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**Indigenous Australian participation in
Pre-registration tertiary nursing courses:
An Indigenous mixed methods study**

Thesis submitted by

Roianne WEST RN, BN (Deakin), MMHN (USQ)

In March 2012

**for the degree of Doctor of Philosophy
in the School of Nursing, Midwifery & Nutrition
James Cook University**

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Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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Statement of the Contribution of Others

This thesis has been made possible through the support of the following people:

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Journal reviewers:

As this is a PhD by publication, I also recognise the valuable feedback provided by a number of expert reviewers and editors.

Declaration on Ethics

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the National Statement on Ethics Conduct in Research Involving Humans (1999), the Joint NHMRC/AVCC Statement and Guidelines on Research practice (1997), and the James Cook University Statement and Guidelines on Research Practice (2001). The proposed research methodology received clearance from the James Cook University Human Research Ethics Committee (approval number H3303).

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Acknowledgements

I respectfully acknowledge the ancestors and descendants, past and present, of all Aboriginal and Torres Strait Islander peoples; the traditional custodians of land and sea throughout Australia. I particularly express my appreciation to the Bindal and Wulgurukaba clans of Townsville and region; as a visitor living, working and studying on their country, I have always been made welcome. To Jenny Pryor and Gracelyn Smallwood; thank you for your guidance and support.

To my colleagues at the Townsville Health Service District; thank you for your patience, understanding and continued support during my research. A special thanks to Mary Bonner (former CEO), and Val Tuckett; your insight creating the first Nursing Director for Aboriginal and Torres Strait Islander Health position in Australia, is indicative of your vision and commitment to improving the health of Aboriginal and Torres Strait Islander peoples. Cathy Styles and Karin Drummond, thanks for understanding the pressure of being a mum, working full-time and undertaking doctoral studies. I trust that the results of my research will be of benefit to increasing the Aboriginal and Torres Strait Islander nursing workforce towards “Closing the Gap”.

To the staff and academic colleagues at the School of Nursing, Midwifery and Nutrition, James Cook University, I give my heartfelt thanks. To my inspirational and driven supervisors, Kim Usher, Kim Foster and Lee Stewart, and my Cultural mentor, Yvonne Cadet-James; this has been a journey of personal discovery, trials and tribulations, and your unyielding commitment and support from the start has ensured I made it to the end. My

brother and sisters who were also part of the Building Indigenous Research Capacity (BIRC) initiative; we have worked and travelled this research road together albeit at various stages of development. Stay strong and committed to your completion; remember anything is possible. I gained strength from our collaborative journey.

During my research journey I had the privilege of travelling to many communities in Queensland. It is important that I remember and acknowledge the traditional custodians, their ancestors and descendants of the communities I visited. My gratitude and indebtedness to the dedicated and inspirational staff and students of the Indigenous Education Support Units and Schools of Nursing at the Queensland University of Technology, Griffith University, University of Southern Queensland, and James Cook University. You provided invaluable support and generously contributed to my research.

Without my family the completion of this thesis would not have been possible and I acknowledge the unrelenting strength and support of my family. At various times during my research journey I have been overwhelmed by the kindness, generosity and love of my family. I was born and raised on my mother's country of North West Queensland and a proud descendent of the Kalkadoon people. I respectfully acknowledge my ancestors and family past and present throughout Australia and on our country.

My twin sister Leeona, brother Laurie and I have all completed our undergraduate nursing degrees on our country in North West Queensland. Our inspirational and proud mum Karen continues to work at the front line of community Aboriginal and Torres Strait Islander health and has done so for over forty years. It is not a coincidence that we would one-day work for

our people in health and nursing. To my Aunty Kerri for your guidance and support. Our nursing bloodline is undeniable; Aunty June Barton, Aunty Sibby West, Aunty Priscilla West and Aunty Kathy West were all nurses. My dear Gran Ruby and Grandad fought for Aboriginal people to have the opportunity to participate as equal citizens in our country. Our ancestors and family have created a legacy for us to follow, through blood, sweat and tears. I honour their memory and continue their legacy with the completion of this, my thesis.

Finally, a special note to my beautiful children, Keehan, Tayla and Tyla, my niece Jordyn, and nephew Tarnah. All I do in my life is to lay a path for you; to show you by example that despite the obstacles life may put in our way, we can still achieve our dreams through hard work and determination.

“My family; my strength”

Abstract

A well-educated Indigenous nursing workforce is one way to improve the poor health of Indigenous Australians. The Indigenous Nurse Education Working Group Report (2002) called for an increase in Indigenous nurses in the health workforce commensurate with the representation of Indigenous people in the Australian population. The aim of this Indigenous concurrent mixed methods study, undertaken using the tenets of Dadirri, was to uncover the current state of Indigenous nursing student success in tertiary courses. The specific objectives were to describe Indigenous student experiences of barriers to and strategies for success, develop a narrative of the student experience, and to describe the factors that academics identify as barriers to, or strategies for, Indigenous nursing student success.

In the quantitative phase, Department of Education Employment and Workforce Relations, Higher Education Statistics Unit data for the years 2002-2008, was collected and analysed to reveal the differences in commencement numbers, progression, attrition, and completion rates between Australian Indigenous and non-Indigenous nursing students. Key study findings were that while national commencement numbers and completion rates for Indigenous nursing students have increased overall, the disparity between completion rates for Indigenous and non-Indigenous students remains wide and in need of urgent attention.

In the qualitative phase interviews were conducted with 8 Indigenous students and 13 academics from Queensland universities. The interview data was analysed using content analysis to identify barriers to, and strategies for, Indigenous nursing student success as identified by students and academics. Barriers to successful course completion identified by

Indigenous nursing students and academics have remained similar to those of the last few years except for financial obstacles, which were less of a concern to these participants. Strategies for success include the importance of identifying and harnessing individual student characteristics; supportive and culturally inclusive institutional structures, systems, and processes; strategic relationships, connections, and partnerships; raising family and community knowledge, awareness, and understanding; and, improving academics' knowledge, awareness, and understanding of the issues experienced by the students.

A secondary narrative analysis of the qualitative student interview data was also conducted to uncover stories of success as revealed by the students. The narratives revealed six threads: Making a difference; Valuing Indigenousness; The healing strength of connections; Resisting racism; Embracing support; and, Persevering towards completion. These narrative threads elucidate the stories of success and offer a new perspective from which the experience for these students can be viewed.

Glossary

Aboriginal/Indigenous: I use ‘Aboriginal’ when referring implicitly to local Aboriginal people and use the term Indigenous when referring to Australian Aboriginal and Torres Strait Islander people more generally.

Country: I use ‘country’ when referring to different abstracts involving political, spiritual and cultural claims to land and place. When ‘on country’ you are bound by protocols for speech, behavior and thought.

Dadirri: Listening to and understanding the self in relationship to others; the notion of truly listening to others is pivotal to the method.

Decolonization: is having ‘a more *critical* understanding of the underlying assumptions, motivations and values that inform research practices’.

Indigenist Research: Culturally safe and culturally respectful research that is comprised of three principles: resistance as an emancipatory imperative; political integrity in Indigenous research; privileging Indigenous voices in Indigenist research.

Murri: I use ‘Murri’ when referring implicitly to Queensland Aboriginal and Torres Strait Islander people.

Narrative: a representation of a series of events.

Non-Indigenous: The common term used to indicate a person is not Indigenous rather than using the term ‘white’ Australian.

Standpoint: Development of an intellectual stand point from which Indigenous scholars can read and understand the western system of knowledge.

Tjirtamai: A Kalkdoon word meaning “to care for”

Yarning: A term used by Indigenous people to mean a conversation or dialogue between Indigenous people.

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Chapter 1. Beginning the journey

1.1 Introduction

Australian Indigenous people have the worst health of any people in the world. They are more likely to die younger and more likely to experience chronic illnesses such as diabetes, cardiac disease and renal failure (Australian Institute of Health and Welfare, 2010). They are also more likely to experience mental illness and drug and alcohol problems (Australian Institute of Health and Welfare, 2010). One way to improve the health of Indigenous Australians is to increase the participation of Indigenous people in the health workforce (West, Usher, & Foster, 2010a). Nurses are the largest sector of the health workforce and considered the cornerstone of the nation's health care industry. Nurses are the most strategically placed workforce to not only offer quality health care, but have the potential to act as role models for quality, culturally safe health care service delivery for Indigenous Australians. It is important that the numbers of Indigenous nurses increase, as the current level is well below the rate that Indigenous people are represented in the general population. In recent years the numbers of Indigenous students entering nursing courses has increased. However, the completion rates for Indigenous students have not kept up with the increased enrolments. In fact, the completion rate for Indigenous nursing students has been consistently lower than non-Indigenous students by about one third (Department of Employment Education and Workplace Relations Higher Education Statistics Unit DHESU, 2009b). There have been a number of studies undertaken to investigate this issue in the past. However, even though the problem continues to remain relatively unchanged since the 2002 'Getting em n keeping em' Report (Indigenous Nursing Education Working Group, 2002) was released, some students do manage to complete and go on to become registered nurses. Therefore, the aim of this Indigenous concurrent mixed methods study was to uncover the current state of Indigenous nursing student success in tertiary courses. The specific objectives were to

describe Indigenous student experiences of barriers to and strategies for success; develop a narrative of the student experience; and to describe the factors that academics identify as barriers to, or strategies for student success. The research was undertaken using an Indigenous research perspective as identified by Rigney (2006) and others (Fredericks, 2007; Martin, 2003, 2008; Sherwood, 2010; Smith, 1999). Using such an approach allows the researcher to promote resistance, political integrity and the privileging of Indigenous voices (Rigney, 1999). I wanted to make a difference and even though the decisions related to the methodology were long and arduous, they were important because much consideration was needed; an important part of conducting Indigenous research.

Also important when using an Indigenous research approach is the articulation of a standpoint that helps the researcher to negotiate the dynamic contested space of the Cultural Interface (Nakata, 2007, p. 213). Nakata defines standpoint as the development of an intellectual position from which Indigenous scholars can read and understand the western system of knowledge. The development of my standpoint occurred through a process of dialogue and yarning with family, friends and colleagues as well as my supervisors. It was also influenced by my beliefs and upbringing. Therefore, I will turn to the beginning of the research by sharing my story and my standpoint.

1.1.1 The beginning of my story

Being a Murri researcher has important meaning for me. Before I could begin to undertake the study described here it was important for me to consider the impact of research on my people. This consideration greatly impacted on how I undertook the study. So to unpack the decisions around the choice of methodology and method it was important to first of all

unpack my own beliefs about research, about research on Indigenous people, and ask myself questions like ‘Who am I and where have I come from’? and ‘How has this influenced what I have undertaken in my career and in this research’?

Before I continue, it is important to take the time to step back and examine exactly what brought me to this place. I will begin with two stories. After his death my Grandad left my aunt papers. Among them was something he had written about the impact of the legislation that governed the lives of Aboriginal people growing up in Queensland and how that had affected him:

“When the white man told you to do something, you did it, and you had no come back...” (and he gave a couple of examples about Gran when she was taken away). He then wrote: ... “after the laws changed, we had nothing, no roof over our head, no education, no money, no job, nothing...” “...but we had our minds.” (Tims, pers comm, 2003)

These words from my Grandad have had a profound impact on my life and inspire me every day to use my mind to be the very best that I possibly can for myself, for my family, for my people.

Peter Read, in his book on Charles Perkins, captured brilliantly the significance of the first Aboriginal graduate of a university in Australia. Charlie said:

Aboriginal Affairs demands that you do, in many cases, the unorthodox. Tread new fields. Break new ground. Make mistakes in achieving objectives. That's what it is all about. You've gotta do things in the space of one year which it takes normal bureaucratic mechanisms to do in five to ten years... That's one thing I always kept in my mind, do things in the shortest possible time in the best possible way for the greatest number of people. If you're not doing it that way you're too slow... you've got people out there you've probably never even met sleeping under trees, bad health, no chance of employment and probably need a feed and a decent drink of water. So what are you doing about it (Read, 1990, p. 257)

I take strength from this message; it helps me to keep focused on the need to improve health outcomes for my people. As a sole parent of three children the responsibility for me is even greater. Keep this in mind as I continue my story.

1.1.2 The meaning of Indigenous knowledge to me

Colonialists arrived in Australia in the 1700s bring with them their western ways of knowledge. Their arrival heralded an era of dispossession and oppression for Indigenous Australians who succumbed to the power of the colonisers. Colonialism targeted Aboriginal and Torres Strait Islander people in a deliberate way with the intent of removing them from the land and distancing them from resources (Sinclair, 2004). Colonisation aimed to denigrate and eradicate Indigenous culture, ways of doing and knowing, and our language. Despite the

intent of the colonisers, Indigenous ways of knowing, language, lifestyle and practices remain today and Aboriginal and Torres Strait Islander people have survived; some have even thrived.

I am a Kalkadoon woman born and raised Kalkadoon on my grandmother's ancestral lands in North West of Queensland. Most of my teachings about my family have come through my mother's baby sister. The following passages talk of my aunt and her 10 brothers and sisters upbringing, from which I have benefitted greatly and that has brought me to where I am today. She said that my grandparents discussed and consciously made the decision to raise their children on their ancestral lands, as they also discussed and consciously made the decision to raise them Aboriginal. Grandad said they needed to consider the potential impact of racism, both personal and institutional, that we would face but Gran and Grandad decided to go ahead and raise us in the traditional way while remaining conscious of the need to prepare us to deal with what lay ahead.

Growing up we hunted and collected food in our region and swam in the rivers – the Cloncurry, Corrella, Gregory rivers, and up in the Gulf – and crossed the border west of Burketown and Lawn Hill to fish for yellow-bellies on the Nicholson River in the Northern Territory. We came to know the land and respect it for what it gave to us.

My grandparents raised eleven kids plus ten others and their home was always bulging with additional uncles, aunts and cousins who lived with us for years at a time. With a streak of Dingo Dreaming in us from one of our great grandmothers, we also shared our home with

plenty of dogs. Mum and Dad were disciplined in their approach to raising us. Our spiritual growth was always a part of our lives and an extension of us – you didn't know where it began or ended. It was part of an ongoing cycle of our life lessons and was always centered on respect – for yourself, for others, and for your country. And this was to be a lesson we were to take on for life – each day you learn more about yourself – who you are, where you come from, and where you are going. You learn about this by always considering what it means on this day to respect yourself, others, and the land.

As we grew we went bush with Gran and Grandad to learn to hunt and collect food; to learn the cycles of the seasons so we would know when to collect the ripest berries and chinky apples, when to hunt the fattest turkeys, and when to fish the swollen waters. We had to know when to do these things and when to let the land and the waters replenish. We had to walk the land proudly, but also silently. The land became our friend and provider, and we learned to respect its power and all that it offered, and also the importance of paying homage to the ancestors who gave us this gift. I listened to my grandparents talk up the country when we walked it, pointing out what we needed to know to survive as well as have fun. The sun above and the land around us were our guides by day and the stars and the moon the guides by night. It was always important to learn to consciously grow our minds, our bodies and our spirits. And responsibility for this quickly became our own. 'You should always learn something new every day' my Grandad would say. On our way home from out bush Grandad would drop off the kangaroo, fish, goanna, bullock to the relevant family or extended family, and we would head home to begin the next part of the learning; preparation of the food. Many of my early fun memories of the stories we told by the fire as we worked the wood to shape and strength. I remember making my first shanghai (a forked stick with a rubber band

attached used to shoot targets) selecting the fork and cutting it. I remember practicing to throw and feeling delighted as my accuracy improved.

These experiences laid the foundation for storytelling and each night our Grandparents sat outside to talk and we would eagerly gather around to hear the next story. I loved the stories they told about the moon and the stars; the tales about our family and our people. I loved the stories about Gran and Grandad's life, their experiences and what that meant for us. We laughed at tales of misadventure and took the learning – like the time we were out spear fishing at four in the morning, standing in the freezing cold water absolutely still, arm up and spear ready to throw, waiting for the fish to come past when a yell split the calm as my uncle felt the pain of a sting from a catfish.

I loved the stories about the dibble-dibbles and their interaction in our lives, the goat-man and his protection of the waterhole, and the little red-eyed men who follow us and guide our actions. When I was young I was terrified of these stories because the lessons were often about situations where our lives could be at risk; but they were always important lessons. I admired my grandmother and her relationship with the magic-man and how they helped our people who were sick with illness that the mainstream medical system seemed confounded by and powerless to address. I loved that she gathered us close and closed down the house and our activities when it was time for the feather-foot to pass through on their business. These were times for serious consideration and reflection. By the time we were in our mid-teens we were expected to know that if we needed any one of us, we could call to each other in that place where no words are spoken but our voices are heard. I love that we thought about each

other and knew when one of us needed help, and trusted that our actions were in response to a real call even if no one else heard it.

