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The Persistence Behaviour of Registered Apprentices: Who Continues, Quits, or Completes Programs?

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Abstract

We utilize a multinomial probit model and the 2007 National Apprenticeship Survey (NAS) to investigate the persistence behaviour of individuals enrolled in apprenticeship programs. These behaviours include continuing, discontinuing (or quitting) and completing programs. The NAS contains detailed demographic data as well as other data regarding respondents' backgrounds and apprenticeship characteristics. Our results show that program completion is positively related to being married, having fewer children, being non-Aboriginal and not a visible minority, not being disabled and having a higher level of education before the beginning of the program. Completion is negatively related to time in the program (beyond the normal program length) and the number of employers. Type of technical training and having a journeyman always present enhance the probability of completion. The regional unemployment rate has little effect on completion. There are also large provincial and trade group differences that are generally consistent with the sparse literature on this topic. Males and females have similar completion probabilities when we control for other influences.

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Executive Summary

Recently there has been increased interest in the topic of apprenticeship training in Canada. Much of this interest is driven by the desire to replace the current stock of skilled trades people who are nearing retirement age, and by the fact that completion rates among apprentices are low compared to those who attend other forms of post-secondary education such as colleges and universities. While the determinants of university and college access and persistence to graduation have been the topic of numerous recent studies, a similar analysis for apprentices in the skilled trades is lacking. This research attempts to fill this gap.

We use a new data set – the 2007 National Apprenticeship Survey (NAS) – to address the correlates of persistence behaviour among Canadians who were registered in apprenticeship programs at some point in the 2002-04 period. In particular, we are interested in the demographic, labour market and employer characteristics that are correlated with the three apprenticeship states given in the NAS: long-term continuation, completion, and discontinuation. Using the postal codes in the NAS as well as the Postal Code Conversion File Plus (PCCF+), we are able to link the person records to the regional unemployment rate in the Labour Force Survey (LFS). We use a multinomial probit model to estimate the relationship between these variables and the completion behaviour of apprentices.

We find that a number of demographic and job-related variables are related to the completion probability of registered apprentices. Divorced and single individuals, the number of children, Aboriginal or visible minority status, having a disability, and low education levels are all negatively related to apprenticeship completion. Time in apprenticeship programs, trade group, province of residence and a variety of job-related variables such as type of technical training and having a journeyman present are also important correlates of program completion. We also find that the regional unemployment rate is very weakly (but positively) related to completion.

Our results tend to be robust to different model specifications and are generally in accord with the sparse, previous Canadian literature on this topic.