The Influence of Support and Development Programs and Services on the Success of University Students from Low Socioeconomic Status Backgrounds

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Abstract

This project engaged a mixed-methods approach to explore how the success of students from low socioeconomic status (low SES) backgrounds was impacted by their interaction with support and development initiatives offered by the division of Student Life and Learning at UNSW Australia. A quantitative database study was used to determine the impact of intervention on several academic success indicators, and multilevel modelling was applied to identify significant results. Student interviews provided experiential accounts of support initiative interaction, which were drawn on to qualify the link between interaction and success. The initiatives examined were academic writing, disabilities, counselling, educational and careers support services, and co-curricular development programs. Findings show that low SES students accessed Student Life and Learning support initiatives at similar or (in the case of some initiatives) higher rates than their peers and that these interactions contributed in multiple and diverse ways to student success. The benefits provided by interactions were not limited to low SES students, although there is some evidence to suggest that academic improvements may be more pronounced for this cohort.

Introduction

It is well documented that students from low socioeconomic status (low SES) backgrounds face particular challenges in their pursuit of success in Australian higher education (see for example, Baik, Naylor and Arkoudis, 2015; Devlin, 2013; James, Krause and Jenkins, 2010; and Tones, Fraser, Elder and White, 2009). Devlin and McKay (2011) present certain characteristics (including family support, priorities and finances) that distinguish many low SES students and which may significantly impact on their university experiences. McIntyre, Todd, Huijsers and Tehan (2012, p. 110) express the sentiment that “for some [low SES] students, engagement with the university experience resembles travelling to another country”.

Despite these challenges, many students from low SES backgrounds are successful at university. A longitudinal survey study by Marks (2007, p. 27) found that “if students from a low socioeconomic background get to university, their background does not negatively affect their chances of completing the course”. Indeed, the landmark Bradley Review of higher education commissioned by the Australian Government in 2008 found that although students from low SES backgrounds were under represented in higher education, the success rates1 of these students were high – 97 per cent of those of their higher SES peers (Bradley, Noonan, Nugent & Scales, 2008). A subsequent study by Gale and Parker (2013) reported retention and success rates for low SES students at 96–98 per cent of those for all students.

Understanding the reasons why low SES students are successful at university regardless of the challenges they face is critical to ensure the optimal direction of policy and delivery of resources. This article explores the contribution of university support and development

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1 ‘Success rate’ is the proportion of units passed in a year compared to the total number of units enrolled, as defined by the ‘Equity Performance Indicators’ of Martin (1994).

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programs and services (referred to as support initiatives throughout this article) to this success. The benefits of providing university support initiatives have been acknowledged by authors such as, Bridgestock (2009); Glaser, Hall and Halperin (2006); Simpson and Ferguson (2012); and Stone (2011). However, there are conflicting reports in the literature on the rate at which low SES students access this support. Gale and Parker (2013) found evidence from some institutions suggesting that low SES students access support services at higher rates than their peers, whereas Tones et al. (2009) propose that low SES students are less likely to make use of support services. Research into the impact that these services have on student success is problematic given that “for many initiatives, there are too many variables to control in any rigorously methodological way, which makes establishing causal relationships between initiatives and effects extremely difficult” (Naylor, Baik & James, 2013, p.35). As such, comprehensive study into the effectiveness of support initiatives has to date been limited (see Walton, 2016 in this issue for a review of previous studies), and there is a gap in our current understanding of how support initiatives are contributing to low SES student success.

In the current study, the authors have sought to address this gap by presenting quantitative and qualitative evidence to explore how the success of low SES students at UNSW is impacted by their interaction with support initiatives. This was achieved through: determining the rates of participation of low SES students in these initiatives; examining variances in academic success indicators as a result of interaction; and conducting student interviews to provide detailed accounts of student experiences. This article explains the relevance of the study at UNSW and describes the methodological approach taken. It then presents the findings on how service interactions impact low SES student success, followed by a comparison of this impact for low SES students and the cohort as a whole.

The UNSW Australia Context

Research conducted for this article took place at UNSW (The University of New South Wales) – a research-intensive university and member of the Group of Eight\(^2\) with a population of approximately 50,000 students. The participation rate\(^3\) for low SES students at UNSW is low – significantly below the national average. However, the success rates of this cohort are consistently high – above the national, state and Group of Eight averages despite the contextually low participation rate.

