

Stakeholder Summary

Food security has positive effects on high school grades and enrolment in postsecondary education

A new study published by the Higher Education Quality Council of Ontario (HEQCO) has found that inadequate quantity and quality of food, also known as food insecurity, has significant impacts on both the academic success and postsecondary education participation of high school students. However, the positive impacts of food security were seen only in university participation, suggesting that better-resourced students demonstrate a preference for university. Additionally, different responses to food insecurity were found by race. For example, food security had a more dramatic positive impact on the grades of White students than it did for Black students.

Project Description

Food Insecurity and Educational Outcomes: A Focus on TDSB Students used data from the Toronto District School Board (TDSB) 2011 Student Census, specifically the more than 15,000 students who were 17 years old (age-appropriate for Grade 12 or Year 4), which is when most Ontario students begin transitioning to postsecondary education.

Food insecurity, often used by researchers as a proxy for poverty, was measured in two different ways for this study. One method used frequency with which students missed meals, in particular breakfast, during the school week. The information on missing meals was supplied directly by students. The other method used a food security index developed to factor in not only the frequency of students missing meals, but also parental occupation status, parental attainment of postsecondary education and neighborhood income. Data on postsecondary applications was sourced from the Ontario University Applications Centre and the Ontario College Applications Service, and matched to students in the TDSB data set.

Findings

Food security has significant effects on average Grade 11/12 marks and PSE confirmations. However, the impact differs among racial groups. The impact of food security on grades is strongest among White students. East Asian students have higher marks at all levels of the food security index and the relationship between grades and food security is weaker than it is for White students. Southeast Asian students start with higher grades than White students at the lowest end of the food security index, but at the high end of the index they have lower marks than East Asian and White students. Using the frequency of breakfast as a measurement, Black and Southeast Asian students had a more modest increase in their grades compared to the noticeably strong increase seen among White students.

Food security has a significant impact on the university participation of East Asian and mixed-background students. Mixed-background students show the lowest likelihood of university participation when at the low end of the food security index, but surpass White students at the higher end. East Asian

students participate at greater rates than White students at the lowest end of the food security index, but the trajectory flattens as food security increases and at the highest end of the index it is fairly equal. For all groups except Southeast Asian students, the probability of college confirmation decreases with greater food security.

The authors caution that these differences by ethnoracial group are likely not restricted to issues of nutrition and poverty, but relate to social and cultural factors that cannot be fully captured by the data in the analysis.

With household food insecurity affecting one in six Canadian children and youth, the authors argue that Ontario should explore and evaluate large-scale school food programs. They highlight Alberta's recent expansion of pilot nutrition, meal and snack programs to all 60 school boards in the province as an example.

Food Insecurity and Educational Outcomes: A Focus on TDSB Students is written by Paul Anisef, Karen Robson, Reana Maier and Robert S. Brown.