Where to go for a Christian research degree [Part 1]

Maria Northcote
Avondale University, Cooranbong, NSW
maria.northcote@avondale.edu.au

Peter Kilgour
Avondale University, Cooranbong, NSW
peter.kilgour@avondale.edu.au

Carolyn Rickett
Avondale University, Cooranbong, NSW
carolyn.rickett@avondale.edu.au

Keywords: Higher education, postgraduate, research, higher research degree (HDR) candidates

Abstract
An institution's support of higher degree research (HDR) candidates engages the supervisor/s and the candidate in a professional learning and teaching relationship, described as *the pedagogy of supervision* (Grant, 2005; Nulty et al., 2009). Universities develop programs to support academic and research staff to supervise postgraduate candidates while also facilitating the learning of novice researchers and HDR candidates (Carton & Kelly, 2014; Carton et al., 2013; Luca et al., 2013). In this mixed methods research project questionnaires and interviews were used to determine what is valued by current and past HDR candidates of Avondale and which areas of our HDR programs need further development. This is the first of two papers that report the findings of this project.

Introduction
The reasons behind a potential student's choice of institution for their postgraduate studies may include issues relating to the institution's geographical location, reputation, academic staff and areas of expertise, as well available services and resources. However, at the centre of most students' choices of institution is the degree itself.

To ensure that the ongoing development of a research degree is informed by evaluation feedback from the candidates in the degree, data need to be gathered from current and graduated candidates. Such data have the potential to identify areas of the degree that assist the progress of enrolled candidates as well as issues that may act as barriers to their progress. In the case of Avondale University, two research degrees are offered: the Master of Philosophy (MPhil) and the Doctor of Philosophy (PhD). The project outlined in this article aimed to investigate, firstly, why MPhil and PhD candidates choose Avondale to complete their research degrees and, secondly, to determine why these candidates stay at Avondale throughout their postgraduate studies. As well as researching information about what attracts HDR (higher degree research) candidates to Avondale, the findings of this project also revealed information about the aspects of Avondale, as an institution, that support or hinder MPhil and PhD candidates' progress. The methodology adopted in this study, outlined later in this article, ensures the voices of the MPhil and PhD candidates are heard and acted upon, within the context of course development at the institution.

By utilising research-informed data, it is anticipated that the outcomes of the study will inform the future development of the postgraduate research degrees at Avondale, including processes associated with course review and accreditation. The data reported in this article are used to supplement other evaluation data on file as part of Avondale's Quality Management System – that is, the review of relevant policies, gathering feedback from external advisory panels, benchmarking, evaluation surveys and both internal and external moderation procedures.

Background literature
The framework and expected factors surrounding student choice of institution to study higher degrees

> *By utilising research-informed data it is anticipated that the outcomes of the study will inform future development of post graduate research degrees*

by research, and the factors that keep the candidate enrolled at that institution for the duration of their program, are the focus of this review.

Since the formation of the Tertiary Education Quality Standards Association (TEQSA) in 2011, it has become crucial to seek student input on their experiences of study at every level, including HDR candidates. Of particular interest has been to collect data on "outcomes and standards for learning and teaching" (Symons, 2012, p. 126). To this end the Postgraduate Research Experience Questionnaire (PREQ) (Ainley, 2000; Graduate Careers Australia, n.d.), one of the tools used in this study, and the Student Research Experience Questionnaire (SREQ) (Ginns et al., 2009), are two measures among others that were developed to seek evaluation data from HDR candidates and graduates.

Given the rigorous processes an HDR candidate encounters in their study program, and the other responsibilities they have while studying, the quality of the human support offered to HDR candidates and their relationships with such supports are typically paramount to the candidate. As suggested by Nulty et al. (2009), "co-supervisors, advisers, language and skills support staff, librarians, IT and other technical staff, and peers also contribute to the students' development" (p. 693). They go on to explain that the main supervisor is the 'focal point' in bringing together and helping the candidate make sense of the many and various contributions the university departments have to offer.

In addition to the support provided by human resources to HDR candidates, there are certain waypoints or threshold concepts they need to reach and internalise in their studies (Kiley & Wisker, 2009). These include: understanding the required standard for a doctoral thesis, being able to critically appraise existing concepts in their discipline area, the ability to put together a coherent argument, the skill of developing a theoretical framework, and being able to position their methodology, results and conclusions within that *framework*. Working together, the supervisor assists the candidate to achieve these threshold concepts and, eventually, to reach the "completion state" of the degree. Given that Australian data shows that the national completion rates for PhDs is less than 50% after studying up to five years, and plateaus at approximately 70% after nine years, there is a mean national attrition rate of approximately 30% (Torka, 2020). Compared to this, Avondale has an HDR attrition rate of 25%.