Gran and Granddad raised us to respect ourselves, respect each other and take responsibility for this great land of ours. They did this by modeling the behaviors they expected of us and by pushing us to use our minds to create the kind of world that we wanted and then encouraging us to take action to bring it about. Significantly, they taught us to do this by backing each other.

They provided guidance and love, caught us when we fell, cheered us when we succeeded, and pushed us when we thought about giving up. They created a large family - an extended family that tied us to our destiny, to each other, to those around us, and to our responsibility for this country. They provided values to guide our behaviors. They provided the encouragement for us to learn and lead beyond our comfort zones. And by blood, they tied us to the destiny of all our people whose veins pulse with forty thousand years of connection to this land. This is not something to be taken lightly, nor something you can walk away from. Our challenge, just as theirs, and that of our ancestors, is to figure out who we are, where we come from, and where we are going with the legacy of the Aboriginal world view that we inherited, and to live a life figuring out how to pass on an enriched legacy to those who follow. This is what Indigenous knowledge means to me.

1.1.3 Indigenous Knowledge in the context of my profession

As a Kalkadoon woman I continued to live on our land for many years. Because of the appalling state of Aboriginal health in my country I was keen to undertake education in the health area. I began and completed a nursing degree on my country after which I moved to the coast to complete a graduate program in mental health and then a Masters in mental health nursing. Eventually I commenced a PhD because I saw being well educated as a way to empower myself to in turn empower my people and help improve their health outcomes.

I worked for a few years as a lecturer in a regional school of nursing where I learned that in many ways this institution is not readily accessible for my people. I now work in a large regional hospital. My role there is as a Nursing Director for Indigenous Health. That is the first position of its kind in the country and acknowledges the potentially strategic and influential position nurses and midwives have in improving Indigenous health outcomes. The position works towards ensuring that the nursing and midwifery workforce in the district have the necessary skills and competence to delivery culturally safe nursing and midwifery care to Indigenous Australians. The main strategy in achieving this goal is to increase the Indigenous nursing and midwifery workforce.

In 2000 my brother, sister and cousin were training together with me and I was perceived to be the 'strongest' of all of us by them, some-one they looked to for direction and leadership. This placed additional pressures on me, including being able to provide an explanation for what we were experiencing and why it was happening. My connection to my brother my twin sister and my cousin-sister magnified each and every nursing experience and associated

emotions, which spilled into our personal lives. This was a journey that we walked together in the heart of Kalkadoon country, my country, in Mount Isa, North West Queensland and that will always connect us. Because of this connection to them, I did not allow myself to connect with others. Without realising, I became involved in an unconscious segregation from other nurses; unknowingly this was segregation from the discipline of nursing itself. I have worked hard to overcome this and to reconnect with my profession and my colleagues, both Indigenous and non-Indigenous.

My experiences in nursing including nursing education have led me to recognise the importance of utilizing the effectiveness of the nursing profession in improving the circumstances facing our people and how developing and delivering programs responding to these circumstances, requires the input of our people. This is not just an ‘Aboriginal thing’; this is good practice, program development, and implementation in any field – to involve the people affected so as to maximise outcomes. This is a very straightforward response and in terms of nursing education, such an approach makes sense.

The evidence, both Australian and international, supports this argument. I have nearly 20 years of experience in the Indigenous health environment and I understand the processes involved in delivering on behalf of government. However imperfect they may be at times, there is at least a process that can be followed and understood. Following this logic, Indigenous knowledge to me, in the context of my profession, is central to all I believe. It means being able to link what I learned from my parents and grandparents about Aboriginal ways of life, ways of living, and ways of respect, to what I do now. Taking all the things I

know about our people and our ways of life has helped me to develop an Aboriginal view of the world and has helped to guide me in my practice and research.

But, the challenge for me is this – is it possible to do anything in my life, are there any circumstances, where I do not or would not bring Indigenous knowledge? I do not believe such a situation can occur. I do not believe you can unlearn what you already know, especially when the importance of the knowledge has been taught to you in such a way that it has become part of who you are in the world - referred to in the research world as ontology. You might make a choice about how you use your knowledge and experiences but I don't think you get away from you – who you are, where you come from, where you are going. And if in your early life the foundations, the values and principles of what it means to be an Aboriginal shaped you, and made you who you are today, then that continues and you are part of it. That doesn't mean subsequent learnings and experiences do not influence who you are – I think they consolidate and grow on the earlier learning's. Let me give you a couple of examples.

In my opinion, my education did not stop when my grandparents completed the active guiding I received in the first seventeen years of my life. They remained active; guiding, challenging, demonstrating, modeling until the day each of them died and left the shell that had been their physical realisation in life. And in their death, I have gained some of the most profound learning's of my life – from the ceremonies surrounding that passage through to everything they ever said or wrote to me – these things are still true and still real to me; they did not die when their bodies left this earth. These learning's are lifelong and they are now mine to carry on and give to my children and others who follow.

Another example relates to my broader mainstream education. My grandparents and parents made sure I went to school. They wanted me to learn how to live in a world that I was not born into. They did not just want me to learn the things they could teach me; they wanted me to also learn the things that they could not teach me; the things they had not experience but knew existed – they wanted to grow my mind beyond anything they had ever experienced or could ever imagine. This saw me continue my education from primary and secondary school through to university education and then onto a job that was beyond any of their experiences. I now have a terrific middle-class life as a result of these choices that I made because I had such a solid upbringing as an Aboriginal. Do my lifestyle choices, including my work, indicate my identity as an Aboriginal, my kinship ties, are diminished in any way? I think not. In fact I believe that, my responsibilities have grown and my capacity to undertake them is much greater than I had ever imagined possible. And it can only continue to grow. I believe I would be somehow diminished to choose a life lesser than what my grandparents were holding out as possible. And part of living a powerful life is spending it figuring out how to keep growing and acting to make a difference. These learning's impact on every aspect of my life, including my professional life. My success I attribute to two things – Indigenous knowledge and respect. Getting the process right and delivering it in a way that is culturally appropriate which would not be possible without the Indigenous knowledge I have learned from my family. My principals are based on proper respect – for myself, for the people I engage with, and for ideals that inspire us to reach our full potential as humans. And we can only do those when we treat ourselves well – in turn, it means we can treat others well and can also show respect for the land and treat it well.

1.1.4 The issue

The appalling health of Australian Indigenous people, both Aboriginal and Torres Strait Islanders, is undeniably related to the impact of colonisation (Sinclair, 2004), racism and oppression (Paradies, Harris, & Anderson, 2008). As a result, Indigenous people in this country, as in others with a similar history, have been labelled as ‘other’ and blamed for their own poor health (Okolie, 2005). In the process, these groups are pathologised as social problems (Okolie, 2005) making it easier to ‘blame’ clients for their health problems than reflect on the real causes (Sherwood, 2009). Further, Aboriginal people were either considered to blame for many of the diseases that confronted early Australian society, or perceived to be inferior in health status because of their inability to resist imported diseases (Bashford, 2000). This type of thinking has pervaded the culture of health delivery.

It is well known that Indigenous Australians have higher levels of ill health and mortality than their counterparts (Paradies et al., 2008). Australian Indigenous people are the most disadvantaged in Australian society; they suffer high rates of unemployment and incarceration in prison, receive low levels of income compared to other Australians, live in substandard housing, and experience poor health and high mortality. They are three times more likely to be admitted to hospital than non-Indigenous Australians and experience high rates of risk factors such as smoking, substance misuse, and exposure to violence, lack of exercise and obesity (AIHW, 2009).

Non-Indigenous nurses and other health workers have tended to ignore the social determinants of health that impact on Australian Indigenous people today: poverty, the

ongoing impact of colonialism, homelessness, poor access to health services, and the bureaucracy of the medical system (Humphery, 2001). As a result, there has been a push to increase the numbers of Indigenous nurses (West, et al., 2010b), as well as Indigenous doctors and allied health workers, as a way of overcoming the health issues rampant in Australian Indigenous society. In fact, regardless of the imperfection of the nursing profession at times, there has been a recent move to develop strategies to recruit, retain and develop our people through its ranks (for example the Queensland Health Aboriginal and Torres Strait Islander Nursing and Midwifery Strategy, 2010 – 2012) (Queensland Health, 2009).

Such a framework offers a potentially strategic role for nurses in reducing the current mortality and morbidity of Australia's Aboriginal peoples. The framework also provides the backdrop for the development of nursing in ways that encompass my beliefs as an Aboriginal nurse; that the best way to provide health care for Aboriginal people is by increasing the numbers of Indigenous nurses (West et al., 2010b). Indigenous nurses are in a unique position to improve the health of Indigenous people; they know their ways, they know their culture, and they know the disadvantage they face. In addition, Indigenous nurses are committed to care for their own people (Stuart & Nielsen, 2011), and understand the reluctance of Indigenous Australians to access mainstream health care services or receive treatment from non-Indigenous health workers (Paradies et al., 2008).

Indigenous nurses, also 'others', are aware of the problems faced by Aboriginal and Torres Strait Islander students in undertaking pre-registration nursing courses in this country; they have experienced the tensions and disadvantage of coming from the non-dominant group in

society. The problems faced by Indigenous nursing students have been recognised for some time now (Goold, 1995; Goold & Usher, 2006; Usher, Miller, Turale, & Goold, 2005b). These experiences, identified by the various researchers in the past, caused me to become concerned about the alienation of Indigenous students within the current nursing education system, and the ongoing failure of many students who attempted to become registered nurses. Unfortunately, little appears to have changed since the release of the Indigenous Nurse Education Working Group Report (2002), which drew attention to the difficulties faced by Indigenous nursing students. Indigenous students continue to be under represented in nursing courses and achieve poor academic outcomes. As a result, the numbers of registered Indigenous nurses in Australia remains low. Given the importance of Indigenous nurses in helping to ‘close the gap’ in Australian Indigenous health outcomes, I felt the need to research in this area as my contribution to ensuring a better future for our people.

The paper that follows discusses the rationale for having more registered Indigenous nurses as a strategy for improving the health outcomes for our people. As this thesis is a PhD by publication, there are articles such as this embedded throughout the thesis.

1.2 Publication 1 – “Published” Contemporary Nurse

1.3 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 1: West, R., Usher, K., & Foster, K. (2010). Increased numbers of Australian Indigenous nurses could make a significant contribution to ‘closing the gap’ in Indigenous health: what is getting in the way? *Contemporary Nurse*, 36(1-2), 121-130.

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 1: Beginning the journey</i>	Increased numbers of Australian Indigenous nurses would make a significant contribution to ‘closing the gap’ in Indigenous health: What is getting in the way?	Published in <i>Contemporary Nurse</i> 36(1-2) 121-130.	West (50%) Usher (25%) Foster (25%)	0.5

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate’s contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	Kim Usher	Date 23/03/2012
Signature 2	Kim Foster	Date 23/03/2012

Increased numbers of Australian Indigenous nurses would make a significant contribution to 'closing the gap' in Indigenous health: What is getting in the way?

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ABSTRACT

The provision of a well trained and culturally safe health workforce is critical to the alleviation of health inequities for Australian Indigenous peoples. Educating and graduating significant numbers of Indigenous registered nurses is one way the 'Close the Gap' initiative succeeds. Indigenous nurses bring a set of unique skills, knowledge and understanding to health service delivery. Their contribution has the potential to enhance future outcomes for Indigenous people by improving access to health services, ensure services are culturally appropriate and respectful, and assist non-Indigenous nurses to deliver culturally appropriate care. This paper discusses the background to the current numbers of Indigenous undergraduate nursing students enrolled in and completing tertiary nursing courses, with a focus on Queensland nursing programs. A range of identified barriers impede Indigenous nursing students' successful completion of their studies. We propose recommendations for education, research and employment to help overcome these problems, and ensure greater Indigenous participation in the nursing workforce.

KEYWORDS: Indigenous nursing students; Indigenous nursing graduates; nursing workforce; Indigenous health; critical Indigenist pedagogy

INTRODUCTION

The provision of a well trained and culturally safe health workforce is critical to reducing the current Indigenous health gap and to the achievement of optimal health outcomes

for Australian Indigenous peoples. For the purpose of this paper, the term 'Indigenous' refers to the Indigenous people of Australia, that is the Aboriginal and Torres Strait Islander peoples. We know that Aboriginal and Torres Strait

Islander people experience much poorer health and higher death rates than non-Indigenous Australians across all age groups (Australian Institute of Health and Welfare [AIHW], 2008). Recognition of this alarming problem, and as a result of unprecedented support from the Australian public, the Australian government signed a statement of intent to close the life expectancy gap between Indigenous and non-Indigenous Australians within a generation (Shadow Report, 2010). One way to help 'Close the Gap' is the provision of a significant number of Indigenous registered nurses (Goold, 1995; Omeri & Ahern, 1999; Ring & Brown, 2003). Given that nurses make up the greatest percentage of the health workforce (40–50% globally and 55% in Australia) (Productivity Commission, 2006; World Health Organization [WHO], 2006), we contend that a National Indigenous nursing workforce strategy is paramount to lead the way towards achieving the goals of the Close the Gap strategy.

Indigenous nurses bring a core set of unique skills, knowledge and understanding to health service delivery (Goold, 1995; Omeri & Ahern, 1999; Ring & Brown, 2003). Their contribution has the potential to enhance future outcomes for Indigenous people by improving access to health services, ensuring services are culturally appropriate and respectful, and assisting non-Indigenous nurses to deliver culturally appropriate care. We also argue that a critical mass of Indigenous nurses is needed to fill leadership roles in all areas of health delivery, in clinical research, as well as within nursing academia. This discussion paper provides an overview of the background to, and updates on, developments related to the current numbers of Indigenous undergraduate nursing students enrolled in and completing tertiary nursing courses, with Queensland nursing programs the focus of discussion. Recommendations for future action with regard to research, education, workforce and employment are also made.

BACKGROUND

The current situation

In 2001, there were only 789 Indigenous registered nurses and 202 Indigenous enrolled nurses in Australia, within a total number of 191,000 registered and enrolled nurses (Australian Bureau of Statistics [ABS], 2005). In Queensland, there are currently 26,000 Registered Nurses, of which 300 have identified as Indigenous (Thinknursing, 2008), equating to 1.15% of the Queensland nursing population. This figure is well below the 2.4% Indigenous representation in the Australian population and even further below the 3.6% Indigenous representation in the Queensland population (ABS, 2008). The current shortage of Indigenous nurses has several very significant implications for Australia's health care system now and into the future. For example, one of the major reasons proposed for the poor health status of Indigenous Australians is lack of access to appropriate healthcare services (Ring & Brown, 2002). Many Indigenous Australians live in rural and remote communities where access to health services is limited. Further, even when health services are available it appears that Indigenous Australians are not accessing health care at the same rate of non-Indigenous Australians, even though they continue to have poorer health status. Their reluctance to access healthcare may in part be attributed to poor experiences within the health care system, racism, and the cultural inappropriateness of the services (AIHW, 2006). This substantial barrier could be addressed with a more representative Indigenous nursing workforce.

In light of the critical state of Indigenous health, where Indigenous Australians have a life expectancy of up to 20 years less than non-Indigenous Australians (AIHW, 2008), there is an urgent need to increase the number of Indigenous students commencing and completing pre-registration nursing programs and also remaining in the nursing workforce following graduation. Indigenous nurses have an inherent

understanding of Indigenous cultural issues and, importantly, how these impact on the delivery of culturally appropriate health care. They are also better positioned to assist non-Indigenous nurses to improve their understanding of Indigenous cultural issues and how these impact on the delivery of culturally appropriate health care. Further, Indigenous nurses have an increased likelihood of ensuring a positive experience for Indigenous people when they do attend a health care service (Goold, 1995; Omeri & Ahern, 1999), which means these patients are more likely to return for follow-up care: an important consideration as chronic illness is a significant issue for Indigenous Australians.

Overview of the issues facing Australia's Indigenous people

In 2006, there were approximately 517,200 Indigenous people residing in Australia. This represents 2.5% of the total Australian population. Most Indigenous people lived in capital cities and regional areas. For example, approximately 32% of Indigenous people lived in major cities, 43% in regional areas and 25% in remote areas (ABS, 2008). The unemployment rates for Indigenous people in 2006 was three times that of the rest of the population and the rate of home ownership in 2006 was half the rate of other Australian households. In 2006, one in every two Indigenous households were receiving some form of government housing assistance, one in seven were overcrowded, and Indigenous people were over-represented in supported accommodation for the homeless and in those at risk of becoming homeless (ABS, 2008).

