

# International Journal of Population Data Science

Journal Website: [www.ijpds.org](http://www.ijpds.org)



Swansea University  
Prifysgol Abertawe

## Understanding variations in the trajectories of academic achievement and mental health service utilization of foreign-born adolescents in British Columbia, Canada: A population-based cohort study

Gagne, Monique<sup>1\*</sup> and Shapka, Jennifer<sup>1</sup>

<sup>1</sup>University of British Columbia

### Objectives

The aim of the study was to examine variations in the academic achievement and mental health service utilization of foreign-born adolescents in British Columbia (BC), Canada, and to subsequently identify predictors of this variation. The objectives of the study were to (a) characterize the academic achievement and mental health service utilization trajectories of foreign-born adolescents over the course of high school, (b) identify assets and risks predicting their academic achievement and mental health service utilization trajectories, and (c) identify the relationship between academic achievement and mental health service utilization.

### Approach

Leveraging administrative data from the BC Ministry of Health, BC Ministry of Education, and Citizenship and Immigration Canada, the study looked retrospectively at a population-based cohort of foreign-born adolescents in BC over the course of their high school years (Grades 10-12), in comparison to a random sample of their Canadian-born peers.

### Results

Utilizing Group-based Trajectory Modeling, the study identified that foreign-born adolescents in BC followed a range of academic achievement and mental health service utilization paths. By way of multinomial logistic regression, the study subsequently identified a number of assets and risks that helped to explain the odds of membership in each trajectory group. Finally, utilizing dual trajectory modeling, the study found a relationship between academic achievement trajectory group membership, conditional upon mental health service utilization group membership.

### Conclusions

As expected, a number of assets and risks as well as cumulative assets and risks associated with migration experiences were found to be powerful predictors of the variation in academic achievement and mental health service utilization for foreign-born adolescents in BC. The results support moving away from a one-size-fits-all understanding of the impact of migration on adolescent development. The utility of contextualizing migration experiences to gain a better understand of who is most likely to struggle or succeed is discussed.

\*Corresponding Author:

Email Address: [moniquehagane@hotmail.com](mailto:moniquehagane@hotmail.com) (M. Gagne)

