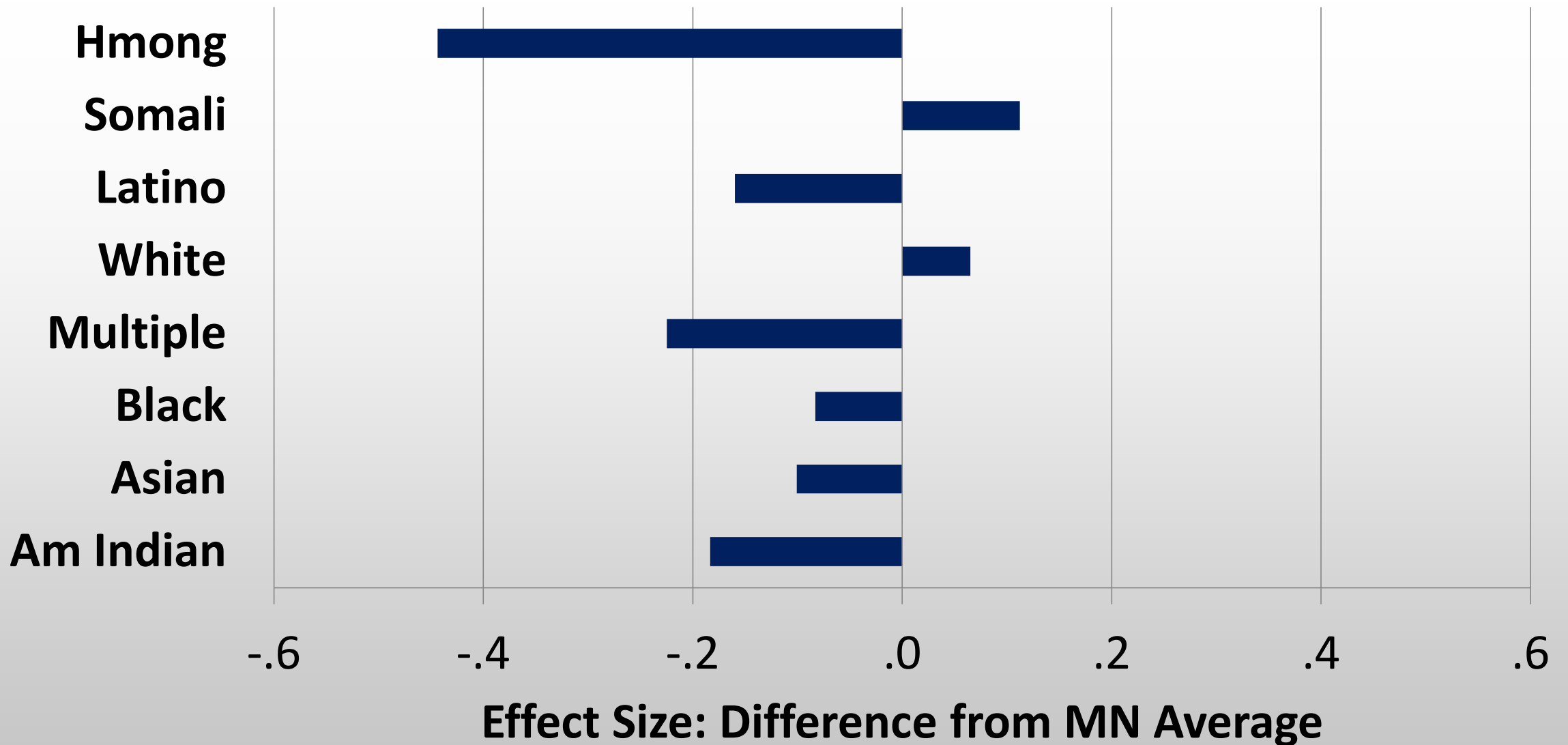




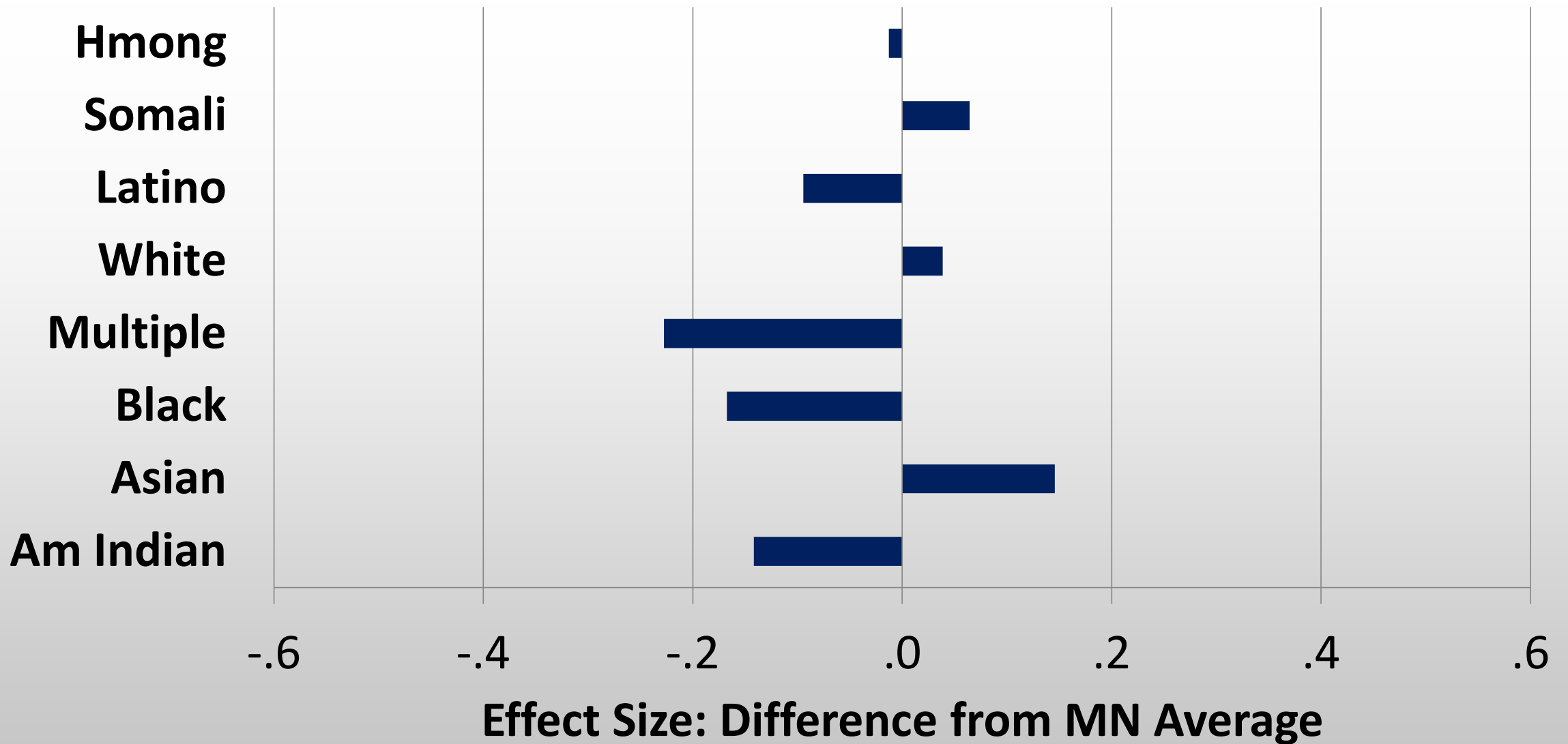
# Disparities in Social Competence



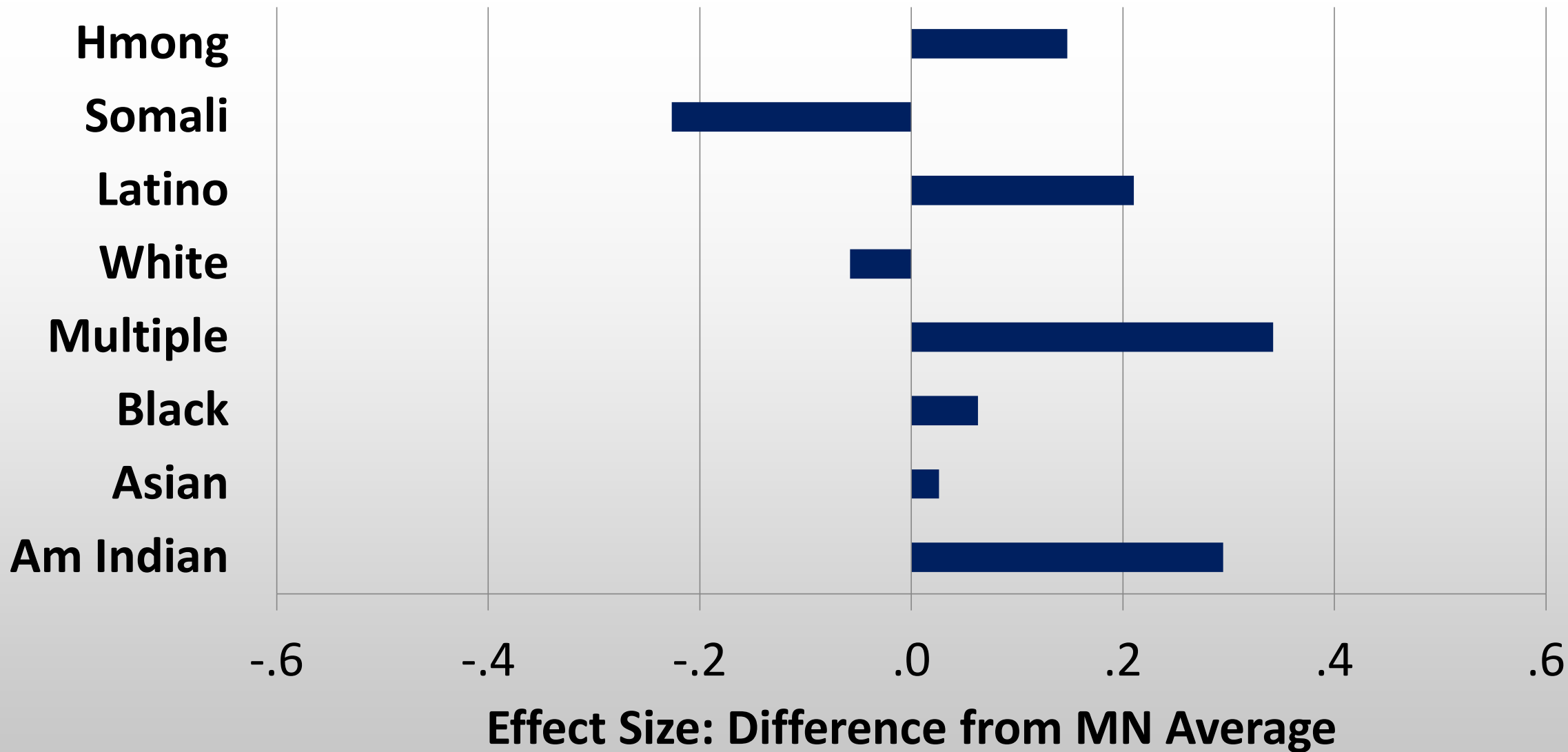
# Disparities in Empowerment



# Disparities in Supported



# Disparities in Teacher/School Support

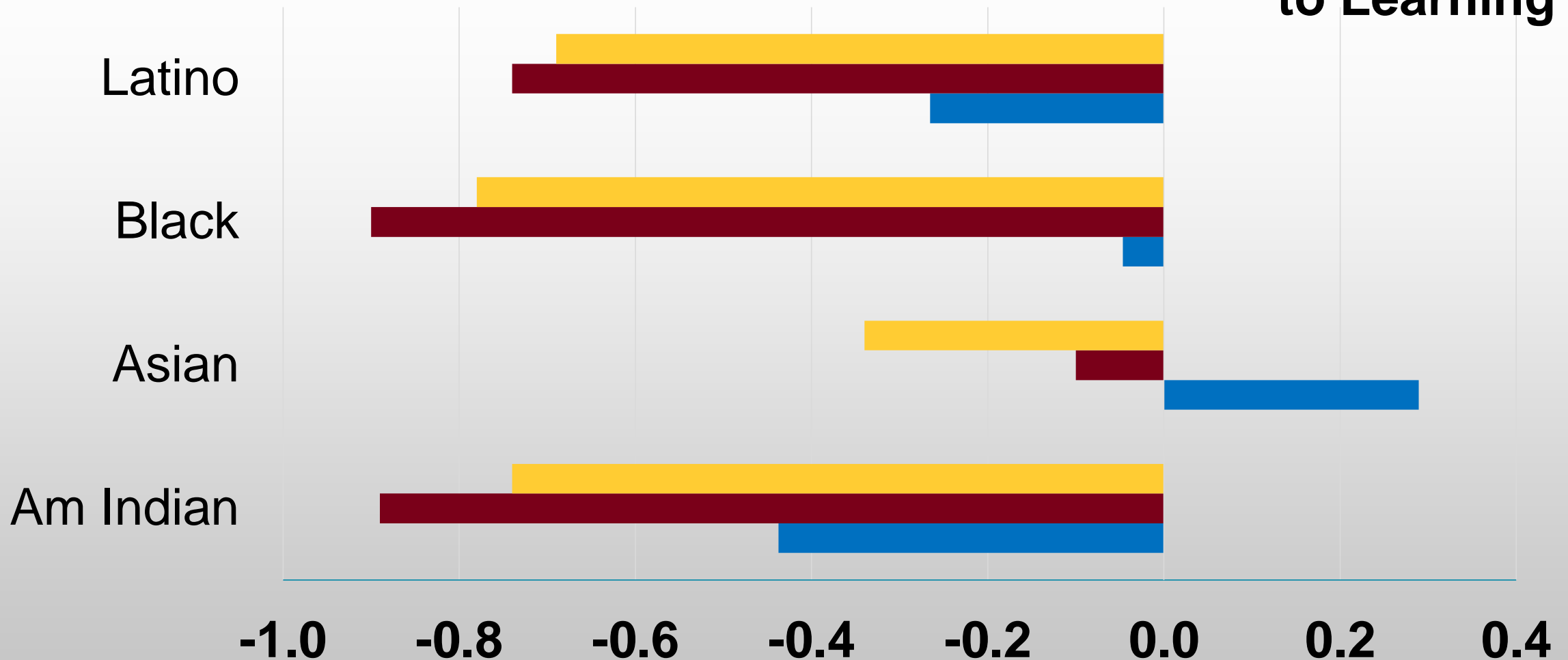


# Disparities in Mental Distress

- Since we use a common effect size – the difference between groups in standard deviations, we can compare disparities in developmental skills with those we see in achievement (achievement gaps).
- Similar data was obtained for 2013 MN Student Survey and the 2013 state MCA tests in Reading and Mathematics.
- We see much larger disparities in achievement than we do with Developmental Skills.

