



MLDS CENTER

Maryland Longitudinal
Data System

Better Data • Informed Choices • Improved Results

The Role of Concentrated
Poverty and Race in Long-
Term Academic and
Workforce Outcomes

Task Force on Reconciliation
and Equity

May 8, 2019

<https://mldscenter.maryland.gov>

Introductions and Acknowledgements

- About the presenters:
 - **Angela K. Henneberger**, Ph.D., is director of the Research Branch at the MLDS Center and Research Assistant Professor at the University of Maryland School of Social Work (SSW).
 - **Bess A. Rose**, Ed.D., is statistician with the Research Branch at the MLDS Center and the SSW.
- Acknowledgements:
 - Maryland Commission on Innovation and Excellence in Education
 - MLDS Center staff

Overview

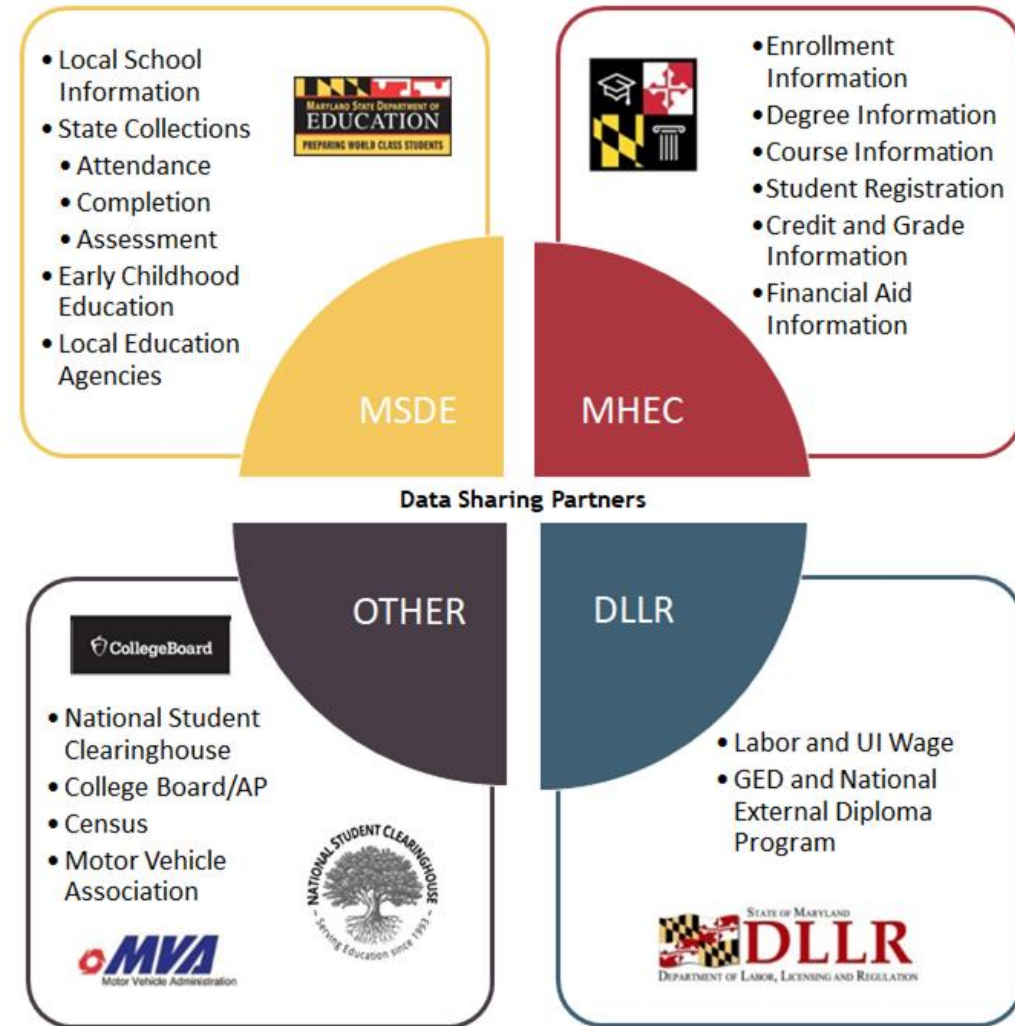
- What is the MLDS Center?
- The problem
- How does the MLDS Center measure race and poverty?
- The overlap of race and poverty
- Results from Maryland's data
- Summary, next steps and Q & A

What is the MLDS Center?

mldscenter.maryland.gov

The MLDS Center

Mission: The mission of the MLDS Center is to develop and maintain a data system that contains student data from all levels of education and workforce data in order to provide analyses, produce relevant information, and inform choices to improve student and workforce outcomes, while ensuring the highest standards of system security and data privacy.



