

## **Opportunities and resilience:**

### **Enablers to address barriers for Aboriginal and Torres Strait Islander**

### **Peoples to commence and complete HDR programmes**

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#### **Abstract**

While numbers of Aboriginal and Torres Strait Islander Peoples' (hereafter Indigenous Peoples) completing undergraduate degrees has improved markedly in recent years, Indigenous Peoples remain under-represented in HDR programmes which limits progression into academic careers. This paper explores factors affecting Indigenous Peoples' commencement and completion of higher degree research (HDR) programmes. The research was undertaken at a large, multi-campus, metropolitan Australian university and involved a qualitative, culturally-appropriate research design based on yarning circles and interviews with Indigenous HDR candidates and interviews with HDR supervisors. The research was undertaken by Indigenous and non-Indigenous researchers 'with advice provided by the Indigenous community at the university to ensure cultural safety. Highlighting the central role of supervisors and system-wide university support, the most significant finding of the research is that though additional research and other university commitments can be a barrier, other research/work opportunities enables completion. The findings suggest that in addressing under-representation of Indigenous Peoples in HDR and academia in Australia, universities need to provide strategic attention to how they engage, support and recognise achievements of Indigenous Peoples in HDR whilst also being cognisant of individuals' competing responsibilities.

#### **Introduction**

The numbers of Aboriginal and Torres Strait Islander Peoples (hereafter respectfully referred to as Indigenous Peoples) enrolled in and completing undergraduate degrees at tertiary institutions/universities in Australia has improved in recent years but Indigenous Peoples remain particularly underrepresented in higher degree research (HDR) programmes. HDR programmes comprise only just over 1% Indigenous peoples (Universities Australia, 2014) though Indigenous peoples represent 2.8% of the total Australian population (ABS, 2017). The Chair of *The Review of Higher Education Access and Outcomes for Indigenous People*, Professor Larissa Behrendt, has commented that “improving outcomes for Indigenous People in higher education benefits everyone” (cited in Evans, 2012). While Universities Australia noted higher education plays a vital role in improving the overall state of Indigenous communities, particularly in respect to health and economic wellbeing, and that improving the higher education outcomes for Indigenous peoples may involve systemic change in the ways universities conduct their business (Universities Australia, 2014). Elston et al. (2013) argued that growing the Indigenous academic workforce, scholarly achievement and research requires senior Indigenous leadership and significant investment and sustained efforts. Moreover, addressing under-representation of Indigenous peoples in the workforce generally and the need to provide careers in culturally-safe work environments remains critical (see Ewing et al., 2017). Yet, being able to increase the number of Indigenous Peoples into and completing HDR programmes, and potentially progressing into academic careers, arguably necessitates greater understanding of factors that assist completion. Given the importance of understanding factors that facilitate entry and completion of Indigenous Peoples in HDR programmes in Australia it is surprising that there is only a small, albeit growing, body of Australian research literature on such critical factors. This is in marked contrast to similar research in Canada, USA and Aotearoa/ New Zealand where there has developed a much deeper body of literature and related insights.

Much extant Australian research about Indigenous Peoples in HDR programmes has involved interviewees/respondents within one discipline area. Moreover, Barney (2016b), who examined under-representation of Indigenous Peoples in HDR programmes, noted that much of the existing research/work has focused on explaining failure rather than providing a deeper understanding of factors contributing to Indigenous candidates' success. In this paper, we critically interrogate the small but growing body of research in order to highlight factors that, despite barriers, assist Indigenous peoples to complete HDR programmes. Specifically the paper examines the perceptions of Indigenous HDR candidates and academics who have supervised Indigenous HDR candidates across academic disciplines. The research questions that have informed this paper include:

*1: What barriers affect entry into, and completion of, HDR programmes by Indigenous Peoples?*

*2: What are the enablers that facilitate continuation and completion of HDR programmes by Indigenous Peoples?*

The next section of the paper examines emerging issues and trends in researching Indigenous Peoples in higher education in Australia. The following section positions our research in respect to how we extend understanding and presents our research design and data collection. We then cover the research findings. The next section discusses the implications and insights of the research including key themes. Finally, the conclusions are presented along with policy implications, and limitations and issues for future research.

## **Emerging issues and trends in researching Indigenous Peoples in higher education in Australia**

As there has already been identified a need to generate greater enrolment and retention of Indigenous Australians into HDR programmes, and given that there is only a small existing body of research on this topic, it is important to critically review the critical factors/issues that have already being identified in order to establish a context for our current research. A range of barriers to retention and completion have been highlighted in earlier research along with reference to factors that enable outcomes. These are discussed and evaluated herein and the research we have undertaken builds on these earlier insights.

### ***Retention of students in Australian universities***

Within the broader context of university education in Australia, increasing attention has been focused on how to retain students after enrolment, increase diversity of the student cohort, and develop success strategies. Students who complete university have economic advantages as well as other improved life chances and individuals and institutions experience costs where students withdraw (see Scott et al., 2008). Willcoxson, Cotter, and Joy (2011) highlighted the pivotal role of both a student's personal background (including prior academic performance, socio-economic status, and distance from home), other personal factors (including work and personal commitments) and his/her interactions with the institution as affecting retention and completion. Student engagement is important for learning outcomes as well as retention, and Kahu (2013) maintains strong engagement of students lies with: a student, teachers, the institution, and the government.

### ***Current knowledge: barriers and enablers for Indigenous Peoples through university studies***

As economic, career and broader life opportunities for Indigenous Peoples flow from education and work retention (see Daly & Hunter, 1999; Hunter & Daly, 2013), Researchers have highlighted a range of issues prior to entry into university, which may be barriers for Indigenous peoples. Barriers include: negative perceptions of higher education within communities

(Cameron and Robinson, 2014) which may involve lack of recognition of Indigenous cultures in western academies; perceived lack of benefit to community, perceptions of limited job opportunities, and pressures to leave school to take employment (see McLisky and Day, 2004). Additional barriers include: past negative educational experiences (see Kippen, Ward and Warren, 2006); lack of role models (McLisky and Day, 2004); lack of information about education opportunities (Kippen, Ward and Warren, 2006); and geographic distance from campuses (Kippen, Ward and Warren, 2006).

Andersen, Bunda and Walter (2008) observed Indigenous Peoples who do enrol are survivors of a long process of attrition in that social, economic, political and cultural factors shaped choices for them and their families, with those who live in rural/remote areas and/or have low socio-economic status having the greatest educational disadvantage. Where such disadvantage is not addressed, the pool of Indigenous Peoples transitioning into higher education, HDR studies, and academic employment continues to be constrained.