Further, the health status of Australia's Indigenous population is a grave concern. In 2004–2005 Indigenous adults were reported to be twice as likely as non-Indigenous adults to assess their health status as fair/poor (29% compared with 15%), twice as likely to report high levels of psychological distress, and to be hospitalised at 14 times the rate of non-Indigenous

people for care involving dialysis, and three times the rate for endocrine, nutritional and metabolic disease. The health issues most responsible for the ill-health experienced by Indigenous people include circulatory diseases, respiratory diseases, musculoskeletal conditions, kidney disease, and eye and ear problems (ABS, 2008). The health of Indigenous Australians is predicted to worsen substantially over the next decade due to the expected growth of the Indigenous Australian population (The Human Rights and Equal Opportunity Commission [HREOC], 1997). One of the most effective preventive strategies for maintaining Indigenous peoples' health and enabling them to overcome socioeconomic and health disparities has been to provide sustainable pathways for educational opportunities for Indigenous people, who can then go on to become health care providers. Indigenous Australians will be more likely to access services when they are culturally and spiritually relevant and/or provided by other Indigenous people (AIHW, 2008; Peiris, Brown, & Cass, 2008). However, this goal remains problematic as Indigenous student participation in secondary and tertiary education programs is poor (ABS, 2008).

Indigenous student education participation and achievement

The primary, secondary and tertiary education of Indigenous students in Australia and elsewhere has been given substantial attention by governments over the past couple of decades. During primary and secondary schooling, research has identified many factors involved in Indigenous students' poorer educational outcomes such as remoteness, poverty, social alienation, rurality, parents' occupation and education, poor quality and crowded housing, and low English language proficiency (Hunter & Schwab, 1998, 2003a, 2003b; Schwab & Anderson, 1999). However, the latest data available indicates that retention rates in school for Indigenous students to year 10 and beyond increased between 1998 and 2007,

and the differences between Indigenous and non-Indigenous retention rates decreased. As a result, between 2001 and 2006, year 12 completion rates for Indigenous people increased from 20% to 23%. Nevertheless, even though these increases occurred, non-Indigenous people were more than four times as likely to hold a Bachelor Degree or above (21% compared to 5%) and twice as likely to have an Advanced Diploma or Diploma (9% compared to 4%) (ABS, 2008).

Within the tertiary system, Indigenous students have high attrition rates and high rates of failure to complete (Department of Education, Science and Training [DEST] 2004; Indigenous Higher Education Advisory Council [IHEAC] 2006). Attrition rates among Indigenous students are much higher than for non-Indigenous students, and are most marked in the first year of study where figures have been reported to be as high as 39% (IHEAC, 2006). Failure to complete tertiary courses have been linked to a number of factors, including severe financial problems, poor health, poor educational preparation for tertiary study, isolation from others of a similar culture, the unfamiliar environment of the university campus, culture shock, racist attitudes, stereotyping, the academic demands of studying and insufficient support, and curricula that are not culturally sensitive or inclusive of Indigenous peoples' issues including health (Goold & Usher, 2006; IHEAC, 2006; Usher, Lindsay, Miller, & Miller, 2005).

Since 2002, consultations have taken place among Australian Vice-Chancellors' Committee (AVCC), universities and DEST in order to investigate how universities can increase the numbers of Indigenous Australians, and improve access, participation and successful completion of tertiary studies in higher education (see consultative documents: AVCC, 2002; Department of Education, Science and Training (DEST), 2002). It is apparent that the numbers of Indigenous students studying in the tertiary sector continues to be lower than non-Indigenous students; however, on a more positive note, their participation rates have increased over the last

decade (Department of Education, Employment and Workplace Relations [DEEWR] 2009).

Indigenous nursing students

Unfortunately, parallel to the health inequalities and poorer education outcomes between Indigenous and non-Indigenous Australians are inequalities between Indigenous and non-Indigenous undergraduate nursing completions. This is not just an educational equity issue. It is essential we increase the numbers of Indigenous graduate nurses as Indigenous nurses are in a potentially strategic position to Indigenise the nursing workforce by challenging dominant perceptions and attitudes and by teaching non-Indigenous colleagues. This in turn has implications for the wider health workforce and the potential health outcomes for Indigenous people. Indigenous Registered Nurses are more likely to ensure a positive experience for Indigenous people when they do attend a health service (Goold, 1995; Omeri & Ahern, 1999).

In 1997, the National Forum for the 'Development of Strategies to Increase the numbers of Aboriginal and Torres Strait Islander Peoples in Nursing' was established, which resulted in the development of the Congress of Aboriginal and Torres Strait Islander Nurses (CATSIN). CATSIN was formed to represent Indigenous nurses and to implement the recommendations of the Forum. The National Review of Nursing Education (2001) and the Senate Inquiry into Nursing (2002) both recommended an increase in the recruitment and retention of Indigenous nursing students as one way to enhance the health of Australia's Indigenous people (Indigenous Nursing Education Working Group [INEWG], 2002).

There have been a number of government initiatives aimed at increasing the recruitment and retention of Indigenous students into nursing. The Indigenous Nurse Education Working Group (INEWG) was also established in 2000 to increase the recruitment and retention of Indigenous students in nursing. They found that

even though the Australian Indigenous population increased between 1996 and 1999, 24 of the 33 Australian Schools of Nursing in 1999 reported less than the 1996 representative proportion of Indigenous students in nursing. In 1999, only four University Schools of Nursing actually had a representative proportion or better of Indigenous nursing students (Melbourne, Deakin, Monash & Wollongong) (INEWG, 2002). The outcome of the INEWG was a recommendation for increasing Indigenous participation in nursing as essential for improving the accessibility, quality and cultural appropriateness of health care for Indigenous Australians.

In Queensland, data allowing comparisons of Indigenous and non-Indigenous university commencement, and completion numbers became available for the first time for a 6-year period from 2002 to 2007 (DEEWR, 2009). Preliminary analysis of the data indicates that on average, approximately one-third of Indigenous students complete higher education degrees (33%; range 18.4–49.5%) compared to over one half of non-Indigenous students (56%; range 40.7–64.5%). For students completing nursing degrees, these differences are even greater, with less than one-third (30%; range 16.2–47.4%) of Indigenous students completing, compared to over two-thirds (65%) of non-Indigenous students across universities.

The findings of one study of Australian Indigenous nursing students (Usher et al., 2003) indicated that financial hardship impacts markedly on retention. Similar to other studies, these researchers found that family issues and inadequate educational preparation impacted significantly upon Indigenous student nurse retention. Additionally, the same research (Usher et al., 2003) uncovered issues related to institutional racism which is congruent with the findings of the Indigenous Nursing Education Working Group (INEWG, 2002). Indigenous student nurses reported that academics lacked awareness of family and kinship commitments and responsibilities, were discriminatory, and their

lack of understanding and support was a barrier to Indigenous students' successful completion of courses (Usher et al., 2003).

Indigenous nursing students' tertiary completions

There are a number of government documents that call for and focus on the recruitment and retention of Indigenous people into the health professions with specific attention given to medicine and nursing; however, very few of these focus on completions. Nationally, the number of Indigenous students enrolled in undergraduate nursing programs is increasing (Miller, Spring, Goold, Turale, & Usher, 2005). In Queensland, in the 6-year period from 2002 to 2007, Schools of Nursing increased the commencements of Indigenous students into nursing by 45%; however, the average of successful completions was only 30% (DEEWR, 2009). Unfortunately, this increase in recruitment is not reflected in completions (307 students commenced and only 92 completed). In other words, Indigenous students are commencing undergraduate nursing programs at higher rates but the completion rates are not increasing at a similar rate. Moreover, some schools appear to commence lower numbers of Indigenous students but get better completion rates when compared to others with similar commencements. At present, we have no explanation for this conundrum.

Current strategies to enhance Indigenous student retention and completion rates

In recent years, a number of strategies have been implemented to increase the recruitment and retention of Indigenous students in nursing. Specific scholarships for Indigenous nursing students have been offered by the Government at both State and Commonwealth level. For example, 10 of the 130 Commonwealth Undergraduate Rural and Remote Nursing Scholarships (CURRNS) are designated for Indigenous nursing students. The Queensland Health Rural Scholarship Scheme (QHRSS) has

specific nursing scholarships of which a number are designated for Indigenous nursing students (Usher, Mille, Turale, & Goold, 2005). More recently, the Commonwealth Indigenous Cadetship Support (ICS) Program of Queensland Health has been successful in quarantining 80 of those cadetships specifically for Indigenous nursing students in Queensland. There is also the broader Indigenous Health Scholarship – the Puggy Hunter Memorial Scholarship – which aims to address the under-representation of Indigenous people in the health care professions and to assist in increasing the number of Indigenous people with professional health qualifications. Other strategies include the offering of a specific program for Indigenous nursing students at Mt Isa. This course was originally funded by the Office of Aboriginal and Torres Strait Islander Health (OATSIH) for five years and was conducted by Deakin University, Victoria, which was a tripartite arrangement between the School of Nursing, the Institute of Koori Education and the Mount Isa Community. Queensland Health now supports the offering of an undergraduate nursing program at Mt Isa delivered by the James Cook University School of Nursing, Midwifery and Nutrition, Queensland. Since 2003, the School has also offered an undergraduate nursing degree on Thursday Island. This program was established specifically to encourage local Indigenous students to study nursing. The course is delivered by mixed mode and the students, while receiving the majority of their classes on Thursday Island, also attend the Townsville campus of James Cook University for some practical sessions (Usher, Lindsay, & Mackay, 2005).

Deakin University, Flinders University and University of South Australia have also undertaken similar initiatives. Each of these university programs aims to address the under-representation of Indigenous people entering nursing programs (Usher, Mille et al., 2005). Anecdotally, we also know that other Nursing Schools in Queensland, and elsewhere, have introduced specific strategies to increase Indigenous student recruitment and

retention. The University of Southern Queensland School of Nursing and Midwifery (SONM) for example graduated 9 Indigenous nursing students in 2009 and reported an expected 10 completions in 2010. In 2009, the school enrolled a record number of Indigenous students ($n = 24$) across two campuses whilst James Cook University enrolled 29 Indigenous students across four campuses, which appears to be the highest number of Indigenous nursing students enrolled across the State of Queensland. The high enrolment numbers and increasing completions at the University of Southern Queensland has been attributed to the delivery of an accelerated nursing program across two years rather than three, the inclusion of Indigenous course content, the employment of Indigenous academics, of which they have three, and the tailoring of specific support strategies designed to meet the needs of the Indigenous nursing students (Stewart, 2009a, 2009b, 2009c).

What is getting in the way of tertiary nursing completions?

What prevents Indigenous nursing students from completing tertiary courses has been researched for more than a decade by various people (Goold & Usher, 2006; Hunter & Schwab, 1998, 2003a, 2003b; Schwab & Anderson, 1999; Usher, Lindsay, Miller et al., 2005; Usher, Mille et al., 2005; Usher et al., 2003). These authors have identified a range of factors including personal, financial, cultural, educational preparation, and other social issues. While these issues are all challenging and pose serious barriers to the students, it appears that some Schools of Nursing have developed ways to assist students that are more effective than others. Perhaps we need to look beyond the issues that challenge Indigenous learners in particular and recognise that these challenges intersect with teaching and learning issues, issues associated with the Indigenous content and the value of Indigenous knowledge, and perspectives in the academy. As a result, the attrition of Indigenous students from courses may be related to the teaching and learning issues surrounding the treatment

or exclusion of Indigenous knowledge and content in courses (Nakata, Nakata, & Chin, 2008). This is interesting, as a call to include Indigenous content in nursing curricula was one of the key recommendations of the INEWG (2002). In fact, the *Getting em n keepin em* report specifically called for the inclusion of Indigenous history, culture and health as stand alone subjects in all nursing courses.

While there is evidence to suggest this has occurred to some degree (Miller et al., 2005), perhaps the solution to the problem at hand is not as simple as this strategy appears to suggest. In fact, Nakata et al. (2008) go further to surmise that while there have been some attempts by the academy to accommodate Indigenous students and the need to include relevant Indigenous content in courses, there has been less evidence of adjustments to curricula and pedagogy. But it will take more than just the addition of Indigenous content into nursing curricula to solve this problem. For schools to be successful at completing Indigenous nursing students, they must Indigenise their curricula which means adopting an inclusive, critical Indigenist pedagogy (Denzin & Lincoln, 2008; Kincheloe & Steinberg, 2008).

Nakata et al. (2008) further suggest the issue may be even more than just the need for an Indigenised curriculum; it may be that there is a need to better equip students to engage more meaningfully with Western knowledge whereby, if they are viewed as bringing assets to the learning interface, they can use their own knowledge and experience from which to contest misrepresentative or absent course content. This is consistent with the findings of Sonn, Bishop, and Humphries (2000), who studied the barriers and protective factors involved in Indigenous student participation in mainstream education. The participants in that study reported that only certain epistemologies and ways of knowing were advanced and that sensitivity towards Aboriginal ways was either lacking or devalued. This is highly relevant as Rigney (1999) also draws attention to the importance of utilising Indigenous

philosophies as necessary for the development of a responsible and accountable Indigenous discourse that is theoretically sophisticated and *responsive to the needs of the people*. However, the challenge of helping students to draw on their own experiences and develop an analytic position, while continuing to uphold an Indigenous standpoint as a way to expand the academic discourse, remains relatively unexplored (Nakata et al., 2008).

This notion also fits with the claims from the Institute of Koori Education (n.d., p. 21), which calls for critically reflective teaching practices. They suggest that Indigenous students have endured 'systemic oppression', which has resulted in mediocre educational outcomes, but rather than continue to focus on these outcomes, instead they call for the examination of the very institutions that perpetuate these outcomes. In addition, they call for the recognition of drop out rates as 'rejection rates' and warn that unless the system reflects on its white Western knowledge base and begins to acknowledge other ways of knowing, Indigenous students will continue to reject the system. For nursing, this also means we need to ensure that all undergraduate curricula adopt a critical pedagogy approach to the examination of the health and other issues impacting on Australian Indigenous people as well as other marginalised groups.

CONCLUSION

The potential for greater participation in the health workforce by Indigenous people as a way to contribute significantly towards closing the current gap in Indigenous health is not a new idea. However, while many strategies have been implemented in an attempt to achieve such a goal, there appears to have been only minimal improvement in this area within nursing. While Australian Schools of Nursing overall appear to be graduating more Indigenous graduates, it is still not enough to make a significant difference to the health outcomes of Indigenous people. An urgent need to increase the numbers of Indigenous nursing students in Australia remains. However, as this paper has outlined, the problem is not just

one of increasing numbers. Once the universities have the students enrolled, they must find ways to assist them to succeed in the program. This appears to be the challenge at present and as the data tells us, some schools appear to be better at this than others. The academy must recognise that the very same oppressive forces that have shaped us into who we are today have also formed the identities of the powerful and the exploited people of the world. Without an in-depth analysis of this process, we will never understand why students succeed or fail (Kincheloe & Steinberg, 2008). The same applies to Indigenous nursing students, for if we fail to develop and offer critical Indigenist nursing curricula in Australia that is both inclusive and respectful of Indigenous knowledge, we will never be able to change tertiary outcomes for Indigenous nursing students (Kincheloe & Steinberg, 2008).

Findings from previous research and our own experience suggest that there a number of possible ways forward. We therefore offer the following recommendations:

- A critical Indigenist pedagogy, grounded in an oppositional consciousness, needs to be utilised in all undergraduate nursing education. Such an approach encourages the inclusion of differing viewpoints and the confrontation of issues such as colonisation, racism and oppression and its impact on Indigenous peoples' lives and health. Teaching would also be inclusive of Indigenous knowledge and encourage Indigenous students to share the experiences they bring to the classroom.
- Further research needs to be undertaken to explore the reasons for the success of programs that have demonstrated high numbers of successful completions of Indigenous registered nurses when compared to other schools with similar intakes. This will provide important information for the development of future strategies and programs.
- Educational workshops need to be developed for non-Indigenous nurse academicson factors affecting Indigenous student retention/completion

and the issues faced specifically by Indigenous nursing students, and effective learning and teaching approaches for Indigenous students. These workshops will offer important background and cultural information to help academics to recognise the issues facing Indigenous students and to respond to them more effectively. The workshops would also assist the academics to recognise the importance of Indigenising nursing curricula.