Considerable efforts are made at UNSW to support students from low SES backgrounds, particularly via the suite of support and development services and programs offered by the division of Student Life and Learning (SLL). However, no comprehensive study into the effect of these initiatives on the academic performance of students has previously been undertaken. This study addresses this gap by exploring how the success of low SES students was impacted by their interactions with SLL support initiatives. The initiatives included in the study were:

- **The Learning Centre (TLC) consultations.** Peer Writing Assistants at TLC support students with academic writing, structuring written assignments, developing arguments, and provide feedback on drafts of papers.

- **Registration with Disability Services.** Students can declare whether they have a disability at entry to UNSW. This allowed a direct comparison of students with a

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\(^2\) The Group of Eight is a coalition of Australia’s eight leading research universities.

\(^3\) ‘Participation rate’ is the proportion of low SES students compared to all domestic students.
declared disability who registered with Disability Services with those with a declared disability who did not register.

- **Counselling and Psychological Services (CAPS) consultations.**

- **Educational Support Service consultations.** Educational Support Advisors (ESAs) provide one-on-one appointments to students offering support with issues such as: academic performance; goal setting; settling-in; and difficult personal circumstances. The ESA team was established under the Australian Government’s Higher Education Participation and Partnerships Program (HEPPP) funding to provide targeted support to students from low SES backgrounds, students entering UNSW through alternative entry schemes and students identified as being at risk of attrition. However, the one-on-one appointments and workshops they offer are open to all students.

- **Careers and Employment consultations.**

- **Advantage programs.** UNSW Advantage accredits professional development and volunteering opportunities at UNSW for inclusion on the Australian Higher Education Graduation Statement (AHEGS). These programs aim to broaden the student experience through developing professional skills, building competencies and enhancing leadership capacity. Only the UNSW Advantage accredited programs offered by SLL were included in this study, and these are referred to as ‘Advantage programs’ in the following analysis. Several of the Advantage programs were established under HEPPP funding to facilitate engagement with low SES students and provide opportunities to develop social capital. To achieve statistical power, analyses considered all of the students interacting with these activities as one group.

**Methodology**

A mixed-methods approach that included a quantitative (database method) and qualitative (interview method) phase was engaged. The statistical analysis of a large dataset allowed the impact of interaction to be quantified in terms of academic success, while interviews provided experiential accounts of support initiative interaction that could not be observed from the dataset. The benefits of using this mixed-methods design are explained in detail in Walton 2016.

The target group for this study was students from low SES backgrounds, and the sample was limited to local undergraduates. This sampling aligns with equity policy in Australian higher education following the Bradley Review (Bradley et al., 2008), which has sought to improve access, retention and completion rates for local, undergraduate students from low SES backgrounds. The SEIFA SAI measure\(^4\) was used to identify low SES students based on their home addresses.

**Database method**

Student demographic and academic information was sourced from the UNSW Student Information Management System and the data management software SAS Enterprise Guide 7.1 (SAS EG) was used to manipulate these data. Each of the SLL units provided available data

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\(^4\) The Socioeconomic Index for Areas Index of Education and Occupation (SIEFA) is used in Australia to identify areas nationally as low (the bottom 25% of the population), medium (the middle 50%) or high (the top 25%) SES. The measure of area used in this study was Statistical Area Level 1 (SA1). There is much discussion around the best method to use to classify low SES (see for example Dockery, Seymour and Koshy, 2015), for this study SA1 was deemed the most consistent and reliable measure available, commensurate with the available student information.
on support initiative interactions until the end of semester two, 2014. Few of these records dated back further than ten years, with some units only having data for the past few years either because of the (young) age of the unit or program itself, or because of the age of the record-keeping software in place. The indicators that were used to determine academic success are given in Table 1.

Determining statistical significance in changes to the success indicators required high-level modelling incorporating the hierarchical structure and non-independent nature of the data. Multilevel modelling (MLM) was selected as the most appropriate statistical test for this purpose. MLMs are built in stages, with variables and effects added to each stage, and output indicating whether the latest model is a better fit than the previous one. The overall fit of a model is tested using a chi-square likelihood ratio – the $-2\text{LL}$ (negative two log-likelihood) or deviance. The smaller the value, the better the model fit. Significance of model improvement was calculated according to the chi-square distribution table with critical values of $\chi^2 = 3.84$ ($p < 0.05$) and $\chi^2 = 6.64$ ($p < 0.01$) at 1 df. The best fitting model is selected as the final model. WAM at completion and WAM before and after interaction were analysed using a linear MLM. A hierarchical generalised linear model was needed to analyse the categorical binary outcome variables of academic standing (good or non-good) before and after interaction and discontinuation count – this was done using a logistic MLM. Independent variables suspected to confound results can be placed in the model at any level as covariates. Statistical modelling of support initiative interactions showed that some variables had a greater influence on the model than others. ATAR, faculty, stage (i.e. number of years enrolled) and student ID had a consistent significant impact on the p-values of the MLMs, and were subsequently included in relevant analyses.