■ Reading ■ Math ■ CTL

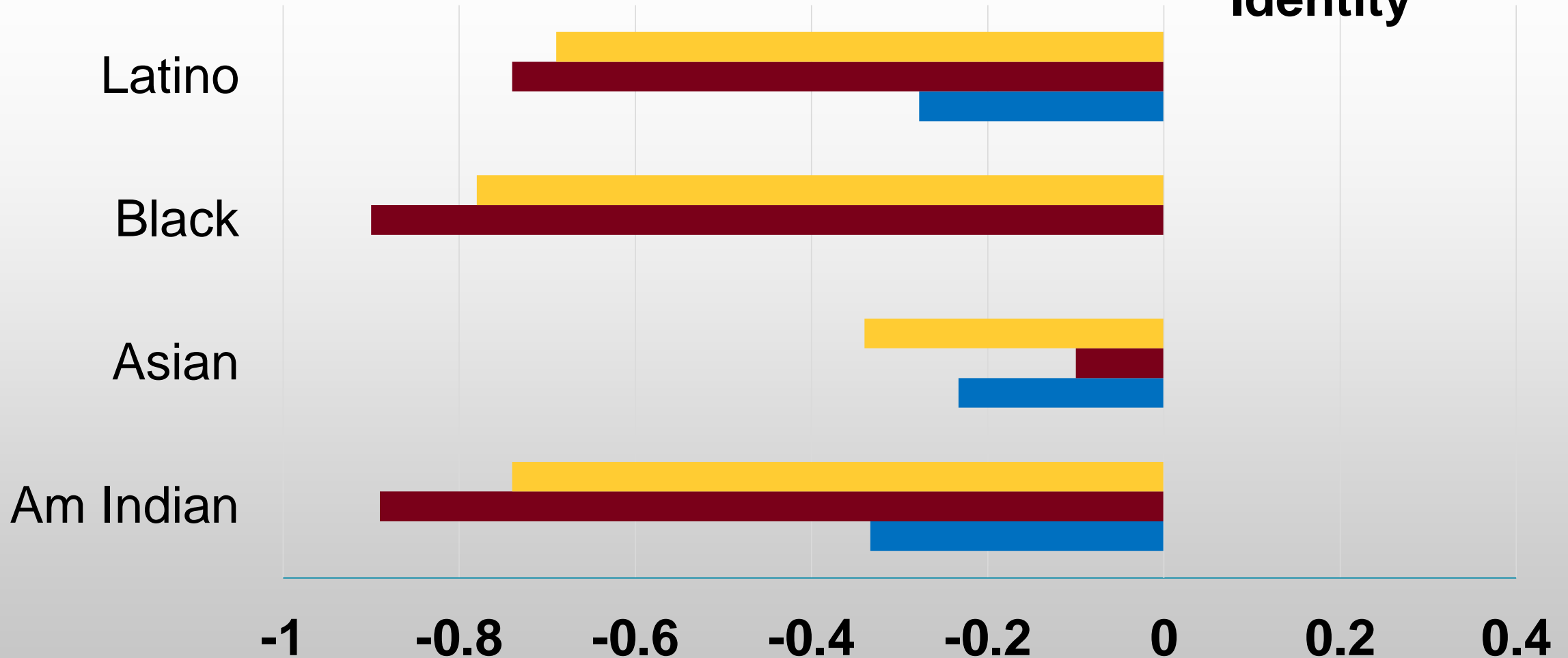
Commitment to Learning



# 8<sup>th</sup> Grade MCA & CtL Disparities v. White

■ Reading ■ Math ■ PI

Positive Identity



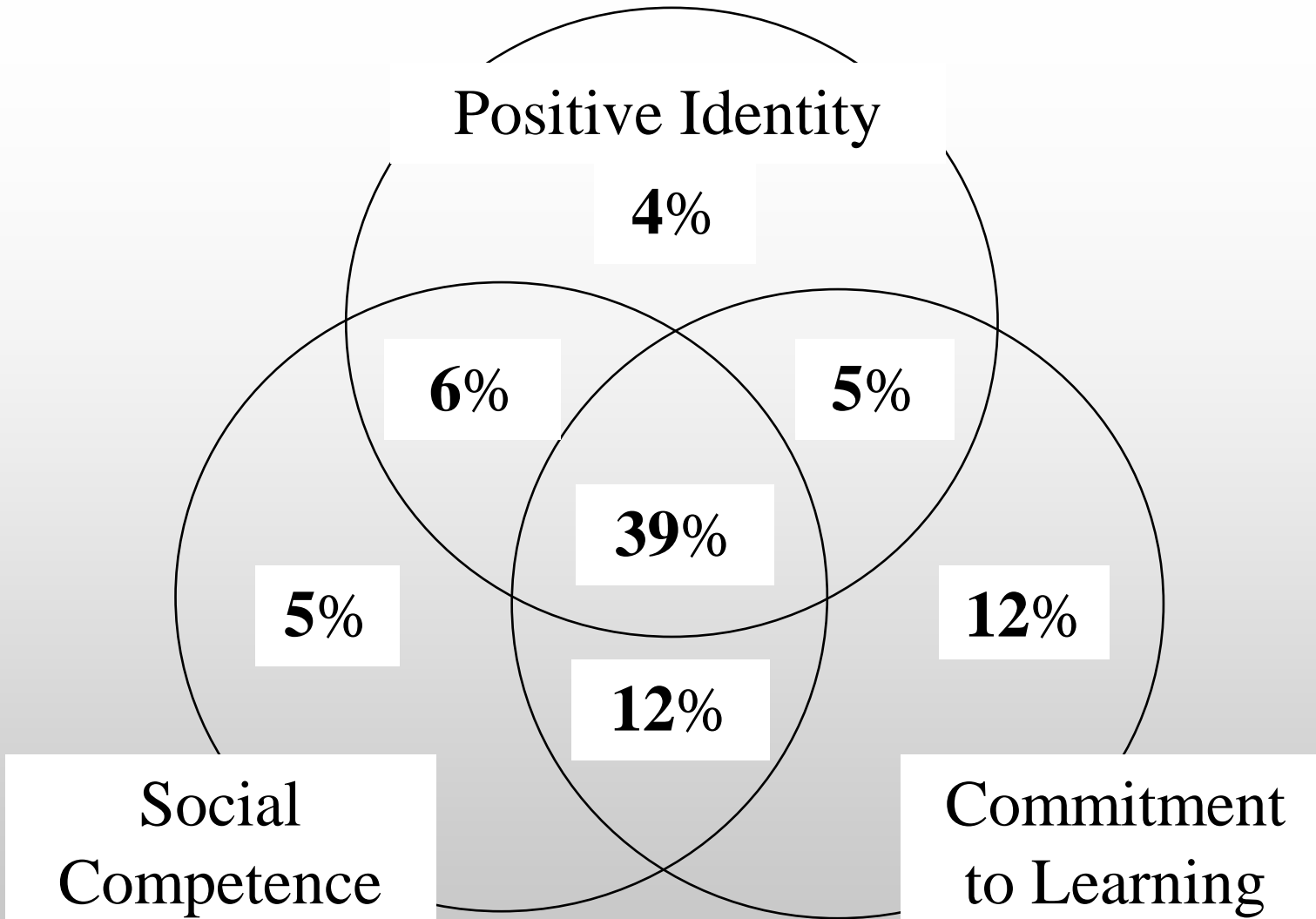
# 8<sup>th</sup> Grade MCA & PI Disparities v. White



# Equipped for Learning

To be equipped means that, on average, the student

- recognizes characteristics associated with the developmental skill as being very much or extremely like them;
- agrees or strongly agrees with values, behaviors, and characteristics defining each skill;
- engages in relevant skill-based behaviors most or all of the time.