Toombs and Gorman (2010) highlighted that for Indigenous peoples who do commence university 'resilience' was necessary in the face of underlying family/community stressors, and Richard et al. (2008) underscored deep cultural issues to be addressed in order to build stronger relationships between universities and Indigenous communities. Indigenous Peoples have continued to experience ongoing racism, discrimination, exclusionary practices and negative attitudes of non-Indigenous students (see Farrington, Daniel Di Gregorio and Page, 1999); and cultural insensitivity from university staff and within course content (Cameron and Robinson, 2014). Inflexibility of higher education systems and, in some cases, unfamiliarity with, and lack of confidence in, academic requirements exacerbates the problem (see Andersen, Bunda and Walter, 2008).

Key institutional enablers assisting success (and which may address the barriers experienced by Indigenous Peoples) include financial assistance, particularly for those from

rural/remote areas (Miller, 2005) as well as study/course-related aspects such as: specialised entry programmes (see Gunstone, 2009); dedicated university departments/centres for Indigenous student support (see Gunstone, 2009); flexibility of course design (Miller, 2005); and provision of quality staff (Cameron and Robinson, 2014; Miller, 2005). Other enablers identified relate to addressing racism including: strategies for students to deal with racism (see Trudgett, 2011); and anti-racist training of staff and students to address the impact of whiteness in Australian universities (Gunstone, 2009). Other important enablers include cultural safety (Kippen, Ward and Warren, 2006); and recognition of Indigenous knowledges (Barney, 2016b; Miller, 2005). In regards to individual and cultural issues, family support (Cameron and Robinson, 2014; Kippen, Ward and Warren, 2006), group identity and resilience (see Toombs and Gorman, 2010) and feelings of self-determination, positive expectations, friends, involvement and belonging (Day and Nolde, 2009) have also been identified as enablers of success.

In recent years, there have been concerted efforts within universities by both Indigenous and non-Indigenous staff to support Indigenous Peoples' learning, retention, and progression from undergraduate studies into postgraduate programmes. Initiatives have included focusing on success (see Behrendt et al. 2012) and events, networking and peer support (see Barney, 2016a). Recommendations have emphasised embedding Indigenous content into curriculum (especially in disciplines with lower Indigenous representation), culturally-appropriate career promotion, strengthening Indigenous academic capacity, more Indigenous pedagogy, and grounding educational strategies in localities rather than for Indigenous Peoples as a whole (White, Frawley and Dang, 2013). Liddle (2016) noted that actioned strategies for increasing the participation of Indigenous Peoples in higher education have had varying degrees of success, but achievement of full engagement of Indigenous Peoples requires a whole of institution approach to culture and governance. Having discussed barriers and enablers for

Indigenous Peoples in higher education generally we now turn to an examination of research about barriers and enablers for Indigenous Peoples in HDR programmes specifically.

*Current knowledge: barriers and enablers for Indigenous Peoples in HDR studies*

Many of the barriers which are operating in the HDR space are similar to those for undergraduate Indigenous Peoples. The available literature on barriers and enablers for Indigenous Peoples in HDR programmes is extremely small but there are additional issues and subtleties that have been identified and need to be better understood. For example, Barney (2016b) found Indigenous undergraduate students valued hearing about experiences and careers Indigenous HDR graduates pursue, but they had limited knowledge about the actual HDR programme/experience. In addition, Indigenous Peoples may have confronted negative experiences with honours programmes, self-doubt, long enrolment processes, and have perceptions of lack of jobs post-PhD (Barney, 2016b). In an earlier examination of barriers for Indigenous Peoples' participation in higher education, Schofield, O'Brien and Gilroy (2013) noted the prevalence of institutional racism and discrimination as well as lack of recognition of Indigenous knowledges and cultures. Like undergraduate students, Indigenous HDR candidates also experience cultural and social isolation within universities and a lack of cultural safety (Barney, 2016b). Further, while the benefits of Indigenous support units for undergraduate students have been identified, it has been suggested that Indigenous units/centres generally seem to provide limited knowledge or support of HDR candidates and do not have specifically-designated HDR staff (Barney (2016b). Trudgett (2011) highlighted the need for cultural awareness training for non-Indigenous supervisors. Nakata, Nakata and Chin (2008) highlighted many Indigenous candidates bring important knowledge (not well represented in the existing disciplinary knowledge in universities) and have to negotiate a conceptual gap between Western and Indigenous knowledge and practice. For instance, West et al. (2012:1582)

advised using research methods that are culturally safe can be ‘difficult when academia claims that valid and rigorous research can only be produced through dominant ways of knowing, quantitative study, and the silencing nature of positivism’.

Barney (2016b) also found HDR graduates noted they had confronted lack of support for Indigenous methodologies in universities and negative history of research with Indigenous communities. Trudgett (2011) emphasised the importance of involvement of Indigenous Elders or community in supervision, as there are limited numbers of Indigenous academics within universities. Barney (2016b), and Asmar and Page (2009) noted Indigenous academics are often overworked and stressed in particular ways. For example, Gunstone (2009) critiqued the lack of recognition in workloads of the substantial community involvement of Indigenous staff. Day (2007) noted Indigenous staff (who may be undertaking their own HDR studies or supervising) often also have wide educational and socio-cultural support responsibilities, and Trudgett, Page and Harrison (2016) revealed the majority of Indigenous candidates employed in the higher education sector are mid-career.

In addition to institutional barriers and pressures, at an individual and cultural level, it has been reported that complex personal circumstances impact more heavily when doing independent research than in undergraduate studies (Chirgwin, 2015). This could include being first in family without networks/role models, juggling family commitments and needing to work full-time (which is more financially attractive and for which strong applicants are in high demand) (Barney, 2016b).

### **Current knowledge: enablers**

Researchers have also identified individual, cultural, and institutional factors as having positive bearing on the success of Indigenous HDR candidates. General encouragement from Indigenous and non-Indigenous academic staff, motivation for career progression, and



contributing to community and Indigenous ways of doing are important enablers to commence. Moreover, personal determination, strong networks, summer schools, and being able to maintain identity (Barney, 2016b) in Western institutions enables continuation/completion. Barney (2016b) highlighted strategies that assist in transitioning undergraduate Indigenous students into HDR programmes as including: targeting and nurturing high-performing undergraduate Indigenous students and encouraging them to discuss, and work on, research projects; building networks for the students into Honours and HDR programmes; and developing flexible entry pathways. Fredericks (2008:115) stated “my survival within the higher education system and the research academy depends on my knowing how the Western academy is structured and operates..... my survival as an Aboriginal woman in the Aboriginal community, in broader society, and within higher education, also relies on my continuing to develop as an Aboriginal woman”.