- Indigenous nurses must be employed as academics in nursing schools across Australia to teach into specific programs of relevance to the health of Indigenous people, to act as support persons for Indigenous nursing students, to encourage the appropriate inclusion of Indigenous content in curricula, to support the adoption of critical Indigenist curricula, and to act as role models for Indigenous students.

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Received 29 March 2010

Accepted 25 August 2010

As discussed in the manuscript, Indigenous students tend to enroll in nursing courses at lower percentages than Indigenous representation in the country. Further, the retention and completions rates are much lower and the attrition rates higher than for non-Indigenous students. My concerns about these issues led to the current study.

1.4 Research Aim

The aim of the research was to uncover the current state of Indigenous nursing student success in tertiary courses. The specific objectives were to describe Indigenous student experiences of barriers to and strategies for success; develop a narrative of the student experience of success; and to describe the factors that academics identify as barriers to and strategies for student success.

1.5 Research Questions

1. What are the national commencement numbers, progression, attrition, and completions rates for Indigenous nursing students since the publication of the final report of the Indigenous Nurse Education Working Group (Indigenous Nursing Education Working Group, 2002) when compared to non-Indigenous nursing students?
2. What are the factors identified by Indigenous nursing students and academics as enablers to successful course completion?
3. What are factors identified by Indigenous nursing students and academics as barriers to successful course completion?

4. What strategies are perceived as resulting in improved completion rates as identified by Indigenous nursing students and academics?

1.6 Approach

In order to undertake meaningful research with Indigenous nurses and to respect and recognise my own Indigeneity, I needed to conduct the research from a position that values Indigenous people, their knowledge, and their input to the research study while also recognising the importance of a social justice, advocacy, or transformatory intent (Creswell & Plano Clark, 2011). Western research methodologies were created for the study of Western rational, industrial, colonising/dominating society (Okolie, 2005). Therefore, those same research approaches and research tools are not suited to the study of peoples who relate to the world differently because of their different social locations, different worldviews, translating to different lived experiences. The Western knowledge system tunes out to the knowledges and ways of knowing that has served the ‘others’ for centuries and refuses to give it any credibility (Okolie, 2005). As a result, Indigenous scholars such as Rigney (1999), Smith (1999), Sherwood (2010) and Martin (2003), encourage Indigenous Australians to look for new anticolonial epistemologies and methodologies to reconstruct their knowledges and cultures as they strengthen their struggle for emancipation. Rigney (2006) defines research undertaken from an Indigenist perspective as informed by three fundamental principles: involvement in resistance as the emancipatory imperative; political integrity; and giving privilege to Indigenous voices. Similarly, anti-race research is committed to promoting anti-racist objectives, and challenging domination and power relationships through the promotion of social justice, equity and fairness (Dei, 2005). The assumption of an Indigenous perspective is that there is institutional racism in mainstream education and research evident in the topics studied, the methodologies and approaches privileged, the voices heard, and in

the production and dissemination of knowledge (Smith, 1999). However, undertaking Indigenous research does not mean we have to adopt radically different approaches or methods because what is different about Indigenous research is the Indigenous scholar speaking back against the research approaches that have oppressed and marginalised Australian Indigenous peoples (Okolie, 2005; Rigney, 1999). Therefore, it is possible to use existing approaches and methods of research to undertake research driven by Indigenous researchers.

1.7 The Study

An Indigenous concurrent mixed methods study was undertaken involving two research phases occurring simultaneously (Creswell, 2009). In this case, the qualitative phase of the study was dominant. The transformative intent of the approach implies that the researcher is using an emancipatory, collaborative, change oriented theoretical framework designed to advance the needs of an underrepresented, disadvantaged or marginalised group in society (Creswell & Plano Clark, 2011). In particular, the Indigenous research methodology used, similar to transformatory research is especially important for people who experience discrimination and oppression and is useful for the ‘...study of the power structures that perpetuate social inequalities’ (Mertens, 2010, p. 4), such as is the case with Australian Indigenous people. We used quantitative statistical data from the Department of Education, Employment and Workforce Relations’s (DEEWR) Higher Education Statistics Unit, collected annually from all higher education institutions, and purchased for use in the study. Data from 2002 to 2008 (the latest year available at the time of analysis) were reviewed for information specific to Indigenous nursing students (DHESU, 2009a, 2009b, 2009c, 2009d). We also conducted interviews with eight students enrolled in third year of a nursing

undergraduate degree across four qualifying Queensland universities, and interviewed academics at all levels, including year coordinators and academic advisors.

Due to our awareness that Indigenous people have been historically bombarded by research, especially research conducted on them, and being mindful that interviews can be interpreted as patronising and condescending (Okolie, 2005), the interviews were conducted using the Dadirri approach. The philosophy of Dadirri is a 'way of being with people' named by Miriam Rose Ungunmerr-Baumann, an Aboriginal woman from the Daly River, Northern Territory, Australia (Atkinson, 2002). As claimed by Atkinson (2002), Dadirri is more a way of life that encompasses practices associated with the importance of community, reciprocity, reflectivity, and trustworthiness. Ultimately, Dadirri means listening to and understanding the self in relationship to others; the notion of truly listening to others is pivotal to the method (Atkinson, 2002). The essence of Dadirri encompasses practices that recognise the importance of community, the need for reciprocity where the researcher and participant/s share something of themselves, and understanding of the need for trustworthiness because people must hold knowledge that is important to another person (Atkinson, 2002). These are all consistent with the tenets of an Indigenous research methodology and transformative research approaches. Furthermore, research based on Dadirri acknowledges the need for research that empowers Indigenous people through a process of deeper and deeper listening and understanding (Atkinson, 2002). The use of the Dadirri approach requires the researcher to cast aside pre-conceived ideas, take the time needed to get to know the participant, be prepared to share something of themselves, and act in a way that engenders trust (Atkinson, 2002).

The quantitative data were analysed using descriptive statistics. Data were extracted and analysed for commencements, progression, and attrition and completion trends assuming Equivalent Full Time Student Load (EFTSL). Data was taken from the time of commencement to completion of degree. This measure has been used extensively in similar situations and is useful because it can be readily determined with a high level of accuracy (Sheridan & Pyke, 1994). Qualitative interview data were analysed using content and narrative analysis. Content analysis, a common approach to qualitative data analysis, is defined as a process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). In this study content analysis was used to identify barriers to, and strategies for success as perceived by Indigenous nursing students and academics. Using Emden's eight-step approach (Emden, 1998), a narrative analysis was undertaken to reveal successful stories of completion by Indigenous students. Narrative analysis is a good fit with research that has a critical intent as is the case in this study. The making of meaning through the process of storytelling can not only be important as a way of dealing with macro-social oppression but also has the potential to contribute to the transformation of the oppressor (Clandinin & Rosiek, 2007). The technique of narrative analysis also facilitated the privileging of Indigenous voices, identified by Rigney (2006) as an important principle of Indigenous research.

1.8 Summary of chapter

In Chapter One I have provided an overview of my position and standpoint as a researcher, defined the research issue to be addressed, and outlined the project to be discussed in the following chapters. I have also identified that this PhD thesis has publications embedded throughout, the first of which was included in this chapter to provide the background and support for the conduct of the study. The next chapter provides an overview of the relevant literature.

1.9 Summary of thesis

Chapter Two provides an overview of the key literature related to Indigenous nursing commencements, attrition and completions and offers some of the key background material pertaining to Indigenous education attainment levels in Australia. The chapter includes an overview of strategies that have been developed to enhance student enrolments in nursing courses and improve completion rates. It also includes a publication outlining a strategy I developed and implemented at Mt Isa during the conduct of my research, and influenced by the preliminary findings of this PhD study. That program was developed with the specific intent of enhancing preparedness for nursing courses.

Chapter Three provides an overview of the methodology and methods used in the study. It begins with an overview of Indigenist research methodology and transformative research - the overarching framework for the study - and then describes the study design. The concurrent mixed methods study is outlined, as are the procedures undertaken during data collection. An overview of the Dadirri method is also included. The chapter also includes three key manuscripts: one that describes the development of the concurrent mixed method approach that used an Indigenous research methodology; one that addresses the link between Dadirri and the emancipatory ideas of Freire and Habermas; and one that outlines the traumatic experience of confronting issues of colonisation while undertaking research from a decolonising perspective.

Chapter Four is the first of the two results chapters and outlines the qualitative findings from the study in greater depth. The chapter includes two key manuscripts: a manuscript that presents the student narratives and a further manuscript that presents the findings from the interviews with academics.

Chapter Five outlines the merged mixed methods findings. A manuscript that provides an overview of the integration of the mixed methods results is included in this chapter.

Chapter Six presents the integration of the mixed methods data and includes a discussion of the overall results including discussion of the results in relation to previous research.

Chapter Seven the final chapter of the thesis, addresses the limitations of the study; provides recommendations for further research; and provides recommendations for practice and education. In addition, a final manuscript is included that offers reflections on undertaking research using a decolonising methodology.

Chapter 2. Literature Review

2.1 Introduction

Our life expectancy as a nation is among the highest in the world and has been that way for some time. However, the life expectancy for our Indigenous peoples is amongst the worst in the world and this has been that way for some time as well. Unfortunately Australia's Indigenous peoples continue to experience much poorer health and higher death rates than non-Indigenous Australians (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2008). Recognition of this problem prompted the Australian Government and Indigenous health leaders to sign a statement of intent towards achieving equality of health status and life expectancy for Indigenous Australians within a generation (Shadow report, 2010). One way proposed to 'Close the Gap' in health outcomes between Indigenous and non-Indigenous Australians is the provision of a well-trained and educated Indigenous nurse workforce (Goold, 1995; Indigenous Nursing Education Working Group, 2002) (Goold 1995; Getting em n keeping em Report 2002; Usher et al. 2005a; West et al., 2010a). West et al. (2010a) proposed that along with the required clinical competencies expected of all nurses, Indigenous nurses have the potential to improve access to health services for Indigenous people by ensuring the services are culturally appropriate and respectful of Indigenous peoples' needs, and offer culturally specific care. Indigenous nurses can contribute to improved quality of care and health outcomes by aligning their clinical skills with their cultural knowledge. The presence of Indigenous nurses in the nursing workforce also has the potential to enhance the relationship between non-Indigenous nurses and Indigenous Australians. It also has the potential to genuinely reform health care practice delivered by nurses and is a significant step towards the Indigenisation of the nursing workforce. Further, Indigenous nurses can help non-Indigenous nurses to deal more effectively with Indigenous patients by role modeling culturally appropriate care (West et al., 2010a). Unfortunately, the

number of Indigenous nurses in Australia remains low and their participation in pre-registration nursing courses is much less than the Indigenous representation in the Australian population. This chapter provides an overview of the available literature of relevance to the study.

2.2 Overview of the Issues Facing Australia's Indigenous People

There are approximately 517,200 Indigenous people residing in Australia. This represents 2.5% of the total Australian population. Most Indigenous people live in capital cities and regional areas. For example, in 2006 approximately 32% of Indigenous people live in major cities, 43% in regional areas and 25% in remote areas (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2008). The unemployment rate for Indigenous people in 2006 was three times that of the rest of the population and the rate of home ownership in 2006 was half the rate of other Australian households. In 2006, one in every two Indigenous households was receiving some form of government housing assistance; one in seven was overcrowded, and Indigenous people were over-represented in supported accommodation for the homeless and amongst those at risk of becoming homeless (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2008).

The health status of Australia's Indigenous population is also a grave concern. In 2004-2005 Indigenous adults were reported to be twice as likely as non-Indigenous adults to assess their health status as fair/poor (29% compared with 15%), twice as likely to report high levels of psychological distress, and hospitalised at fourteen times the rate of non-Indigenous people for care involving dialysis and three times the rate for endocrine, nutritional and metabolic

disease (including diabetes). The health problems responsible for much of the ill-health experienced by Indigenous people include circulatory diseases (including heart disease), diabetes, respiratory diseases, musculoskeletal conditions, kidney disease and eye and ear problems (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2008). The health of Indigenous Australians may, however, be even worse than indicated by these statistics (Burns, 2006), and is predicted to worsen substantially over the next decade due to the expected growth of the Indigenous population (The Human Rights & Equal Opportunity Commission, 1997).

2.3 Indigenous Student Education Participation and Achievement

During primary and secondary schooling, research has identified many factors involved in Indigenous students' poorer educational outcomes. These include: remoteness, poverty, social alienation, rurality, parents' occupation and education, poor quality and crowded housing, and low English language proficiency (Hunter & Schwab, 1998; Hunter & Schwab, 2003a, 2003b; Schwab & Anderson, 1999). Once in the tertiary system, Indigenous students have high attrition rates and high rates of failure to complete (Australian Department of Education, 2006; James, Devlin, & Indigenous Higher Education Advisory Council, 2006). Attrition rates among Indigenous students is much higher than for non-Indigenous students, and is most marked in the first year of study where figures have been reported to be as high as 39% (James et al., 2006). Failure to complete tertiary courses have been linked to a number of factors including severe financial problems, poor health, poor educational preparation for tertiary study, isolation from others of a similar culture, the unfamiliar environment of the university campus, culture shock, racist attitudes, stereotyping, the academic demands of studying and insufficient support, and curricula that are not culturally

sensitive or inclusive of Indigenous peoples' issues, including health (Usher et al., 2005a; Indigenous Higher Education Advisory Council IHEAC, 2006; Goold & Usher, 2006). A recent Australian study (Krause, Hartley, James, & McInnis, 2005) of first year university students found that Indigenous students reported many similar problems to other students. However, Indigenous students also reported problems in adjusting to University teaching styles and that the volume of work caused them much concern. They were also more likely to report financial and family problems than other students. The researchers also found that Indigenous students' grades were lower than other students in the first semester and many received a grade of less than a pass (Krause et al., 2005). In response to the poorer participation of Indigenous students in higher education, in May 2003 The Indigenous Higher Education Advisory Council (IHEAC) was formed. The Council provides policy advice to the Minister and the Department of Employment, Education and Workplace Relations (DEEWR) on improving outcomes in higher education for Indigenous students and staff in terms of their participation, progression and retention in study and in employment.

The education of Indigenous students in Australia and elsewhere has been the subject of much concern. However, the latest data available indicates that retention rates in school for Indigenous students to Year 10 and beyond increased between 1998 and 2007, and the differences between Indigenous and non-Indigenous retention rates decreased. As a result, between 2001 and 2006, Year 12 completion rates for Indigenous people increased from 20% to 23%. However, even though these increases occurred, non-Indigenous people were more than four times as likely to hold a Bachelor Degree or above (21% compared to 5%), and twice as likely to have an Advanced Diploma or Diploma (9% compared to 4%) (Australian Bureau of Statistics & Australian Institute of Health and Welfare, 2008). Since 2002,

consultations have taken place between the Australian Vice-Chancellors' Committee (AVCC), universities and DEEWR in order to investigate how universities can increase the numbers of Indigenous Australians, and improve their access, participation and successful completion of tertiary studies in higher education: (see consultative documents: Forward from the crossroads; Pathways to effective and diverse Australian Universities (Australian Vice-Chancellors' Committee, 2002) and Achieving Equitable and Appropriate Outcomes: Indigenous Australians in Higher Education (Department of Education, Employment and Workplace Relations, 2002).

It is obvious that the numbers of Indigenous students studying in the tertiary sector continues to be lower than non-Indigenous students; however, on a more positive note their participation rates have increased over the last decade (DHESU, 2009b, 2009c, 2009d). Indigenous student enrolments in health related courses have also increased. Given the current shortages of healthcare workers globally, it is important to look for ways to enhance registered nurse outcomes in all programs. As greater participation by Indigenous people in the health care professions is proposed as one way to improve Indigenous health in this country, it is important to develop strategies to increase the number of registered Indigenous nurses in Australia.

2.4 Indigenous Nursing Students

Parallel to the health inequalities between Indigenous and non-Indigenous Australians are inequalities between Indigenous and non-Indigenous undergraduate nursing student completions. This is not just an equity issue. It is essential that we increase the numbers of Indigenous graduate nurses because Indigenous nurses are in a potentially strategic position to Indigenousise the nursing workforce by challenging the perceptions and attitudes of, and by

educating non-Indigenous colleagues. This in turn has implications for the wider health workforce. Indigenous Registered Nurses are more likely to ensure a positive experience for Indigenous people when they attend and use a health service.

In 1997 the National Forum for the ‘Development of Strategies to Increase the Numbers of Aboriginal and Torres Strait Islander Peoples in Nursing’ was established, which resulted in the development of the Congress of Aboriginal and Torres Strait Islander Nurses (CATSIN). CATSIN was formed to represent Indigenous nurses and to implement the recommendations of the Forum. The National Review of Nursing Education (2002) and the Senate Inquiry into Nursing (2002), both recommended an increase in the recruitment and retention of Indigenous nursing students as one way to enhance the health of Australia’s Indigenous people (Indigenous Nursing Education Working Group, 2002).

