Student age, disciplinary incidents biggest predictors of dropouts in study

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Age and disciplinary incidents are the factors most likely to impact a student's decision to drop out of high school, according to a research brief from the Houston Education Research Consortium (HERC), part

of Rice University's Kinder Institute for Urban Research.

The paper, "Evaluating High School Dropout Indicators and Assessing Their Strength: Evidence From the Houston Independent School District (HISD)," evaluated potential factors affecting student dropout rates for HISD's 2009-2010 cohort of freshman students.

"Finding accurate predictors of high school noncompletion continues to rank as a major concern among policymakers and social science scholars whose research focuses on inequality in educational attainment," said Diego Torres, the paper's lead author and a former HERC researcher.

The researchers examined factors that might influence high school dropout rates while accounting for sex, race, free-lunch qualification, socio-economic advantage/disadvantage, English proficiency, disciplinary issues, test scores, previous grades and these issues within the whole school district.

The researchers found that students who were older than the typical age for their grade at the beginning of high school (16 or older at the beginning of ninth grade) had 336 percent higher odds of dropping out in any given year of high school. In addition, students who experienced a disciplinary incident in the eighth grade had 124 percent greater odds of dropping out during high school.

Other factors influencing the likelihood of students dropping out from high school included:

- Students from poor families (in this instance, anyone who received Temporary Assistance for Needy Families or other aid but had failed to complete paperwork for the National Free Lunch Program) had 80 percent higher odds of dropping out in any given year of high school.

- Students who received an "F" during any grading period during the eighth grade were more than twice as likely to drop out of high school than peers who did not receive an "F" during a grading period in the eighth grade.
- Students who failed to meet the eighth-grade Texas Assessment of Knowledge and Skills (TAKS) math standard had 65 percent higher odds of dropping out of high school (with all other factors being equal). Students who failed to meet the eighth-grade TAKS reading standard had 36 percent higher odds of dropping out of high school.
- If the school at which a student attended freshman year had a proportion of students in poverty at or above the district high school mean, that student had 84 percent higher odds of dropping out than peers whose freshman-year school had a proportion of students in poverty below the district high school average.

If a student's freshman-year school had a proportion of students deemed at risk of dropping out that was at or above the district high school average (65 percent for HISD), that student had 84 percent higher odds of dropping out than peers whose freshman-year school had a proportion of students deemed at risk below the district high school average.

The data for the study were provided by HISD via a data-sharing agreement with HERC. The sample included the ninth-grade cohort for the 2009-2010 academic year, which included 9,000 students after accounting for those who left HISD for reasons other than graduating, for those for whom data errors made it impossible to determine their final status and for those who had eighth-grade TAKS math and reading scores readily available.

Torres and his fellow researchers hope that their research will shed light on the factors that impact dropout rates and ultimately lead to improvements.

"District resources across the country are often limited, so correctly allocating monies to combat malleable factors is of utmost importance," Torres said. "With respect to the dropout crisis, it is natural that interventions should be targeted at students who need it most. Just as important, however, is avoiding the wasting of resources on interventions targeted at students who don't really need it."

More information: Evaluating High School Dropout Indicators and Assessing Their Strength. kinder.rice.edu/uploadedFiles/ … Programs/HERC/Torres %20et%20al.%20-%20Dropout%20Indicators%20Research%20Brief%20Main.pdf

Provided by Rice University

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