All data relating to the potential identification of individual students were removed and Student IDs were re-identified using a reversible anonymisation code known only to the project team. Data on student interactions with CAPS were fully de-identified before leaving the service owing to the particularly sensitive nature of the information.

Table 1. Indicators used to determine student academic success

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Average Mark (WAM) before and after interaction</td>
<td>WAM is the average of a student’s grades for all courses enrolled in a particular semester. The average WAM for all semesters enrolled before a student’s initial interaction was compared with the average WAM for all semesters enrolled after a student’s initial interaction.</td>
</tr>
<tr>
<td>Academic standing before and after interaction</td>
<td>At UNSW there are seven levels of academic standing ranging from ‘good standing’ to ‘exclusion’ which are allocated to a student after each semester. To measure success in this study, an academic standing of ‘good’ was assigned ‘1’ and ‘non-good’ assigned ‘0’. The average standing (between 1 and 0) for all semesters enrolled before a student’s initial interaction was compared with the average standing for all semesters enrolled after a student’s initial interaction.</td>
</tr>
<tr>
<td>WAM at completion</td>
<td>WAM at completion was calculated by averaging a student’s grades over all semesters of enrolment up to completion of the program. WAM at completion was compared for students who did not interact with a support initiative, students who did interact with a support initiative, and students who interacted with a support initiative in their first semester of enrolment.</td>
</tr>
<tr>
<td>Discontinuation rate</td>
<td>At UNSW students are assigned a ‘discontinuation count’ if they indicate to UNSW that they are no longer continuing with their program. The main difference between discontinuation and retention rates is that the discontinuation rate does not take into account those students who do not return to nor inform UNSW of their intention to discontinue (information that was not available for this study).</td>
</tr>
</tbody>
</table>
The discontinuation rate was calculated as the number of students who enrolled for at least one semester and then discontinued, compared to the total number of students enrolled over the same time period. The discontinuation rate was compared for students who interacted with a support initiative and those who did not.

Interview Method

In-depth interviews were used to gain a deeper understanding of the issues encountered by low SES students at UNSW and their experiences with using support initiatives. Interviews were drawn on to explore the factors influencing student success and whether these were impacted by SES. As the database study could only elicit evidence on how support initiatives impact academic success, the interview responses were of particular interest for initiatives whose primary role did not involve direct academic intervention (e.g. completion of an Advantage program or counselling consultations). Student testimonies elicited through interviewing enabled further unpacking of data, identified otherwise overlooked connections, and in turn supported a better understanding of the initiatives’ influence on low SES students.

Participants were recruited via a questionnaire that invited respondents to provide a telephone number or email address if they agreed to be interviewed – a total of 22 interviews were conducted (20 in-person, two over-the-phone). Interviews were transcribed and then coded for thematic analysis using NVivo software. Themes were then analysed using the principles of narrative analysis, now commonplace in social research (Minichiello, 2008). Walton (2016) provides further insight into the applied interview methodology used in this study.

Support initiative influence on student success – Findings for low SES students

The participation rates (percentage of students interacting that were low SES) and ratios (percentage of low SES students interacting/percentage of low SES students in whole population) of students interacting with each of the initiatives are given in Table 2. These show that low SES students were over-represented in their interactions with all support initiatives with the exception of Disability Services. Encouragingly, they were particularly well represented at ESA consultations, a service providing targeted support for this cohort, and in Advantage programs, some of which were established to facilitate low SES student engagement.

Table 3 presents academic indicators before and after interaction with the initiatives and Table 4 gives the discontinuation rates for interacting and non-interacting groups. Table 5 compares grades at graduation for interacting and non-interacting students. ATAR is also included as an indicator of prior academic success of the interacting and non-interacting cohorts.