There have been a number of government initiatives aimed at increasing the recruitment and retention of Indigenous students into nursing. The Indigenous Nurse Education Working Group (INEWG) was established in 2000 to increase the recruitment and retention of Indigenous students in nursing. INEWG found that even though the Australian Indigenous population increased between 1996 and 1999, twenty four of the thirty three Australian Schools of Nursing in 1999 reported less than the 1996 representative proportion of Indigenous students in nursing. In 1999, only four University Schools of Nursing actually had a representative proportion or better of Indigenous nursing students - Melbourne, Deakin, Monash & Wollongong (Indigenous Nursing Education Working Group, 2002). The outcomes recommended by INEWG included increasing Indigenous participation in nursing as essential for improving the accessibility, quality and cultural appropriateness of health care

for Indigenous Australians. Further, the INEWG claimed that the needs of healthcare for Indigenous people cannot be met by Indigenous nurses alone. Therefore, they recommended the inclusion of subject material and clinical experience that addresses the history, culture and health needs of Indigenous people be an essential component of all nursing curricula (Indigenous Nursing Education Working Group, 2002).

For the first time in Queensland, data allowing comparisons of Indigenous and non-Indigenous University commencement numbers, progression, attrition and completion numbers is available for the seven year period from 2002-2008 (DHESU, 2009a, 2009b, 2009c, 2009d; INEWG, 2002). In Queensland less than one third (30%; range 16.2%-47.4%) of Indigenous students enrolled in a nursing degree completed, compared to over two thirds (65%) of non-Indigenous students across universities.

Research to date begins to provide reasons for these disparities states that Indigenous nursing students face similar challenges to non-Indigenous nursing students once in the tertiary system. However, the findings of a study of Australian Indigenous nursing students (Usher et al., 2003) indicated that financial hardship impacts markedly on retention. Similarly to other studies, family issues and inadequate educational preparation impacted significantly upon Indigenous student nurse retention. Additionally, the same research (Usher et al., 2003) uncovered issues related to institutional racism that is congruent with the findings of the Indigenous Nursing Education Working Group (INEWG, Indigenous Nursing Education Working Group, 2002). Further, Indigenous student nurses reported that academics lacked awareness of kinship responsibilities, were discriminatory, were unaware of family

commitments and obligations, and their lack of understanding and support was a barrier to Indigenous students' successful completion of courses (Usher et al., 2003).

2.4.1 Indigenous Nursing Students' Tertiary Completions

There are a number of Government documents which call for and focus on the recruitment and retention of Indigenous people into the health professions with specific attention given to medicine and nursing; however, very few of these focus on completions. Nationally, the number of Indigenous students enrolled in undergraduate nursing programs is increasing (Miller, Spring, Goold, Turale, & Usher, 2005). In Queensland, in the seven-year period from 2002 to 2008, Schools of Nursing increased the commencements of Indigenous students into nursing by 45%, however the average of successful completions was only 30% (DHESU, 2009b), which is inconsistent with the increases (307 students commenced and only 92 completed). In other words, Indigenous students are commencing undergraduate nursing programs at higher rates but the completion rates are not increasing at a similar rate. Moreover, some Schools appear to commence lower numbers of students, but get better completion rates when compared to others with similar commencements. At present, we have no explanation for this situation.

While the research around the barriers faced by Indigenous nursing students is important and must not be downplayed, it is time to focus on success (Devlin, 2009) and why some students manage to succeed despite the barriers they face (Devlin, 2009) identifies the need for evidence-based evaluation of current courses and qualitative in-depth exploration of the experiences of successful Indigenous students and graduates. This sentiment is reinforced by

Smith, McAlister, Tedford-Gold and Sullivan-Bentz (2011), who explain that we are yet to identify how to offer experiences and contexts that foster success for these students. This is an important point; one that was pivotal in my decision to seek out stories of success rather than to research the issue from a deficit based approach.

2.4.2 Interventions designed to increase the numbers of Indigenous nursing students

In recent years a number of strategies have been implemented as a way to increase the recruitment and retention of Indigenous students in nursing. Various Government departments have offered specific scholarships for Indigenous nursing students. For example, the Puggy Hunter Memorial Scholarships and ten of the Commonwealth Undergraduate Rural and Remote Nursing Scholarships (CURRNS) have been quarantined for Indigenous nursing students. Queensland Health also offers nursing scholarships, a percentage of which are designated specifically for Indigenous nursing students (Usher et al., 2005a).

Other strategies include the offering of specific programs for Indigenous nursing students. For example a program for undergraduate nursing was offered at Mt Isa by Deakin University, Victoria in 1998, which completed six Indigenous Registered Nurses for that community. The Office of Aboriginal and Torres Strait Islander Health (OATSIH) funded that program for 5 years. Queensland Health now supports the offering of an undergraduate nursing program at Mt Isa that is offered through the James Cook University School of Nursing, Midwifery and Nutrition.; the only university in the country with remote campuses. Furthermore, since 2003, the James Cook University School of Nursing, Midwifery and Nutrition have also offered an undergraduate nursing degree on Thursday Island. This

program was established specifically to encourage local Torres Strait Islander students to study nursing. The course is delivered by mixed mode and the students, while receiving the majority of their lessons on Thursday Islands, also attend the Townsville campus of James Cook University for some practical sessions (Usher et al., 2005b). Anecdotally, we also know that other Nursing Schools in Queensland, and elsewhere, have introduced specific strategies to increase Indigenous student recruitment and retention. However, to date there is little information on these programs and their effectiveness in achieving their aims. Given that the latest data from DEEWR indicates that some Schools are more successful at graduating Indigenous students, the strategies they are using appear to be working successfully to produce Indigenous nurse graduates.

My interest in how some programs and courses manage to enroll and complete Indigenous nursing students, and in ways to better prepare Indigenous students for nursing, resulted in my applying to the Queensland Health, former Office of Chief Nursing Officer for funding to conduct a pre-nursing program in Mt Isa; my country.

The following manuscript provides an overview of the innovative program and its outcomes.

2.5 Publication 2 – “Published” Contemporary Nurse

2.6 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 2: West, R., West, L., West, K., & Usher, K., (2010). Tjirtamai - 'To Care For': A nursing education model designed to increase the number of Aboriginal nurses in a rural and remote Queensland community. *Contemporary Nurse*, 37(1), 40-49.

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 2: Literature Review</i>	Tjirtamai - 'To Care For': A nursing education model designed to increase the number of Aboriginal nurses in a rural and remote Queensland community	Published in <i>Contemporary Nurse</i> 37(1), 40-49	West (50%) West (20%) West (20%) Usher (10%)	0.5

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	Leeona West	Date 23/03/2012
Signature 2	Karen West	Date 23/03/2012
Signature 3	Kim Usher	Date 23/03/2012

Tjirtamai – ‘To care for’: A nursing education model designed to increase the number of Aboriginal nurses in a rural and remote Queensland community

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ABSTRACT

In 2009, a nursing education model was locally designed and delivered to support the interest of a group of Aboriginal community members living in a rural and remote town in Queensland, specifically to prepare for entry into further nursing education. Named ‘Tjirtamai’ by the traditional owners of the area, the program was offered in recognition of the challenges faced by Aboriginal people when they enter nursing education courses and as a way to increase the local number of Aboriginal nurses. This program, while funded by the Government, had unprecedented support and involvement from both the local Aboriginal and wider community. The model offered multiple exit points, assistance with financial and other known challenges for Aboriginal and Torres Strait Islander students, and included contextualised literacy and numeracy. Of the 38 Aboriginal students who enrolled in the course, 26 students completed. Of those students, 18 have since enrolled in a bachelor degree in nursing while another 4 enrolled in a diploma of nursing. This paper provides an overview of the course and its outcomes.

KEYWORDS: Aboriginal; Torres Strait Islander; Indigenous; nursing; *Tjirtamai* model; education; community nursing; *closing the gap*

INTRODUCTION

In October 2009 an Aboriginal Community Controlled Health Service (ACCHS) in a rural and remote community entered into a partnership with a Registered Training Organisation (RTO) to deliver a Certificate III in Health Services Assistance (Assistant in Nursing) to local Aboriginal people aspiring to become nurses. Although the program was managed by the Aboriginal Community Controlled Health

Service, the delivery model later became known as *Tjirtamai*, which means ‘to care for’, a name gifted to the program by the Traditional Owners of the land on which the course was conducted. The *Tjirtamai* model was in fact developed and delivered by descendants of the same traditional owner group, all of whom are Aboriginal Nurses or Primary Health Care Workers. The family to which these people belong is strongly committed to *closing the gap* between Indigenous and

non-Indigenous health outcomes. The *Closing the Gap* strategy was launched by the Australian Government in recognition of the poor health outcomes of Indigenous Australians, especially the gap between the life expectancy of Indigenous and non-Indigenous people. Importantly, increasing the numbers of Aboriginal and Torres Strait Islander health workers, specifically Aboriginal and Torres Strait Islander nurses, is recognised as one way to work towards achieving the goals of the *Close the Gap* Campaign. The *Tjirtamai* model was built around the provision of direct social and emotional support to the students alongside intensive face-to-face delivery of educational sessions. Support for the initiative from the local community was overwhelming. When seeking funding for the project, letters of support were provided from all sectors of the community, State and Commonwealth Government, and non-Government bodies. The project eventually received significant funding from Queensland Health. This paper provides an overview of the model and describes the first student cohort.

BACKGROUND

In March 2009, a young Aboriginal girl presented to the local ACCHS asking for information about undertaking an ‘Aboriginal nursing program’. The health service at that time employed five Aboriginal nurses. To assist the young girl, one of the Aboriginal nurses used her networks and contacted a local university to ask how the student could be linked with a nursing program which was ‘safe’ for Aboriginal students to undertake. Whilst this originally appeared to be a single request to undertake an Aboriginal nursing course, over the coming days and weeks, many more Aboriginal locals presented with the same request. Eventually, after a significant number of expressions of interest to undertake an ‘Aboriginal nursing course’ was received, a formal announcement calling for expressions of interest was posted at the ACCHS. As a result, over 60 expressions of interest from both school and mature aged Aboriginal community members were received.

A consultant was engaged to undertake the leading sourcing funding, and in the establishment and coordination of a specifically designed Aboriginal pre-entry nursing course that would equip local Aboriginal students to enter a nursing course at either VET or Tertiary level. The initiative was timely and all involved agreed to act swiftly so as to not lose momentum. Cognisant of the importance that the program not be seen as an end point, the consultant explored pathways for entry to either a VET Diploma of Nursing or University Bachelor of Nursing, or other employment option on completion of the course. As a result, the *Tjirtamai* program was designed to enable the students to exit with either a Certificate III in Health Services Assistant (HLT32507), which would make them eligible to enter either a Diploma of Nursing and/or a Bachelor of Nursing (see Figure 1), or exit and work as Assistants in Nursing. Multiple exit points were considered important because they enable students to function as a member of the health workforce while continuing to study if desired and also offer a

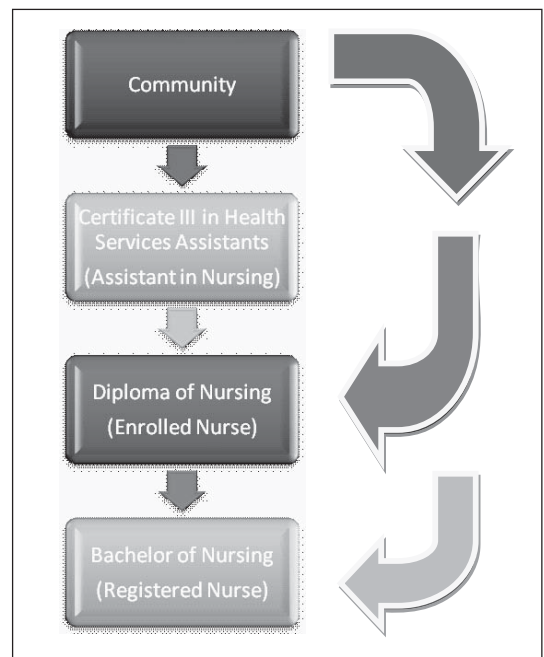


FIGURE 1: MODEL WITH MULTIPLE EXIT POINTS

exit point if the student feels they are unable to continue to a higher level qualification.

THE NEED FOR ABORIGINAL AND TORRES STRAIT ISLANDER NURSING EDUCATION WITHIN A COMMUNITY FRAMEWORK

As demonstrated by the outcomes of the Deakin University, Institute of Koorie Education (2010), and the James Cook University (JCU) Bachelor of Nursing (Pre-registration) Mt Isa Program, it is possible to Indigenise a nursing curriculum and design and deliver it in a way that is accommodating of the unique needs of Aboriginal and Torres Strait Islander students. The Deakin course at Mt Isa, conducted between 1996 and 1999, had two student cohorts that resulted in eight graduates, of which five were Aboriginal and three non-Indigenous (Goold & Usher, 2006; The Vic Health Koori Health Research and Community Development Unit, 2001; Usher, Lindsay, & Mackay, 2005a). In addition, the Deakin course demonstrated the importance of building partnerships with Aboriginal communities, especially in a rural and remote context. The JCU course at Mt Isa is ongoing and currently has eight Aboriginal students enrolled. The results of other programs implemented in specific communities for the same purpose are also encouraging (see for example Usher et al., 2005a).

It is well known that students are a reflection of the wider community in which they exist. In light of the social and health inequalities that exist between Indigenous and non-Indigenous people (AIHW, 2008; Hunter, 2007), further exacerbated in rural and remote communities, students from rural and remote backgrounds are known to be even more disadvantaged when they enter an education program (Lane, 2009). Aboriginal and Torres Strait Islander students who do gain entry to an education program are then faced with many challenges that impact markedly on their potential to succeed (Goold & Usher, 2006; IHEAC, 2006; Usher, Miller, Turale, & Goold, 2005b). The factors surrounding this issue have been researched by many over the last few decades

(Goold & Usher, 2006; Hunter & Schwab, 1998, 2003a, 2003b; Schwab & Anderson, 1999; Usher et al., 2003, 2005b, 2005c; see Table 1 for an

TABLE 1: KNOWN BARRIERS TO ABORIGINAL AND TORRES STRAIT ISLANDER STUDENT COMPLETIONS

-
- remoteness
 - poverty
 - social alienation
 - rurality
 - parents' occupation
 - education
 - poor quality and crowded housing
 - low English language proficiency
 - poor health
 - poor educational preparation for tertiary study
 - isolation from others of a similar culture
 - unfamiliar environment of the university campus
 - culture shock
 - racist attitudes
 - stereotyping
 - academic demands of studying
 - insufficient support
 - curricula not culturally sensitive or inclusive of Aboriginal and Torres Strait Islander people's issues including health
 - problems in adjusting to university teaching styles
 - the volume of work
 - financial problems
 - family problems
 - financial hardship
 - institutional racism
 - academics lacking awareness of kinship responsibilities
 - discrimination by academics
 - academics unaware of family commitments and obligations
 - academics lack of understanding and support

Adapted from Usher et al. (2003, 2005c), Miller et al. (2005).

overview of these issues). Therefore, similar to the Deakin program, the Tjirtamai course was designed and implemented to prepare Aboriginal students from a rural and remote town for a less challenging entry to a diploma or degree level nursing course.

The program organisers were in a unique position to design the model. All were intimately aware of the challenges that impact on Aboriginal and Torres Strait Islander nursing students once they enter nursing courses and hence identified the need to deliver a community based culturally appropriate nursing education pre-entry model specifically designed for rural and remote students. Significantly, the organisers were either graduating students of the Deakin program or Elders involved in the delivery of that program a decade earlier. In addition, the principal project officer is currently undertaking a PhD investigating successful completions of Aboriginal and Torres Strait Islander nursing students in Schools of Nursing in Queensland. Knowledge accumulated during the interviews for that study has informed the development and implementation of the Tjirtamai program.

RATIONALE FOR THE COURSE

It is well documented that the Aboriginal and Torres Strait Islander population is under-represented among Australians who hold higher education qualifications. In fact, Aboriginal and Torres Strait Islander people who hold Diploma level and above qualifications are in the minority (ABS, 2008). Education participation rates for non-Indigenous people remains substantially higher than Aboriginal and Torres Strait Islander people and the unemployment rate for Aboriginal and Torres Strait Islander Australians is more than three times that of non-Indigenous Australians (DEEWR, 2009), making Aboriginal and Torres Strait Islander people a potentially untapped health workforce. There is currently a significant general shortage of enrolled and registered nurses nationally and internationally. As a result, those who hold nursing qualifications

are extremely employable. Aboriginal and Torres Strait Islander nurses are under-represented in the current Australian nursing workforce (Goold, 1995; Goold & Usher, 2006), making those who have completed a nursing course highly employable across a variety of areas.