In highlighting the limited number of part-time scholarships, Barney (2016b) argued that having higher value scholarships is important to enable enrolment and completion of HDR programmes for Indigenous Peoples. For this reason, Behrendt et al. (2012) recommended federal scholarship funding be increased.

Specific HDR role models are considered important in providing success stories, as is prior research experience as an undergraduate student (Barney, 2016b). Candidates’ concern for their own identity in doing culturally-applicable research is associated with the need for strong supervision (Barney, 2016b) supporting cultural safety and recognised knowledge (see also Trudgett, 2014). Moreover, McLennan and Woods (2017) argued that training of new researchers must prioritise understanding and enacting post-colonial Indigenous research paradigms. Loban (2014:14) concluded that “what mentors may provide is a way of knowing, navigating, surviving and succeeding in the university’s tricky terrain”. Recognising the aforementioned commitments and workload of Indigenous supervisors, Behrendt et al. (2012)

recommended system flexibility to allow use of supervisors from other institutions. Trudgett (2013) advised Indigenous HDR candidates should be provided with support separate from that available to non-Indigenous postgraduate students. Elston et al. (2013) provided an excellent example of how establishing an Indigenous HDR cohort can provide personal, social and cultural support that builds capacity, resilience and skills to overcome institutional factors that inhibit participation and completion of research degrees.

### **Extending understanding through the current research**

The research on which this paper is based had its origins in 2013 in conversations amongst the authors and others with an interest in growing the numbers of Indigenous Peoples commencing and completing HDR programmes in Australian universities. Following significant discussion with key Indigenous stakeholders at the university and review of earlier research, a process for research data collection was designed and conducted from 2015-2017. We now discuss the research approach, and data collection.

### ***Research approach***

The research involved an exploratory, qualitative study which was most appropriate for a small sample and to allow for deeper exploration of the ‘why’ and ‘how’ questions (see Miles and Huberman, 1994). Moreover, a qualitative approach was deemed suitable given the story telling history of Indigenous cultures. Herbert (2003) highlighted that a range of researchers suggest that Indigenous Peoples learn through listening, observing, imitating and participating and thus use of a story telling approach in collecting data from participants is salient. Drawing on the belief that all reality is socially and systemically constructed (Denzin, 2000, cited in Herbert, 2003a: 2) a qualitative approach sets the stage for a dialectic relationship that enhances the discovery process because it encourages participants and the researcher to co-operate in

investigating the complexities of ever-changing, socially-constructed realities (Glesne, 1992, cited in Herbert 2003a: 2). Herbert (2003a: 2) said that an important consideration is not just to describe people's experiences but to understand the meaning of those experiences in such a way as to learn from them. She highlighted that while qualitative research initially emerged as a means for anthropologists and sociologists to undertake studies of the 'other', qualitative research now emphasises hearing the emic voice and providing a space for Indigenous Australians to be part of the process that is needed to change the discourse (Herbert, 2003a: 2).

The research was undertaken in accordance with ethical requirements of the participating university and with strategies consistent with ethical principles for conducting research with Indigenous Peoples. The ethics application included more than 30 pages of text and was informed by knowledge from a range of seminars delivered by Indigenous researchers at the university and a university document developed by Indigenous researchers which provided advice on key questions to ask when preparing proposals for research projects involving Aboriginal and/or Torres Strait Islander Peoples.

The research team included Indigenous and non-Indigenous Peoples, and capacity development through training in research and writing of junior Indigenous researchers/research assistants alongside developing cultural knowledge of the non-Indigenous researcher. The project was very much a collaborative process involving mutual learning and respect with the Indigenous researchers and non-Indigenous researcher working together throughout the project. Over a two-year period prior to commencement of data collection, the non-Indigenous researcher attended a large number of research seminars/workshops offered by the university about undertaking Indigenous research and an Indigenous member of the research team and the non-Indigenous researcher worked together in developing policy documents. The non-Indigenous researcher managed the project, undertook the desktop research, drafted the research materials, did some data collection, undertook the data analysis, and led the writing of

the publications. The Indigenous researchers informed the research design of the project, developed the cultural knowledge of the non-Indigenous researcher, ensured cultural safety of the project, and undertook the majority of the data collection. All aspects of the research were discussed between members of the research team and all written documents/publications were circulated amongst the team for input. Meetings between Indigenous members of the research team and the non-Indigenous researcher were held weekly, fortnightly or monthly over a period of five years.

We acknowledge “the term ‘research’ is inextricably linked to European imperialism and colonialism.....one of the dirtiest words in the Indigenous world’s vocabulary” (Tuhiwai Smith, 1999:1; cited in Denzin and Lincoln, 2005). Fredericks (2008: 114) notes that “historically the vast majority of this research was carried out by non-Indigenous people. Some of this research has been invasive into Aboriginal people’s lives and communities, and been undertaken without permission or regard to Aboriginal peoples’ rights to participate or not to participate..... Sharon Cruse puts it simply when she states ‘Many researchers have ridden roughshod over our communities, cultures, practices and beliefs, and we are now in a position to prevent this from continuing’ (2001: 27). For many years Aboriginal peoples have raised questions about the research that has been and continues to be undertaken in their communities.....Throughout the world, Indigenous peoples have criticised research carried out within their own and other Indigenous communities.....”. Accordingly the current research was undertaken with focus on ensuring cultural safety. We ensured cultural safety through consultation with an Indigenous university committee into aspects of research design. Contact with Indigenous candidates was made through the university’s Indigenous support unit (hereafter referred to as the support unit), who asked candidates to contact the research team directly if they were interested in participating in the project. A list of supervisors of Indigenous

HDR candidates was provided to the research team by the university's graduate research school (excluding names of candidates supervised).

### ***Data collection***

The research involved yarning circles and interviews with 3 HDR candidates and 11 HDR supervisors. Figure 1 summarises the research design and data collection process utilised.

(insert Figure 1 about here)

Yarning circles and interviews were recorded with the participants' agreement and participants were asked to keep confidential comments made by others.