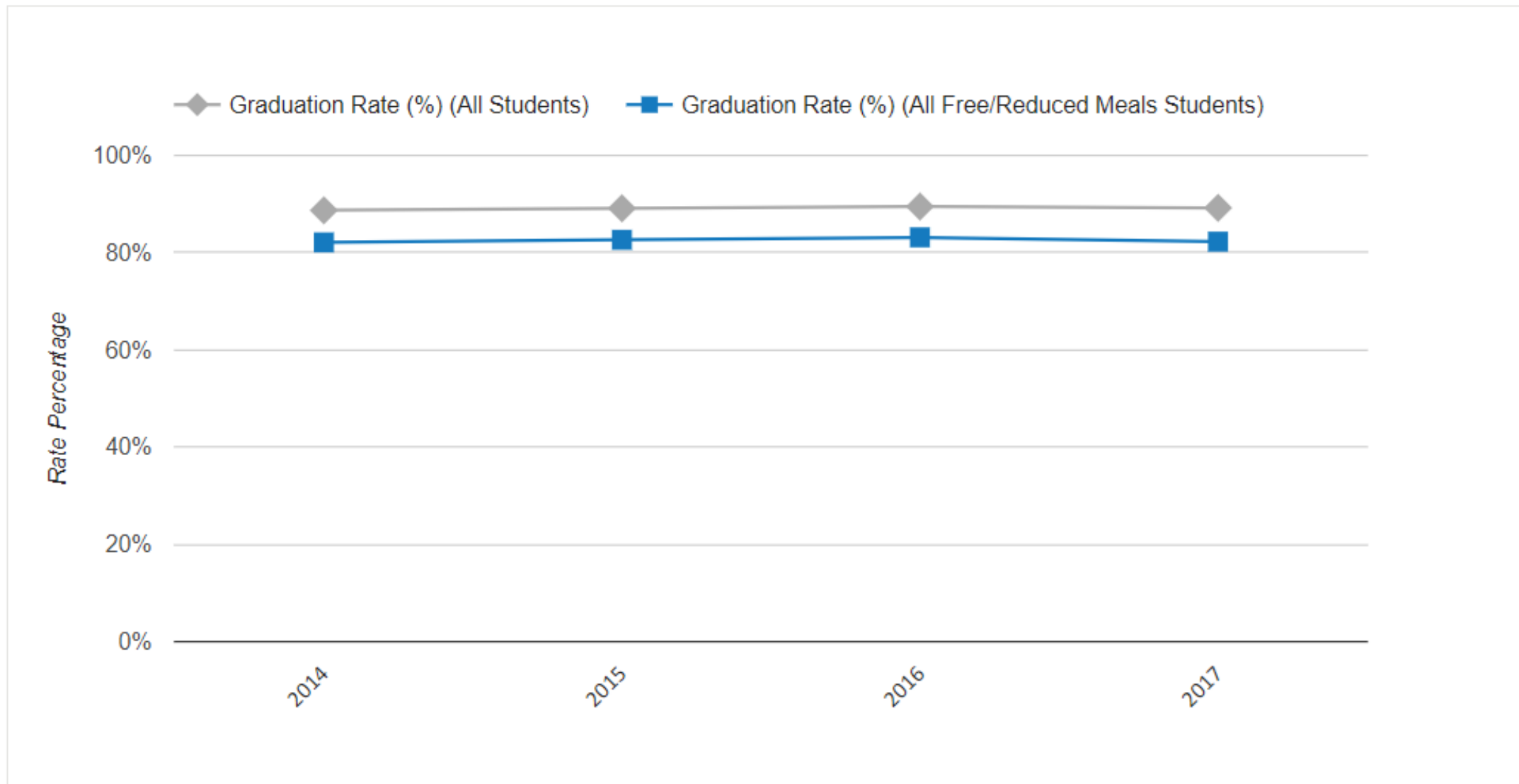
The problem

Students in poverty and Black students have worse educational outcomes

Cohort Graduation Rate Trend Data (2014 - 2017) ?

Source: mdreportcard.org

Data Last Updated: 3/5/2019



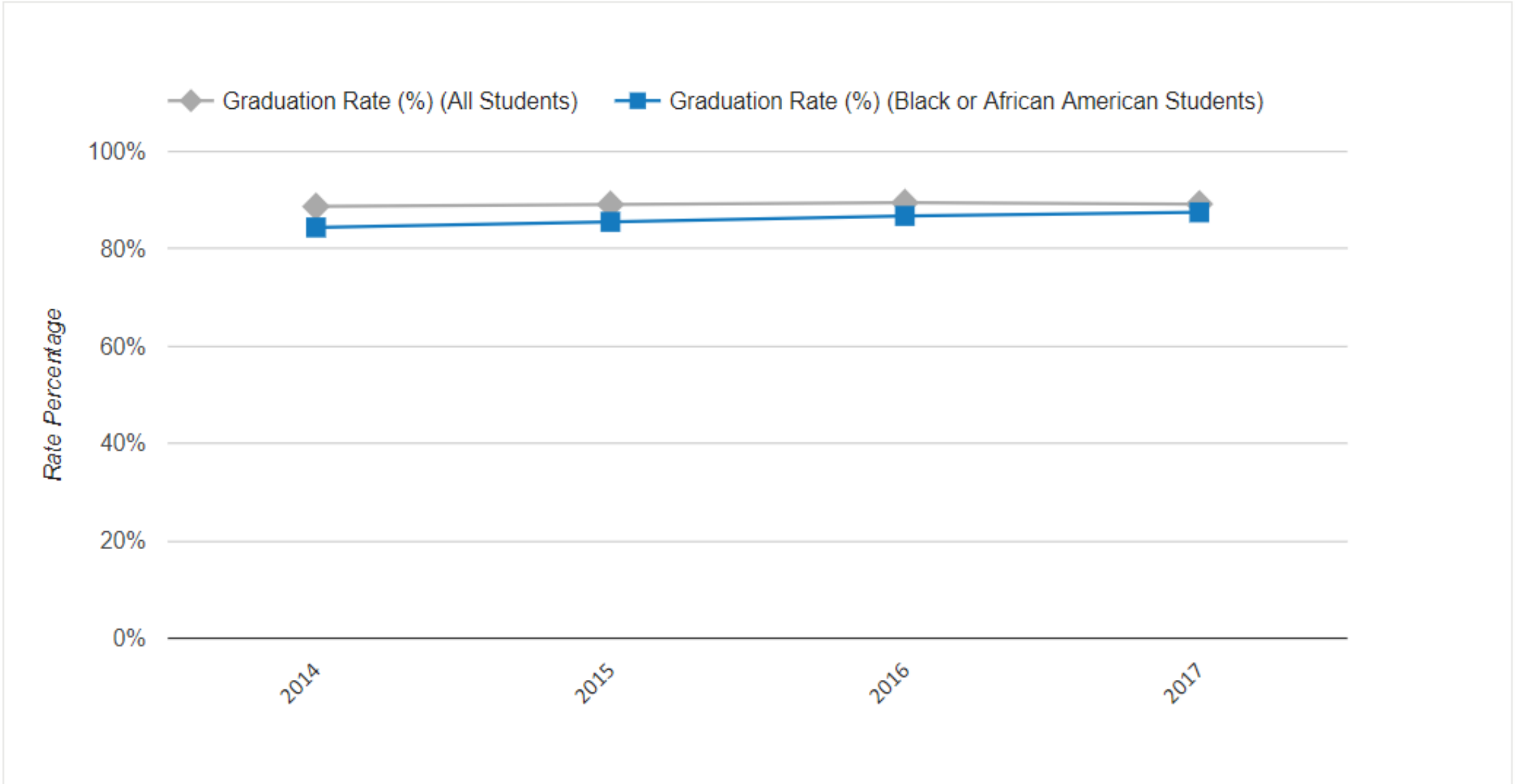
Filter Results:

Cohort Type: 5-Year Adj Cohort, Gender: All Students, Special Services: FARMS, Race and Ethnicity: All Students

Cohort Graduation Rate Trend Data (2014 - 2017) ?

