

# Non-cognitive skills and labour market outcomes in Canada: New evidence using the BFI

## Abstract

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## ABSTRACT

This report presents an analysis of the relationship between “non-cognitive” skills and employment, earnings, and workplace activities in Canada. Using data from the Longitudinal and International Study of Adults, we address four main research questions:

1. How are non-cognitive skills related to employment status and earnings both before and after controlling for a range of individual characteristics, educational attainment, and cognitive skills?
2. Does the association between non-cognitive skills and these labour market outcomes differ by gender, age, and immigration background?
3. Do non-cognitive skills matter more or less among high, mid, and low earnings individuals?
4. How are non-cognitive skills related to the probability of engaging in various constructive workplace activities, again both before and after controlling for the individual characteristics and educational attainment?

To measure non-cognitive skills, we employ the Big Five Inventory (BFI), a widely used assessment that measures “individual differences in people’s characteristic patterns of thinking, feeling, and behaving” (Soto & John, 2017, p. 69) across five dimensions: openness, conscientiousness, extraversion, agreeableness, and emotional stability. We investigate the relationship between each BFI domain and employment status, earnings, and workplace activities using a series of regression models which include variables representing the five BFI domains first on their own and then along with various combinations of the control variables.

Among the main findings, individuals who have high conscientiousness scores are more likely to be employed and to earn more, but these effects are largely driven by the results for women and the effects are much more limited for men. Conversely, emotional stability is also positively related to employment and earnings, but in the case of employment only without controlling for other factors for the entire sample taken together, and when looked at separately the effects are confined to men and are not significant for women. Extraversion is positively related to earnings for young adults and higher engagement in productive workplace activities across the entire sample. Individuals with high openness scores earn less but are more likely to engage in a range of constructive workplace activities. Finally, people with high agreeableness scores also earn less – an earnings penalty that is more pronounced among low earners.

Policy focused on skill development usually targets cognitive and other essential skills, including essential skills such as literacy and numeracy, but the evidence presented here suggests that

non-cognitive skills also matter and should potentially be considered in education and training policy, while further research is needed to help further inform these and related discussions.