There was a good response rate (30%) from HDR supervisors with 11 of 37 supervisors contacted agreeing to participate. There was a relatively low response rate from HDR candidates (14%) with 3 of 22 candidates agreeing to participate despite the research team/research assistant contacting candidates several times to endeavour to increase the response rate. The research team employed an Aboriginal research assistant as we believed candidates may have felt more comfortable speaking with a person who had been a student rather than the research team who are members of academic staff and also known to staff within the support unit. As the topic of the research was of direct relevance to HDR candidates and the research team articulated to potential participants that the information gathered would be used to inform future HDR practice, we might have expected a higher response rate given the candidates were provided with an opportunity to discuss challenges they had encountered and support they would like to receive. There is the possibility that given the small cohort size the HDR candidates may have had concerns that they could be identified (despite assurances from the research team and a very lengthy ethics protocol to ensure confidentiality) and one participant did request that minimal demographic detail be provided in publications. In contrast

supervisors may have been more prepared to provide their views as they would not have had the same concerns about identification as they are part of a much larger pool of supervisors who supervise Indigenous and non-Indigenous candidates. Given the response rate from HDR candidates, we decided to contact the HDR cohort to ascertain their reasons for non-participation. Sixteen of the original cohort of 22 HDR candidates responded. We provided a list of reasons from which respondents could choose multiple options. Their responses were:

- I did not have enough time to participate (9);
- I was too busy doing research for my MPhil/PhD (2);
- I had too many other commitments at university and/or work (7);
- I had too many other responsibilities outside of university and/or work (4);
- I was away from the university at the time the research was being conducted (3);
- I did not feel comfortable discussing my experiences (2);
- I did not think the research would benefit me and/or other HDR candidates (0);
- I had previous negative experiences with involvement in research projects (2).

In response to the option to provide other reasons, one candidate said they were not aware of the study, one said they had travel issues, and one noted the rescheduling of the yarning circle.

As the candidates clearly indicated in the follow-up survey that their non-participation was due to other commitments we decided not to contact them again to further request participation in yarning circles or interviews. The responses from this follow-up survey are used to support our findings about barriers to continuing/completing HDR studies and it provides insights into how future research projects could be undertaken. Tables 1 and 2 provide summary data for participants. Given the small cohort of Indigenous candidates at the university, and in order to protect identities, we are not able to relate demographic data of individuals to their responses. The candidates and supervisors are from faculties across the university.

(Insert Tables 1 and 2 about here)

## **Findings**

### *HDR candidates*

In respect to barriers faced before commencing and while continuing and completing HDR, the candidates mentioned several critical factors. These factors are shown in Table 3

(Insert Table 3 about here)

Additionally, all the candidates mentioned reconciling their identity and lack of recognition within the university as a factor affecting continuing and completing. As one candidate said

“There’re no issues with support.....But.....there’s still not a real understanding.....there is still this expectation that you just do a PhD. You get it done and if you don’t well, then there’s something wrong with you.....in my mind at the moment especially, there’s the Aboriginal side of it. It does bring up conflict within yourself about your own identity, about what I’ve experienced and the things I experience on a daily basis in the institution dealing with the issues. You can’t explain that to other people in the university.....” (*HDR Candidate 1*).

“We’re just trying to do things differently and because of certain conditions and things that we experience differently. It’s not better or worse than the other. It’s different” (*HDR Candidate 2*).

All the candidates also highlighted factors they considered critical to continuing with their HDR programme. Receiving additional opportunities alongside their study including attending conferences and presenting their research (2) was seen as important. One candidate recalled: “To be here now is unbelievable. I went to a conference.....and had the opportunity to talk

to..... professors. They're all talking to me about my ideas" (*HDR Candidate 1*). All 3 candidates spoke positively about their supervisors but one mentioned the importance of also receiving support from other non-Indigenous staff – "You have your Indigenous academics and staff, even other students, but if you have non-Indigenous academics and staff around you to, to say 'hey, look, can we help you in any way?'" (*HDR Candidate 3*).

Other retention issues highlighted included: being a role model for undergraduates who ask about Honours/HDR (1); and giving back to community (2). One candidate referred to resilience (1) – "You just keep going, you know?" (*HDR Candidate 3*). Two candidates spoke of family and community support e.g. ".....A lot of Indigenous people around are like 'good on you brother'.....that keeps you going" (*HDR Candidate 3*). Also mentioned by two candidates was personal growth and the (positive) challenge of the research e.g. "Hopefully you will come out the other side a different person; a stronger person; a more knowledgeable person; a more stretched kind of person.....if you go through life not being stretched or challenged you're not maxing out your capability" (*HDR Candidate 2*).

One candidate mentioned the importance of having greater financial/scholarship support to concentrate on research. One candidate elaborated on the importance of receiving university support including: extra borrowing time at the library; training courses; Indigenous-specific research activities such as writing retreats; and the value of an Indigenous HDR orientation programme at another university. Advice for other Indigenous Peoples considering HDR studies included: maintaining health (1); studying something related to work if working full-time (1) and doing HDR part-time (1).

The responses to the follow-up survey to non-participants strongly indicated lack of time/other competing priorities and this reinforces the findings that Indigenous candidates are challenged with completing their studies given many other responsibilities at, and outside, university.



## *Supervisors*

Supervisors highlighted a range of similar and additional barriers for commencement as including:

- colonial legacy of lack of rights/discrimination (1);
- prior schooling experiences (1);
- family who have not attended university (3);
- lack of role models in the university and society more generally (3);
- lack of confidence (2);
- wanting to go to work after undergraduate studies (1);
- wanting to work in caring professions rather than research (1);
- financial unaffordability of staying at university (1);
- managing study with work (2);
- lack of suitable supervision including insufficient Indigenous supervisors and limited knowledge of non-Indigenous academics (4); and
- feeling the research/methodology would not be valued (2).

Three supervisors highlighted there is an expectation the same standards need to apply for entry, inflexibility in entry requirements and lack of recognition of prior issues. One supervisor commented “....people..... argue academic standards are really important and while we are sympathetic to Indigenous students we must have the same academic standards - and that’s preposterous.....” (*HDR Supervisor 2*). One supervisor elaborated on structural systemic disadvantage which has pervaded the lives of Indigenous peoples outside and inside universities and noted “.....they are disempowered and disenfranchised every day of their lives. Then.....come to a white institution on their land and it’s quite often just before the end of their

degree that someone mentions their culture or their way of life, and that's [expletive]" (*HDR Supervisor 9*).

Barriers to continue/complete mentioned by supervisors included:

- commitments to family/community/cultural events (5);
- isolation of being the only Indigenous HDR candidate in the Centre/Department (1);
- not feeling culturally safe/fitting within a white institution (3);
- lack of support for HDR candidates compared to undergraduates (1);
- cultural politics within the university community (1); and
- measuring themselves against standards set by others and/or not feeling up to it (2).