Source: mdreportcard.org

Data Last Updated: 3/5/2019



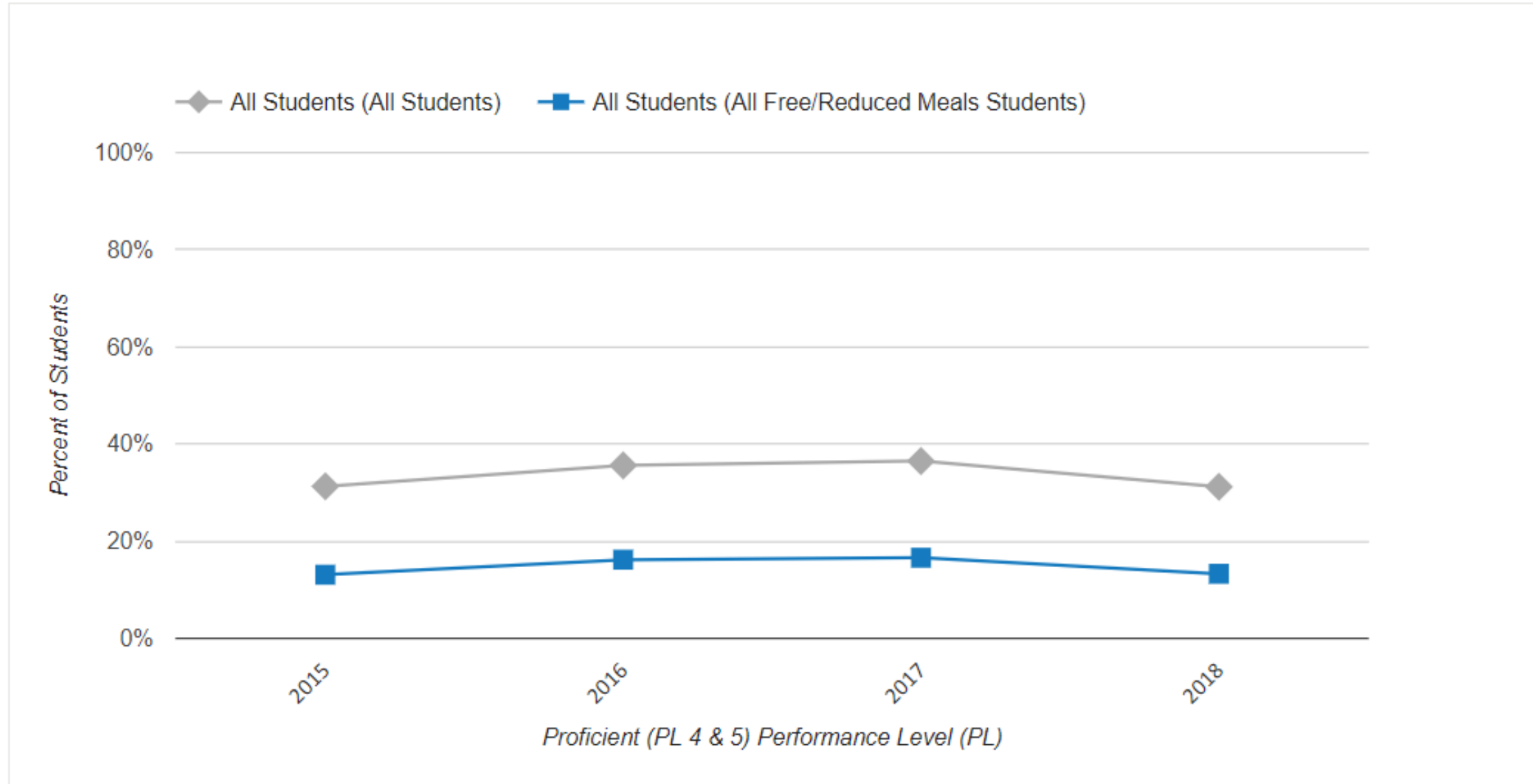
Filter Results:

Cohort Type: 5-Year Adj Cohort, Gender: All Students, Special Services: All Students, Race and Ethnicity: African Am.

Mathematics Trend Data (2015 - 2018) ?

Source: mdreportcard.org

Data Last Updated: 7/30/2018



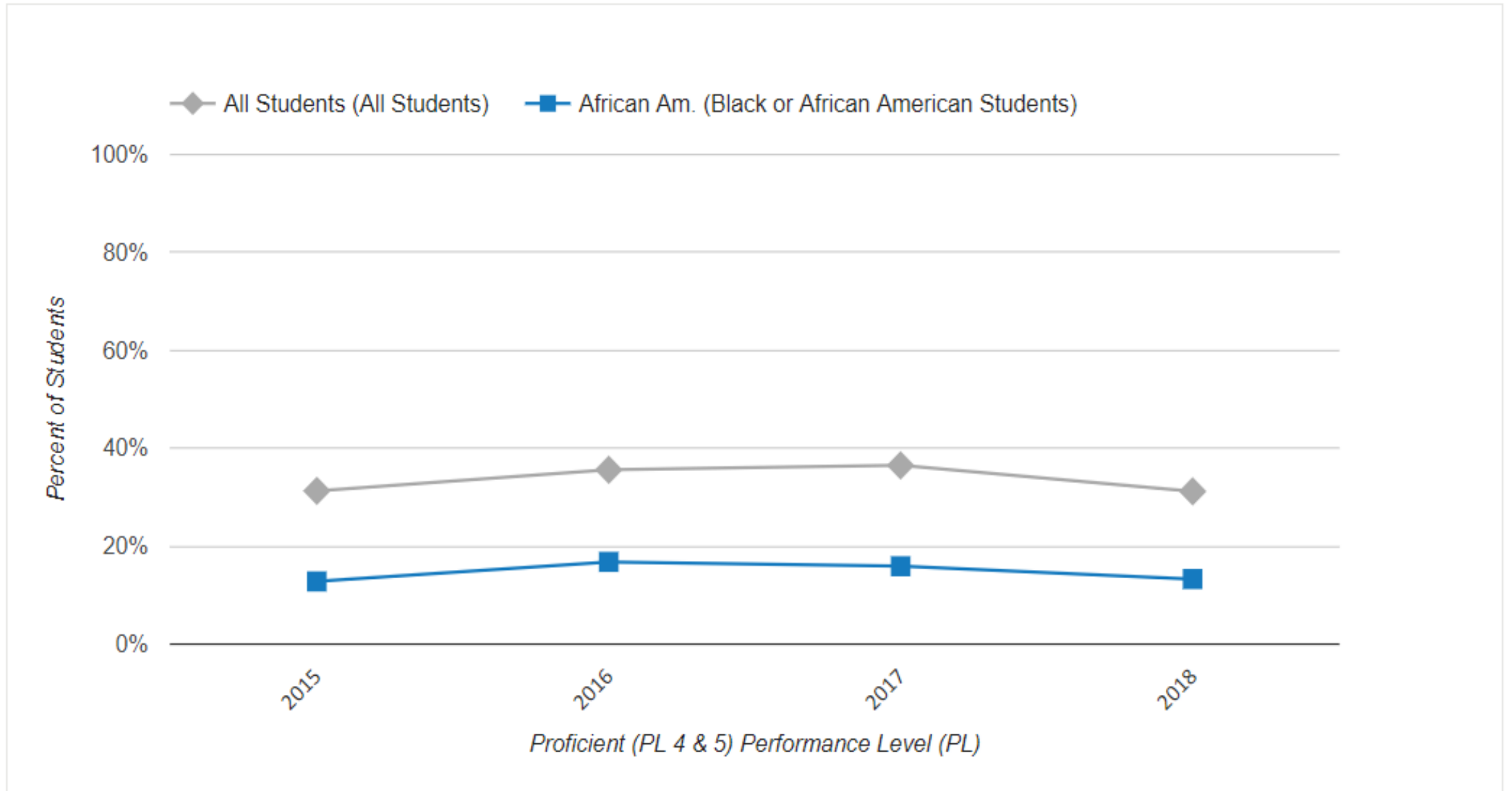
Filter Results:

Assessment Type: Math - Algebra I, Gender: All Students, Special Services: FARMS, Race and Ethnicity: All Students

Mathematics Trend Data (2015 - 2018) ?

Source: mdreportcard.org

Data Last Updated: 7/30/2018



Filter Results:

Assessment Type: Math - Algebra I, Gender: All Students, Special Services: All Students, Race and Ethnicity: African Am.