Analysing the history of the relationship between universities and HDR candidates, Carayannopoulos (2012) explores the evolution in the last decade of candidates becoming the customers of universities. In order for universities to secure the enrolment of

> *very importantly for Avondale is the ethical desire and responsibility to provide the best experience for the candidates.*

HDR candidates in what is a competitive environment, they need to provide a product that is 'user friendly' and this starts with the relationship between the candidate and the supervisor. The importance of seeking candidate feedback to improve the program is highlighted:

> If a student is to provide frank commentary on the quality of the supervision they receive, this may be identifiable and may place the student-supervisor relationship under greater strain or pressure, however if the comments of students are not addressed specifically with each supervisor or the survey instruments are not intentionally designed to obtain this feedback, can a university hope to improve the outcomes for both students and staff? (Carayannopoulos, 2012, p. 63)

While the relationship between candidate and supervisor is of prime importance to the experience of the candidate, there are other processes of socialisation that contribute to the candidate's experiences. Gardner (2010) claims that the culture of the faculty contributes to the candidate's socialisation. Another application of socialisation for the candidate is that of peer mentoring, and the way it develops. Gregoric and Wilson (2012) studied the informal process of two doctoral students and the way their relationship developed over time and followed the steps identified some time ago by Kram (1983) which are: no mentoring, initiation of mentoring, cultivation of mentoring, separation of mentoring, and redefinition of mentoring. According to Rose (2003), each of these stages revolves around relationship, integrity and guidance.

It is relevant to this background discussion to mention that Avondale's quantitative survey of candidates used in the study reported in this paper, included 43% of items that related supervision and socialisation. The topics of these items, drawn from various research, included satisfaction with supervisory relationship (Carayannopoulos, 2012), socialisation with fellow candidates (Gregoric & Wilson, 2012), and relationship to other entities such as the Research Office, the library and the Information Technology Department (Nulty et al., 2009).

There are therefore multiple purposes for seeking input from HDR candidates regarding their experiences in their study programs. Firstly, there is the accountability required of institutions by TEQSA (Baird, 2010). Secondly, there is the commercial necessity of the university to attract and retain HDR candidates by seeking to discover their experiences and modify programs to cater for their needs. Finally, and very importantly for Avondale is the ethical desire and responsibility to provide the best experience for the candidates.

Research methodology

This mixed methods research project was conducted specifically to inform the ongoing improvement and evaluation of Avondale's Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) degrees. As part of Avondale's commitment to quality assurance and enhancement, findings from this study have been used to inform the course review and accreditation processes that took place during 2020 for the MPhil and PhD degrees.

By gathering evaluation data from the main stakeholders (i.e., the candidates and graduates) involved in these two degrees, this participatory research project (Bergold & Thomas, 2012) ensures that the stakeholders' perspectives are used to identify which successful aspects of the degrees Avondale should maintain and which problematic aspects of the degrees should be improved.

Research setting and participants

The research setting of this research study was Avondale University and the participants of the study were drawn from the population of candidates who were currently enrolled or recently graduated from the institution's HDR program. The participants were considered eligible to contribute to the study if they met the following inclusion criteria:

1. candidates who had been enrolled in the MPhil and PhD degrees during the six year period from 2014 to 2019; and
2. graduates who had completed either the MPhil or PhD degrees during the six year period from 2014 to 2019.

When this research began, the study's population was made up of 24 graduated candidates and 45 current candidates (69 participants in all), all of which were invited to contribute to the study's *Why Avondale Online Questionnaire*. From this population, 29 participants (42% of the total population) contributed responses to the online questionnaire and eight candidates participated in interviews (12% of the total population). Additionally, of the 15 HDR candidates who graduated from MPhil or PhD degrees from 2014 to 2019, eight of these (53% of total no. of graduates 2014-2019) responded to the Postgraduate Research Experience Survey (PREQ).

Research Questions

Qualitative and quantitative data were gathered from the study's participants in order to gain answers to the following research questions (RQs):

RQ1: Why do HDR candidates, in MPhil or PhD degrees, choose Avondale to complete their postgraduate studies?

RQ2: What aspects of Avondale's postgraduate learning experiences are valued or not valued, as reported by HDR candidates who are or were enrolled in MPhil or PhD degrees at Avondale?

Data collection and analysis

In total, four types of data (including quantitative and qualitative) were gathered using the following data collection instruments.

Enrolment data were gathered from Avondale's enrolment systems regarding the demographic information about current candidates and graduates of Avondale's MPhil and PhD degrees (e.g., gender, age, enrolment dates).