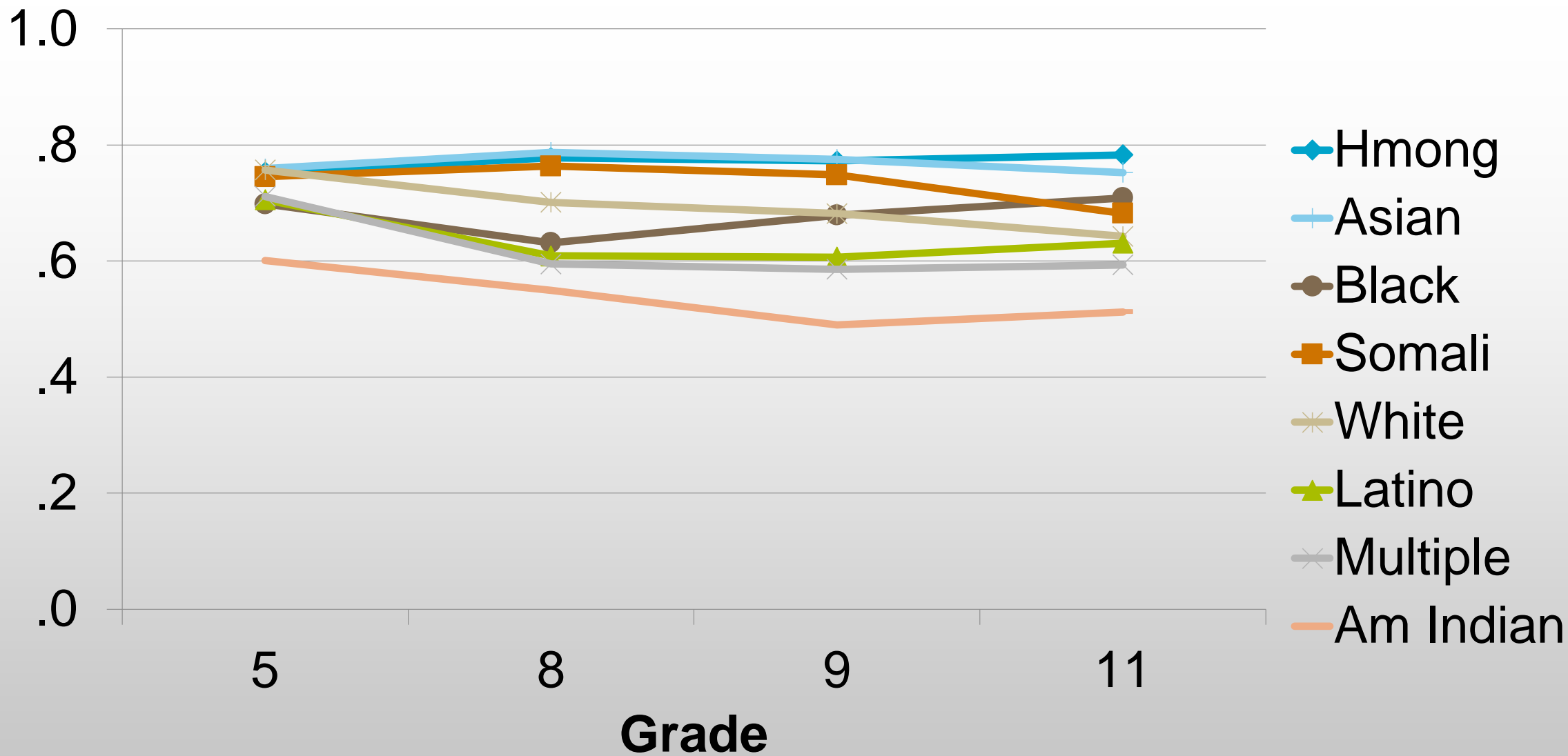


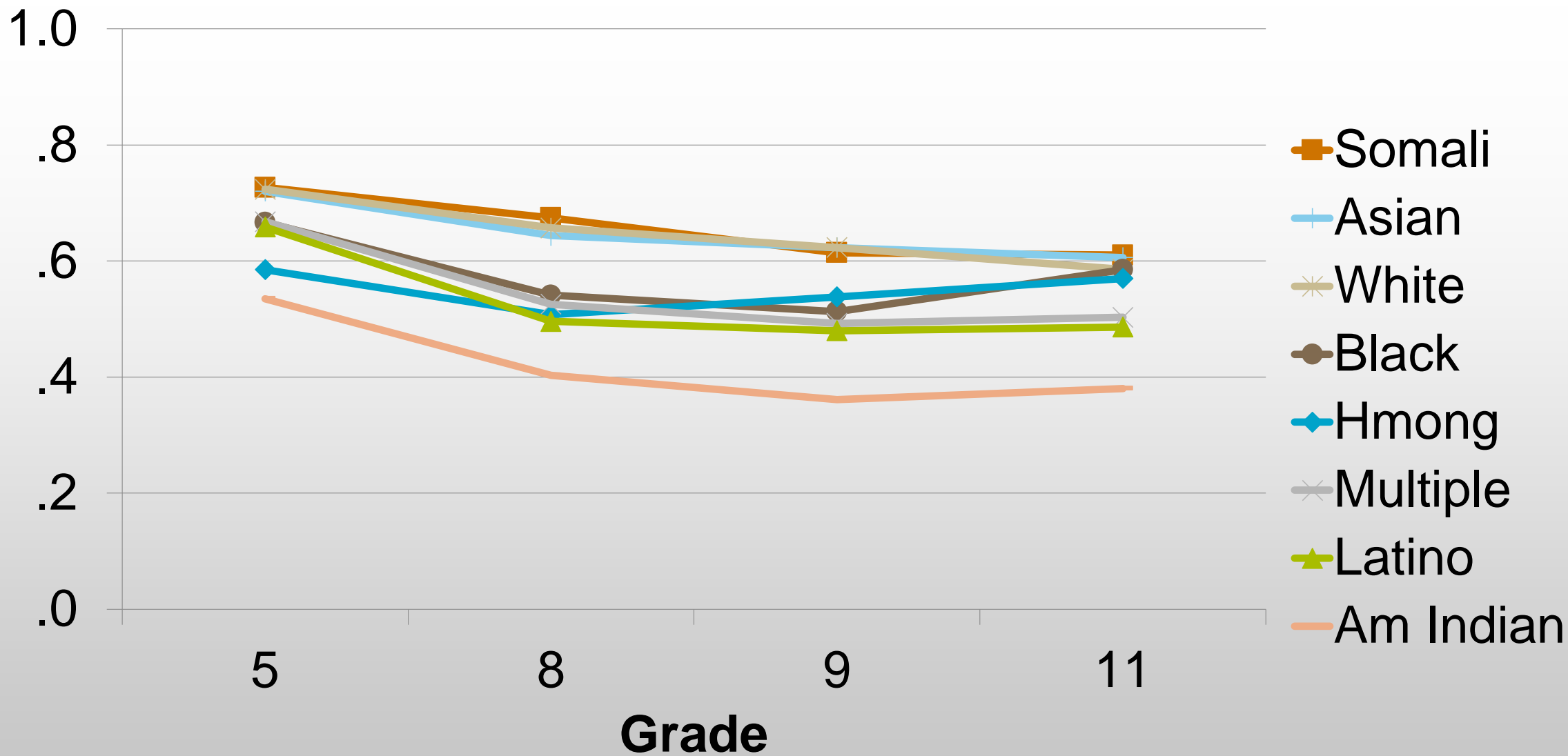
**17% have 0 Skills**

**21% have 1 Skill**