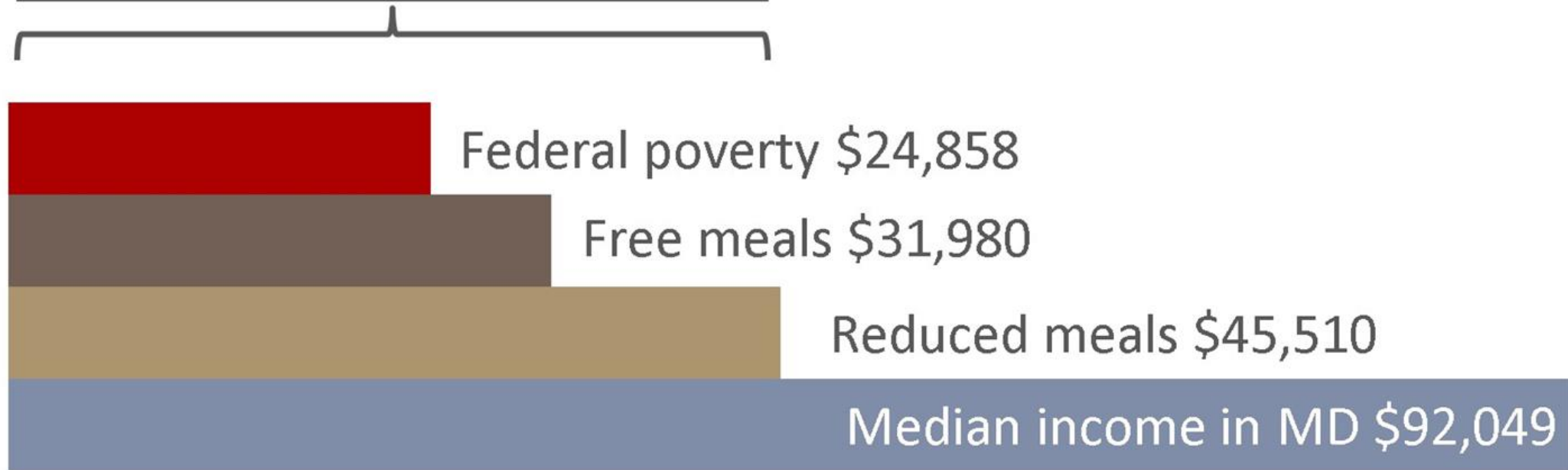
How does the MLDS Center measure race and poverty?

How does the MLDS Center define race?

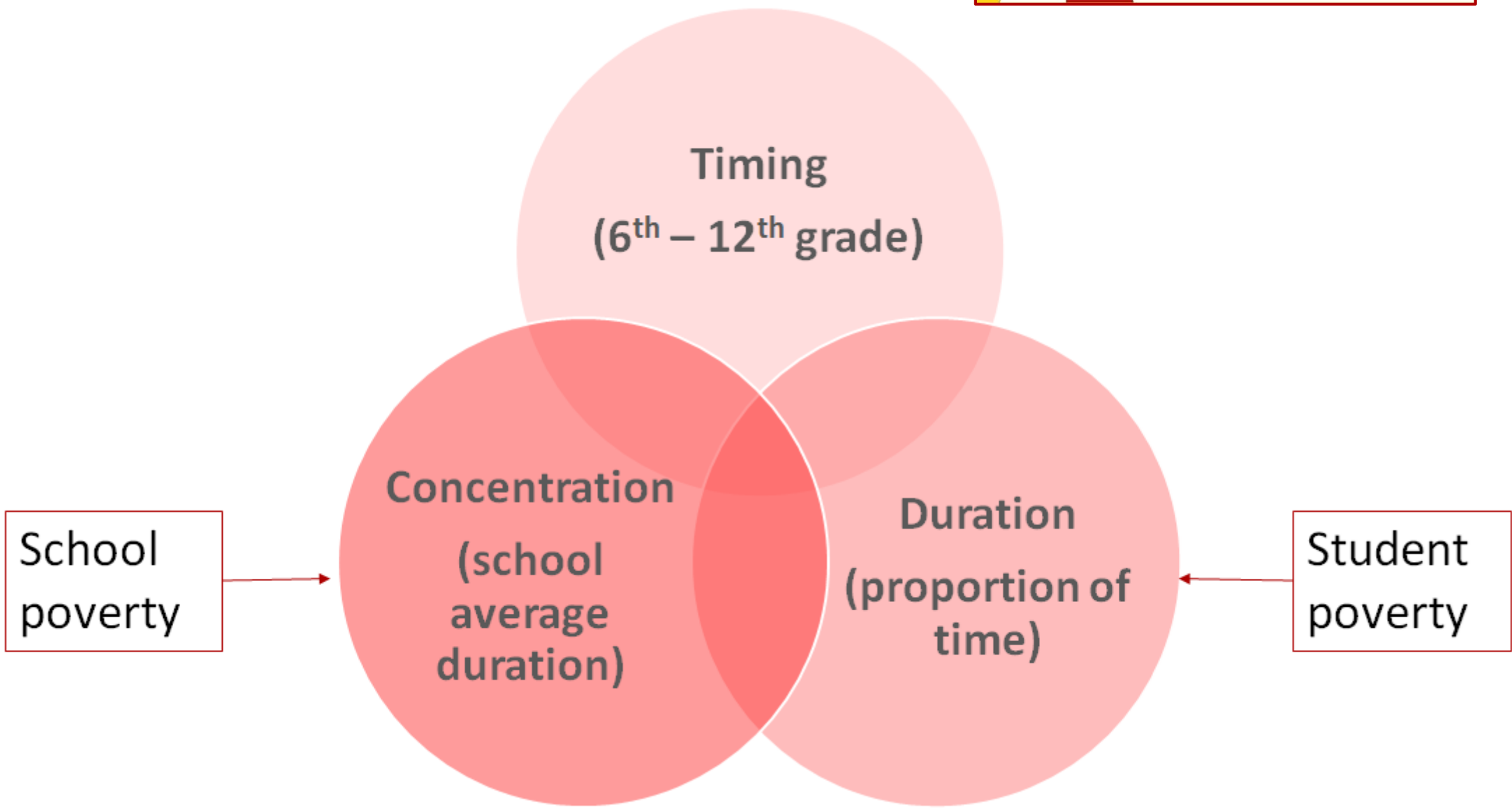
- ❑ Race
 - ❑ Asian
 - ❑ Black
 - ❑ White
 - ❑ Native Hawaiian or Other Pacific Islander
 - ❑ American Indian or Alaska Native
 - ❑ Two or More Races
 - ❑ Unknown
- ❑ Ethnicity
 - ❑ Hispanic or Latino
 - ❑ Not Hispanic or Latino
 - ❑ Unknown

How does the MLDS Center define “poverty”?