### Table 2. Participation rates/ ratios of low SES students interacting with support initiatives

<table>
<thead>
<tr>
<th>Support Initiative</th>
<th>Participation Rate</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC consultations</td>
<td>9.6%</td>
<td>1.04</td>
</tr>
<tr>
<td>Disability Services</td>
<td>8.5%</td>
<td>0.95</td>
</tr>
<tr>
<td>Counselling consultations</td>
<td>10.4%</td>
<td>1.14</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>15.5%</td>
<td>1.65</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>10.3%</td>
<td>1.13</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>14.5%</td>
<td>1.61</td>
</tr>
</tbody>
</table>
Table 3. Student mean WAM and academic standing before and after initial interaction with support initiatives

<table>
<thead>
<tr>
<th></th>
<th>WAM Before</th>
<th>WAM After</th>
<th>Academic Standing Before</th>
<th>Academic Standing After</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLC consultations</td>
<td>62.3</td>
<td>65.3*</td>
<td>0.87</td>
<td>0.93</td>
<td>59</td>
</tr>
<tr>
<td>Counselling consul-</td>
<td>63.3</td>
<td>62.7**</td>
<td>0.84</td>
<td>0.78*</td>
<td>307</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>58.7</td>
<td>60.6</td>
<td>0.67</td>
<td>0.76*</td>
<td>71</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>67.3</td>
<td>69.5</td>
<td>0.90</td>
<td>0.92</td>
<td>256</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>70.8</td>
<td>71.3**</td>
<td>0.99</td>
<td>0.95</td>
<td>125</td>
</tr>
<tr>
<td>All students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLC consultations</td>
<td>64.9</td>
<td>67.1**</td>
<td>0.89</td>
<td>0.91</td>
<td>602</td>
</tr>
<tr>
<td>Counselling consul-</td>
<td>64.3</td>
<td>65.0**</td>
<td>0.85</td>
<td>0.82**</td>
<td>3,085</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>60.7</td>
<td>62.7</td>
<td>0.75</td>
<td>0.75</td>
<td>507</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>67.7</td>
<td>69.5**</td>
<td>0.94</td>
<td>0.95**</td>
<td>2,414</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>70.7</td>
<td>71.6</td>
<td>0.97</td>
<td>0.95*</td>
<td>864</td>
</tr>
</tbody>
</table>

'n' = total number of students who recorded a WAM/standing in at least one semester both before and after initial semester of interaction, *significantly different at p < 0.05, **significantly different at p < 0.01.

Table 4. Percentage of interacting and non-interacting students discontinuing

<table>
<thead>
<tr>
<th></th>
<th>% non-interacting students discontinuing (n)</th>
<th>% interacting students discontinuing (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLC consultations</td>
<td>6.8 (342)</td>
<td>5.2 (5)</td>
</tr>
<tr>
<td>Disability Services</td>
<td>8.0 (20)</td>
<td>7.4 (6)</td>
</tr>
<tr>
<td>Counselling consul-</td>
<td>7.2 (376)</td>
<td>6.3 (25)</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>5.3 (204)</td>
<td>9.5 (10)</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>7.3 (390)</td>
<td>3.9 (11)</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>7.5 (487)</td>
<td>0.8 (1)</td>
</tr>
<tr>
<td>All students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLC consultations</td>
<td>5.8 (3,133)</td>
<td>4.2 (42)</td>
</tr>
<tr>
<td>Disability Services</td>
<td>7.0 (193)</td>
<td>5.5 (53)</td>
</tr>
<tr>
<td>Counselling consul-</td>
<td>6.0 (3,493)</td>
<td>6.5** (247)</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>4.7 (1,966)</td>
<td>7.5** (51)</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>6.2 (3,655)</td>
<td>3.1 (85)</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>6.5 (4,757)</td>
<td>0.8* (7)</td>
</tr>
</tbody>
</table>

'n' = total number of students discontinuing (given in brackets), *significantly different at p < 0.05, **significantly different at p < 0.01.

Table 5. WAM at completion and ATAR for non-interacting students, interacting students, and students interacting in their first semester

<table>
<thead>
<tr>
<th></th>
<th>WAM at completion</th>
<th>ATAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No int. (n)</td>
<td>Initial int. any sem. (n)</td>
</tr>
<tr>
<td>Low SES students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLC consultations</td>
<td>69.2</td>
<td>70.0*</td>
</tr>
<tr>
<td>(1,666)</td>
<td>(25)</td>
<td>(9)</td>
</tr>
<tr>
<td>Disability Services</td>
<td>66.4</td>
<td>69.1*</td>
</tr>
<tr>
<td>(85)</td>
<td>(17)</td>
<td>(9)</td>
</tr>
<tr>
<td>Counselling consul-</td>
<td>69.1</td>
<td>68.2</td>
</tr>
<tr>
<td>(1,819)</td>
<td>(154)</td>
<td>(16)</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>69.7</td>
<td>63.0</td>
</tr>
<tr>
<td>(1,063)</td>
<td>(11)</td>
<td>(2)</td>
</tr>
</tbody>
</table>
The influence of support and development programs and services

