

Undergraduate student aspirations, awareness and knowledge of postgraduate study options: A cross-institutional examination

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Abstract

A small body of research is building a picture of how undergraduate students view postgraduate study. This paper reports the extension of an earlier study on the awareness, knowledge and intentions for postgraduate study of undergraduate students. Subjects in this study were Bachelor of Business undergraduate students in a new outer-suburban metropolitan Australian university. Differences between what students know and intention levels were expected between universities. Results suggest differences may be attributable to four year scholarships available to high achieving students in one university, which may encourage students to pursue honours study. Results also demonstrate the generalisability of most of the key findings from early research. Similarities and other differences are highlighted and recommendations for faculty and administrators are given.

Keywords: educational research, student attitudes, postgraduate study, career development, decision making

The milestone of graduation from the undergraduate degree is an area of student decision-making to have received limited research attention. On completion of undergraduate degrees, students are confronted with a range of options. A student may choose to enter the workforce, take time off or continue studying. When an Australian undergraduate chooses to continue studying past their bachelor degree, there are a number of options available. Where the student meets the minimum academic prerequisites, he or she could choose a fourth or honours year (Jepsen & Neumann, 2008b), which could later allow progression to a PhD. Alternatively, a bachelor degree graduate might progress to postgraduate coursework study, with postgraduate diploma and Masters levels programs available. Some undergraduate students might progress to three postgraduate options and complete an honours, a Masters and a PhD degree. Although the majority of students complete their university education with the bachelor degree, there is an increasing number of students who plan to progress to postgraduate study given the increase of postgraduate enrolments across various specialities in Australia (Chapman & Salvage, 2001; Fox & Arnold, 2008).

Despite an increase in student intentions to pursue postgraduate study (Chapman & Salvage, 2001) there remains a paucity of research in this area. Consequently, little is known about how undergraduate students make this critical decision to embark on postgraduate study or at what point

decision-making occurs. The antecedents and factors influencing the postgraduate study decision are not well understood. The decision to embark on a postgraduate degree may be made or changed at many stages: before the start of a student's undergraduate career, during the undergraduate degree, towards the end of the undergraduate degree, or some period of time after the student has graduated (Jepsen & Neumann, 2008b).

Postgraduate intentions research is limited for a number of reasons. The majority of postgraduate research students' characteristics and decision-making literature is post-hoc, after the student has enrolled in a postgraduate research degree (see, for example Neumann, 2003). Post hoc research focusing on students who are currently enrolled in postgraduate degrees have found that many factors impact on the postgraduate student decision-making. Influential factors include intrapersonal characteristics such as age (Hearn, 1987), gender (Farmer et al., 1995), race (Liu, 1998), class year (Long et al., 1995), levels of self-efficacy (Gianakos, 2001), and approaches to career-decision-making (Niles et al., 1997). External factors found to influence postgraduate decision-making include institutional types, personal interactions with family (Hearn, 1987) and mentors (Packard, 2003).

Research on postgraduate aspirations is limited also to a focus on specific populations, such as women (Brown, 2004), dental students (Scarbecz & Ross, 2007), Greek working women (Vryonides & Vitsilakis, 2008) and American and Chinese college students (Ling-Yi, 2006). Others have examined student decision-making related to specific career choices such as information technology (Lang, 2007), mathematics students (Davis et al., 2008) and medical students (Reed et al., 2001).

Researchers have begun to investigate postgraduate decision-making that occurs during a student's undergraduate degree, prior to enrolling in a postgraduate degree. Jepsen and Neumann (2008a) conducted the first study of this nature by examining the effect of a single semester on the postgraduate research degree intentions of third year students. Results indicate that only slight changes occurred in students' intentions to embark on postgraduate study over the course of a single

semester. Students neither changed their preferences for the type of Masters course in which they intended to enrol, nor did they change the degree they intended to study either a combined Masters/PhD or research-only PhD degree.