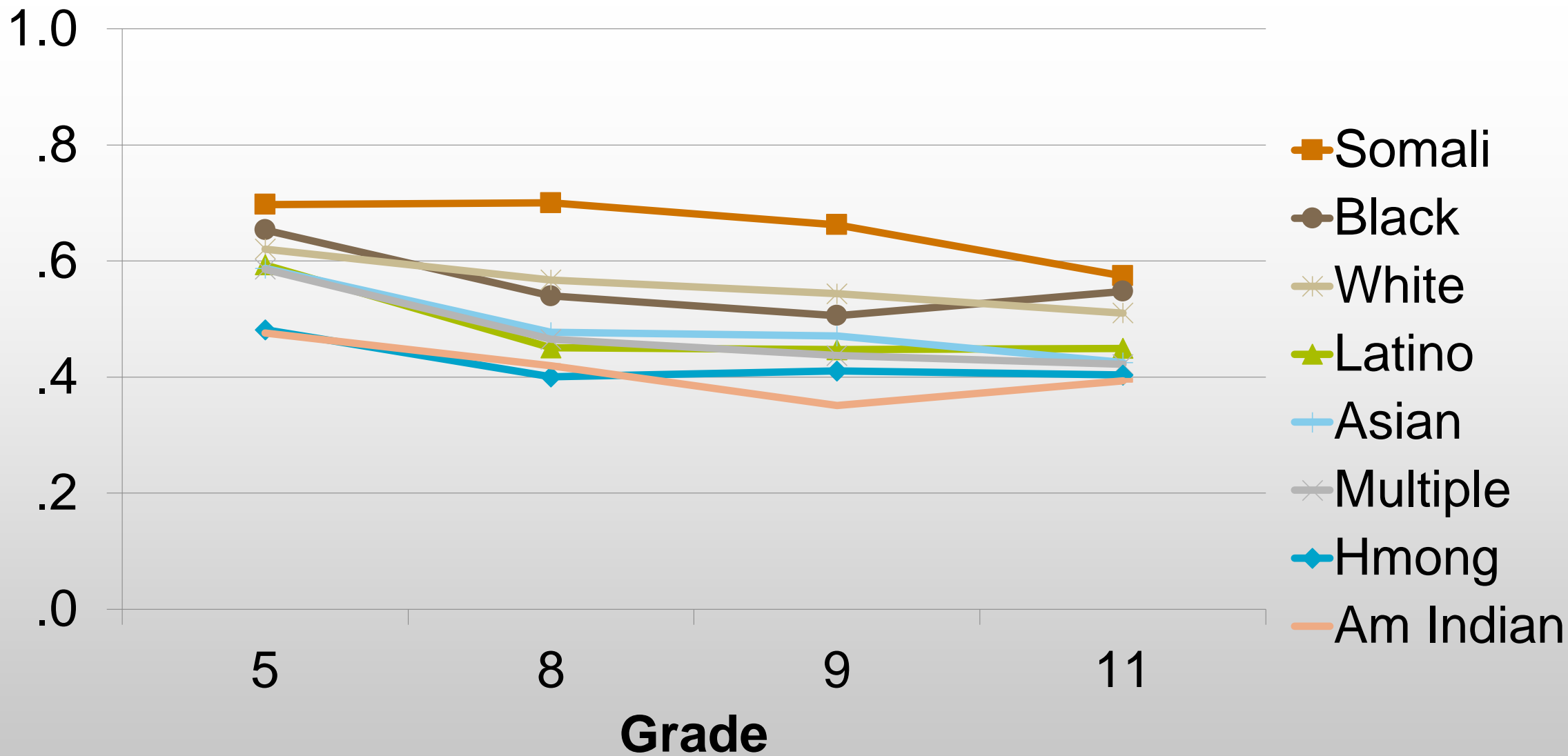
**23% have 2 Skills**

**39% have 3 Skills**



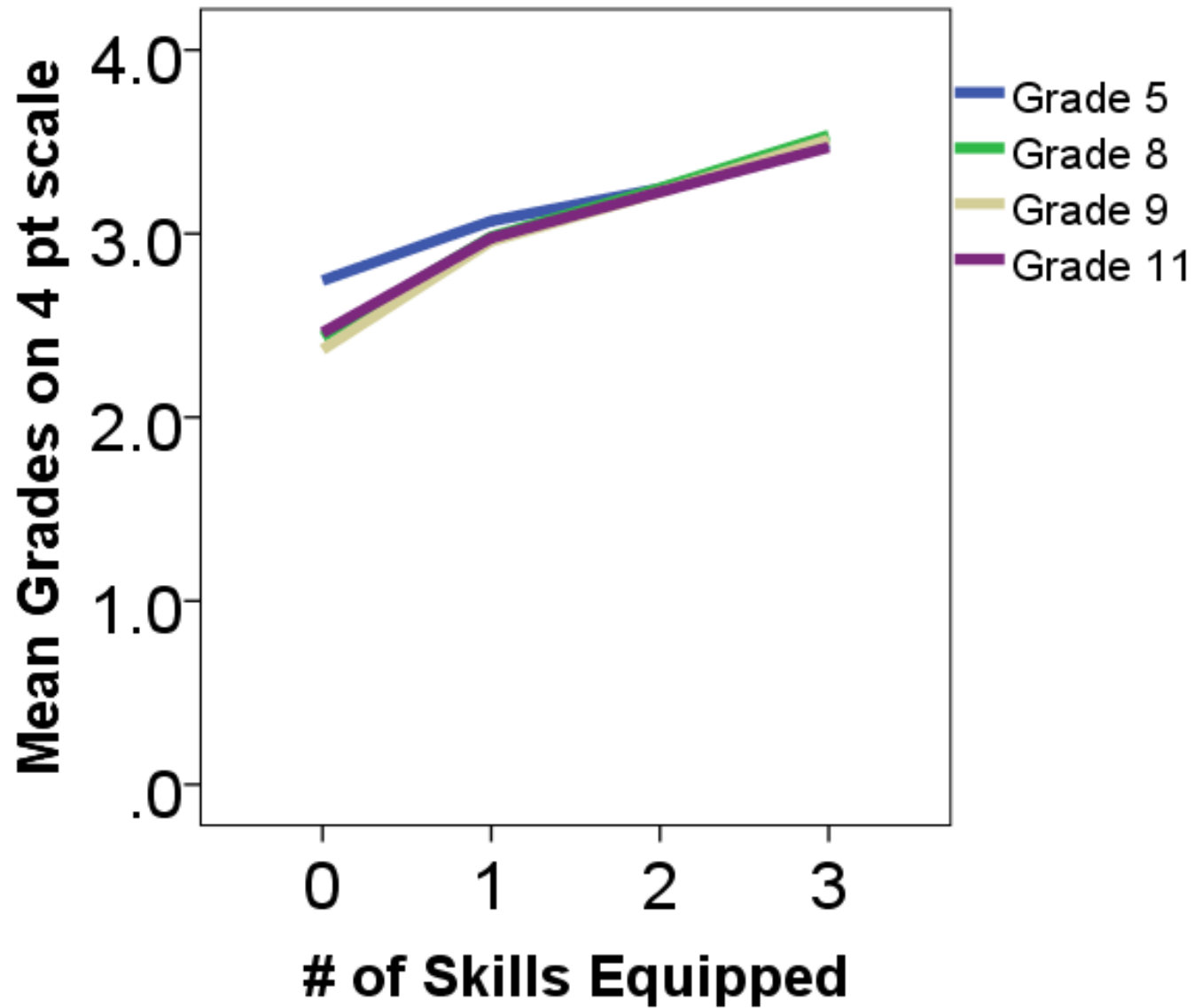