<table>
<thead>
<tr>
<th>Program</th>
<th>Average</th>
<th>SD</th>
<th>Average</th>
<th>SD</th>
<th>Average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careers consultations</td>
<td>68.9</td>
<td>71.0**</td>
<td>74.8</td>
<td></td>
<td>88.2</td>
<td>88.7</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>68.9</td>
<td>72.9**</td>
<td>74.6</td>
<td></td>
<td>88.6</td>
<td>91.7</td>
</tr>
<tr>
<td>All students TLC consultations</td>
<td>70.4</td>
<td>70.9</td>
<td>73.7**</td>
<td>90.0</td>
<td>87.8</td>
<td>88.0</td>
</tr>
<tr>
<td>Disability Services consultations</td>
<td>68.6</td>
<td>69.7**</td>
<td>71.2**</td>
<td>88.0</td>
<td>85.8</td>
<td>85.6</td>
</tr>
<tr>
<td>Counselling consultations</td>
<td>70.2</td>
<td>69.7**</td>
<td>70.7</td>
<td>90.0</td>
<td>89.1</td>
<td>87.8</td>
</tr>
<tr>
<td>ESA consultations</td>
<td>70.7</td>
<td>67.8</td>
<td>69.8</td>
<td>90.2</td>
<td>88.1</td>
<td>84.8</td>
</tr>
<tr>
<td>Careers consultations</td>
<td>70.1</td>
<td>71.4*</td>
<td>73.4</td>
<td>90.0</td>
<td>89.7</td>
<td>89.0</td>
</tr>
<tr>
<td>Advantage programs</td>
<td>70.1</td>
<td>73.2*</td>
<td>71.7</td>
<td>90.2</td>
<td>92.8</td>
<td>92.3 (23)</td>
</tr>
<tr>
<td></td>
<td>(1,830)</td>
<td>(143)</td>
<td>(6)</td>
<td>(1,394)</td>
<td>(110)</td>
<td>(4)</td>
</tr>
<tr>
<td></td>
<td>(2,396)</td>
<td>(55)</td>
<td>(2)</td>
<td>(1,802)</td>
<td>(50)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

‘n’ = total number of students completing, and those completing who have a recorded ATAR (‘n’ values given in brackets), *significant at p < 0.05, **significant at p < 0.01.

The Learning Centre consultations

Given that the primary role of TLC consultations is to improve students’ academic performance, the effect of an interaction can be directly assessed as a function of academic indicators – which do suggest that interaction is having a positive effect on low SES student success. This was evidenced by significantly improved grades after interaction, and significantly higher grades at program completion. Moreover, this was despite the fact that low SES students attending consultations had a lower mean ATAR than those who did not attend. This suggests that these students are behind their peers on entry, but effectively overtake them after interaction. Low SES students interacting also showed an improvement in academic standing and lower rates of discontinuation, although these results were not significant.

A number of student responses to the in-depth interview questions also attest to the positive influence of TLC consultations on their academic performance, for example:

*It was very effective... someone would sit down with you, go through your essay and then in two or three weeks they’d follow up and give you feedback and assistance, and a bit of critique. I found that exceptionally helpful.*

Registration with Disability Services

Disability Services were only able to provide a list of students who had registered to use the service and the year of registration, but not information on individual appointments, it was therefore not possible to compare student grades before and after initial interaction (note this information is missing from Table 1). However, a study of grades at graduation showed that low SES students who registered with Disability Services completed with a significantly better mean WAM than those who did not register. Moreover, students who registered in their first semester had an average WAM at completion that was 9.4 percentage points higher than those that did not register. This was the highest recorded average WAM at completion for any interacting group in the study, despite registered students having considerably lower ATARs than those not registered. The average rate of discontinuation was lower for the group that had registered, although not significantly so.