Acknowledging that Aboriginal and Torres Strait Islander people often respond better to health care providers who identify with their own culture has led to the call for the development of a well trained and culturally safe health workforce. This is considered critical for the achievement of optimal health outcomes for Aboriginal and Torres Strait Islander peoples (Ring & Brown, 2002, 2003). This is now well recognised in Government initiatives such as the *Close the Gap* campaign. Thus the provision of an Aboriginal and Torres Strait Islander health workforce is necessary to ensure these outcomes. Unfortunately, many Aboriginal and Torres Strait Islander people who do enter the health workforce hold qualifications specific only to Aboriginal and Torres Strait Islander health service delivery, such as an Aboriginal Health Worker qualification. Those who hold such specific qualifications are limited in their ability to contribute to, or change, the predominant approach to health service delivery. The authors argue therefore that what is needed is an increase in the numbers and range of Aboriginal and Torres Strait Islander health workers including Aboriginal health workers, nurses, doctors and allied health professionals. In particular, we agree with West et al. (2010) that an increase in the numbers of Aboriginal and Torres Strait Islander nurses, especially those working in remote and rural areas, will make a significant contribution to health service delivery for Aboriginal and Torres Strait Islander people in Australia and reduce the gap in Indigenous life expectancy.

The region has a nursing workforce of approximately 250, of which less than 3% ($n = 7$) identify as Aboriginal (R. Blackman 2010, personal comm., 19 April). However, this is well below the rate at which Aboriginal and

Torres Strait Islander people occupy the region. According to the 2006 Census of Population and Housing (ABS, 2008), the Aboriginal and Torres Strait Islander population account for 27.3% of the region's population of 21,838. Recruitment of nurses to rural and remote areas is a locally and nationally recognised challenge; the ongoing nursing shortages have a potential impact on service delivery in rural and remote locations. However, as discussed above, this is far more than just an equity issue. Recent solutions to staffing shortages in Queensland have centred on overseas recruitment and the employment of agency nurses. While this meets some short term staffing needs, longer term solutions are required. The students in the Tjirtamai program are potential enrolled and registered nurses already familiar with the community and the people; they also have a genuine passion for helping their people. Further, as most of the students were born and raised in the community, there is an increased likelihood they will remain in or return to their community after completing further nursing qualifications.

THE TJIRTAMAI MODEL

The model was one of intensive support designed to assist the students to overcome the educational challenges known to face Aboriginal and Torres Strait Islander students. As a result, it was funded to include assistance with child care, housing, transport, meals (including breakfast, morning tea, lunch, and afternoon tea), and contextualised support around the development of numeracy and literacy skills. Although an investment such as this may be considered substantial in monetary terms, the rewards for the individuals, their families and the community are immeasurable. For example, the program has established a ‘culture’ of Aboriginal nursing in the community, role modelling nursing as a very achievable career pathway for our mob (a term used by Aboriginal people to indicate the other person is also Aboriginal). It has demonstrated the efficacy of a specifically designed

model, and has led to increased enrolment into local nursing courses by Aboriginal students. Embedded within the model was the Certificate III in Health Services Assistant (HLT32507), which was considered essential to build the capacity of those local Aboriginal people to an equivalent pre-entry nursing level. It was also deemed to be at an acceptable level for the intended applicants. The Tjirtamai model incorporated guidance through the Queensland Tertiary Admissions Centre (QTAC) process, and provided assistance with other university admission requirements such as the Blue Card application (a formal clearance to work with children), Australian Federal Police check application, and education on the purpose of compulsory Hepatitis B vaccination. Students were also assisted to apply for available scholarships to support them once entry to the Diploma or Degree course was attained.

STUDENTS IN THE TJIRTAMAI PROGRAM

The original 60 expressions of interest in the course resulted in 38 enrolments – 2 males and 36 females. The other 22 opted not to enrol once the information about the proposed course was disseminated although a number have indicated interest in a future course. The group (see Figure 2) included six students who were in the final year of high school, and subsequently completed the course immediately following completion of year 12, and 32 other students with a variety of past work experience. Age range for the group was from 16 to 62 years of age. The students came from all sectors of the community and surrounding communities, and included those who had only achieved year 10 level of education; a few who already held Certificate III, IV, or Diploma of Primary Health Care qualifications; some with Aboriginal health worker backgrounds; mature age students with small children; and sole parents. Two of the students had previously enrolled in a tertiary level nursing course but had discontinued. All students had a shared passion to care for their own people.



FIGURE 2: PHOTO OF THE STUDENTS IN THE FIRST TJIRTAMAI PROGRAM

SPECIFIC STRATEGIES USED IN THE PROGRAM

Rolling enrolment

A rolling enrolment was utilised. This meant that students were initially enrolled in only 5 of the 15 modules to gauge their preparedness. Completion of the first five modules was mandatory for continued progression at which point students were then enrolled into stage 2 (modules 6–10), and finally into stage 3 (modules 11–15). In this way the students were presented with smaller goals that were more achievable for the students and seemed less daunting.

Matriculation into other programs

Recognition of the successful completion of the Certificate III as provisional entry into a Bachelor of Nursing was negotiated with a local School of Nursing. Negotiations with the local VET sector

also led to an agreement for 5 of the 15 modules delivered to be credited towards the Diploma of Nursing. An agreement was also forged with the RTO, who agreed to sanction a minimum of 10 places within the local Diploma of Nursing course for graduates from the Certificate III in Health Services Assistant (HLT32507) component of the Tjirtamai program. These places were agreed as direct entry places not reliant upon the usual QTAC admission process. The transition from one program into another needed to be as seamless as possible to increase likelihood of success.

National Indigenous leadership program

The Tjirtamai program also incorporated the National Indigenous Leadership Program (NILP) delivered by the Department of Families, Housing, Community Services and Indigenous Affairs

FaHCSIA (2010). The leadership component of the course was identified in the student evaluations as one of the best aspects of the program. The program focussed on personal leadership as well as overcoming racism and discrimination. It included content aimed at building confidence and strengthening self-esteem and identity. The process of undertaking the NILP also provided opportunity for the students to observe strong Aboriginal role models, as the inclusion of local elders is a unique and strong component of the NILP.

Timing

Easily the most critical aspect of the program was the timing of which delivery commenced and ceased. Delivery commenced in late October and ceased in early January to allow minimal time between completing one program and entering into another so as to maintain momentum. The timing also allowed for the students from high school to commence the program immediately following their completion of year 12 without missing too much content and allowing them to catch up where necessary. Loss of momentum between completing the program and entering the other was considered a risk for losing students; hence the course was designed so that the students moved straight on to the next course.

OUTCOMES OF THE COURSE

All students were born and raised in the community where Tjirtamai was designed and delivered and had no intentions of ever leaving because of their strong family connection and ties to country. Land, country and family connection have significant meaning for Aboriginal people so the likelihood that the students who graduated from the course would remain in the area is high. The students reported that their confidence levels increased over the duration of the course which was evident in the number who opted to go on to a Bachelor degree when initially they only considered they were able to undertake the Certificate III component of the program.

In addition, the following outcomes were achieved:

- Of the 38 students who commenced the course, 26 completed; the other 12 dropped out for a variety of reasons but mostly due to poor health and family commitments;
- Eighteen students enrolled into a Bachelor of Nursing; four enrolled into a Diploma of Nursing; with four exiting as Assistants in Nursing;
- Eighteen Indigenous Cadetship Support applications were successful;
- Two students were awarded and accepted a Puggy Hunter Scholarship;
- Four students were awarded and accepted Commonwealth Rural & Remote Nursing Scholarships;
- Twenty-six applications were completed for the Sally Gould Book Bursary – four students were awarded a bursary;
- Seven students completed year 12 in 2009 – four completing year 12 with a Senior Certificate and three with a Senior Statement. As a result of successfully completing the course, one student with a Senior Statement will be upgraded to a Senior Certificate in early 2010;
- All 26 students completed student Blue Card applications and Australian Federal Police check applications.

CHALLENGES IN DELIVERING THE COURSE

Even specially designed education programs such as Tjirtamai will result in a number of challenges along the way. The authors were aware of the potential challenges unique to Aboriginal and Torres Strait Islander students undertaking similar programs in the past and hence were constantly assessing and reviewing the model from the development stage, during the implementation of the program, and through to the completion. This process was absolutely critical for the safe and successful progression of the students. For example, ‘sorry business’ has had a significant impact on the attendance of the students. On

average, we experienced approximately a funeral each week during the delivery of the program which required the model be adapted accordingly. Cultural obligations to family and community were paramount. If the course was not sufficiently flexible to accommodate the cultural issues of the students, we knew the students would not have completed the course.

Aboriginal and Torres Strait Islander students, especially those from rural and remote areas as discussed earlier in this paper, are disadvantaged in many ways. This disadvantage is especially evident in educational preparation (Lane, 2009) which meant we experienced many situations during the course that required backtracking to accommodate the varied rates and needs of the learners.

The transition from Tjirtamai to other educational programs was of concern for the program developers, as they were unsure if the institutions could accommodate the unique needs of these Aboriginal and Torres Strait Islander students. Until such time as there is a critical mass of Aboriginal and Torres Strait Islander nursing students in the VET and Tertiary sectors, these challenges will continue to exist and remain mainly unaddressed.

Something that became quite apparent and central to the program was the need to work with the students on skills unrelated to the course, such as personal confidence, self-esteem, and maintenance of motivation. The program staff worked hard to create a real sense of ownership of the course for the students, as well as respect for them as Aboriginal people. This was critical to ensure their progression through the modules and appeared to help them overcome their issues around confidence, self-worth and recognition. The sense of ownership by the students is demonstrated by the gift of a piece of artwork to the program, completed by a student who is also one of the Traditional Owners of the area. The artwork tells the story of the challenges of the journey for the Aboriginal nursing students (see Figure 3).

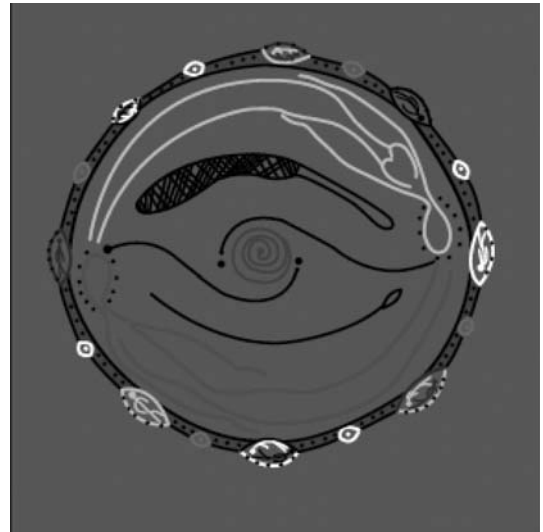


FIGURE 3: TJIRTAMAI ARTWORK

The program facilitators were required to spend a considerable amount of time debunking myths about University. Participants were instructed that university is not just for the ‘white’ people, or for the very rich or very clever – concerns often raised by Aboriginal and Torres Strait Islander students and their families. The program valued and acknowledged the students’ Aboriginality and cultural knowledge and while the students may have entered the program lacking in certain areas of formal education, they excelled in areas that made use of their awareness of Aboriginal history, culture and health care practices. By valuing this expertise, the students are more likely to feel at ease in a new and challenging environment.

DISCUSSION

Indigenous health workforce shortages, particularly Indigenous nursing shortages, are a national concern (Goold & Usher, 2006; Miller, Spring, Goold, Turale, & Usher, 2005; West et al., 2010). The Tjirtamai program outcomes demonstrate how a specifically designed and unique educational model can make a difference. The success of the Tjirtamai program has made a small but significant contribution towards overcoming the current shortages of Aboriginal and Torres Strait

Islander nurses in Australia. However, it is now up to the VET and Tertiary sectors to ensure the students remain in their chosen courses and complete the qualification. Importantly, the students in the program were local rural and remote Aboriginal people with close ties and affinities to their traditional land. This means they are highly likely to remain in the area, or return to it, after completing further nursing education. The fact that a large proportion of the students had already entered one of the local nursing courses, rather than move away from their home, is further evidence to support this claim. However, we are also aware that the real success of this program will not be known until the students complete the courses in which they have now enrolled. It will only be fully realised when the students are qualified and working within the health system of their local area. Initiatives such as the Tjirtamai program thus have a role to play in contributing to *closing the gap* between the current health of Australia's Aboriginal and Torres Strait Islander people and the wider community by preparing Aboriginal students for entry to nursing courses.

The Tjirtamai program was a specifically designed and implemented model which offered intensive support. The course's staff is fully cognisant of the fact that this highly intensive support is not sustainable for the duration of longer courses. However, we believe the course has prepared the students well which will mean they will require less support in the study they undertake in the future. It is important to recognise that without the support offered during the current program, the students' outcomes would not have been as impressive. As well as intensive support, the model also included a number of other components that added to its success. For example, the flexibility of the model, the inclusion of cultural content, the learning approach, and the inclusion of local Aboriginal coordinators, were all paramount to the overall success of the program.

The Tjirtamai model for preparing Aboriginal students for entry to nursing courses at the VET and/or Tertiary level is recommended as

a successful way to increase the numbers of Indigenous people entering nursing. We recommend the model be taken up and trialled in other States across Australia. It may also be a useful model with international applicability. In addition, we recommend that the model be repeated in Queensland and that a formal evaluation of the model be undertaken by an external group.

CONCLUSION

This paper has offered an overview of the Tjirtamai course offered to Aboriginal students in a rural and remote community in Queensland. This is the first time an innovative model such as this has been delivered in a rural and remote area of Australia with the intention of preparing local Aboriginal community members for entry into nursing education. The authors argue that if Australia is to be genuinely committed to *closing the gap* between the education and health outcomes of Aboriginal and Torres Strait Islander Australians and the wider Australian community, more courses such as this one conducted by local Aboriginal and Torres Strait Islander people within their communities are needed. The challenge now is to replicate and test the transferability of this program to other locations across the country as suggested by the local community.

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Received 22 April 2010

Accepted 25 November 2010

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The previous paper outlined an important program developed and implemented to increase the number of Indigenous people entering nursing. As a result of the program many local people, some who may not have otherwise done so, entered a nursing course. Further programs such as this one are needed in the future to ensure Indigenous people have the opportunity to enter nursing with sufficient preparedness and confidence to succeed.

2.7 Summary of chapter

This chapter has outlined the relevant literature related to the topic. In addition, the chapter presented the publication ‘Tjirtamai’, which outlines a program implemented in Mount Isa during the conduct of the study for the purpose of improving Indigenous student preparedness for entry to a nursing course. The next chapter describes the methodology and methods used in the study.

Chapter 3. Methodology and Methods

3.1 Introduction

Being a Murri researcher has important meaning for me. Before I could begin to undertake the study described here it was important for me to consider the impact of research on my people; this consideration strongly influenced how I undertook the study. I found it necessary to undergo what is termed a decolonising process before I was able to move forward with the research; this is explained in the chapter. Overall the journey was an arduous one but the end result has been worth it and I hope you find the following chapter and the papers included interesting.

This chapter provides an overview of the approach, theoretical position, and methodology that I chose to guide the current study. Initially, the chapter offers an overview of Indigenous research, includes reference to some of the emerging work in the area, and discusses why it was used in this study. An overview of Indigenous ontology and Indigenous epistemology is then addressed, followed by an overview of the critical theory and pedagogy upon which an Indigenous research approach is predicated. The methods used in the study will then be addressed beginning with an overview of mixed methods research, an explanation of why this was the most appropriate design for the study, an overview of the data collection methods, the survey and interviews using the Dadirri approach, and finally, an overview of the analytic techniques employed in the study will be provided. Other issues such as case identification, participant selection, and ethical issues, are also addressed. Once again some of this information is provided in the form of publications.

3.2 Research Aim

The aim of the study was to describe undergraduate pre-registration nursing commencement numbers, progression, attrition and completion rates in Australia; and to identify the barriers to, and supportive strategies for Indigenous nursing completions from the perspective of Indigenous nursing students and academics. The study emerged as a result of my experiences as a student and later as an academic. These experiences caused me to become concerned about the alienation of Indigenous students within the current nursing education system and the ongoing failure of many students who attempted to become registered nurses. Given the importance placed on increasing the numbers of Indigenous registered nurses, the growing numbers of students falling by the wayside greatly troubled me and led me to ask the stated research questions.