# Proportion Equipped: Social Competence



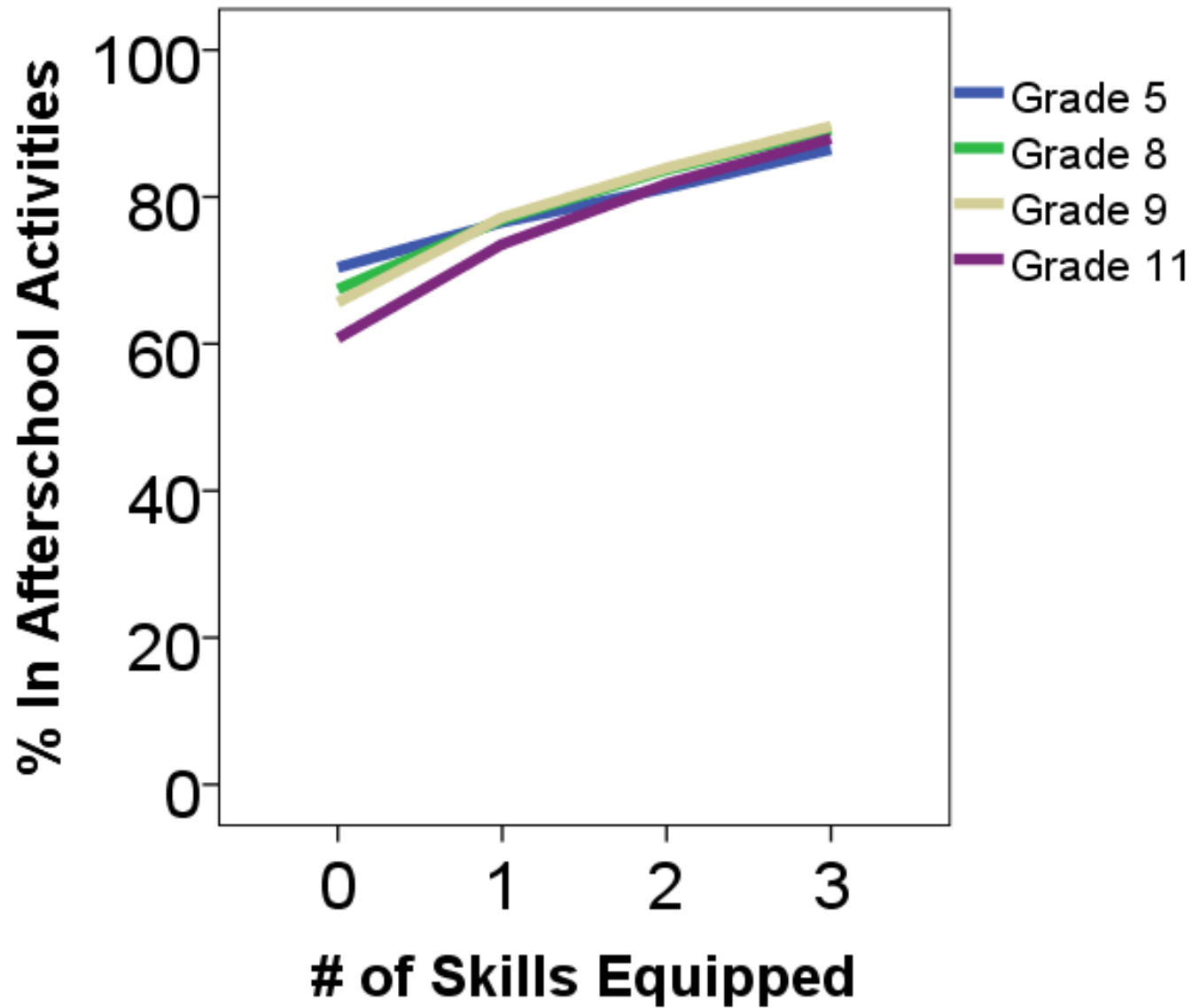
# Proportion Equipped: Positive