The ability of Disability Services to support low SES students and improve their chance of
success was also highlighted by interview participants. For instance:

*I’ve got chronic depression and anxiety issues. Sometimes the stress has gotten to me, but I have got procedures in place with Disability Services, and that’s been fantastic... There’s only been a couple of times I’ve had to request an extension, and that’s gone through with no dramas.*

*It’s great being able to get a doctors certificate that just says ‘illness’ and that’s good enough, no questions asked. As well as just having that leniency of being able to get extensions (through being registered with Disability Services), it’s so valuable, even just an extra week and extra time in exams.*

**Counselling and Psychological Services consultations**

Low SES students interacting with a counsellor had a significantly lower mean WAM after interaction than before, and demonstrated significantly worse rates of good academic standing. This would suggest that interaction is having a negative impact on student success; however, these findings must be addressed within the context of the cohort of students accessing the service. Recent studies conducted at Australian universities show that students who access university counselling services are experiencing high levels of psychological distress (for example Schweitzer, Klavich and McLean, 2009; Vivekananda, Telley and Trethowan, 2011). Andrews and Chong (2011) describe how experiences of mental health problems can have a considerable impact on academic performance, with counsellors reportedly well aware of the association between anxiety/mood disorders and issues such as impaired concentration, short-term memory loss, impaired motivation, and increased lethargy.

Notwithstanding these issues, low SES students who interacted with a counsellor were no more likely to discontinue, and did not have significantly lower WAMs at completion than those who did not interact. This highlights the benefit of counselling intervention for many students. Testimony from the interviewed students who had attended consultations was drawn on to produce more complete accounts of interaction success. Students described multiple benefits from visiting the service, including gaining clarity around the issues affecting them:

*They did highlight a lot of issues I didn’t realise [I had]. I didn’t realise how much anxiety affected uni for me, and I didn’t realise how much it influenced my attendance. They were pretty good at dealing with things like that.*

*I could sort of speak about my problems, and it really helped me process what was going on.*

Students also explained how counsellors helped in ways not necessarily limited to mental health:

*CAPS was most helpful. Even if it is about something that’s non-mental health related, I can still talk to them and see if they’ve got some strategies, or we can work together to figure out some strategies to cope with other things.*

*I mean, they (CAPS) are good for those times when you’re feeling low, and then you go and speak to someone and they sort of help you with your confidence to realise it’s not the end of the world – you’ve still got a chance to try your best, to do whatever you can.*

Successful outcomes were also described in terms of positive experiences after referral:

*I started an early psychosis treatment program through Headspace... seeing CAPS led into that. Without going to CAPS I would not have gone to Headspace.*

*CAPS were good because they referred me to go and find some external [help]... which was what I needed.*
**Educational Support Advisor consultations**

Results indicate that the low SES group interacting with the ESAs were generally the lowest academic achievers in the study. Of all the interacting groups, these students exhibited: the lowest mean WAMs before and after interaction; the highest rates of discontinuation; the lowest mean WAM at completion; and the lowest average ATAR on entry.

Notwithstanding relatively lower academic success before interaction, many low SES students benefited from ESA intervention, with students showing a 9% improvement in rates of good standing after interaction – a significant result and the largest average gain of any group in the study. Student WAM also improved after interaction, with the mean increasing by 1.9 percentage points (though modelling showed that this was not a significant result).

There were few interviewees who mentioned having visited an ESA, but one student described how the service had contributed to their success as a student at UNSW:

> I’ve always had trouble with time management. In high school I never worked out how to organise my time. At uni I’ve sort of just tried to work it out myself, which didn’t really work... [The] ESA showed me how to do a weekly study timetable, and how to plan out assessments for the whole semester. I found that really helpful... It made a big difference.

**Careers and Employment consultations**

Low SES students who had attended appointments with careers consultants graduated with a significantly better average WAM than those who had not attended and they had lower rates of discontinuation. These students also had higher WAMs and improved academic standing after interaction (though these results were not significant).

These results suggest that interaction with a careers consultant had a positive impact on low SES student success regardless of this service not being explicitly operated to serve this function. This finding may be explained by previous studies, which have shown that students who focus their school performance around career aspirations often perform better academically than students with less career clarity (see for example, Dennis, Phinney and Chuatceco, 2005; Evans and Burck, 1992). Student testimony highlighted the influence of a careers consultation on obtaining this clarity:

> I had no idea what I wanted to do with my life and so what they [the careers consultant] helped me with was narrowing down possible fields or industries and occupations that I can get with my current degree.

> It [the careers consultation] was steering [me] in the right direction, helping [me] figure out what [I] want; it was nice having that sort of guidance.