The following research questions were used to guide the study:

3.3 Research Questions

1. What are the national commencement numbers, progression, attrition, and completions rates for Indigenous nursing students since the publication of the final report of the Indigenous Nurse Education Working Group (INEWG, 2002) when compared to non-Indigenous nursing students?
2. What are the factors identified by Indigenous nursing students and academics as enablers to successful course completion?
3. What are factors identified by Indigenous nursing students and academics as barriers to successful course completion?
4. What strategies are perceived as resulting in improved completion rates as identified by Indigenous nursing students and academics?

3.4 Indigenous Epistemology

A worldview is a way of seeing things; a knowledge system that helps us to interact with and understand the world in which we live. Our worldview is something we learn as we grow, something passed down from one generation to the next (Schultz, 1974). A worldview therefore differs depending on where and how we grow up. Earlier in this thesis I told you about how I grew up as an Aboriginal child on my mother's country. Indigenous people have a totally different worldview to non-Indigenous Australians. For Indigenous Australians the time of learning never stops - in the Aboriginal world it is always considered as ongoing. Ways of knowing are specific to ontology and the entities of Land, Animals, Plants, Waterways, Skies, Climate and the Spiritual systems of Aboriginal groups. Knowledge about ontology is learned through processes such as listening, sensing, viewing, reviewing, reading, watching, waiting, observing, exchanging, sharing, conceptualising, assessing, modeling, engaging and applying. It is also believed that no one Entity knows all. Further, within Indigenous Australian ways, roles are gender specific and life stage related (Schultz, 1974). Importantly, all knowledge is relational and all Indigenous knowledge systems are built upon relations (Chilisa, 2012).

Ways of being in Indigenous epistemology rest upon the notion that we are part of the world just as much as it is part of us, and exist within a network of relations among Entities. These determine the rights to be earned and bestowed as we carry out rituals to country, self and others - our ways of being (Martin, 2003). Ways of doing are a synthesis of our ways of knowing and being. These include our languages, art, imagery, technology, traditions and ceremony, land management practices, social organisation and social control (Martin, 2003).

The Indigenous way of knowledge creation as outlined by Tuhiwai Smith (1999), recognises that the paradigm is rooted in the social struggle for recognition. Past research, the written literature on the colonised, deficit theory, and dominant language are all involved in the construction of knowledge that marginalises the worldview and knowledge of Indigenous peoples and other disadvantaged groups (Chilisa, 2012). Chilisa (2012) explains the thrust for people to undertake postcolonial research using a process of decolonising and indigenising Euro-Western research methodologies. This process encourages the researcher to use Indigenous knowledge to inform ways that new research approaches are defined, new tools developed, and the literature base broadened (Chilisa, 2012). Because of my commitment to undertake research in a way that was respectful of my people and in order to ensure my work did not perpetuate the health research of the past, I was driven to search for new and more appropriate ways to undertake research than the current Western methodologies commonly in use within the academy. Early on in my PhD I was fortunate enough to be introduced to the notion of Indigenous research. Once I was aware of its existence, as an Aboriginal women, I came to realise I could research no other way.

3.5 The Indigenous Research Methodology

An Indigenous research approach was chosen as the best way to guide my study. Indigenous methodologies must be based on an Indigenous philosophy or worldview (Kovach, 2010; Rigney, 1997; Wilson, 2008). Utilising Indigenous philosophies is important for the development of a responsible and accountable Indigenous discourse that is theoretically sophisticated and responsive to the needs of the people. Indigenous methodologies are a paradigmatic approach based on an Indigenous philosophy or epistemology. In keeping with the critical paradigm, Indigenous paradigms recognise the ways in which power can be used

to oppress multicultural ways of knowing (Boutain, 2008). As a Murri woman it is important to me to use an approach to research that removes the voice of the coloniser and values Indigenous knowledge. I believe it is important to privilege Indigenous voices and Indigenous lives as indicated by others (Smith, 1999).

The root of Indigenous epistemology in social struggle and oppression, and its link to empowerment, are consistent with the tenets of critical theory. Critical theory was used by Rigney (1997) to develop what he terms Indigenist Research methodology (IRM). Similar to critical theory, IRM aims for a just world. Critical theorists are interested in analysing how institutions dehumanise, anesthetise, and alienate the people living and working within them, as well as how systems of oppression in modern capitalistic societies not only disempower people but also the way in which they obscure the sources of the oppression (Clandinin & Rosiek, 2007). While an Indigenous paradigm welcomes a decolonising perspective, considered necessary by some Indigenous researchers given the current social inequities experienced by Indigenous people, it is not central to an Indigenous approach (Kovach, 2010). Rather, as explained by Kovach (2010), it is the relational nuances of the Indigenous approach that must remain central to the methodology. Hence, it is necessary to choose methods of research that link closely with the paradigmatic aspects of the approach, as “the methods chosen should make sense from an Indigenous knowledges perspective” (Kovach, 2010, p. 41).

According to Rigney (1997), Indigenous research must also be culturally safe and culturally respectful research comprised of three principles; it must have:-

- an emancipatory imperative;
- political integrity; and
- privilege Indigenous voices.

Martin (2003) further argues that Indigenous research must honour the uniqueness of Aboriginal ontology and epistemology, the principles of which are:

Recognition of our worldviews, our knowledges and our realities as distinctive and vital to our existence and survival.

Honouring our social mores as essential processes through which we live. Learn and situate ourselves as Aboriginal people in our own lands and when in the lands of Aboriginal people.

Emphasis of social, historical and political contexts which shape our experiences, lives, positions and futures.

Privileging the voices, experiences and lives of Aboriginal people and Aboriginal lands (Martin, 2003, pp. 204-205).

Epistemology is more than merely a 'way of knowing' as pointed out by Ladson-Billings and Donnor (2005) who argue that the distinction is not trivial. However, developing a worldview that differs from the dominant view is not easy because schools, society and the production of knowledge are designed in ways that encourage internalisation of the dominant view. As a result, the dominant worldview is perpetuated as the only way to view the world (Ladson-Billings & Donnor, 2005). The development of the Indigenous research approach, paradigm, or methodology has taken many years and involved a number of phases. Basically, it has moved from where Indigenous scholars situated themselves within a Western framework,

where Indigenous researchers Indigenised Western methodologies or decolonised them for their own use, to where today Indigenous scholars are being respected for their ability to conduct their own research that emanates from and values their own worldview (Wilson, 2008). Wilson (2008) explains that the recognition of the Indigenous approach as a valid way of conducting research has led to an uptake of research courses at universities by Indigenous people in Canada; the same appears to be occurring in Australia as Indigenous methodology and methods course begin to emerge. The possibilities of these developments are immense as the Indigenous research methodology agenda grows.

The Indigenous approach to research aligns well with the use of the Dadirri approach, which involves deep contemplative listening to another in a reciprocal relationship (Atkinson, 2000). Similar to other conversational methods, Dadirri respects the oral tradition and upholds the relationality, which is necessary to maintain a collectivist tradition (Kovach, 2010). Wilson (2001) further explains that it is the relationship between sharing story and listening that leads to the development of a strong relationship. The Dadirri approach "...is a principle of inter-personal relations central to the cultures of Aboriginal nations...it is, yet, an obligation in common to contemplate, in real time, everything that you hear - to self-reflect as you listen, and then, tellingly, to act on what you've registered" (Gabb & McDermott, 2007, p. 5). Introduced by Australian Aboriginal woman and distinguished scholar Miriam-Rose Ungunmerr-Baumann from the Daly River people of the Northern Territory of Australia, Dadirri is an act of two way, reflective listening that goes beyond the physical world as we know it to include a sense of the present, the past and the spiritual (Ungunmerr-Bauman, 2003). Dadirri has been described and used by others since Rose first wrote about it in 2003. For example, Atkinson (2002) described Dadirri as a process of deep contemplative listening

within a reciprocal relationship with someone else. As such, Dadirri offers a respectful and reflective way to work with Indigenous people and requires that users situate themselves within an Indigenous universe. This means they must let their SELF be known, become familiar and transparent. For example, the researcher revealing something of themselves, like clarifying some-one traditional country, language/family group and position within the kinship system which is the Indigenous way of introduction and acknowledgement of obligations and commitments and rules of social engagement.

As will become evident in this study, interviews with students took on an informal open questioning style otherwise known as ‘yarning’ within Indigenous circles, which is consistent within an Indigenous research framework. Interviews with non-Indigenous participants also adopted a conversational ‘yarning’ approach, often used in qualitative research (Streubert-Speziale & Carpenter, 2003). In addition, a variation of Dadirri is possible, and has been used in terms of thematic analysis of people’s stories, or, as more conventional academe would have it, ‘the data’. Underpinning the use of the Dadirri approach is the recognition that Indigenous research values relationality unlike Western research that considers it a bias (Stewart, 2009). Thus the relational aspects of Dadirri are critical to understanding its link to Indigenous methodologies and make it an ideal approach for data collection.

3.6 An Overview of Critical Theory and Pedagogy

Critical theory is considered to have its origins in Marxist critique of social forces and existing conditions. It emerged in Germany in the 1920s through what came to be known as the Frankfurt School. The Frankfurt School engaged in the analysis of capitalist societies and

was concerned with the unspoken relationships between power, action and understanding (Kincheloe & Steinberg, 2008). The Frankfurt School re-examined the work of Marx, who argued that 'social order' was the constraint that ultimately limited a person's ability to speak their truth (Fontana, 2004). Therefore, critical theory was applied to a capitalist ideology where the working class was kept oppressed by the upper class. Critical theorists associated with the Frankfurt School included Marx, Kant, Hegel, and Weber; the Continental theorists were Foucault, Habermas and Derrida; the Latin American thinkers included Paulo Freire; French feminists included Irigaray, Kristeva, and Cixous (Kincheloe & McLaren, 2005); and the scholars of today include the late Joe Kincheloe, Peter McLaren, Shirley Steinberg, and others.

Paulo Freire followed the thinking of Marx and became concerned with how people could free themselves from oppression by increasing their critical consciousness. He referred to his adult educational approach as critical pedagogy (Leonardo, 2004). He was mostly concerned with how oppressed people can become accepting of their position and eventually internalise their own oppression (Fay, 1987) and how this happens in many ways including through education. This can lead to the situation where the 'oppressed' adopts the values of the 'oppressor' and wants to be 'like them'. Freire (1970) however believed that it was possible for people to move beyond their current oppressive existence. He was convinced that given the proper tools, the individual can gradually come to perceive personal and social reality and the contradictions it constrains, become conscious of their perception of that reality, and deal critically with it (Freire, 1970).

Critical theory was originally invested in the tenets of enlightenment and consciousness-raising in order to facilitate change in society. There is no one critical theory but rather a series of premises that underlies the associated thoughts and beliefs (Kincheloe & McLaren, 2005). Critical theorists were, for example, interested in looking below the surface to uncover the underlying meaning of knowledge (Freundlieb, Hudson, & Rundell, 2004). They were politically motivated to draw attention to the injustices within society and were interested in raising people's awareness of these inequities. In other words, they aimed to make people aware of injustices and encouraged debate and discussion around these issues as a means of bringing about dissatisfaction with the oppressive realities. By acknowledging these oppressive forces, one's own subordination offers a better opportunity for upheaval and change (Kincheloe & McLaren, 2005). Critical theorists are therefore interested in analysing how institutions dehumanise, anesthetise, and alienate the people living and working within them, as well as how systems of oppression in modern capitalistic societies not only disempower people but also the way in which they obscure the sources of the oppression (Clandinin & Rosiek, 2007).

Privileged groups however have an interest in supporting the status quo as a means of protecting their advantage; critical theorists are very aware of these issues. As a result, studies of privilege often include issues such as race, gender and sexuality (Kincheloe & McLaren, 2005). Ideas such as these are furthered by the work of critical race theorists (CRT) who argue for a theory that displaces taken-for-granted norms around unequal binaries such as male-female, white-non-white, public-private, able-disabled, and foreign-non-foreign (Ladson-Billings & Donnor, 2005). Ladson-Billings and Donnor (2005) explain that CRT, is

not limited to the notion of race, but is a rubric for considering difference using a multiple of methodologies. These ideas are very similar to those proposed by Indigenous researchers.

The arguments proposed by the critical theorists' interest me because of the link to issues of domination and oppression and how the person, who is oppressed, comes to see the world through the eyes of the dominant person/people. This is extremely relevant to Indigenous Australian people. Engaging with these ideas also resonated for me because emancipatory pedagogies seek to expose the invisible oppression that influences the way we are educated (Rose & Glass, 2008). I am concerned about the macro social conditions that impact on Indigenous students, as outlined in the last chapter, yet remain hidden. By studying these and the current education of Indigenous nursing students it might be possible to identify hidden agenda, subtle domination, and practices of domination and oppression, that can be opened up to the possibility for change. In keeping with the critical paradigm, Indigenous paradigms recognise the ways in which power can be used to oppress multicultural ways of knowing (Boutain, 2008). Further, the root of Indigenous epistemology in social struggle and oppression, and its link to empowerment, all fit with the tenets of critical theory and critical pedagogy. Kincheloe and Steinberg (2008) describe their disappointment that Indigenous knowledge has been dismissed from academic curricula. They explain how a critical pedagogy recognises that there is no single, privileged way to see the world. Once teachers become conscious of the current mono-cultural and one-truth way of seeing the world, they will come to value and pursue new frames of reference in regard to their students and classrooms (Kincheloe & Steinberg, 2008). This is my dream!

It was also important for the framework to be culturally safe and culturally respectful, comprising three principles: emancipatory imperative, political integrity, and privileging of Indigenous voices (Rigney, 1997, 2006). In order to ensure the emancipatory intent recognised by people such as Habermas and Freire, and continued today in the work of Indigenous scholars such as Rigney, Martin, Smith, Sherwood, Kovach, Stewart, and Wilson, I chose an emancipatory design.

An emancipatory design is based on the same principles of critical theory as an Indigenous research methodology. Emancipatory theory as discussed earlier, involves taking a stance that favors underrepresented, disadvantaged or marginalised groups. Included within this perspective are race theory, feminist theory, disability theory and sexual orientation theory; all of which have a similar goal of calling for change to the current system (Creswell & Plano Clark, 2011). Sweetman, Badiee and Creswell (2010) explored the use of transformatory theory within mixed methods designs and reported that it is becoming more popular. They recommended a number of points for evaluating the emancipatory intent of a mixed methods study. For example, the study should introduce the emancipatory lens at the beginning, apply it when discussing the literature, incorporate data collection techniques that will not further the disadvantage or marginalisation of the group, make it explicit when interpreting and discussing the findings, and position the researcher/s within the study. I argue that I have accomplished these tasks adequately.

Martin (2003) argues that Indigenous research must honour the uniqueness of Aboriginal ontology and epistemology, the principles of which are:

Recognition of our worldviews, our knowledges, and our realities as distinctive and vital to our existence and survival.

Honouring our social mores as essential processes through which we live, learn and situate ourselves as Aboriginal people in our own lands and when in the lands of Aboriginal peoples.

Emphasis of social, historical and political contexts which shape our experiences, lives, positions and futures

Privileging the voices, experiences and lives of Aboriginal people and Aboriginal lands (Martin, 2003, pp. 204-205).

Indigenous peoples are those who have experienced the imperialism and colonialism of the modern historical world, as outlined by Smith (2005). Smith explains that while these people remain culturally distinct, and may still have their language and belief systems intact, they are minorities in lands over which they once held ownership, or may even be displaced from their lands. More recently, Indigenous people have been actively working towards developing methodologies designed to privilege Indigenous voices and move from a position of passive victims to one where Indigenous people engage with research as a way of overcoming the dominant discourse (Smith, 2005).

Implicit within Indigenous research is a goal to change the status quo and the research is considered a lever for transforming institutions, communities, and society. It is also seen as a way to make space for Indigenous knowledge, and recognises the role of research in enabling people and communities to reclaim and tell their stories (Smith, 2005). Implicit within such an approach is the necessity for the Indigenous researcher to confront the colonisation that

has disenfranchised their people. This process occurs as the researcher contemplates why an Indigenous approach to the research is necessary.

The following article provides an overview of the decolonisation process I underwent as I made decisions about the best research approach for this study. The manuscript was written with a colleague, also an Indigenous student undertaking a PhD, and my supervisor.

3.7 Publication 3 – “Published” Australian Journal of Indigenous Research

3.8 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 3 Saunders, V., West, R. & Usher, K., (2010) Applying Indigenist research methodologies in health research: experiences in the borderlands. *The Australian Journal of Indigenous Education*, 39 (Suppl), 1-7.