To further understand how and when students decide to pursue postgraduate study, Varhegyi and Jepsen (2009) conducted a preliminary focus groups investigation into the knowledge, awareness and aspirations of undergraduate business students. Focus groups conducted across first, second and third year students revealed a number of misconceptions regarding postgraduate study in that well-established single inner-city university study. The study identified four key influencers that needed to be articulated clearly, early and frequently throughout the undergraduate degree. Those key issues are the specific entry requirements into the different postgraduate options, the costs of the postgraduate degrees, the financing options available to different categories of students and the expected duration of each of the postgraduate degrees.

The current study aims to extend that research by comparing the knowledge, awareness and intentions of undergraduate business students from a second Australian university. This study investigates the influence of the university context in shaping the knowledge, awareness and postgraduate intentions of undergraduate students.

Method

Participants were first, second and third year local and international undergraduate students from one of the newest universities, located in Sydney's western suburbs. Twelve females and eight males with a mean age of 18.44 years ($SD = 0.88$) participated in focus groups. Six students were enrolled in double degrees and seven were on four year scholarships. All were enrolled in the university's advanced Bachelor of Business program which is available to students with high entrance scores (UAI over 90).

Focus groups were based on procedures proposed by Morgan, Krueger and King (1998). A transcriber documented participants' comments, enabling real-time clarification. Debriefings after

each focus group corrected students' misconceptions about postgraduate studies. Due to scheduling and logistical problems with third year students, individual interviews were used to supplement the focus groups as recommended (Webb et al., 1991).

Results

Results are presented in tabular form. See Table 1 for the focus group results of undergraduate attitudes towards postgraduate study. See Table 2 for the focus group results of factors that influence postgraduate intentions and information sources for postgraduate study.

Discussion

The purpose of this study was to extend preliminary findings of Varhegyi and Jepsen (2009) to a second university in order to determine possible institutional differences and to increase the generalisability of results. The study found students in this second university, like those of Varhegyi and Jepsen (2009), have many misconceptions about the content, entry requirements, class attendance and costs of postgraduate degrees.

Cost estimates for postgraduate degrees were at times wildly inaccurate, particularly for PhD studies. The suggestion that the government provides scholarships for PhD students whose research is seen as worthwhile indicates the level of misunderstanding about PhD study, given that no fees are payable for a PhD for local Australian students, and often a scholarship is available. Those scholarships are based on the merit of the student, not the topic (other than as PhD stipends within research grants). The first new recommendation from this study is that university faculty and administrators may wish to test for and correct misconceptions about the costs of postgraduate degrees, particularly PhDs.

However, respondents in this study placed less emphasis on the costs of postgraduate degrees as an influencing factor over other factors such as siblings, tutors, friends and colleagues. Whereas Varhegyi and Jepsen (2009) found that costs were particularly influential and financing options were an important piece of information required to make the decision to study postgraduate, the majority of

respondents in the current study were on a four year scholarship and only one respondeent raised the issue of financing postgraduate study as a potential barrier. Although some were not certain whether their scholarship would cover an honours year, they were less concerned about possible costs if they choose to do so. A second recommendation is that faculty and administrators in universities with large numbers of scholarship holders might wish to clearly articulate the duration of the scholarships and whether the fourth year can be used in a postgraduate degree.

The perceived benefits of postgraduate degrees echoed Varhegyi and Jepsen's (2009) findings, identifying workforce competitiveness as a clear benefit with only one respondent referring to the intrinsic benefit of study interest. The third recommendation from this study is that university faculty and administrators might wish to be more active in communicating the intrinsic and extrinsic benefits of postgraduate degrees to their undergraduate students.

The study replicated the Varhegyi and Jepsen (2009) finding that students are not aware of the entry requirements for postgraduate courses and were also confused about the duration of the courses. When asked where students could source information on postgraduate degrees, most students were concerned that unless they know what they are looking for, information on postgraduate degrees is difficult to source. Students expressed concerns with postgraduate information distributed on career days in the separate undergrad and postgrad booklets. First year students preferred an overview of postgraduate degrees when given undergraduate information. Furthermore, information on the duration, differences between degrees, content, admission requirements, sequence of degrees and specialty options are sought, with students suggesting that information is most appropriate from presentations rather than booklets.

