Demographic aging and the first-in-family university student. The New Zealand experience.

 Extended summary

Topic: The growing demand for skill in demographically aging countries pressures them to increase their university enrolments. This paper considers the mental health consequences for those students who are the first in their family to attend.

Theoretical focus:

The veiled message behind the label 'first-in-family' is that students who are the first in their family to attend university are disadvantaged relative to 'continuing-generation' students whose parents are graduates. It has been argued for example that first-in-family students

> "experience higher levels of psychological distress compared to their non-university peers ....Students with diverse backgrounds, ... from low SES areas and mature age or relocating students, are more at risk of experiencing these negative health outcomes .... particularly in their first year of transitioning to university study. " (King, Luzeckyj, & McCann, 2019) p. 76

In another example from an extensive literature, Dong writes,

> "With the projected continued growth of Students of Color ..., the socioeconomic profile of first-generation students will continue to evolve (i.e.,increasing overrepresentation of lower-income households), and concern for their success in college will remain high." (Dong, 2019) p. 18

The purpose of our paper is to test whether those students whose parents do not have a degree will not only have a more difficult time at university but will, as a consequence exhibit lower levels of wellbeing, and experience higher levels of psychological distress.

Many conclude that first generation status is associated with increased cognitive-emotional and somatic anxiety symptoms, if not depression and that high social and emotional support can suppress their somatic anxiety symptoms (Noel, Lakhan, Sammaritino, & Rosenthal, 2023). Others argue that the assumption that first-in-family students lack the necessary social and cultural capital to succeed is flawed (O'Shea, 2016) and that "While these students face many challenges, they also bring assets that enrich universities such as resilience" (Rockwell & Kimel, 2023).

We are aware of no published study of first-in-family students in New Zealand. Unlike the attention these students have received recently from academics in Australia, the New Zealand literature remains confined to an unpublished Master's thesis (Wilson, 2020). In the absence of a domestic literature the prevailing perspective is a class and culture one based mainly on the USA and the UK experience.

We agree that "Simply assuming that general effects sufficiently model the dynamic reality of college impact fails to consider how individual differences among students shape the impact of the postsecondary experience." (Padgett, Johnson, & Pascerella, 2012) P. 261. We therefore stress the importance of testing for conditional effects as they apply to a diverse student body in New Zealand.

Data

Our primary data source is the YOU Student Wellbeing Survey supplemented by the university administration enrolment record. The YOU survey is a multi-cohort, longitudinal study of the mental health of a sample of nearly 4000 students who enrolled full-time or part-time in first year courses in 2019, 2020 and 2021 at Victoria University of Wellington (*Te Herenga Waka*). The baseline survey carried 139 questions under 28 topics and was sent electronically to all first-year students via Qualtrics in April each year, two months after the start of the university's first term. We analyse five different outcome measures: wellbeing (WHO-5), psychological distress (PHQ-9), life satisfaction, anxiety and loneliness. The average age of respondents was 18.3 years, with three quarters being under the age of 24 years. There was an over-representation of female students; otherwise, the samples reflect the target population of all first-year students.

About a quarter of the first year students who responded to the YOU survey each year said they were first-in-family (24.36%).

Table 1. The proportion of first-in-family first year undergraduate students enrolling at Victoria University of Wellington in three successive years.

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First in family. |              Cohort
            YOU  |    2019      2020      2021  |    Total
-----------------+------------------------------+----------
   First in family |  25.74     23.52     23.43 |    24.36
Not first in family |  72.76    74.17     74.72 |    73.76
            Other |   1.51      2.31      1.86  |     1.88
-----------------+------------------------------+----------
            Total |  100.00    100.00    100.00 |   100.00
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Source: The YOU Student Wellbeing Survey. N = 3,721

Research methods

We estimate the parameters in the following generalised multivariate model,

(1)   W = f (F | X, F.X)

where W stands for one of five psychological wellbeing measures. The first-in-family identifier, F is our primary argument of interest, and the vector X is a suite of controls including age, sex and ethnicity, school background, health, financial status and family support.

The extensive international literature points to the *conditional* nature of the first-in-family effect on wellbeing, the way in which being first-in-family raises or lowers wellbeing according to the attributes of the student. These interaction effects (F.X) therefore receive particular attention.

Expected findings

We expect to find first-in-family students returning lower than average scores on our wellbeing instruments before and after controls are applied. More nuanced results will become apparent with the testing of specific interaction effects. For example, if first-in-family status has a stronger negative effect on male compared to female students, whether the negative influence of being first in family is more marked in students from particular cultures, and the degree to which the psychological distress experienced by first-in-family students is reduced relative to others in the presence of family support.

Our paper draws on the statistics research paper by Adam Glucksman and builds on our previous papers from the YOU survey (Li, Fan, Liu, Morrison, & Liu, 2024; Liu, Morrison, & Zeng, 2023; Morrison, Liu, & Zeng, 2023).

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