Project title

**Students at Sydney University – Preparation, Personality and Performance**

1. Research question

The aim of this pilot study is to a) pilot the student entry survey; (b) assess the feasibility of linking survey and student application records; and (c) to conduct a small-scale research study on the relative college readiness of students from disadvantaged backgrounds.

2. Background/Problem

[4] has shown that study behaviour at university (attendance of classes, study hours, etc.) maybe more strongly influenced by the students non-cognitive skills (conscientiousness, future orientation) than their family background (based on Irish data). [1] confirms a strong link between university graduation and another non-cognitive skills - openness to experience - especially so for students from disadvantaged backgrounds in the US. Such as link was also found in Australia by [2], who explain the strong correlation, mainly due to self-selection effects, of openness and conscientiousness into the university track.

3. Knowledge gap

This pilot study will test the survey and data linkage feasibility. By linking newly collected survey data with student entry and university record data, we will be able to identify early indicators of university readiness. University readiness will be measured not only by high school test and ATAR scores, but also by non-cognitive skills such as openness to experience, conscientiousness, and other socio-emotional skills that have previously been identified as positively associated with school performance, selection into the university track and the probability to graduate [4,5,6]. By introducing anchoring vignettes to control for reporting heterogeneity in self-reported personality, we will be able to make statements about the degree of measurement error in non-cognitive skills and to what degree it causes biases in the estimates of interest. Previous studies have applied vignettes to correct for scaling bias in
conscientiousness [7] and life satisfaction [8]. The pilot will aide in minimizing the time burden of subsequent surveys ensuring adequate response rates of students.

4. Data required and data linkage

Two data sources will be used

(1) Survey data from first-year students upon entry into university sampled across all disciplines. The students will be invited to participate in the survey by email from FASS and advertising around campus. Two email reminders will be sent out from FASS to any students that have not yet responded. In addition, posters distributed at key locations across all campuses will invite students to take the online survey.

The online survey tool will be coded by NUBIS (University of Southern California). The content of the survey will cover questions on non-cognitive and socio-emotional skills, detailed questions about the socioeconomic background of the parents, past mentors and mental health. Wherever possible, for comparability these questions will be copied from the Household, Income, and Labour Dynamics Survey (HILDA). In addition, we will add three vignette questions to anchor the self-responses provided to the non-cognitive skill questions (Conscientiousness and Openness to Experience). The vignettes questions are adapted from [7]. Students will be provided with a unique identifier that will be used (if the student consents) to link their survey response with student record data from the University of Sydney Strategic Information and Business Intelligence (SIBI) database. The survey will be conducted in March 2015.

(2) Student record data. We will use unit record data on University of Sydney students extracted from three sources. The first source is students’ Full Applicant Reports (FAR) for university studies, assembled via the University Admission Centre (UAC) and managed at the University of Sydney’s Planning and Information Office within the SIBI database. This data contains administrative information on the student’s university id, date of birth, citizenship, country of birth, first language, residential address, CHESSN, degree preference list, ATAR, Year 12 courses and marks (/100), employment qualifications if any, bonus points for flexible entry if any, and high school attended.

The second source of administrative data is student record data on extracted from the SIBI warehouse on student diversity. The SIBI Student Diversity module contains detailed information in students including their socioeconomic status (SES) and background including indigenous, regional, remote, disability, non-English speaking background (NESB) and gender equity groups. This diversity information collected by the university for its HEPPP reporting will be a crucial piece of our study given our focus on the student experience and outcomes for disadvantaged students.

5. Methodology and output

This pilot will result in two research articles
1. Methodological analysis: A study analysing the usefulness of anchoring vignettes in correcting for measurement error in self-reported personality instruments.

2. Economic analysis: A study on the relative university readiness of students from low socioeconomic backgrounds and sorting into field of study.

6. Timelines and milestones

What are the timelines and milestones for the project?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
<th>Time period</th>
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<tbody>
<tr>
<td>Literature review and update</td>
<td>RE, SS</td>
<td>Ongoing</td>
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<tr>
<td>Negotiation with Planning and Information Office</td>
<td>RE, CH, SS</td>
<td>Oct 2014-Feb 2015</td>
</tr>
<tr>
<td>Survey Design</td>
<td>RE, SS</td>
<td>Completed</td>
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<tr>
<td>Ethics approval</td>
<td>RE, SS</td>
<td>Obtained 20 Nov 2014</td>
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<tr>
<td>Survey Online Tool</td>
<td>Arie Kapteyn at USC</td>
<td>Completed</td>
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<tr>
<td>Survey email invitation</td>
<td>FASS</td>
<td>Week 1, March 2015</td>
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<td>Survey-in-Field</td>
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<td>Week 1-5, March 2015</td>
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<td>Data Linkage</td>
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<td>April 2015</td>
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<tr>
<td>Statistical analysis</td>
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<tr>
<td>Writing</td>
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<td>July 2015</td>
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1. LCC collaborators (including partners) and Non-LCC collaborators

Rebecca Edwards (University of Sydney, School of Economics)
Stefanie Schurer (University of Sydney, School of Economics)
Colm Harmon (University of Sydney, School of Economics)

Arie Kapteyn (University of Southern California) [Survey Online Tool]

References