Two findings from the earlier study were not replicated in this context. First, the finding that information about postgraduate options should be discipline-specific was not raised by respondents in the current study. The students in this study seemed less concerned whether discussion was about business, law, or some other discipline focus. Second, students in the current study were keen to hear about postgraduate options from their lecturers and tutors, in contrast to the inner-city university

respondents who wanted advice on postgraduate study from currently working employer representatives or new academics.

Despite the limited range of students used in this study and the small number of participants, the study has replicated many of the key findings of Varhegyi and Jepsen (2009). The next step in determining the awareness, aspirations and intentions of undergraduate students for postgraduate study is to conduct more thorough, quantitative, cross-institutional research to determine the extent to which these qualitative studies apply to larger samples. Longitudinal studies that track students could establish the changes to students' awareness and attitudes towards postgraduate study as they progress through their undergraduate study.

Recommendations and conclusions: Recommendations from the early study are worth repeating. First, rather than waiting to see which students turn out to be the superior students, universities could clearly articulate the postgraduate study options available to all first, second and third year undergraduate students. Second, information about postgraduate options will be more worthwhile when conducted within a discipline-specific context rather than a non-specific setting where variations might cause confusion, for example where a masters degree may be completed in either one or two full time years in different disciplines. Third, the information given about postgraduate study could be presented by a combination of both faculty and industry or employer representatives.

The additional recommendations from this study are that universities providing four year scholarships might wish to clearly articulate scholarship provisions in order to ensure that students are aware of postgraduate options and that universities might wish to more clearly articulate the intrinsic and extrinsic benefits of postgraduate study.

Beyond those recommendations, however, the study has confirmed the key decision making influences for postgraduate study on undergraduate students. The undergraduate students require these issues to be articulated clearly and early in the undergraduate degree. It is important these messages

are communicated frequently to students, rather than just once or twice in a degree. We would recommend postgraduate information campaigns be aimed at undergraduate students at both the beginning and end of every semester, for every year of undergraduate study. It would seem students pay more or less attention to this information at different times in their degree. The issues to be articulated in postgraduate information campaigns would include the differences between the honours, masters and PhD courses, the costs, financing and scholarship options and expected duration of the courses, the type of content in each course, the admission requirements and the specialty options available in the postgraduate courses.

By extending the earlier study in a second university, this study has demonstrated both the generalisability of undergraduate students' levels of knowledge, awareness and intentions of postgraduate study and highlighted significant new issues for university faculty and administrators. The study contributes to the emerging picture of undergraduate students' aspirations for postgraduate study.

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Table 1: Focus Group Results of Undergraduate (UG) attitudes towards Postgraduate (PG) study

Topic	Summary and supporting verbatim of results
Duration of postgraduate degree	
Honours	<ul style="list-style-type: none"> Some respondents said honours is one year of extra study.
Masters	<ul style="list-style-type: none"> Duration depends on whether it is “accelerated or normal” with a “normal” masters taking “three years part-time and two years full-time” while an “accelerated” masters takes “one and a half years”. Some said masters takes “maybe two years”.
PhD	<ul style="list-style-type: none"> Some said the duration of a PhD can be based on work commitments: “you can do a PhD over a certain number of years if you work. You have a designated time – you could cram it into two or stretch it into four years”. Estimates of PhD duration ranged from three to five years, with some saying a PhD is “quite long, much longer than a normal degree”.
Content of postgraduate degree	
Honours	<ul style="list-style-type: none"> One respondent said she “wouldn’t have a clue... about what is done in each degree”. Others said the content depends on the area of study: “for instance if you are doing finance, you do finance units”.
Masters	<ul style="list-style-type: none"> One said honours and masters are research based, where students “do field work and practical stuff” and “write a paper or thesis, or something”.
PhD	<ul style="list-style-type: none"> “You have to research something”. A PhD is “very in depth and consumes your life” but “is very rewarding”. There is “no class time in a PhD, it’s your own individual study” as students “are assigned someone to help you, an advisor”. Another admits he is “pretty naive about the whole thing, I cannot even guess what would be involved in a PhD”.
Admission to postgraduate degree	
General	<ul style="list-style-type: none"> Almost all respondents said they did not know the exact admission requirements even though they realise “you have to have a certain average before you get into a PG degree” and “all of them require a minimum... maybe a credit average, I assume a bit higher for something like law”.
Honours	<ul style="list-style-type: none"> Some said that honours requires a credit average. Others said “only a certain... group is selected”, essentially “you have to be invited”.
Masters	<ul style="list-style-type: none"> “Need pre-requisites”. For instance, with an MBA, “students... need a couple of years of managerial experience”.