MLDS Center “poverty”:
Eligible for FARMS

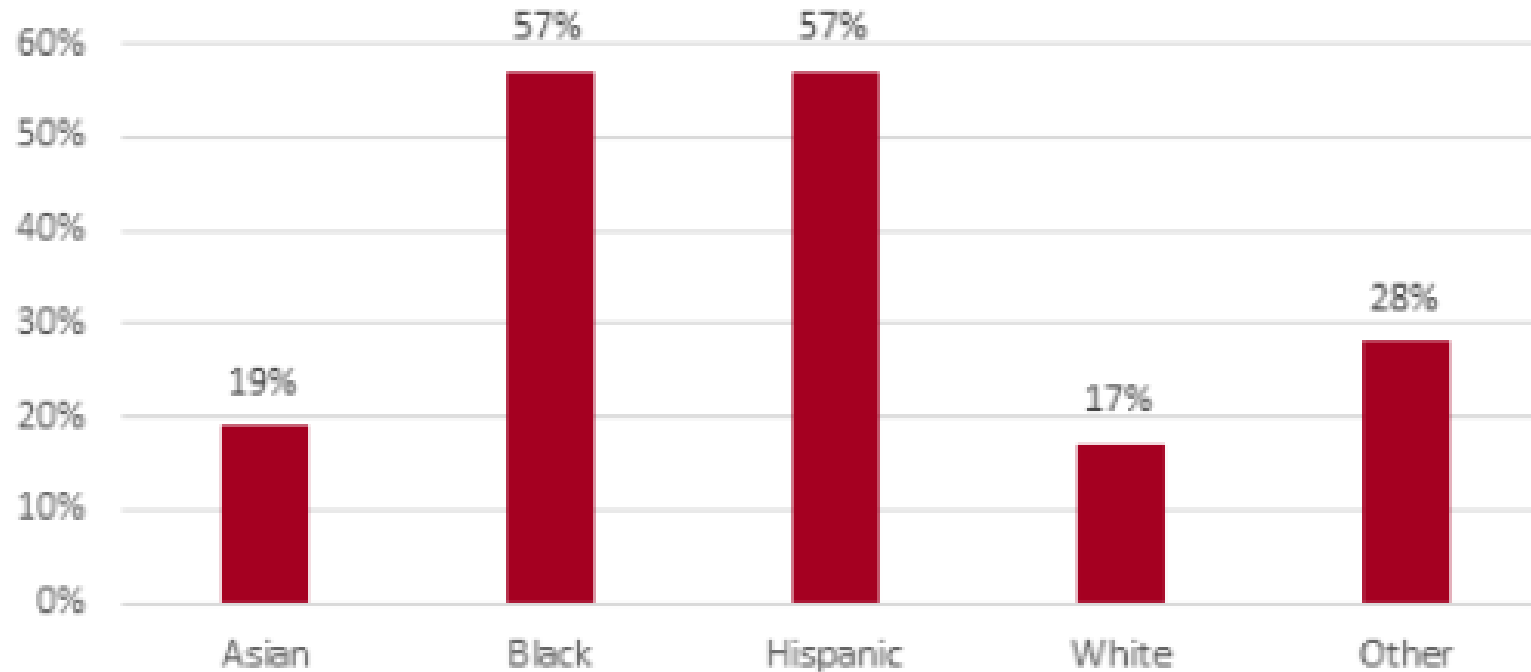


Household income thresholds for a family of 4

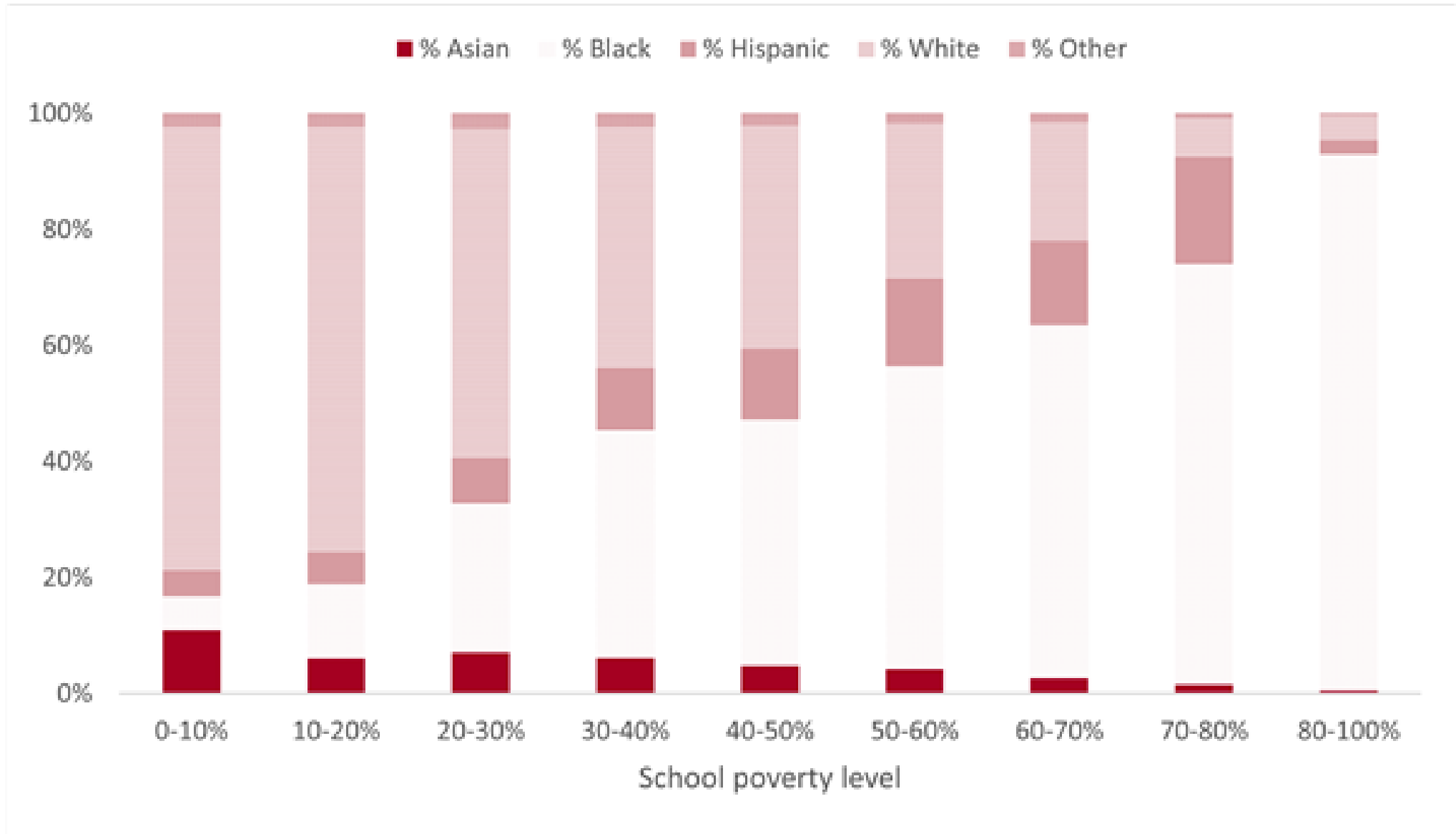


The overlap of race and poverty

Percent of Time Eligible for FARMS in 6th-12th Grade by Student Race/Ethnicity



Average School-Level Racial/Ethnic Composition by School-Level Poverty



Results from Maryland's data

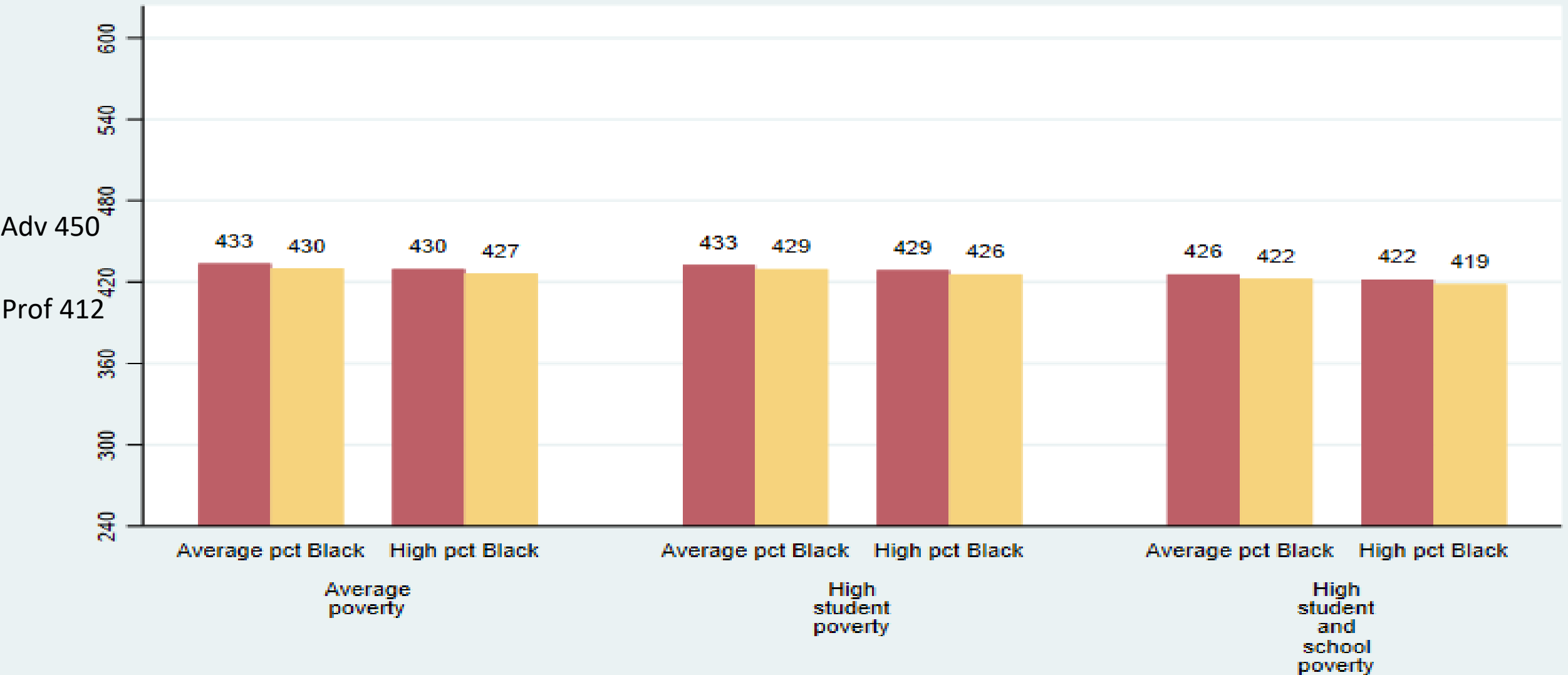
Disentangling the roles of student poverty, school concentration of poverty, student race/ethnicity, and school racial/ethnic composition

Overview of findings

- Students who experienced poverty for longer periods of time have worse educational outcomes
- School concentration of poverty, regardless of individual experience, predicts worse educational outcomes
- **Black-white gaps in standardized test scores and wages persist regardless of poverty**
- **Black-white gaps in high school graduation and postsecondary enrollment are reversed when controlling for poverty and school composition**

Results: Standardized test scores

White-Black gaps in predicted HSA Algebra scores by school racial composition and student and school poverty