Questionnaire data (qualitative and quantitative) from current candidates and graduates of Avondale's MPhil and PhD degrees. The *Student Experience Survey – HDR* was modified to suit Avondale's context and HDR program. This questionnaire became known as the *Why Avondale Online Questionnaire*. This questionnaire was administered online and requested participants to contribute information and views regarding the following issues:

- demographic data including age, geographic location, employment, languages spoken and gender;
- degree information including program type, enrolment dates, fee payment, mode of study and degree milestones achieved;
- reasons behind choice of Avondale as an institution for postgraduate study;
- valued or problematic aspects of their higher degree research (HDR) experience at Avondale;
- academic climate, skill development, expectations, impact, support and amenities; and
- suggested changes for future iterations of Avondale's HDR program.

Interview (qualitative) data were gathered from a stratified purposive sample (Burns, 2000) of 15-20% the study's total population of participants. This selection aimed to ensure that interviewees represented a variety of genders, degree programs, degree stages, ages, modes of study and ethnicities. Participants were asked to answer questions that focused on their reasons for selecting Avondale as a place of study, enablers and barriers to their study and recommendations for future modifications of Avondale's HDR program. Sample questions from the interview scheduled included:

- Please describe why you selected Avondale as the institution where you enrolled in your higher research degree.

> " *the stakeholders' perspectives are used to identify which successful aspects of the degrees Avondale should maintain and which problematic aspects of the degrees should be improved.* "

- When enrolling at Avondale in your HDR degree, did you have any reservations about completing your HDR here? If so, what were these reservations?
- When reflecting on your experience as an HDR candidate at Avondale, what aspects of your study did you particularly appreciate?
- When reflecting on your experience as an HDR candidate at Avondale, what were the main aspects of your study do you think could have been improved?
- If you could recommend some changes to how Avondale supports their HDR candidates, what changes would you suggest?

> " *When enrolling at Avondale in your HDR degree, did you have any reservations about completing your HDR here?* "

Questionnaire data (qualitative and quantitative) from the Postgraduate Research Experience Questionnaire (PREQ) from graduates of both the MPhil and PhD degrees, as part of the QILT (Quality Indicators for Learning and Teaching) survey program which is funded by the Australian Government Department of Education and Training.

The data gathered during this project were cleaned, collated and analysed, for the purposes of answering the study's research questions, using the following data analysis methods:

- *Descriptive statistics* (including means, standard deviations and frequencies) were calculated from the quantitative questionnaire data gathered in this study.
- *A matrix analysis method* (Groenland, 2014; Patton, 2015) was used to code the qualitative data gathered in this study from questionnaires and interviews. The matrix analysis method was used with the intention to develop a grid that represents the various aspects of Avondale's higher degree research programs

as one dimension on the grid (x axis) in relation to the participants' comments (as evidenced in questionnaire, interview and QILT data) as the corresponding dimension (y axis). Both mapping and cognitive mapping) will be used (Miles & Huberman, 2013).

Data gathered from the interviews were audio recorded by the researchers and then de-identified before coding and analysis processes began.

Findings

Based on an analysis of data gathered from questionnaires, interviews and the Postgraduate Research Experience Questionnaire (PREQ), our results provided evidence to report on why HDR candidates (in MPhil or PhD degrees) chose Avondale to complete their postgraduate studies (answers to Research Question no. 1) and the aspects of their postgraduate learning experiences that they valued or did not value (answers to Research Question no. 2). Table 1 outlines how each source of data were used to inform answers to each of the study's research questions.

Reasons for choosing Avondale

Analysis of the qualitative data provided by participants' responses to the *Why Avondale Questionnaire*, along with their interview data, provided evidence about why recent graduates and current candidates chose Avondale as the institution to study their postgraduate degree. The qualitative data from the study were analysed using a matrix technique. The summarised results below have been extracted from the completed matrix.

When asked why they chose Avondale to study their HDR (Higher Degree Research) degree,

Table 1:   *Source of data used to answer the study's research questions*

RQ	Research Questions	Type of data used to answer the RQ		Data collection instrument used to answer the RQ
		Qualitative	Quantitative	
1	Reason for choosing Avondale	✓	-	Interviews
		✓	-	Questionnaires (open-ended questions)
2	Aspects of HDR course that were valued and not valued	-	✓	PREQs
		✓	-	Interviews
		-	✓	Questionnaires (closed questions, Likert-style items)
		✓	-	Questionnaires (open-ended questions)

candidates in the MPhil or PhD courses provided a variety of responses, ranging from their perceptions of the institution as a whole through to expectations about how they expected to engage with their individual supervisors.

Many of the candidates commented on how they expected the degree to benefit their future employment and this reasoning was frequently linked to either Avondale's special character or their employment at an institution which was seen to have a special character. The candidates noted that they were attracted to Avondale as an institution to complete their postgraduate studies due to the special Christian character of the institution: *Being a Christian institution as well, that was important and that their philosophy was very compatible with what Avondale stands for.*

Aspects of Avondale that were valued

The participants in the study reported on issues that assisted their progress during their studies as well as areas where they felt improvement was required. This information was drawn from the data gathered from the study's questionnaires and interviews.

