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### What Explains the Educational Attainment Gap between Aboriginal and Non-Aboriginal Youth?

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# What Explains the Educational Attainment Gap between Aboriginal and Non-Aboriginal Youth?

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## **Abstract**

Aboriginal people generally have lower levels of educational attainment than other groups in Canada, but little is known about the reasons behind this gap. This study is the second of two by the same author investigating the issue in detail. The first paper (Frenette 2011) concludes that the labour market benefits to pursuing further schooling are generally not lower for Aboriginal people than for non-Aboriginal people. This second paper takes a more direct approach to the subject by examining the gap in educational attainment between Aboriginal and non-Aboriginal youth using the Youth in Transition Survey (YITS), Cohort A. Aboriginal people who live on-reserve or in the North are excluded from the YITS and, thus, from this analysis. The results of the analysis show that most (90 percent) of the university attendance gap among high school graduates is associated with differences in relevant academic and socio-economic characteristics. The largest contributing factor among these is academic performance (especially differences in performance on scholastic, as opposed to standardized, tests). Differences in parental income account for very little of the university attendance gap, even when academic factors are excluded from the models (and thus do not absorb part of the indirect effect of income). Differences in academic and socio-economic characteristics explain a smaller proportion of the gap in high school completion than in university attendance.

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KEYWORDS: Educational attainment, Aboriginal

## Executive Summary

It is well-known that education is a key component of labour market success and thus economic well-being (e.g., Card 1999). It is also well documented that Aboriginal individuals lag behind non-Aboriginal individuals in terms of educational attainment (e.g., O'Donnell and Ballardin 2006; Costa and Siggner 2005; Tait 1999). However, less is known about the reasons behind this gap, although Bougie (2008) looks at literacy profiles of Aboriginal people. A companion study (Frenette 2011) demonstrates that the economic benefits to schooling are generally as high for Aboriginal people as for non-Aboriginal people, or even higher. Thus, it is unlikely that economic incentives explain why the educational attainment of Aboriginal people lags behind that of others. This follow-up study examines more directly the gap in educational attainment between Aboriginal and non-Aboriginal youth by considering academic and background characteristics of both groups.

The purpose of this study is to identify how much of a gap in educational attainment remains after accounting for observed differences in academic and socio-economic characteristics between Aboriginal and non-Aboriginal youth and to determine the extent to which these characteristics are correlated with educational attainment. Specifically, the study employs a standard Oaxaca decomposition approach where the gap in the mean educational outcome in question can be expressed as the sum of an 'explained' component and an 'unexplained' component. The explained component is simply the sum of the differences in mean characteristics (i.e., the factors that are believed to be important correlates of educational attainment, according to previous studies), each weighted by its "importance" in terms of its correlation with the outcome in question. The remainder is the unexplained component. The weights used are regression coefficients in a model of educational attainment as a function of the various socio-economic characteristics. Of course, the results should not necessarily be interpreted in a causal manner; the term '*explained*' should be interpreted in an accounting sense only. Furthermore, some factors may influence the outcome directly, while others may do so indirectly through other factors. For example, parental income may influence educational attainment directly (by helping children pay for higher education) or indirectly (by influencing academic performance).

The data are drawn from the Youth in Transition Survey (YITS), Cohort A. This survey was developed in conjunction with the Programme for International Student Assessment (PISA), a project of the Organisation for Economic Co-operation and Development (OECD) consisting of standardized tests in reading, mathematics, and science. According to OECD (2002), PISA is not primarily an assessment of school curricula. Rather, it assesses mainly the application of knowledge acquired in school and elsewhere.

All students wrote the reading test, while one half also wrote the mathematics test and the other half also wrote the science test. The target population consisted of students enrolled in an educational institution on 31 December 1999 who were 15 years old on that day (i.e., born in 1984). The assessment took place in April or May 2000. Furthermore, background questionnaires were administered to students through PISA and the YITS. Parents and schools were also administered questionnaires through the YITS. Students were followed up every two years. At the time of this study, we had information up to, and including, Cycle 4 (youth who were 21 years old as of 31 December 2005). Students who were deemed mentally or physically unable to perform in the PISA assessment, as well as students who were non-speakers of the language of assessment (English or French) and who had received less than one year of instruction in that language, were excluded. Also excluded were students living in the territories (Northwest Territories, Nunavut, and Yukon) or on Indian reserves. Thus, the current study excludes Aboriginal youth who live on-reserve or in the North, and no inferences should be made to those populations on the basis of the results of this study.

The results show that most (90 percent) of the university attendance gap among high school graduates is associated with differences in relevant academic and socio-economic characteristics. The largest contributing factor among these is academic performance (especially differences in performance on scholastic, as opposed to standardized, tests). Differences in parental income explain very little of the university attendance gap, even when academic factors are excluded from the models (and thus do not absorb part of the indirect effect of income). Differences in academic and socio-economic characteristics account for a smaller proportion of the gap in high school completion than in university attendance.