Note. Model-based predictions based on the cohort of 6th grade students in 2007-08 with HSA Algebra scores, n=51,012.

Predicted standardized test scores: Summary

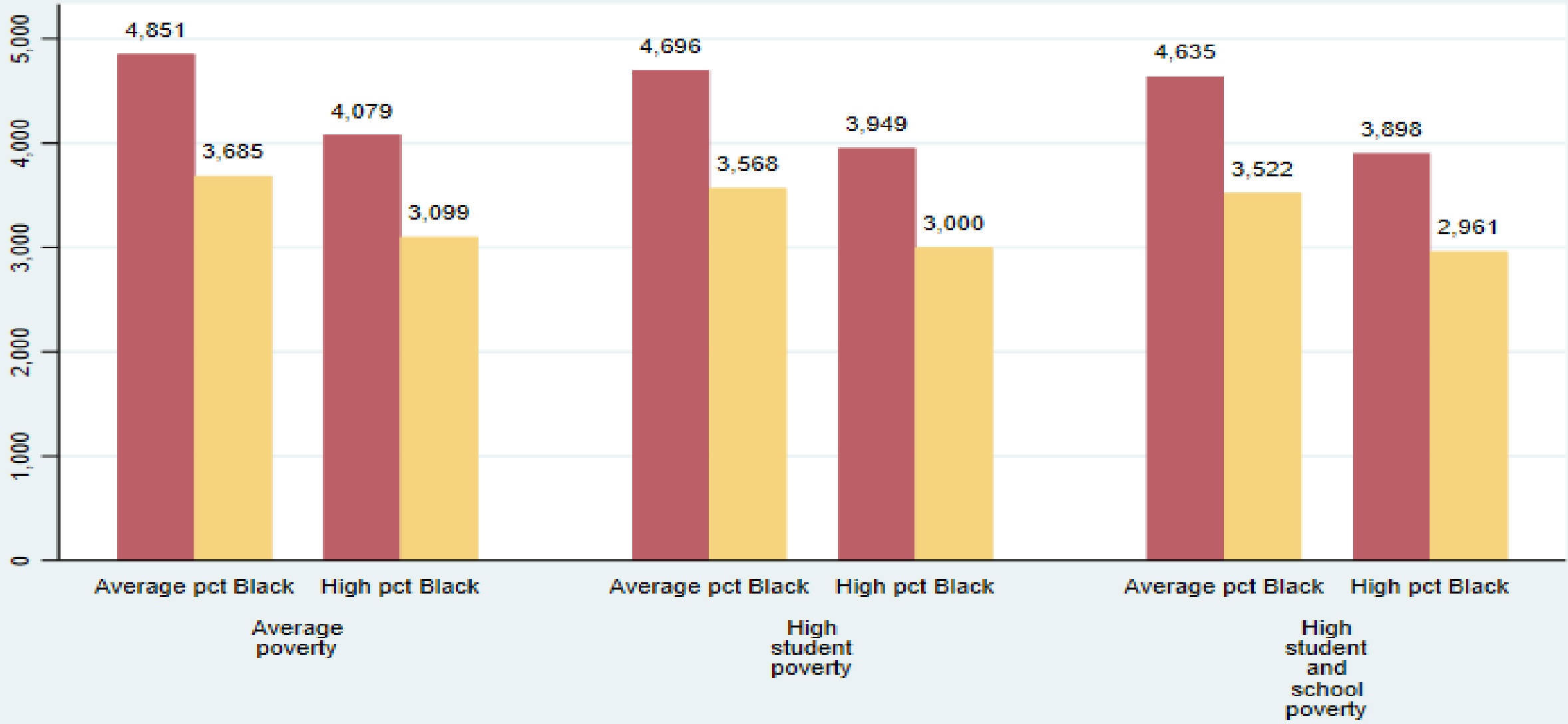
Controlling for poverty and race/ethnicity:

1. Student poverty: Students with longer duration of poverty are predicted to have lower scores
2. School poverty: Students who attend schools with higher concentrations of poverty are predicted to have lower scores
3. Student race/ethnicity: Black students are predicted to have lower scores than white students with similar poverty backgrounds
4. School race/ethnicity composition: Students in schools with larger Black populations are predicted to have lower scores on HSA Algebra than similar students in schools with smaller Black populations

Results: Wages for high school graduates not enrolled in college

White-Black gaps in predicted MD wages - not enrolled in postsecondary

by school racial composition and student and school poverty



Note. Model-based predictions based on the cohort of 8th grade students in 2007-08 who graduated from high school on time and were not enrolled in postsecondary, n=8,529.