The participants' responses to open-ended items in the *Why Avondale Questionnaire*, and their comments during the interviews revealed that the participants frequently mentioned their supervisors in a positive light, especially in relation to the way they disseminated advice and support: "Their comments and advice have been amazing". They were typically described as "genuine", "wonderful", "knowledgeable" and "flexible". The assistance provided by Library staff was also valued: "I have had really good assistance, extremely good assistance, from the library and … these library guys are able to perform miracles and get hold of the docu ment that you needed to help you".

The candidates and graduates both appreciated the academic climate at Avondale in which their study was completed. This climate was described as "honest", "supportive", "encouraging", "rigorous", "open", "professional and nurturing". The institutional environment was perceived as particularly supportive to HDR candidates and their research, with some candidates mentioning how they valued the opportunity to study with like-minded people and the personalised educational experience offered by Avondale: "… there is a lot more potential there [at Avondale] for a personalised experience". Many candidates valued opportunities they were given to develop resilience as well as their writing, thinking and analysis skills.

The participants' responses to the *Why Avondale Questionnaire* provided further evidence about the aspects of Avondale's postgraduate learning

experiences that were valued (see Table 2). The question that attracted the most agreement from the participants was "doing my research sharpened my analytical skills". Out of all questions on the survey, this question also had the lowest standard deviation, meaning that there was the most agreement from participants with this statement. Other questions that were 'strongly agreed' with revolved around areas that were very impactful on the candidates' actual academic programs. These included having multiple supervisors (4.6), developing and writing their ideas (4.52), using the library (4.45), and having appropriate places to work (4.36).

Table 2: *Aspects of Avondale that candidates/graduates valued most*

Overall most agreed with	Mean Score*	Standard Deviation
Doing my research sharpened my analytical skills	4.62	0.86
I benefitted from having more than one supervisor (if applicable)	4.6	1.03
I learned to develop my ideas and present them in written work	4.52	0.87
I used Avondale's Library services	4.45	0.92
I had access to suitable working space when needed	4.36	1.10

*Responses indicated level of agreement on a Likert scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

> *Being a Christian institution as well, that was important and that their philosophy was very compatible with what Avondale stands for.*

Aspects of Avondale that were not valued

The qualitative data gathered throughout the study revealed some areas that past graduates and current candidates valued least about their postgraduate study experiences at Avondale. Problematic areas that were identified by the participants were primarily related to the institution's administration systems. For example, many commented on the difficulties associated with navigating the policies and systems within the institution and the problems they encountered when enrolling in their courses, describing the experience as "very tricky", "extremely frustrating" and "not streamlined". The barriers they encountered when accessing reading material, resources and other support services were noted by some participants as memorable in their study

experiences. In terms of their dealings with their supervisors and other candidates, some participants found they encountered communication problems with their supervisors and wanted to experience more opportunities to connect with other candidates, noting that they enjoyed such experiences when they had the chance to engage in activities where candidates connected with each other, although they were rare.

The quantitative data further revealed areas of concern for candidates and graduates about their study experiences at Avondale. Table 3 outlines results from the *Why Avondale Questionnaire* that provided information about the aspects of Avondale's postgraduate learning experiences that were least valued by the participants of the study.

Table 3 illustrates that the statements the candidates least agreed with were things that were peripheral to their actual academic productivity and their work with their supervisors, but further did not score lower that 2.4 which might be interpreted as only slighty disagree. Importantly these items indicated experiences the farthest from optimal. It is interesting to note that on the questionnaire, the statement that had the widest range of scores from the candidates was the one referring to the impact a higher degree has had on the candidate's mental health (standard deviation of 1.40).

> *higher (over 4) mean satisfaction levels were evident for three scales: Overall Satisfaction, Supervision, and Skill Development*

Table 3: *Aspects of Avondale that candidates/graduates valued least*

Overall least agreed with	Mean Score*	Standard Deviation
Opportunities to work with other research students were provided	2.41	1.03
Studying for a higher degree has had a negative impact on my social life (transposed)	2.48	1.39
Avondale's counselling staff were helpful to my study (if applicable)	2.50	0.95
I found the online environment at Avondale useful to collaborate with other staff or students about my research	2.60	1.12
Studying for a higher degree has had a negative impact on my mental health (transposed)	2.67	1.40

*Responses indicated level of agreement on a Likert scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

These problematic areas provide specific direction into how the HDR program at Avondale, and the research training programs that support the HDR candidates, will be developed in the future.

Supplementary data gathered from the PREQ

To supplement the data gathered from questionnaires and interviews conducted during this project, data gathered from the administration of the *Postgraduate Research Experience Questionnaire (PREQ)* between 2016 and 2019 were also analysed, especially for the purposes of answering Research Questions no. 2.