Other issues mentioned included: working, for a long time, with a supervisor (who has insufficient knowledge and insensitivity) (2); and inflexibility in HDR milestones (2). One supervisor mentioned too many other drains on time to work on HDR – “If you are in a university environment and you are Aboriginal you get a lot of offers to do other things that sometimes it's hard to knock back, like ‘be on this committee’, ‘join our project’, ‘do this, do that’, and that's always a struggle for students. I often tell my students.....your number one priority is to finish this PhD as soon as you can and that's hard in reality” (*HDR Supervisor 5*). Additionally one supervisor said cultural practices could be a barrier “Culturally there is a very different sense of time.....he will go and do what he needs to do.....a brilliant writer.....when I am given the chance for input we are under pressure” (*HDR Supervisor 4*).

Supervisors mentioned that enablers to surmount some of the barriers and continue HDR programmes included:

- support from the Indigenous research unit (3);
- there being an Indigenous support unit (5);
- other community support (1);
- Indigenous cultural mentor or extra supervision (7)

- the importance of developing a community of practice amongst Indigenous HDR candidates (and post-doctoral researchers) (2) including opportunities to network interstate and overseas;
- having role models (1);
- sending messages the HDR work is an achievement and is relevant to their career (1); and
- involving candidates in university matters related to Indigenous research (1).

One supervisor also mentioned the importance of the candidates' own (cap)ability (2) – “.....these students are the best I have had. It is really exciting to be working with them on their research” (*HDR Supervisor 11*).

Support the university provides to assist candidates to complete that was mentioned by supervisors included Indigenous scholarships (3). One supervisor noted, though, that her candidate “..... wanted the academic one which he was actually entitled to because he had done better than everybody else and he felt annoyed when he was given the Indigenous one....I fully understand where he was coming from because he wanted to be recognised for his academic outcomes.....” (*HDR Supervisor 6*).

Most supervisors said they had used (or would appoint in future) an Indigenous examiner (10). One supervisor noted the need for an Indigenous Chair of Examiners/Internal Examiner and four supervisors recommended Indigenous independent assessors for confirmations. The latter had occurred in two cases e.g. “[An Elder] came and she co-assessed the student's confirmation and she was given the first right to speak after the student's presentation” (*HDR Supervisor 11*). One supervisor referred to research centre post-award publishing fellowships for Indigenous peoples.

In respect to other support the university could provide, supervisors mentioned: financial support for data collection (1); better scholarships to study full-time (3); and need for

cultural training including Indigenist knowledge of supervisors (5). Four supervisors highlighted that support mechanisms should be tailored for HDR candidates, with one arguing the need for Indigenous HDR learning assistance and a perception the support unit is for undergraduates. One supervisor noted the importance of more recognition – “showcases, awards, newsletters” (*HDR Supervisor 4*). One supervisor noted the requirement for extensions to accommodate differing circumstances, while another mentioned more counselling/medical facilities. One supervisor highlighted the importance of the university engaging with communities not just individuals.

Some supervisors could name some Indigenous researchers locally and internationally (6) and others mentioned the importance of narrative research (2) and using yarning circles (1). Five supervisors highlighted the need for greater recognition of Indigenous culture and knowledges and the importance of supervisor knowledge of, and respect for, the candidate’s topic/methodology. As one supervisor said “.....we need to take their culture much more seriously than we do.....We need to take a look at.....the way Indigenous students think about the world” (*HDR Supervisor 2*). Supervisors highlighted the need for academics’ training/development and enhanced knowledge. One supervisor commented “.....it was hard to communicate with my supervisor [manager].....that when I supervise my students it’s not just a one hour meeting. It generally takes a lot longer” (*HDR Supervisor 11*). A supervisor said supervisors need a ‘ready reckoner to support their students.....and less bureaucracy as it does not work with the other-centred approach (*HDR Supervisor 4*).

We now discuss the implications and insights of the research and key themes.

### **Implications and insights from the current research**

A number of key themes were identified in relation to barriers to enrol in HDR, barriers to continue/complete HDR, enablers to continue/complete HDR, and additional support which

could be provided by universities. Table 4 summarises these key themes. There were no significant differences in views of candidates or supervisors across faculties with the exception that supervisors in faculties with ‘caring/helping’ professions were more likely to mention candidates wanting to move directly from undergraduate studies into the workplace to give back to community.

(Insert Table 4 about here)

### ***Key themes***

The key themes from the research findings were examined against extant literature to identify where the findings support, extend or add new knowledge (as summarised in Table 5). We concur with Kahu (2013) that student engagement at university requires the involvement of the student, teachers, the institution, and the government, but the current research suggests family is also important and that for Indigenous peoples the support of, and recognition of commitments to, community is also central. The research also supports the conclusion of Andersen, Bunda and Walter (2008) that for Indigenous peoples the legacy of colonial history and a range of social, economic, political and cultural factors shapes choices about education and impacts on attrition. Our research suggests that the issues may be exacerbated in HDR studies given requirement for more independent work.

(Insert Table 5 about here)

### **Barriers to enrol in HDR**

The findings suggest a generally positive experience with supervision and this supports earlier research about the centrality of suitable supervision for success (Barney, 2016b; Trudgett,

2014). However we also agree with Day (2007) about there not being enough Indigenous supervisors and that addressing the need for Indigenous supervision means system flexibility to use supervisors from other institutions (Behrendt et al. 2012). We also argue for more involvement of Indigenous peoples as mentors.

Research on entrance into undergraduate degrees has highlighted that there may be negative perceptions of higher education within communities (Cameron and Robinson, 2014) which could reflect concerns about the insufficient recognition of Indigenous culture within western academies. Also negative views may arise from perceived lack of benefit to community, perceptions of limited job opportunities from university study, and pressures to leave school to take employment (see McLisky and Day, 2004). Our findings support and extend this research in suggesting that while family and community may have supported individuals to take an undergraduate degree for career development, concerns may be held about the value of research degrees and wanting to make use of the undergraduate study in the workplace (particularly in the ‘caring’ professions). This could reflect a colonial legacy of Indigenous peoples being inappropriately researched and having a negative view of research (see Barney, 2016b). Moreover, financial pressures to earn income after undergraduate studies may be prohibitive for HDR studies, reinforcing Barney’s (2016b) point that HDR scholarships are too low in financial value and not readily available for part-time studies.

Inflexibility of higher education systems can affect enrolment of Indigenous peoples into undergraduate degrees (see Andersen, Bunda and Walter, 2008) and our findings support research that pathways into HDR studies are similarly inflexible (Barney, 2016b). Our participants noted the need to have undertaken an undergraduate (fourth year) Honours degree or a qualifying programme. As Honours usually needs to be done soon after undergraduate and qualifying programmes are full fee-paying, these options take insufficient account of barriers affecting Indigenous Peoples from completing feeder education.