Wages - not enrolled in college: Summary

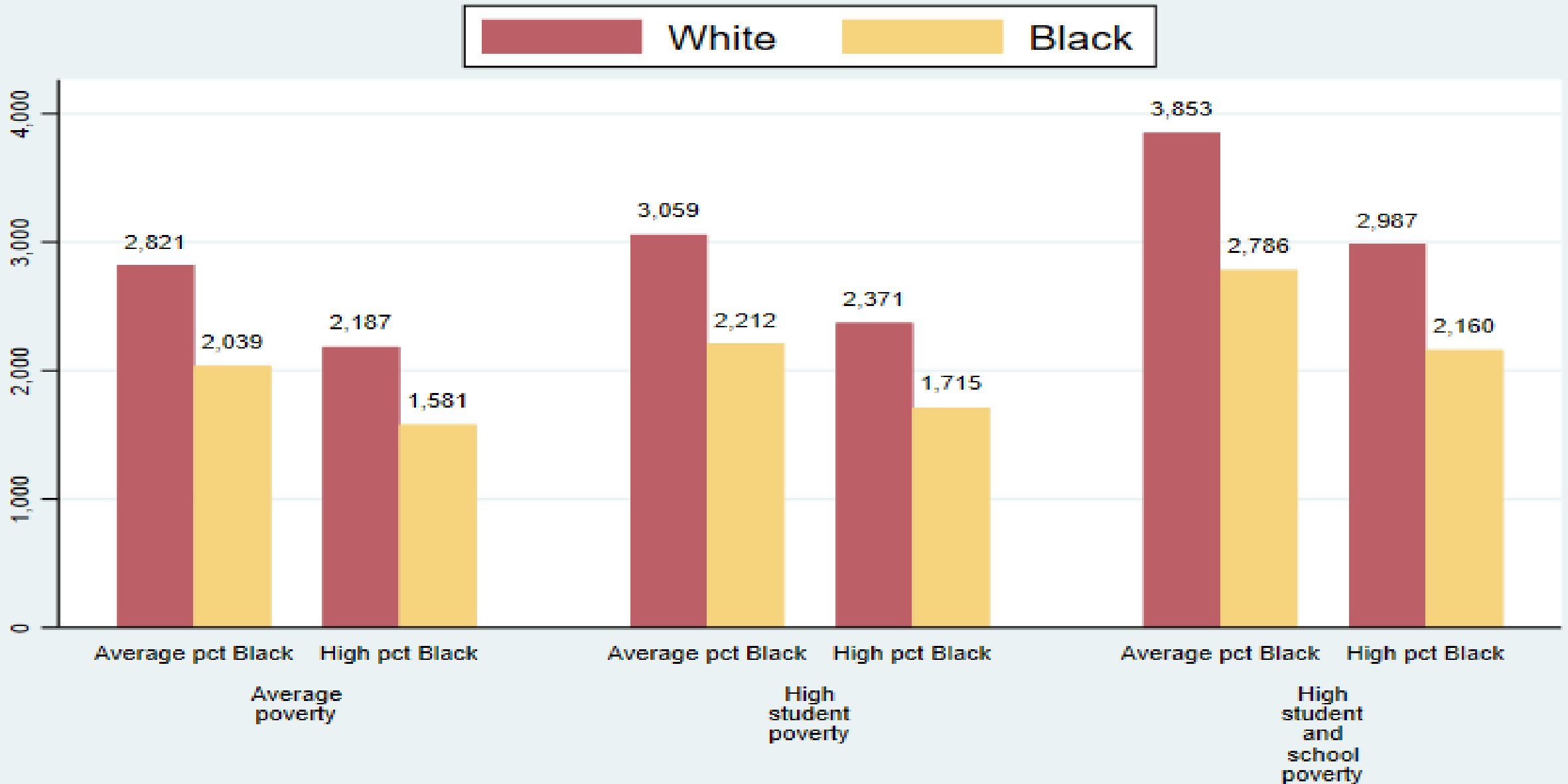
Controlling for poverty and race/ethnicity:

1. Student poverty: Students with longer duration of poverty are predicted to have slightly lower wages
2. School poverty: Students who attend schools with higher concentrations of poverty are predicted to have about the same wages
3. Student race/ethnicity: Black students are predicted to have 28% lower wages than white students with similar poverty backgrounds
4. School race/ethnicity composition: Students in schools with larger Black populations are predicted to have lower wages than similar students in schools with smaller Black populations

Results: Wages for high school graduates enrolled in college in Maryland

White-Black gaps in predicted MD wages - enrolled in MD postsecondary

by school racial composition and student and school poverty



Note. Model-based predictions based on the cohort of 8th grade students in 2007-08 who graduated from high school on time and were enrolled in postsecondary in MD, n=22,550.

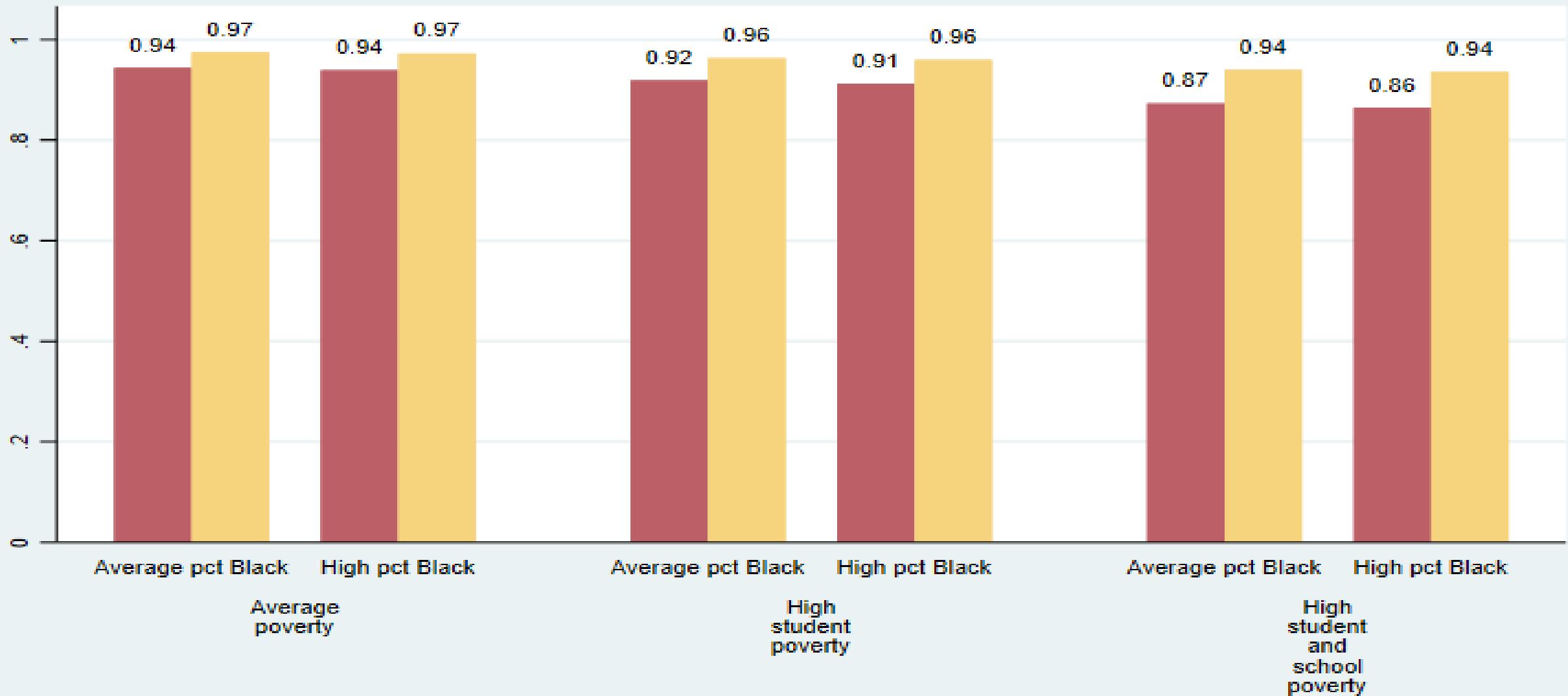
Wages - enrolled in college in Maryland: Summary