**Advantage programs**

The results of this study suggest that completion of an Advantage program predicts improved academic success. Low SES students who completed an Advantage program were found to have a significantly higher mean WAM after interaction than before, and had a significantly higher average WAM at completion than those students who did not interact. Only one out of 132 low SES students who had completed an Advantage program subsequently discontinued.

The results also indicate that low SES students who had completed an Advantage program tended to be the highest achieving cohort of any group in the study. They had the highest average WAM before and after interaction, the highest rates of good academic standing, the highest mean WAM at completion (not including first semester interaction results), and the highest average ATAR.
Advantage programs are run to develop professional and leadership skills, rather than to directly influence academic success, so the link to this apparent positive impact is not implicit. Indeed, student interview testimony did not directly attribute these interactions to academic improvements, but rather they identified benefits such as improved mental health and social engagement, which in turn could compel students to succeed:

When I get to talk to people (during the volunteering program) I feel less stressed, and when you’re less stressed it feels like you’ve got some of the load off you so you can focus back on your work.

Through being involved in the student bodies, having a community and having friends, I’ve been able to limit the impact of being from a rural area and finding it hard to adjust or being unwell.

For mental health [reasons], having a support network was probably the biggest [help]. Through [volunteering] I was able to overcome a lot of difficulties that I had, and I have been able to find ways to self-help and also have other people help as well.

Some of the responses supported the finding that those who interact with these programs tend to be high achievers. When asked if they had accessed any of these programs, one student commented:

No. That’s going a bit above and beyond, isn’t it? I’m a bit more of a mediocrity kind of student [laughs]. I’m barely getting through the classes I’m doing.

Whereas another student who had interacted stated:

I think looking back at when I was in primary school and high school, just going to school wasn’t enough for me. I definitely feel like, especially at this university where there is a really big push toward gaining more out of your university experience, I’m constantly seeking new things to get involved in.

Support initiative influence on student success – A comparison of low SES Students and all students

The benefits of interaction were not restricted to low SES students, but for the majority of the support initiatives, these benefits did appear to be more pronounced for this cohort. Findings from the database study for all students (local, undergraduates) show:

- Significant improvements in mean WAM after consultations with TLC, with those students interacting graduating with a higher WAM on average (significantly so for those interacting in first semester) despite lower ATARs. Interaction resulted in a non-significant improvement in academic standing and in the percentage of students discontinuing. These improvements reflected those of the low SES group, but the average gains in WAM and academic standing after interaction were greater for the low SES cohort, as was the average improvement in WAM at completion.

- Those registered with Disability Services graduated with significantly better grades at completion than those that did not register despite having lower ATARs on entry. Early interaction with the service had a positive impact, with those students registering in their first semester showing significantly improved grades at completion. The low SES cohort showed a greater average increase in WAM at completion for registering students, and for those registering in their first semester.

- Students who visited a counsellor had significantly higher WAMs after consultation than before, which is in direct contrast to the low SES group where there was a significant drop in WAM after consultation. The rates of good academic standing dropped after interaction, though the average drop was less than for the low SES group. The average decrease in WAM at completion was less than for the low SES cohort. However, the rate of discontinuation of interacting students was significantly higher.
This was not the case for the low SES cohort, where the discontinuation rate was lower (although not significantly so).

- The relatively poor academic achievement exhibited by the low SES cohort was reflected in the average grades across all students interacting with an ESA. However, they did show academic gains after interaction. There was a similar increase in WAM before and after interaction, but the low SES group had a significantly greater gain in academic standing.

- Students who attended careers consultations showed significant average improvements in WAM and academic standing after interaction. They also had significantly higher mean WAMs at completion, and lower rates of discontinuation. The average gains for the low SES cohort who interacted with careers consultations were marginally higher across these academic indicators.

- Those completing an Advantage program were represented by a high achieving cohort overall. The gains from interaction were reflective of those of the low SES cohort in terms of WAM before and after interaction (though this gain was not significant for the whole cohort) and WAM at completion. The two groups had the same (relatively low) percentage of students discontinuing (1.8%).