Our findings support existing research about the effects of prior experience. While Indigenous Peoples may have surmounted many of the documented barriers to complete an undergraduate degree, the legacy of that experience affects their confidence when they move into further (research) study. Like Barney (2016b), our research also found that in the HDR programmes, there are limited Indigenous role models, limited advice about undertaking research work, and limited networks.

### **Barriers to complete HDR**

A new and important point raised in our findings is that HDR candidates emphasised a barrier to completing HDR is the sheer difficulty of the work. This is an additional stressor for Indigenous Peoples who are dealing with not only competing responsibilities for work and family/community but also working within a Western institution that may present cultural safety issues which may also undermine confidence. Our findings support earlier insights emphasising the need for cultural safety for Indigenous HDR candidates (Barney, 2013; 2016b), in the context of challenges in maintaining cultural identity (Fredericks, 2008) and doing culturally-applicable research within a Western institution (Usher, 2011; West et al., 2011).

The most significant new issue raised by our research is that supervisors noted other HDR-related commitments. A range of researchers have expressed the difficulties experienced by Indigenous HDR candidates in managing commitments to study, paid work and family/community with Chirgwin (2015) opining this is more difficult when doing independent research compared to coursework studies; a view expressed by HDR candidates in our study. Our findings extend this insight in highlighting Indigenous HDR candidates may have additional requirements such as requests to become involved in committees and other research projects of relevance to Indigenous peoples. While these may provide interesting opportunities,

it may be difficult for candidates to manage all their competing responsibilities and may be reluctant to decline (especially when asked by their supervisor/s).

### **Enablers to complete HDR**

While a barrier to completion can be having too many extra activities associated with HDR studies, conversely responses from candidates and supervisors also suggest that being provided with other research opportunities (such as presenting at conferences), can improve individuals' confidence in their abilities and thus be an enabler to completion. Moreover, supervisors noted that candidates' own intellectual capabilities and work commitment enabled them to constructively work within systemic obstacles. While researchers have mentioned other opportunities (e.g. Barney, 2016b) we specifically add new knowledge in highlighting the conflict between other research/university opportunities being valuable for the overall research experience but also compounding the extra challenges/stress in juggling paid work and community responsibilities.

Our findings support and extend earlier research regarding the value of support mechanisms within and outside the university; and in particular, the importance of a 'whole of institution' approach (Liddle, 2016). Prior research has suggested making a contribution to community is seen as equally important as contribution to scholarship (Usher, 2011) but our findings equally support earlier research about the need for financial support (Behrendt et al., 2012; Barney, 2016b) and university recognition of specific needs e.g. dedicated postgraduate support and HDR-designated assistance within Indigenous support units (Barney, 2013; 2016b). Moreover, our findings substantiate the centrality of supervision experience for enabling Indigenous HDR candidates to complete their studies, but that non-Indigenous academics do not have sufficient knowledge (e.g. Barney, 2016b). Thus culturally-appropriate supervision can include involvement of Elders (Trudgett, 2011). It is important to note that



Indigenous HDR candidates often bring to their research a unique perspective: a standpoint/worldview that can provide depth to the research and knowledge development.

### **Other university support**

The supervisors raised a number of areas where universities could provide more assistance, and we agree with Trudgett (2013) that Indigenous HDR candidates need to be seen as a separate cohort worthy of specific support mechanisms. The supervisors suggested: more flexibility in application of policy; more cohort-tailored resources such as specific workshops (also identified in Barney's (2016b) report). The supervisors argued for cultural training of non-Indigenous supervisors; and that universities need to engage with HDR candidates' communities; also supporting earlier research findings. The supervisors suggested the need for more financial support beyond scholarships, such as additional research funds for data collection using Indigenous methodology. The supervisors highlighted the need for much more recognition of the achievements of Indigenous HDR candidates, which could be done in concert with additional research/other opportunities. Such recognition also needs to fit within a culture of recognising Indigenous methodologies and thus we concur with McLennan and Woods (2017) that training of new researchers needs commitment to understanding and enacting post-colonial Indigenous research paradigms.

### **Conclusions**

While having a small sample, this research has been innovative in examining both HDR candidates and supervisors across a range of discipline areas. The use of in-depth qualitative yarning interviews generated a small but insightful dataset that we believe makes a significant contribution to extending the existing limited body of research in this field. Our contributions to the existing research include recognition that a barrier to commence HDR studies is that

family may support undergraduate studies but do not see the value in progressing beyond that into research studies. Furthermore, a critical finding is that if they do enrol, HDR candidates feel burdened by the difficulty of research work compared to undergraduate coursework, and by the challenge of doing higher level work alongside other responsibilities.

Yet our research also suggests that these barriers can be surmounted by candidates' own capabilities and resilience, along with strong supervision and system-wide university support. Supervisors recognised the outstanding capability of their Indigenous research candidates (which the candidates themselves did not emphasise perhaps because of their history of negative experiences in the education system and consequent confidence issues). But supervisors also highlighted that there needs to be much more university-wide support and recognition of the achievements of Indigenous HDR candidates.

Both candidates and supervisors emphasised the role of supervisors and positive support systems within universities in addressing negative perceptions of universities and the value of HDR studies (which affect enrolment), and negative experiences and difficulties within the system (which affect HDR completion once enrolled). The research further found that both candidates and supervisors believe in the benefit of other research-related opportunities. It is essential for supervisors to provide Indigenous HDR candidates with the space to research within their own world views, within western institutions, and for non-Indigenous supervisors and other researchers to learn about Indigenous ways of researching. Thus, most significantly, our research adds new knowledge in emphasising that other research opportunities and university commitments can seem a barrier but can be re-framed as an enabler to complete. This strongly suggests that universities need to give significantly greater strategic attention to how they can better engage with and involve Indigenous HDR candidates in a range of research and other university experiences, reward them, and train them for future academic careers. The research also indicates that such initiatives should be cognisant of not overburdening

individuals who are already managing multiple commitments to HDR study, work, family and community.

### ***Policy implications***

This research addresses one of the objectives of the Australian Government, in its *Indigenous Economic Development Strategy 2011-2018*; namely, of supporting growth of the Indigenous sector through assisting Indigenous Peoples to complete HDR studies and use such for employment. The Australian Government has invested millions of dollars in projects to close the gap in education outcomes, such as school to work transitions, higher education and job readiness programmes. Moreover, Australian universities recognise the unique place of First Peoples in Australian history and culture and continued contribution to the nation and emphasise in their strategic plans recruiting and supporting the academic success of Indigenous candidates. Yet within this context, the focus of Indigenous education must move beyond equity-only orientation and pathways via research and employment capacity-building. There is need for more attention to policy development within universities and by government to assist Indigenous individuals' personal, cultural and economic wellbeing beyond undergraduate studies.