Identity

# Unending Questions...



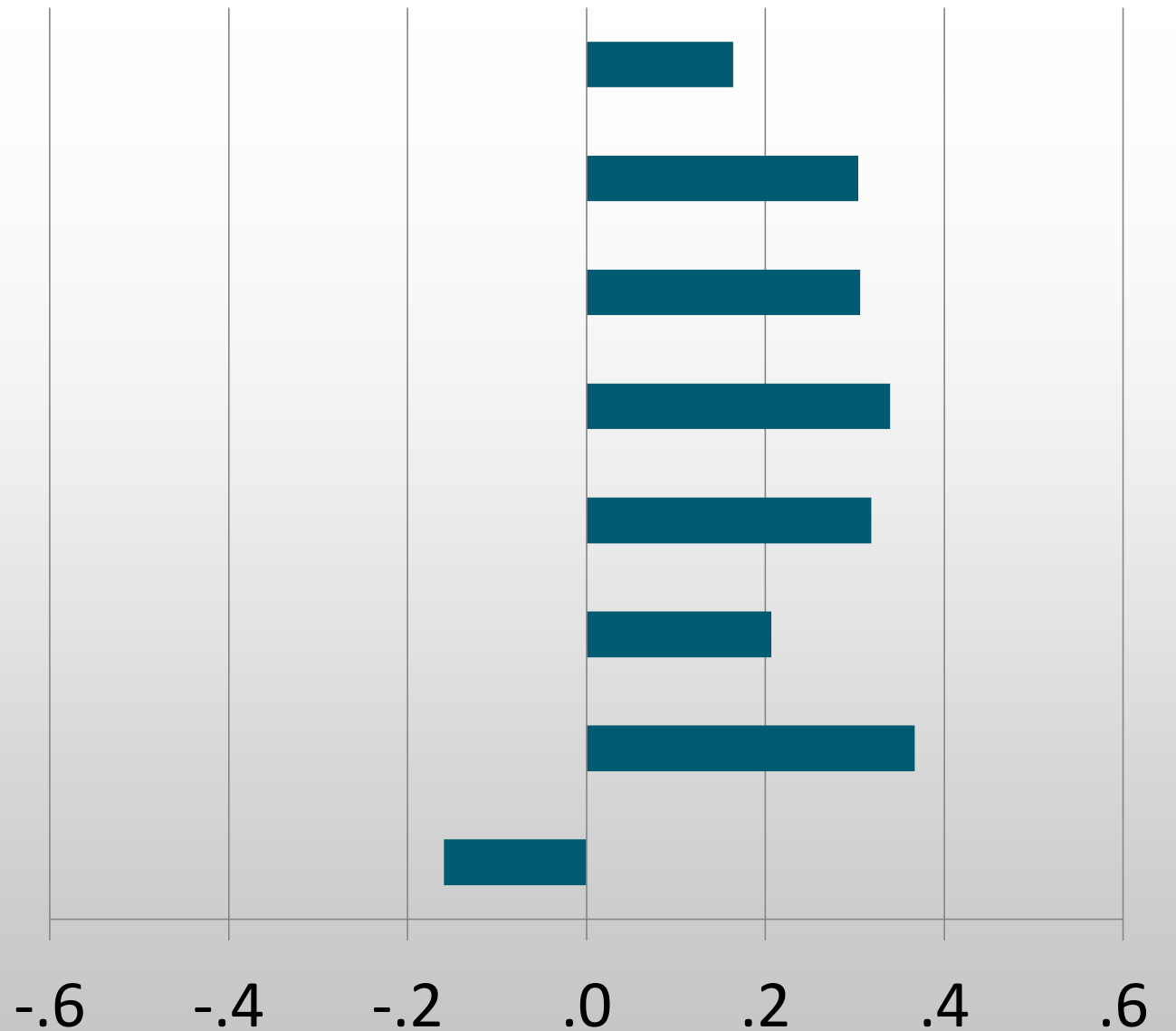
# Equipped Skills & Grades Earned in School