The *Postgraduate Research Experience Questionnaire (PREQ)* is administered as part of the QILT (Quality Indicators for Learning and Teaching) survey program which is funded by the Australian Government Department of Education and Training. This questionnaire "invites postgraduate research graduates four months after completing their degree to express agreement or disagreement on a five-point scale with statements about various aspects of their degree" (Australian Government Department of Education and Training, 2019, p. 23). Graduates are asked to respond to questions about supervision, intellectual climate, skills development, infrastructure, thesis examination and goals and expectations, as well as their overall satisfaction with their degree.

Of all of the candidates that graduated from Avondale's HDR program between 2016 and 2019, eight of these graduates responded to the PREQ. Between 2016 and 2019, Avondale had two candidates graduate from the MPhil program and 13 candidates graduate from the PhD program – a total of 15 HDR graduates in all. Therefore, the PREQ data represents responses from 53% (8 out of 15) of our graduates between 2016 and 2019.

The mean scores of the responses provided by Avondale's graduates indicated that higher (over 4) mean satisfaction levels were evident for three scales: Overall Satisfaction, Supervision, and Skill Development. Furthermore, the two scales that reported the lowest mean satisfaction levels were: "Intellectual Climate" and "Industry Engagement Scale". Table 4 provides the means of each scale within the PREQ, based on four years of data from 2016 to 2019.

While the PREQ data from 2016 through to 2019 do not provide any specific insights into the reasons why HDR candidates in the MPhil and PhD courses choose Avondale to complete their postgraduate studies, these data provide an indication of the aspects of Avondale's postgraduate learning experiences that are valued or not valued (i.e., answers to Research Question no. 2).

As such, these PREQ data suggest that, while Avondale HDR graduates are satisfied with their

overall experience at Avondale, further work is required to develop a research culture that is characterised by an intellectual climate and strategies are required to assist candidates to see the relevance and make links between their postgraduate studies and their career "industries".

Summary of findings

To answer the first research question, the main reasons identified by candidates as to why they selected Avondale as the institution to complete their postgraduate studies, had to do with the nature of the institution. The main reason revolved around the Christian special character and worldview of the institution, including the special character employment options that became available to them through their connections with Avondale. Secondary to this was the personal attention they believed they would receive in a smaller institution and the nature of the HDR course.

The second research question sought to identify the main aspects of the HDR program that were appreciated by HDR candidates. These reasons included a combination of support from Avondale personnel, access to academic resources, and opportunities for personal and professional development. Specifically highlighted were: the work of their supervisors; the academic climate; assistance from Library staff; availability of working space; flexibility of the program; and opportunity to develop skills.

The main areas HDR candidates expressed concern about were mostly peripheral to the

Table 4: *Means of scales from Avondale's PREQ results: 2016-2019*

Scale	Mean (1-5) (Avondale, 2016-2019)
Overall Satisfaction	4.0
Supervision	4.04
Intellectual Climate	3.13
Skill Development*	4.20
Infrastructure	3.68
Thesis Examination	3.67
Goals and Expectations	3.96
Industry Engagement Scale**	3.22

*Some participants did not respond to all items in the SD scale.
**The IE scale was introduced in 2019 and, as such, was only completed by the 3 graduates from 2019.

academic program. Administrative concerns were at the top of the list, including: the enrolment process which was seen as unnecessarily complex; access to some services and resources; and understanding Avondale's systems and policies. Other concerns were associated with communication, lack of induction and making connections with other HDR candidates.

Findings from the PREQ data indicated that, overall, candidates were most content with their supervision, their skill development, and their overall satisfaction. This triangulates with the data gleaned from the *Why Avondale Online Questionnaire* which also highlights the positive aspects of the candidates' supervision experience and the strong development of individual skills that HDR candidates have experienced. The one anomaly presented by the two sets of survey data is that the initial survey highlighted Avondale's academic environment as a strength but Avondale's intellectual climate was rated as being quite low in the PREQ data. It would be interesting to find out why candidates see academic environment and intellectual environment differently.

Discussion and recommendations

As predicted, many aspects raised by current candidates and past graduates of Avondale's HDR program were related to how they interacted with their supervisors, support staff and librarians, as was highlighted through Nulty et al.'s work (2009). The candidates' comments reflected issues outlined under the TEQSA (Tertiary Education Quality Standards Association) standards for Standard 4.1 Research and Standard and 4.2 Research Training (Tertiary Education Quality and Standards Agency, 2011).