Our findings suggest that addressing the current disparity of Indigenous Peoples completing HDR programmes relative to non-Indigenous candidates, and so closing the gap, could be greatly assisted by the creation of an inter-university Community of Practice to recognise achievements, showcase role models and provide support for individuals to manage the broader research/other opportunities that are presented to them as Indigenous researchers. Doing so is important not only for facilitating higher levels of HDR completions by Indigenous Peoples, but also for building knowledge within universities (especially for non-Indigenous candidates and researchers), of other ways of knowing and doing research.

### *Limitations and issues for future research*

Despite several attempts to achieve participation from HDR candidates (including by involving Indigenous Peoples in collecting data, utilising yarning circles and culturally-sensitive approaches, and offering flexible options for meeting times/places) the response from HDR candidates was relatively low. We were cognisant of the need not to provide too many requests for participation so as not to seem coercive and the research team did receive informal feedback that HDR candidates were interested in the research project but just felt too many competing pressures on their time (which was affirmed in the follow-up survey). There was a high response rate to the follow-up survey and it does perhaps indicate that, even though we deliberately chose a qualitative methodology as being most culturally appropriate, the competing time commitments of HDR candidates may mean a future quantitative research design could yield better response rates.

Moreover, although we contacted 10 academics who had supervised previously-enrolled Indigenous HDR candidates, none of the latter participated so we do not have the views of supervisors involved with candidates who graduated and could provide insights into factors which assisted their success. Similarly, due to difficulties in being able to contact them, we did not interview previously enrolled (graduated or withdrawn) HDR candidates. So, future research might especially seek to target previously-enrolled candidates and their supervisors. Further, given significant time demands on Indigenous Peoples in universities we did not interview informal mentors. We recommend future research examine perceptions of Elders and informal mentors.

Further, though our research has a strength in involving participants from different disciplines, the research is limited in presenting results from only one university in a metropolitan area. The candidates in his cohort may have had a more or less favourable

experiences than candidates at other universities. Thus there is the need for future research to examine if there are differences across universities and in particular between city and remote campuses.

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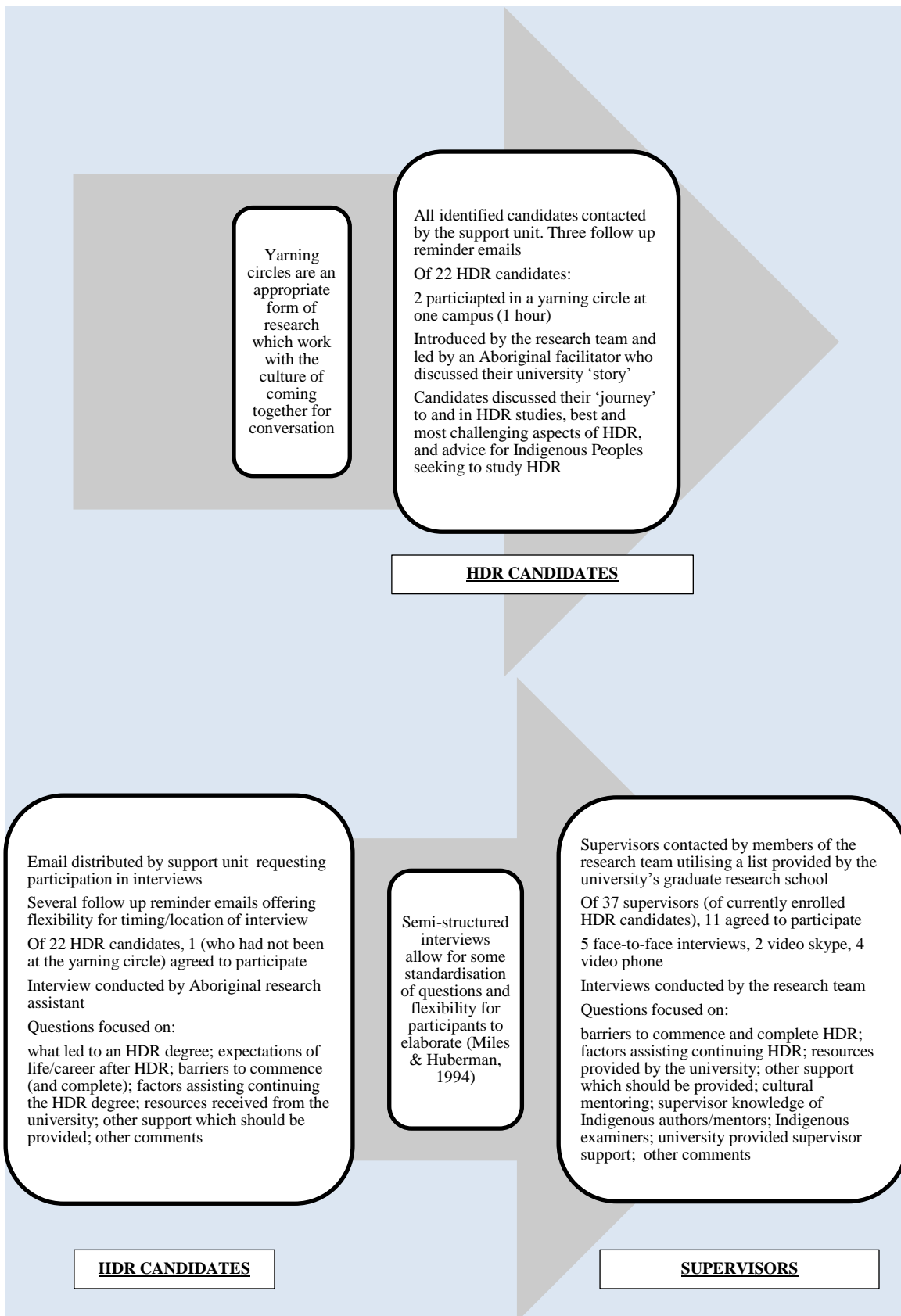
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**Figure 1: Research design and data collection process**

**Table 1: HDR candidate demographics**

<b>Gender</b>	<b>First in family to attend university</b>
2 male	2 yes
1 female	1 no