- PhD
- “First class honours”.

Benefits of postgraduate degree

- General
- A PG degree makes you “more employable to have extra skills” and shows “you’ve done well in your degree”, “making people stand out from a thousand others who have done the same degree”
 - “Gives you benefits. Academically speaking you are seen as superior”; “provides an academic edge”.
- Masters
- One respondent recalls “my uncle says that when employers see you have an MBA, they want you” and “in some companies you can’t be a CEO unless you have an MBA”.
- PhD
- Respondents suggest a “PhD makes you more specialised... [it is] easier to get a job if you have a PhD”.
 - With a PhD, “you get the title of Dr and you pursue study in an area that you are passionate about”.

Cost of postgraduate degree

- Honours
- One respondent said “while we all have uni scholarships we’re not worried about costs but I think it’s about \$5,000 to do an honours degree”.
 - Honours costs “either \$5,000 or \$7,000”, although it “depends on the course because I know law costs more than business”.
 - Others said honours is “double what we are paying now”, from \$10,000 to \$16,000 for a year.
- Masters
- A masters is “double the costs of honours” at \$32,000. Up-front payment was estimated at around \$20,000 by one respondent.
 - With regards to government supported places, if a student continues straight after the bachelor degree then “HECS covers you, but not if you have a break” according to some respondents.
- PhD
- Most agreed that a “PhD would probably be pretty expensive”, costing \$20,000 to \$40,000.
 - One said PhD costs are a deterrent: “Few people do a PhD - money is obviously a big factor” and a PhD was bound to be expensive because it “sounds impressive. It’s the biggest thing you can do because it’s more value to you so you would pay more for it. It’s extensive study and very personal and very tailored”.
 - One said “I’m starting to think now that a PhD would be cheaper... there are no tutorials or lectures so you don’t need to pay for that labour. Only paying for one mentor, one person.”
 - All agreed there are no government supported places for PhDs however honours and masters are government supported.
 - One said the government provides PhD scholarships and funds, but “it depends on whether your research is seen as useful”.

Timing and location of postgraduate study

- General
- Some respondents said they would do PG study straight after UG “to get all my study out of the way”.
 - Most were not sure whether part-time options were available for PG study: “I don’t see why you couldn’t do both a job and study at the same time”.
- Honours
- Most were not sure if honours could be deferred and some said honours can be studied part-time.
 - One said honours can be studied at a different university than UG “so long as the courses are similar”.
 - Another: “didn’t know you could do that with honours – I thought you could do masters or PhD at a different uni”.
 - All expressed confusion on the sequencing of PG degrees. Honours should be done “straight after you finish and before going into a PhD. You need something before [a PhD] an honours or masters.”
 - One said “you need honours. It is a base. I know it’s to do with research and so is a PhD”.
- Masters
- Some expect time at work between the UG and masters degrees: “experience is a pre-requisite”. “You graduate and work for a bit and then come back”.
- PhD
- “You can do a PhD when you feel you are ready for it” however “people do not usually do a PhD straight after uni, they return after years of working”.
 - Age, apparently, is an advantage for a PhD according to one who recalled his school principal had “gone back and done a PhD and he’s pretty old”. Similarly, another said “there are tons of old people doing a PhD”.
 - One said a PhD cannot be done part-time because “there is a maximum deadline of five to six years. Not sure why.”
 - Another said a “PhD might have to be done where your undergrad was done”.
 - One said honours is a prerequisite to masters, which is a prerequisite for a PhD. That respondent later contradicted herself, saying that honours is not needed to do a masters, but a masters is needed to do a PhD.