Aspects of previous research published about the pedagogy of supervision (Bruce et al., 2009; Grant, 2005; Green & Lee, 1999; Qureshi & Vazir, 2016; Sinclair, 2004) were also evident in the findings of this study. For example, our participants commented frequently on the interaction with their supervisors and how such interaction taught them about research. One area from the pedagogy of supervision research that was somewhat absent from the data we gathered was evidence that the HDR candidates thought of themselves as researchers. Their comments were more focused on the product of their research (publications, presentations, theses), rather than their own development as a researcher.

HDR candidates often complain about the isolation they feel as a postgraduate researcher (Gregoric & Wilson, 2012; Keefer, 2015) and this was also a concern of Avondale's HDR candidates. HDR candidates at other institutions have reported the need for "increased candidate support and socialization opportunities" (Rigler Jr, et al., 2007, p. 2)

aspects … appreciated … included … support from Avondale personnel, access to academic resources, and opportunities for personal and professional development.

while researchers have highlighted the "advantages of community approaches to learning" (Parker, 2009, p. 44) in HDR education. So too, Avondale's candidates expressed interest in engaging in more social and networking activities that enabled them to meet up with other candidates. Because our HDR cohort are primarily studying from a distance and are not able to easily visit either of our physical campuses, much of the peer interaction sought by our candidates needs to be, and has become, facilitated using online technologies, as suggested by a number of researchers in recent years (Guerin, et al., 2018; Sapouna et al., 2020).

The findings of this study indicated that the overall nature of the institution was important for applicants considering Avondale as a place of study as well as candidates who were progressing through their degree. While this has not been a strong theme in past studies about HDR candidates' experiences, it appears to be a deciding factor in, firstly, attracting research candidates to Avondale and, secondly, keeping them enrolled throughout their degree. While some of aspects of our findings reinforce or overlap with previous literature on the professional learning needs of HDR candidates and reasons for attrition (Gardner, 2009; Rigler Jr et al., 2017), our research has revealed a slightly new field of interest from

> "
> *our research has revealed a slightly new field of interest from HDR candidates – their appreciation for the special character institution*
> "

HDR candidates – their appreciation for the special character institution. Interestingly, the participants' comments gathered during this study reflected their awareness of the institution's special character before they applied to study, during their studies and the predicted potential of the institution to provide future employment opportunities was also mentioned.

Recommendations

In consideration of the results of the study, we have identified a number of modifications that are required to improve the MPhil and PhD programs and the Research Training Program that supports the candidates throughout these HDR programs at Avondale. Being guided by the recommendations of Carayannopoulos (2012), we have used this data to improve the way in which our institution and our supervisors interact with HDR candidates. Table 5 provides an account of the types of research-informed recommendations that have been or are being implemented, based on the current and past HDR candidates' and graduates' recommendations.

Limitations of current study and suggestions for future research

This study only sought data from candidates in the research degrees at Avondale – that is, the MPhil and

Table 5: *Practical recommendations being implemented*

Topic of recommendation	Recommendation	Progress
Enrolment system	Needs to be more streamlined with obvious advice regarding required actions of applicants.	Planned
Orientation program	Orientation programs for new candidates and re-orientation programs for returning candidates have been introduced for on-campus and distance candidates at the beginning of each semester.	Achieved
Research Training Program	More candidate-candidate interaction	In-progress
	Offer mainly online	Achieved
Clarity of milestones	Review of HDR-policies and Research Training Support Framework	In-progress
Distance candidates	More specifically-tailored services and support for candidates studying at a distance	In-progress
Feedback mechanisms	Develop opportunities for supervisors and candidates to offer ongoing feedback about the HDR program and Research Training Program	Planned
Finance	More transparency required about amounts, due dates and invoices	Planned
Mental health support	Increase visibility of and communication about mental health services	In-progress
Research culture	More engagement between HDR candidates and other researchers	In-progress

PhD degrees within a limited time frame. Views from the candidates' supervisors were not gathered during this study. Future researchers may wish to include supervisors, as well as candidates and graduates, to expand the views represented regarding their institution's HDR programs. This study could also be re-worked to find out more about how supervisory panels operate including investigations into the interaction between supervisors, sharing of expertise, their various roles and contributions.

While this study did include differences in responses between candidates and graduates, as well as between males and females (to be explored in the next paper), there are many more contributing factors that could be investigated including: previous degrees, demographic profiles, and work experience. Each of these factors are not only areas for future possible research, but were likely to have been limitations that contributed to the nature of the data collected.

There are several other possible directions this study could follow. One possibility would be to replicate this study over an extended period to collect longitudinal data for the purpose of investigating trends and responses to change. Another avenue to increase the size of the data sample would be to invite other universities to participate, thereby allowing benchmarking of results and collaborative improvement.

Being a special character institution, more data could be collected that applies to that niche role and having other Christian tertiary institutions collect similar data would be worthwhile.