Controlling for poverty and race/ethnicity:

1. Student poverty: Students with longer duration of poverty are predicted to have higher wages
2. School poverty: Students who attend schools with higher concentrations of poverty are predicted to have higher wages
3. Student race/ethnicity: Black students are predicted to have 32% lower wages than white students with similar poverty backgrounds
4. School race/ethnicity composition: Students in schools with larger Black populations are predicted to have lower wages than similar students in schools with smaller Black populations

Results: High school graduation and postsecondary enrollment

White-Black gaps in predicted probability of ever graduating from high school by school racial composition and student and school poverty



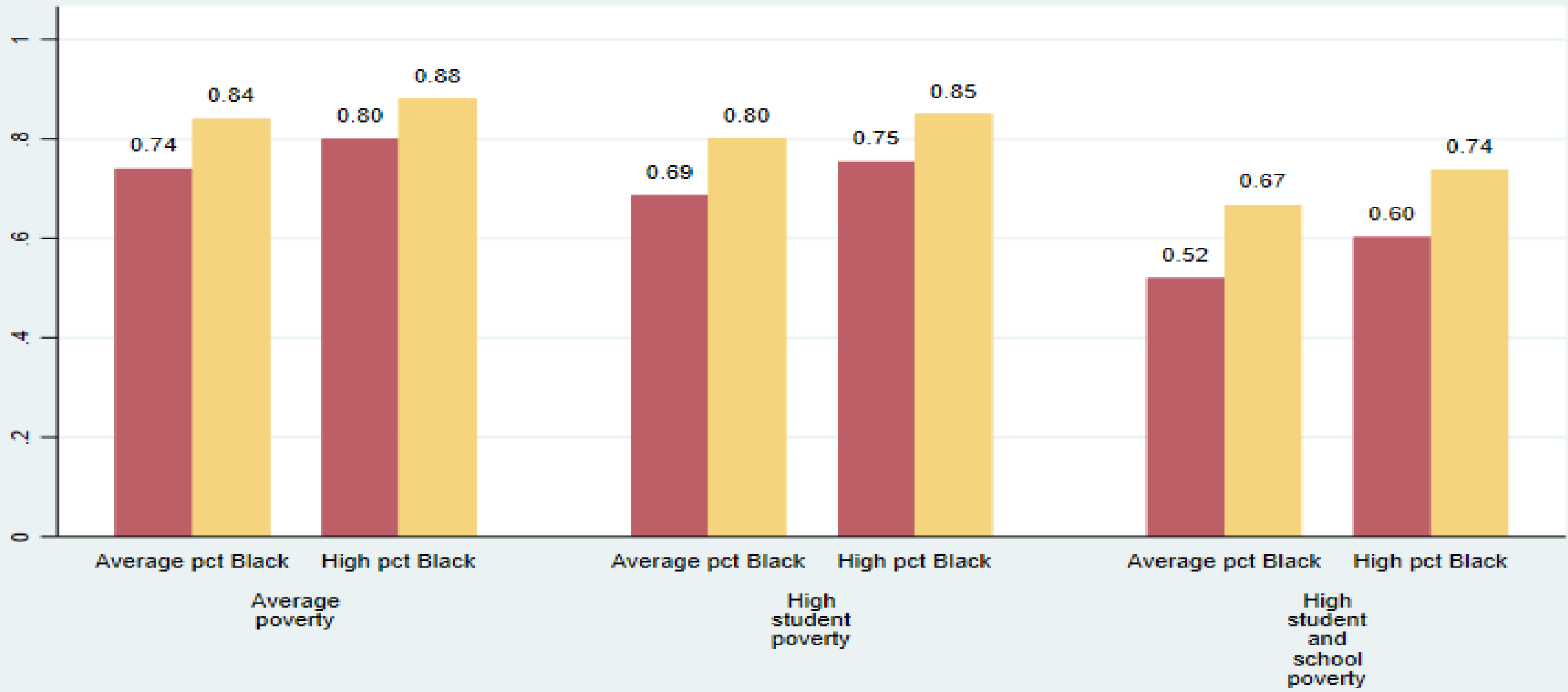
Note. Model-based predictions based on the cohort of 8th grade students in 2007-08, n=52,610.

Predicted HS graduation ever: Summary

Controlling for poverty and race/ethnicity:

1. Student poverty: Students with longer duration of poverty are less likely to ever graduate from high school
2. School poverty: Students who attend schools with higher concentrations of poverty are less likely to ever graduate from high school
3. Student race/ethnicity: Black students are *more* likely to ever graduate from high school than white students with similar poverty backgrounds
4. School race/ethnicity composition: Students in schools with larger Black populations have about the same likelihood to ever graduate from high school than similar students in schools with smaller Black populations

White-Black gaps in predicted probability of enrolling in postsecondary by school racial composition and student and school poverty



Note. Model-based predictions based on the cohort of 6th grade students in 2007-08 who graduated from high school on time, n=45,580.

Predicted postsecondary enrollment: Summary

Controlling for poverty and race/ethnicity:

1. Student poverty: Students with longer duration of poverty are less likely to enroll in postsecondary within 1 year of on-time high school graduation
2. School poverty: Students who attend schools with higher concentrations of poverty are less likely to enroll in postsecondary
3. Student race/ethnicity: Black students are *more* likely to enroll in postsecondary than white students with similar poverty backgrounds
4. School race/ethnicity composition: Students in schools with larger Black populations are *more* likely to enroll in postsecondary than similar students in schools with smaller Black populations



Summary

Summary of findings

- Students who experienced poverty for longer periods of time have worse educational outcomes
- School concentration of poverty, regardless of individual experience, predicts worse educational outcomes
- **Black-white gaps in standardized test scores and wages persist regardless of poverty**
- **Black-white gaps in high school graduation and postsecondary enrollment are reversed when controlling for poverty and school composition**

Questions?

- Contact us: MLDS.Center@Maryland.gov

Acknowledgements

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