Intentions to progress to postgraduate

- General
- One respondent said she will think about PG study at the end of her degree and “if I think I could keep going then that will be fine. If I think I can’t go to any more classes then I won’t keep going”.
 - Others said their PG intentions may change “towards the end of the degree” and further study “will depend on how you go in your course and if you want to go to the workforce”.
 - Another said she would want to do PG study but does not know what the differences are.
 - Another admitted that because she is in second year, she has not “really thought about it”.
 - One said he began to think about PG study between first and second year.
- Honours
- One said “I think our three year degree is really short so why not be here for another year, so honours is slightly more appealing.” Another said that since their scholarship “goes four years but the course is only three years then it is an option to keep going for the honours year”.
 - Others admit that given they have not even chosen their major, they do not have a focus and “honours is so far away and is not an obvious option”.

Masters
PhD

- Some said masters would be an option “after having worked”, and “not straight after finishing undergrad”.
- One first year respondent said his parents have urged him to focus on his studies day by day since he is new to university, but he still has a desire “to further my education and do a masters or PhD”.

Table 2: Focus Group Results of factors that influence Postgraduate intentions and information sources for Postgraduate study

Topic	Summary and supporting verbatim of results
Factors influencing postgraduate study	
Parents	<ul style="list-style-type: none"> Some respondents said parents are “somewhat” of an influence, however “not the most influential”, with one saying “my parents will support me in whatever I want to do”.
Siblings, other family	<ul style="list-style-type: none"> Siblings and other family were identified by some as influential, for instance “I have one older sister doing a bachelor of law/social science. Her outcome at the end of her degree will influence me if she feels the need to go on to PG study”.
Motivation	<ul style="list-style-type: none"> Another influence was “the innate desire to specialise in the field” and the idea that “some people are interested in research”. One said her major influence would likely be her competitive nature and her desire to be better than others.
Friends, work colleagues and employers	<ul style="list-style-type: none"> Friends, work colleagues and employers were also identified as having some influence on PG intentions: “My dad’s friend from work... is now doing masters because she wants to keep active in the mind. Her saying that has influenced me. I might want to do it one day”, “I think in the workforce they are really into furthering their education and keeping skills up to date so continually going back to uni is the culture of the place. I’m willing to do that like everyone else” and “say someone goes for the job and doesn’t get it but the person that got it had a PG degree. That would influence me heaps”.
Flexibility	<ul style="list-style-type: none"> Some said costs and flexibility of study options were influential.
Tutors	<ul style="list-style-type: none"> Some admit to sourcing influence from tutors who “had done a PhD and loved it”.
Information sources for postgraduate study	
Information students have received	<ul style="list-style-type: none"> One respondent said he had “only been told about UG studies” and that “there could be the possibility of an additional year of PG study”. On career days there are separate booklets for UG and PG study – the information is divided between the booklets, so “unless you are really looking for postgrad then you don’t get the information about it”.
Sources of information	<ul style="list-style-type: none"> Some said information about PG degrees can be found on the university website, in brochures, the student information line and open days that have of “heaps of people to speak to”. One said a PG evening “specifically aimed to tell everyone about a PG options” would be best.
Needed information	<ul style="list-style-type: none"> Most students seek information about the duration of the degrees, differences between a PhD and masters, admission requirements and specialty options, course or study content and the order of PG degrees. Most agreed they would like an overview of PG courses initially and more detail later on.

Preferred sources	<ul style="list-style-type: none">• One suggested emails are preferred, while others prefer “tutors to talk about their experiences” and for “lecturers and tutors to be available for questions”.
Timing of information	<ul style="list-style-type: none">• One said “what we know will get us by but we will want to know more by the end of this year. It is not a major decision until we are close to graduating”.