Although this bespoke project design has been constructed for the specific purposes of conducting this research project at Avondale as part of the data collection processes required to complete the course review and accreditation processes for the MPhil and PhD degrees, this research design may be replicated by other higher education institutions to evaluate their own postgraduate programs.

Conclusion

This study set out to address a gap in researcher education: to source the voices of an institution's current and recent HDR candidates and graduates, and to use these voices to inform future development of both the institution's HDR program and the research training program that supports supervisors and candidates in the HDR program. While some evaluation data have been gathered intermittently within the institution about its HDR program, a consolidated and systematic evaluation program was needed. Such a program has now been established to inform the program's future improvement and development.

Much has been said and written about doctoral and researcher education by researchers, supervisors and professional learning educators but the voice of the candidate has not always been central to such conversations. While only reporting evaluation data from one institution's HDR candidates and graduates, this article offers a systematic approach to analysing an institution's HDR program over a stretch of six years (2014-2019), incorporating multiple sources of internally and externally collected data.

This research found that HDR candidates at Avondale appreciated, above all, the special nature of the institution and the quality of the supervision they received. While they had suggestions for how some of the institution's administration processes and research training could be improved, the participants consistently expressed appreciation for the human element of support at the institution which was made available to HDR candidates on a consistent basis.

This paper is the first of a series of two articles that report on the results of a study, conducted at Avondale University. This research evaluated the institution's HDR program by gathering feedback from the HDR candidates themselves. This article has reported on the aspects of Avondale's HDR program that its candidates valued and, on the other hand, found wanting. The next paper in this series will report on the differences between the way the current candidates and graduates reported on their postgraduate experiences, and the differences between the way males and females reported on their postgraduate learning experiences. **TEACH**

> *This study could also be re-worked to find out more about how supervisory panels operate … the interaction between supervisors, sharing of expertise, their various roles and contributions.*

References

Ainley J. (2000). *The 1999 Postgraduate Research Experience Questionnaire*. Australian Council for Educational Research. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.2860&rep=rep1&type=pdf

Australian Government Department of Education and Training. (2019). 2019 Graduate Outcomes Survey (GOS), *National Report, October 2019*. https://www.qilt.edu.au/docs/default-source/gos-reports/2019-gos/2019-gos-national-report.pdf

Baird, J. (2010). Accountability relationships in Australian postgraduate research education. In M. Kiley (Ed.), *9th Quality in Postgraduate Research Conference: Educating researchers for the 21st century* (pp. 129-310). Adelaide, South Australia.

Bergold, J., & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research/ Historische Sozialforschung, 37*(4), 191-222.

Bruce, C., Bell, J., Gasson, S., Geva, S., Kruger, K., Oloyede, K., O'Shea, P., Stoodley, I., Raymond, K., & Wissler, R. (2009). *Towards a pedagogy of supervision in the technology disciplines*. www.olt.gov.au/resource--towards--pedagogy--supervision--qut--2009

Burns, R. B. (2000). *Introduction to research methods* (4th ed.). Sage.

Carayannopoulos, G. (2012). Measuring research student satisfaction in an era of 'Students as customers'. In M. Kiley (Ed.), *Narratives of transition: Perspectives of research leaders, educators & postgraduates. Proceedings from the 10th Quality in Postgraduate Research Conference* (pp. 59-70). Adelaide, Australia.

Carton, J., & Kelly, A. (2014). *Lessons learned from a multi-institutional collaboration to develop a national framework for*

research supervisor support and development. Paper presented at the Quality in Postgraduate Research, Adelaide, South Australia.

Carton, J., O'Farrell, C., & Kelly, A. (2013). Developing an institutional framework for supporting supervisors of research students: Lessons learned from a unique inter-institutional project in Ireland. *Journal of the European Higher Education Area, 2, 37-68*.

Gardner, S. K. (2009). Student and faculty attributions of attrition in high and low completing doctoral programs in the US. *Higher Education, 58*(1), 97-112.

Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high-and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *The Journal of Higher Education, 81*(1), 61-81. https://doi.org/10.1080/00221546.2010.11778970

Ginns, P., Marsh, H.W., Behnia, M., Cheng, J.H., & Scalas, F. (2009). Using postgraduate students' evaluations of research experience to benchmark departments and faculties: Issues and challenges. *British Journal of Educational Psychology, 78*(3), 577-598. doi: 10.1348/978185408X394347.

Grant, B. M. (2005). *The pedagogy of graduate supervision: Figuring the relations between supervisor and student*. (PhD). University of Auckland. https://researchspace.auckland.ac.nz/handle/2292/295

Graduate Careers Australia. (n.d.). *Postgraduate research experience questionnaire overview*. http://www.graduatecareers.com.au/files/research/start/agsoverview/ctags/preso/

Green, B., & Lee, A. (1999). Educational research, disciplinarity, and postgraduate pedagogy: On the subject of supervision. In A. Holbrook & S. Johnston (Eds.), *Postgraduate education in education* (pp. 88–104). Australian Association of Research in Education.