# Equipped Skills & Afterschool Participation

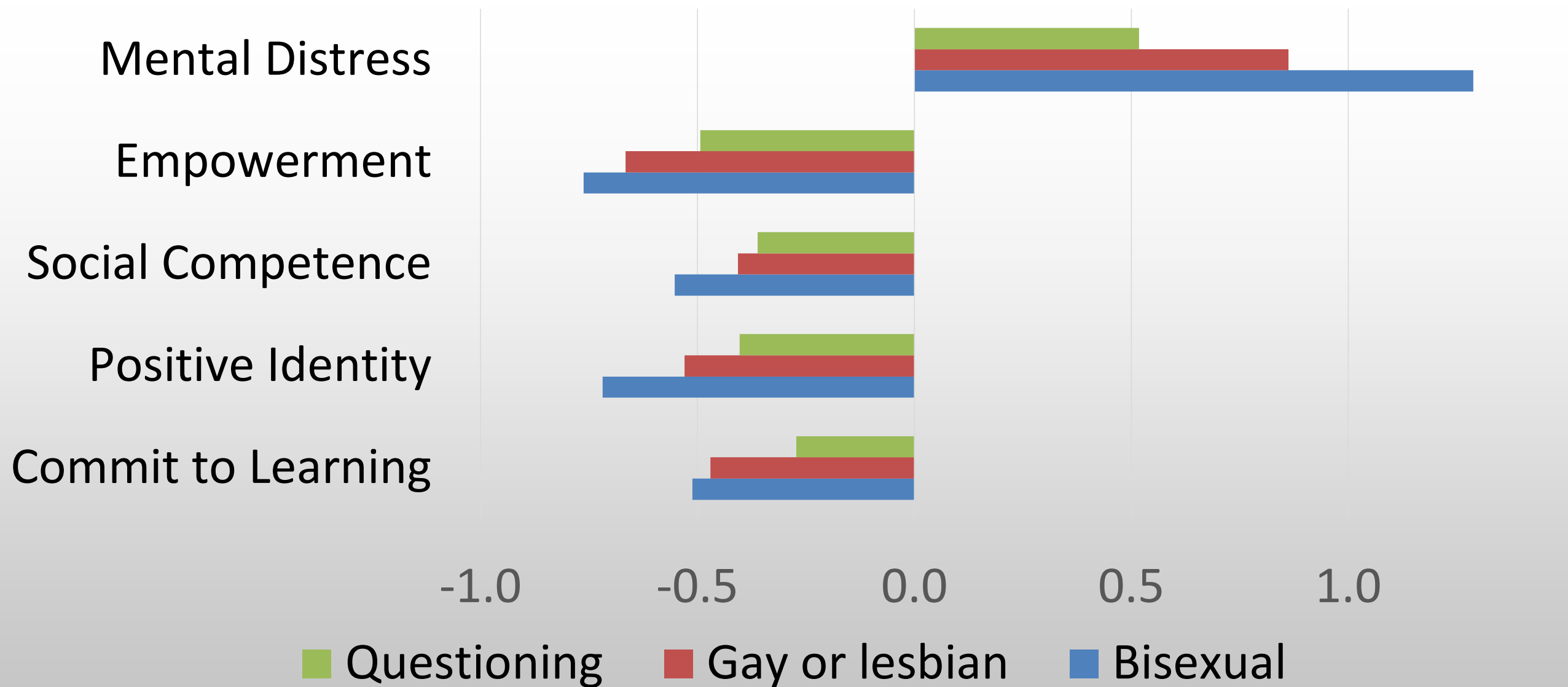
**Teacher/School Support**  
**Social Competence**  
**Supported**  
**Positive Identity**  
**Empowerment**  
**Commitment to Learning**  
**Grades**  
**Mental Distress**



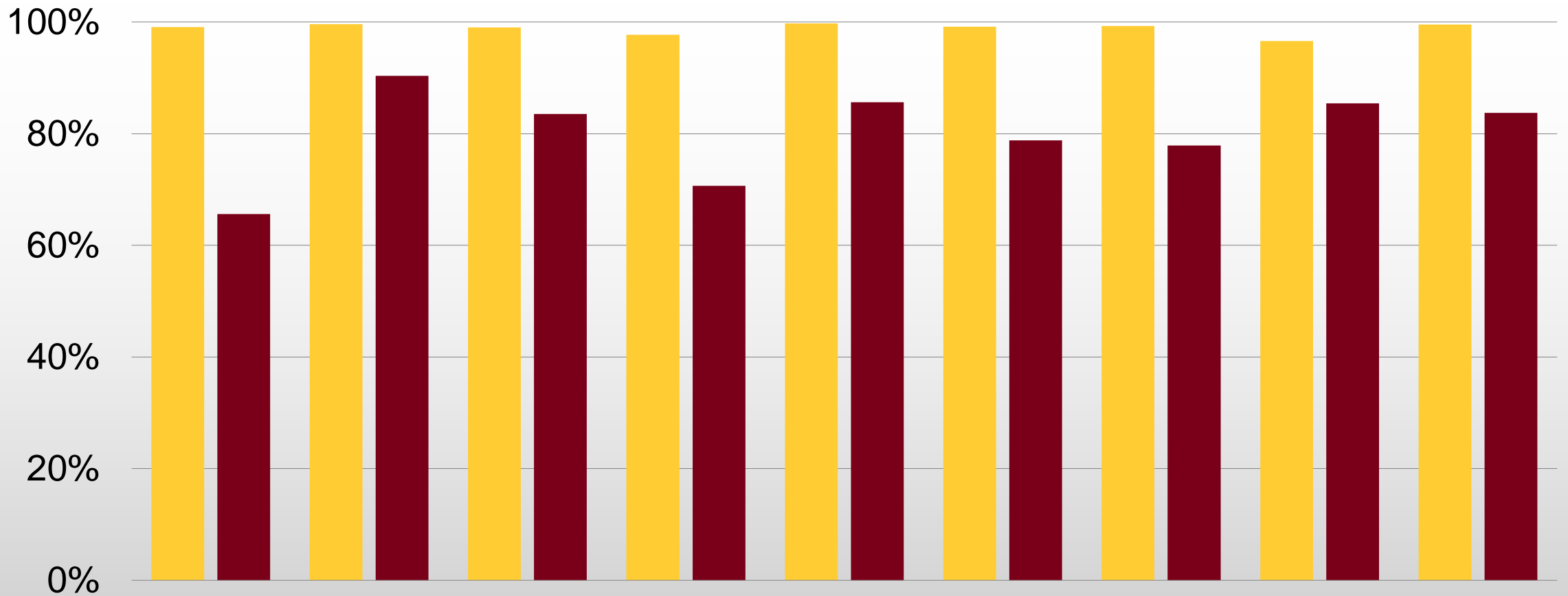
# Disparities in After-School Participation

## Of students in grades 8-11 in St. Paul:

- About 31% report to work at least 1 hour a week (of these, 22% work more than 10 hours/week).
- Of those working, 77% participate in after-school activities.
- Of those **not** working, 70% participate in after-school activities.



# Disparities: Sexual Orientation



■ Complete High School
 ■ Post-Secondary Education

# Post High School Plans

# UNIVERSITY OF MINNESOTA

**Driven to Discover<sup>SM</sup>**



**More to come...**