These findings suggest that low SES students realise greater benefits from interactions with support initiatives than the population as a whole; although, students who interacted with CAPS were the exception to this. Analysis of student interview data was used to unpack this. Students were asked whether their SES had impacted on any issues they had faced or on their interactions with the support services. Many respondents identified that their (low) SES was in some way linked to problems they had encountered while studying, for example:

*I’ve been flat broke. That’s why I now live in the western suburbs instead of the eastern suburbs... Sometimes you’ll skip uni to do an extra shift or something because you need the extra hundred bucks.*

*I’m having to work a lot more than some, just to make sure that I can stay afloat.*

*University is a hard thing to adjust to, especially if you do have issues with family or housing or money and stuff. It can get overwhelming.*

Several students noted that their low SES background meant that they were inclined to use the services. This provides some explanation for the finding that low SES students were over-represented in their interactions. For instance:

*I would say I was probably more inclined to use the services being from a disadvantaged background... I think the mindset and culture in our society is if you’re disadvantaged, you look for a service.*

*Maybe it [being from a low SES background] has meant that I have engaged more with things on campus because they are specifically tailored to students, so they're free generally.*

Some students also linked the tendency of low SES students to seek free intervention to being less likely to access paid services:

*For a lot of services, at first I’m always quite wary, (I think) oh do I need to pay? . But at the university, most of the services are free, so that has really helped.*

*I guess it would be easier if I was from a super-rich family because they could just put me in to see some fancy pants psychiatrist that charges $300 a session. But instead I have to go see free ones.*

Most students did not directly link this increased usage to a perceived increase in benefit based on their SES. However, several students connected the (in this case low) socioeconomic indicators of parental occupational and education (James et al., 2008) to a lack of family
support, leading to a greater requirement for services and positive outcomes from interaction:

Maybe I found the careers service so useful because my parents aren’t professionals so they weren’t able to teach me about the sort of graduate recruiting or networking… I imagine for a lot of the Law students, their parents are lawyers so they already have access to those sorts of circles, and they already know how it works… people seemed to understand what was going on a lot better than I did.

I’m the first person in my family to go to university… My family don’t know how to support me and they don’t understand why I’m struggling with it (university) I think, because they don’t understand how different it is from high school... Without them (CAPS and Disability Services) I would’ve just dropped out and given up. I definitely think if I didn’t access those services I wouldn’t still be studying.

The findings for CAPS were somewhat conflicting in that low SES students appeared to be receiving less benefit from interaction in terms of academic grades, but more benefit in terms of retention. The impact on grades may be a function of the severity of issues faced by low SES students, rather than an indication of the effectiveness of the intervention for this group. It has been well established that mental health issues tend to be exacerbated in the low SES population. Ng, Muntaner, Chung and Eaton (2014, p.1) highlight “generations” of research confirming the link between SES and mental health, with the most deprived sections of society tending to experience the worst mental health outcomes. Andrews and Chong (2011) reported that student financial circumstances exert a significant negative influence, with this being the stand out risk factor for experiencing psychological distress, stress, anxiety and depression. However, student interview testimony provided some insight into the importance of counselling in their decisions to persist at UNSW despite the issues they faced, as one student explained:

I’ve had difficulties socialising. That’s sort of something that gets you down and sort of puts the motivation on the backburner… I just didn’t really fit in properly perhaps because I’m from a regional background and kind of didn’t identify with the Sydney thing… It’s just a completely different world… CAPS has blown my mind with how much it’s sort of helped me keep some perspective and keep chugging along with my studies.

Another student explained:

I have depression, and sometimes that sort of impacts on study… [I accessed CAPS because] I was trying to work out what I was doing with my degree. I didn’t feel like I was fitting in to uni and I wasn’t sure how to fix it… I called them (CAPS) when I was thinking about dropping out of uni and they were helpful then as well.

Conclusions and implications for future research

This study addressed the gap in current knowledge of how support initiatives are contributing to low SES student success. It used a mixed-methods approach by providing quantitative evidence from academic success indicators, and detailed personal accounts of student experiences.

Results showed that attendances at support initiatives are well represented by students from low SES backgrounds and these interactions are contributing in unique and multiple ways to student success. The benefit they provide is not exclusive to low SES students, though there is some evidence to suggest that academic improvements may be more pronounced in this cohort. The research team acknowledges that many of the forces and influences that act upon low SES students are intangible, highly variable and contextually situational. Nevertheless, findings from this study build on the existing evidence (e.g. Tinto, 2010) that university support initiatives can have a positive influence on low SES student success.
This study was limited in that it took place wholly at UNSW. In order to corroborate, refute or extend the findings it is suggested that it be repeated at other institutions – possibly those where there are higher rates of participation of low SES students. Further study may also target other equity groups or examine the efficacy of faculty support programs and services. The study could also be extended to incorporate graduate success by using data from the Australian Graduate Survey.

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References


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