Gregoric, C., & Wilson, A. (2012). Informal peer mentoring during the doctoral journey: Perspectives of two postgraduate students. In M. Kiley (Ed.), *Narratives of transition: Perspectives of research leaders, educators & postgraduates. Proceedings from the 10th Quality in Postgraduate Research Conference* (pp. 83-92). The Australian National University, Canberra: CHELT.

Groenland, E. A. (2014). Employing the matrix method as a tool for the analysis of qualitative research data in the business domain. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2495330

Guerin, C., Aitchison, C., & Carter, S. (2018). Digital and distributed: Learning and teaching doctoral writing through social media. *Teaching in Higher Education: Critical Perspectives, 25*(2), 238-254. https://doi.org/10.1080/13562517.2018.1557138

Keefer, J. M. (2015). Experiencing doctoral liminality as a conceptual threshold and how supervisors can use it. *Innovations in Education and Teaching International, 52*(1), 17-28. doi:10.1080/14703297.2014.981839

Kiley, M., & Wisker, G. (2009). Threshold concepts in research education and evidence of threshold crossing. *Higher Education Research and Development, 28*(4), 431-441.

Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal, 26*(4), 608-625. https://doi.org/10.5465/255910

Luca, J., Standing, C., Adams, R., Borland, H., Erwee, R., Jasman, A., . . . Bertone, S. (2013). *Developing a toolkit and framework to support new postgraduate research supervisors in emerging research areas: Final report 2013*. http://www.olt.gov.au/system/files/resources/ID11_2091_Blass_report_2013.pdf

Miles, M. B., & Huberman, A. M. (2013). *Qualitative data analysis* (3rd ed.). Sage.

Nulty, D., Kiley, M., & Meyer, N. (2009). Promoting and recognising excellence in the supervision of research students: An evidence-based framework. *Assessment & Evaluation in Higher Education, 34*(6), 693-707. http://www98.griffith.edu.au/dspace/bitstream/handle/10072/28506/56218_1.pdf?sequence=1

Parker, R. (2009). A learning community approach to doctoral education in the social sciences. *Teaching in Higher Education, 14*(1), 43-54.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage.

Qureshi, R., & Vazir, N. (2016). Pedagogy of research supervision pedagogy: A constructivist model. *Istraživanja u pedagogiji, 6*(2), 95-110.

Rigler Jr, K. L., Bowlin, L. K., Sweat, K., Watts, S., & Throne, R. (2017). *Agency, socialization, and support: A critical review of doctoral student attrition*. Paper presented at the International Conference on Doctoral Education, Orlando, Florida.

Rose, G. L. (2003). Enhancement of mentor selection using the ideal mentor scale. *Research in Higher Education, 44*(4), 473-494.

Sapouna, M., Wilson, C., Beloucif, A. R., Zihms, S., & McGillivray, D. (2020). *Using an online peer-assisted learning scheme to support the supervision and professional development of doctoral researchers*. Paper presented at the Researcher Education and Development Scholarship Conference 2020, Leeds, UK.

Sinclair, M. (2004). *The pedagogy of 'good' PhD supervision: A national cross-disciplinary investigation of PhD supervision*. Department of Education, Science and Training.

Symons, R. (2012). Developing a framework for recording and reporting the narrative of the research higher degree student®. In M. Kiley (Ed.), *Narratives of Transition: Perspectives of Research Leaders, Educators & Postgraduates. Proceedings from the 10th Quality in Postgraduate Research Conference* (pp. 125-136). Adelaide, Australia.

Tertiary Education Quality and Standards Agency. (2011). Higher education standards. http://www.hestandards.gov.au/

Torka, M. (2020). Change and continuity in Australian doctoral education: PhD completion rates and times (2005-2018). *Australian Universities' Review, The, 62*(2), 69.

Author information:

Maria Northcote is a Professor in the School of Education and Science at Avondale University in New South Wales Australia. She is an experienced higher education teacher, leader and researcher and is involved in undergraduate and postgraduate education, and professional development. Some of her research interests include threshold concepts, researcher education, online teaching and professional learning.

Peter Kilgour is an Associate Professor and Dean of Research at Avondale University in New South Wales Australia. He has 42 years experience in Christian education and has research interests in Christian school learning environments, innovations in tertiary learning and teaching, online education and cultural awareness in tertiary students.

Carolyn Rickett is an Associate Professor and Dean of Learning and Teaching, senior lecturer, researcher and creative arts practitioner at Avondale University. Utilising her background in arts, medical humanities and healthcare chaplaincy, she currently teaches undergraduate students and supervisors postgraduate candidates in the fields of communication, creative writing, education, nursing and chaplaincy.