**Table 2: Supervisor demographics**

<b>Gender</b>	<b>Indigenous</b>	<b>Years of supervision experience</b>	<b>Number of candidates supervised throughout career</b>	<b>Number of Indigenous candidates currently supervising</b>
1 male 10 female	10 no 0 yes 1 not identified	1 (4-5 yrs) 1 (5-6 yrs) 5 (6-10 yrs) 1 (11-15 yrs) 3 (> than 15 yrs)	3 (5-10 candidates) 4 (11-15 candidates) 4 (over 20 candidates)	2 supervisors have 3 candidates 9 supervisors have 1 candidate

**Table 3: HDR candidates' views of barriers in HDR programmes**

<b><i>Barriers in commencing HDR programmes</i></b>
financial commitment (1)
lack of prior study at the required 'standard' and needing to follow a different pathway into HDR (1)
insufficient Indigenous supervisors and non-Indigenous supervisors with limited knowledge about the area of research (2)
perception amongst community/society research is not a real job (1)
confidence in their ability (2)
<b><i>Obstacles to continuing and completing HDR programmes</i></b>
the amount of effort required compared to undergraduate/coursework studies (1)
competing time demands when studying the degree part-time and working full-time and needing time for family (3)
lack of family support for the value of/recognition of the difficulty of, the study (1)
difficulties in gaining ethics approval (1)
ongoing issues of confidence (2)

N.B. numbers in brackets refers to number of candidates that mentioned an issue

**Table 4: Key themes**

	<b>HDR candidates</b>	<b>HDR supervisors</b>	<b>THEMES</b>
<b>Barriers to enrolment in HDR</b>		Work after undergraduate Want to work in caring rather than research	Focus on working after undergraduate
		Managing paid work and study	Time commitment
	Financial commitment	Financial unaffordability of staying at university	Financial commitment
	Lack of prior study/inflexible pathways	Inflexibility in entry requirements	Inflexibility in entry requirements
	Insufficient Indigenous supervisors/insufficient knowledge of non-Indigenous supervisors	Insufficient Indigenous supervisors and limited knowledge of non-Indigenous academics	Inadequate supervision available
	Perception of family that research is not a real job	Feeling research is not valued	Research not valued by family
	Confidence in ability	Lack of confidence	Confidence issues
		Colonial legacy of discrimination Prior schooling experiences Family not attend university Lack of role models in university/society Structural disadvantage	Prior experiences, discrimination, and lack of role models
<b>Barriers to completing HDR</b>	Ongoing issues of confidence	Not feeling 'up to it'	Continuing confidence issues
	Effort for research Difficulties with ethics approval Lack of family recognition		Difficulties of HDR
	Time pressures for study, work and family	Commitments not well recognised by university HDR milestone inflexibility	Time commitments to family and community
	Reconciling identity in the institution	Isolation Not feeling culturally safe/cultural politics Limited assistance Culture and university time	Issues with cultural safety
		Insufficient knowledge	Inadequate supervision
		Drains on time/too many opportunities e.g. committee work, other projects	Too many other time commitments associated with HDR
<b>Enablers to completing HDR</b>	Other research opportunities e.g. conferences		Other research opportunities
	Giving back to community Being a role model to undergraduates Resilience		Giving back to community
	Family and community support	Community support	Family and community support
	Personal growth/challenge		Personal growth
	Financial support	Scholarships	Financial support



	A range of other university support mechanisms	Support from student support unit/ research unit A community of practice amongst HDR candidates Networking opportunities involving role models Messages HDR is an achievement Involvement in university Indigenous matters Post-award publishing fellowships	University support and recognition of specific needs
		Working with cultural mentor/extra supervisor Indigenous independent assessors for confirmation Indigenous examiner	Cultural supervision and examination
		Candidates' own capabilities	Candidates' own capabilities
<b>Additional support by universities</b>		Scholarships Additional financial support for data collection	Additional financial support
		Cultural training of supervisors Ready reckoner for supervisors	Cultural training of supervisors
		Recognising achievements	Recognising achievements
		More counselling services A support unit specifically for HDR Greater flexibility in study requirements	Support and flexibility for specific needs
		Engaging with communities	University engagement with communities

**Table 5: Key themes in relation to other literature**

	Themes	Relationship to prior literature
<b>Barriers to enrol</b>	Focus on working after undergraduate	Supports and extends
	Time commitment	Supports and extends
	Financial commitment	Supports
	Inflexibility in entry requirements	Supports
	Inadequate supervision	Supports
	Research not valued by family	<b>NEW KNOWLEDGE</b>
	Confidence issues	Supports
	Prior experiences, discrimination and lack of role models	Supports
<b>Barriers to complete</b>	Continuing confidence issues	Supports
	Difficulties of HDR studies	<b>NEW KNOWLEDGE</b>
	Time commitments to family/community	Supports
	Issues with cultural safety	Supports
	Ongoing issues with inadequate supervision	Supports
	Too many other HDR commitments	<b>NEW KNOWLEDGE</b>
<b>Enablers to complete</b>	Other research opportunities	<b>NEW KNOWLEDGE</b>
	Giving back to community	Supports and extends
	Family and community support	Supports
	Personal growth	Supports
	Financial support	Supports
	University recognition of needs	Supports
	Cultural supervision/examination	Supports
	Candidates' own capabilities	<b>NEW KNOWLEDGE</b>
<b>Other university support</b>	Additional financial support	Supports and extends
	Cultural training of supervisors	Supports
	Recognising achievements	<b>NEW KNOWLEDGE</b>
	Support and flexibility for specific needs	Supports
	University engagement with communities	Supports

<sup>i</sup> Through the ethics documents and later discussions with some participants, the research team informed the Aboriginal and/or Torres Strait Islander Peoples who participated in the research about the type of publications that would result from the research. Participants were in agreement with publishing their comments but some participants requested that limited demographic information be included in publications. The authors were cognisant of respecting participants' identities and thus the Aboriginal and non-Indigenous authors had collaborative meetings to discuss specific content and aspects of the research to include in the publications. The non-Indigenous author maintained high ethical standards to ensure Indigenous research ethics principles were embedded throughout

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the research. As a result, there was significant contributions from Indigenous people in this research and subsequent outcomes. Two of the three authors of this paper are Aboriginal researchers who have excellent track records. The non-Indigenous researcher led the writing of this article but had many face-to-face meetings and telephone discussions with the Aboriginal researchers throughout the process of drafting the article as well as revising and responding to editor/reviewer comments to gain agreement on included content and ensure cultural safety and appropriateness of language. All versions of the article and response to reviewer document were circulated among the authors with the Aboriginal researchers providing written or verbal changes/additions for modifying the text.