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 3: Methodology and methods</i>	Applying Indigenist research methodologies in health research: experiences in the borderlands.	Published <i>The Australian Journal of Indigenous Education</i> , 39 (Suppl), 1-7.	West (40%) Saunders (40%) Usher (20%)	No impact factor available

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	V Saunders	Date 23/03/2012
Signature 2	Kim Usher	Date 23/03/2012

APPLYING INDIGENIST RESEARCH METHODOLOGIES *in* HEALTH RESEARCH: EXPERIENCES *in the* BORDERLANDS

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■ Abstract

For Indigenous scholars in health sciences, finding “ways of doing” research that value Indigenist knowledge is an important consideration. Indigenist research methodology offers a useful alternative to mainstream research approaches that draw upon orthodox Western knowledge systems. However, as Indigenous research approaches have only recently entered the academic discourses of health science, few courses currently exist to support Indigenous students and their supervisors who work in this area. While negotiating Indigenist methodologies is challenging, more Indigenous scholars are recognising the importance of doing so. This paper will outline some of the issues experienced by two Indigenist research students coming to terms with the relevance of an Indigenist research approach to their study, as well of those of their supervisor, the third author of the paper.

■ Introduction

Choosing a methodology appropriate to the research question is a challenging journey for most students enrolled in higher degrees by research. This journey is even more demanding for Indigenous postgraduates aware of the need to undertake research in ways that are respectful of both Indigenous and non-Indigenous values and ways of knowing, while at the same time recognising the need to challenge the claims of Western orientated research and its methodologies. Unfortunately this means the student must first come to terms with the role that science – and we include research here – and Western traditions have played in the colonisation of Indigenous people (Smith, 2005). While Indigenous people may have embraced higher education as an opportunity to reclaim, protect and nurture Indigenous culture, Rigney (2001, 2006) warns us that this is done with some degree of reservation. The basis of his concern is the academy’s continued reliance on the Western knowledge paradigm. Recognition of the domination of Western ways of thinking is a conundrum for Indigenous researchers who see an urgent need to “decolonize and deconstruct those structures within the Western academy that privilege Western knowledge systems and their epistemologies” (Denzin & Lincoln, 2008, p. 6).

Choosing the best research approach for use with Indigenous peoples is problematic within the health sciences where quantitative and positivist research practices and theories have been valued and espoused. The practices and theories embedded within these traditions uphold the assumptions of the Western knowledge paradigm. For example, it has been suggested that medical and public health research have contributed to the health disadvantage of Australian Indigenous people. Rather than focusing on improving health for all, the current systems for measuring research performance concentrate only on scientific quality (Houston & Legge, 1992; Smith, 2001). However, the “field of Indigenous health research has been transformed over the past two decades, especially in terms of how researchers are expected to act towards and co-operate with Indigenous communities and organisations” (Humphery, 2000, p. 3). In 1991

the National Health and Medical Research Council (NHMRC) released the ethical guidelines for Indigenous health research which include three important elements: consultation; community involvement; and ownership and publication of data. As a result, communities, which had previously been the subjects of outside research, were recognised as having a role in selecting the types of research that were relevant to their needs and started to take on a more active role in the implementation of the research process (Henry et al., 2002a; Mayo et al., 2009; NHMRC, 2002). Some Indigenous academics however believed the guidelines did little to overcome the ongoing colonial domination of Indigenous research. As a result, the Indigenous Health Research Reform Agenda was directed towards achieving deeper institutional change (Henry et al., 2002a). As part of that process, Indigenous academics have proposed the development and adoption of Indigenous research methodologies “to ensure Indigenous intellectual sovereignty within research projects involving Indigenous people and their interests and concerns” (Henry et al., 2002b, p. 3). As a result, we now have new and innovative Indigenous approaches to research that are better suited to the needs of Indigenous people.

Over the past decade in Australia, Indigenous research that has emerged from the tenets of critical and feminist theory (Rigney, 1997; Smith, 2005) resists positivist and postpositivist methodologies that validate colonising knowledge about Indigenous people. Rather, “Indigenists deploy, instead, interpretive strategies and skills fitted to the needs, language, and traditions of their respective indigenous community” (Denzin & Lincoln, 2008, p. 11).

However, as Indigenous research approaches have only arrived in the health discourse within the last decade, the extent of uptake of these approaches and progress towards achieving methodological reform within mainstream higher education institutions is not clear (Henry et al., 2002b). This makes it difficult for Indigenous research students in health and other disciplines, as well as their supervisors, to develop the required knowledge and capacity to negotiate the Indigenous research labyrinth. It also means that we have not yet fully realised the experience for Indigenous students who adopt this approach for their research.

We offer this paper from three perspectives: an overview of the challenges and opportunities that have arisen from the experiences of two Aboriginal research students, and an outline of the challenges and opportunities for supervisors provided from the perspective of a non-Indigenous supervisor. Finally, some ideas will be highlighted that might help future students and supervisors considering taking this path.

■ Why Indigenist research and what is it?

To begin, it is important to establish the significance of adopting an Indigenist research approach for Indigenous researchers, including Indigenous research students, and for all research that involves Indigenous people. Rigney (2006) explains that methodological reform is necessary to strengthen ways of privileging Indigenous voices throughout the entire research process and to facilitate “the Indigenous scholar speaking back to research epistemologies that have contributed to the social construction of Indigenous Australians as oppressed” (p. 41). He defines Indigenist research as informed by three fundamental and interrelated principles: involvement in resistance as the emancipatory imperative; political integrity; and, giving privilege to Indigenous voices (Rigney, 2006).

We acknowledge that finding the right way to conduct research is challenging for most research students, but we argue this decision presents an even greater challenge to Indigenous research students. Although it may suit some Indigenous researchers to work within the dominant paradigm (Rigney, 1997), our experience has shown that the Indigenous student soon develops an awareness that most of the methods of research currently available to researchers, perpetuate assumptions about reality that are not in-keeping with the Indigenous student’s background or beliefs. This is the case because:

The research academy and its epistemologies have been constructed essentially for and by non-Indigenous Australians. Indigenous Australians have been excluded from all facets of research. The process of radicalisation declared that my peoples minds, intellect, knowledges, histories and experiences were [sic] irrelevant (Rigney, 1997, p. 114).

The claim for an epistemological ground is thus a powerful legitimising force intimately linked to Indigenous worldview. Knowledge systems and worldviews are shaped by our living conditions where we learn to accept the dominant view (Ladson-Billings, 2003). Aboriginal and Torres Strait Islander peoples have therefore been critical of research undertaken on, and in, their communities for some time (Humphery, 2001). They have long recognised the way research serves to perpetuate ongoing racism and colonialism, and fails to value Indigenous ways of knowing or recognise Indigenous worldviews. Smith (1999, p. 42) explains that Western research:

... brings to bear, on any study of Indigenous peoples, a cultural orientation, a set of values, a different conceptualization of such things as time, space, and subjectivity, different and competing

theories of knowledge, highly specialized forms of language, and structures of power.

Recognition of the domination of Western methods of research has led Indigenous scholars to be involved in the development and use of research epistemologies and designs that contribute to self-determination and liberation (Humphery, 2001; Kincheloe & Steinberg, 2008; Rigney, 1997; Smith, 1999):

Indigenous Peoples must look to new anti-colonial epistemologies and methodologies to construct, re-discover and/or re-affirm their knowledges and cultures. Such epistemologies ... strengthen the struggle for emancipation and liberation from oppression (Rigney, 1997, p. 115).

However, to develop a worldview that differs from the dominant one is not easy; the dominant worldview claims not only another way to view the world, but purports their way as the only way to view the world (Ladson-Billings, 2003). Sadly, the dominant worldview in Australia “continues to re-shape knowledge construction of Indigenous peoples via colonial research ontologies, epistemologies and axiologies which is so fundamentally subtle and common sense” (Rigney, 1997, p. 114). It is not surprising then that Indigenist research originated from within the traditions of critical theory as critical theory is guided by a vision for a just world with the goal of liberating “individual groups and society from conditions of domination, powerlessness and oppression which reduce control over their own lives” (Rigney, 1997, p. 120). Critical researchers are painfully aware of the need for members of the community and research participants to take control of their futures and seek to undertake research in ways that foster emancipation, democracy and community empowerment while simultaneously seeking to redress power imbalances, in order to enable those who were previously marginalised to find their voice (Lincoln & Guba, 2003). Research undertaken in this way becomes an endeavour that is unashamedly *political* and closely aligned with the development of a critical consciousness. Rather than cling to the rail of neutrality, critical researchers openly admit their partisanship in the struggle for a better world (Kincheloe & McLaren, 2003). Hence, Indigenist research is defined as:

... research by Indigenous Australians whose primary informants are Indigenous Australians and whose goals are to serve and inform the Indigenous liberation struggle to be free of oppression and to gain power (Rigney, 1997, p. 120).

At the heart of Indigenist research approaches is a critical awareness of the need to rediscover the ways knowledge is produced and how particular

knowledges are rendered legitimate and perceived as superior to others (Nakata, 2002).

An important factor linked to the subjugation of Indigenous knowledge, is the ongoing cultural attack on the identity of Indigenous people under the legacy of colonisation (Lavallee & Poole, 2009). This leads us to argue for the need to embrace Indigenous culture, worldviews and knowledge systems, and to conduct research which espouses a critical and liberating intent. Rigney (2001, p. 7) argues Indigenous people must ask themselves: “can we participate in Western science without reinventing the hegemonic colonial imagination about ourselves?” We also contend that Indigenous people have an obligation to conduct research in ways that respect the values and traditions of Indigenous people. Denzin and Lincoln (2008, p. 27) stated that “getting mad is no longer enough”; the time to act is now. It is possible to imagine “... an alternative and more natural context” that offers the potential to “...reduce the residue of colonialism; domination and oppression” (Lafrance & Bastien, 2007, p. 109).

As Indigenous scholars have established an academic argument for an Indigenist methodology, it has been stated that it will now be “harder to dismiss” (Rigney, 2009, pers. comm.) within the academy. However, we are warned that the road ahead may still be difficult (Kincheloe & Steinberg, 2008) and resistance will have to be addressed. Regardless, future research endeavours by, and with, Indigenous people can now begin to reap the benefits of the approach and begin to focus on the “gifts” it can bring to academic outcomes and discourses; to fail to do so would be an injustice. However, as use of the Indigenist approach grows, it is also necessary to recognise that while new qualitative researchers who move away from the scientific or empirical approach go through a process of “unlearning” or letting go of bias and preconceived ideas, a different experience occurs for Indigenous researchers. For them, this experience can be described as a “decolonising” process (Smith, 1999), which requires the researcher address the trauma associated with colonisation while also recognising its role in the denigration of Indigenous identity (Kirmayer et al., 2007). We contend that this is indeed very much a reality and thus offer an overview of the experiences of two Aboriginal research students in this regard.

■ Issues that arise for Indigenous research students

As Australian Aboriginal women, Roianne and Vicki responded to the call to arms that Indigenist researchers espouse. Thus they both used Indigenist research methodologies which were adapted to suit the needs of their individual projects. It is not easy to learn a new methodology, especially one that espouses an innovative and necessarily critical approach. We recognise this requires a lot of background study

and preparation before data can be collected. Both students wanted to use a qualitative approach which necessitated first of all learning the philosophical underpinnings of the qualitative paradigm. But it may also be useful to remember, so aptly pointed out by Rigney (2001), that the early Indigenist scholars within the academy, such as Langton and Langford, had to first of all be mindful of classical Western epistemes in order that they were able to articulate the partial distortions and racial biases inherent within the philosophical reasoning of science. For Vicki and Roianne, this meant they not only needed to learn the extent of methodology required of any other research degree student, but also that they must learn the tenets of critical theory (from which Indigenist research emanates) and other qualitative approaches. Only after they had grasped this adequately, could they begin to understand and articulate the Indigenist research approach fully within their contexts. However, the academy has valued and advanced certain ways of knowing in preference to, and to the exclusion of, others while at times even actively devaluing some ways of knowing, such as Indigenous ways of knowing (Sonn et al., 2000). Making the decision to adopt an Indigenist approach is not easy especially when it counters the dominant view and ways of doing research. Roianne described this as: “the most difficult thing I have ever done” and said, “there were times when I just thought it would be easier to do a ‘normal’ Western methodology, but it wasn’t possible” (West et al., 2009). Vicki added, “Once you know something, you cannot unknow it. Once you recognise the ‘reality’ of the knowledge constructed about Indigenous peoples and the harm it causes, ‘doing’ research as you did before is no longer possible” (West et al., 2009). This reminds us of Nakata’s (1998, p. 4) assertion that in order to fully appreciate the situation for Indigenous people in an attempt to improve it, “... we must first immerse ourselves in and understand the very systems of thought, ideas and knowledge that have been instrumental in producing our position”. However, it is also important to realise that the tensions between the Western ways of knowing and doing research and the epistemologies of Australian Indigenous peoples, lead to what has been termed by Rigney as “the journey of academic contradiction”. This term acknowledges while the academy has a role in contributing to the oppression of Indigenous people, it also raises consciousness about that oppression:

Such a journey is traumatic and deculturalising for some of our Indigenous peoples. However, without such an intellectual journey our contemporary problems and their solutions remain neither knowable nor visible. The “journey of contradiction” in academe is problematic. However, we simply would not be in the current historical moment of Indigenous epistemic

revolution and scientific transformation without it (Rigney, 2001, p. 8).

For the supervisor, this means being prepared to work alongside the student as they grapple with the sophisticated knowledge of the discipline and its philosophical underpinnings. It also means assisting the student to come to terms with the “academic contradictions” that will inevitably arise. We also know that as “knowledge is always in process, developing, culturally specific and power-inscribed” (Kincheloe, 2001, p. 689), the needs of the student will change over time. As a result, the supervisor must remain aware that the students need change as they move through their work and as they uncover the underpinnings of various approaches. In addition, they must expect the students to have different experiences, backgrounds, understandings, worldviews and goals (Laycock et al., 2009), and recognise that these which must also be accounted for by the supervisor. As the student’s critical consciousness grows, the supervisor’s support will be even more important as the student struggles to overcome the inevitable awareness of the impact of colonialism on Indigenous people.

Choosing to implement an alternative or new methodology, such as an Indigenist research methodology, means there is little available to support the researcher. As a result, all development, adaptation and implementation becomes an individual process; a process which Sommerville (2007) calls emergence. This has been the case for qualitative research which has seen the emergence of a variety of alternative approaches in recent times (Lather, 1991; Denzin & Lincoln, 2005). Many new ways of doing research “... facilitate the emergence of alternative voices and new knowledges” (Somerville, 2007, p. 228) which set the scene for the inclusion of Indigenist approaches within the academy (Rigney, 2001). In the case of students implementing a relatively new research approach, this also means not only do they have the extra work associated with developing an innovative approach, but also take the risk of moving into the borderland spaces (Clandinin & Rosiek, 2007) which requires they risk that examiners and others will appreciate their work.

For the student to succeed in this endeavour, the supervisor must be prepared to spend the necessary time to work alongside the student while they grapple the many complex issues. For example, Roianne has worked to develop a methodology that incorporates an Indigenist approach while offering the potential to offer new understandings around Indigenous nursing workforce issues. This was necessary as previous ways of researching the topic had all ended up confirming what had gone before. Roianne has therefore worked to develop a methodology that incorporates both an Indigenist and narrative approach. Vicki has used her creativity to draw, paint and write poetry as a means

of explanation which she then uses to bring about an articulation of the issues within the research project. This articulation is a way of translating her different ways of knowing and being in the world into a story line that helps to unravel a complex issue. However, developing these innovative approaches is extremely demanding and time consuming. It is not uncommon, from our experience, for the student to lose their motivation or, even at times, lose their way in the process. An attentive supervisor must be continually on the look out for this problem and when it occurs, seek collaborative ways forward. Developing new and innovative approaches to research also requires the supervisor become familiar with an entirely new body of work (Laycock et al., 2009) while learning to appreciate the importance of the approach to the individual; especially important when supervising Indigenous research students.

Undertaking research within the academy invariably requires the Indigenous student to confront many difficult issues such as colonialism, discrimination, racism, and the domination of the Western model of knowledge, all of which has the potential to cause emotional distress. This emotional journey is described as involving "... outrage, pain, anger, humiliation, guilt, anxiety and depression" (Nakata, 1998, p. 4). Vicki described how for her the decolonising process was "brutal and personally confronting. It can also be a process of deconstructing core personal and research beliefs which causes an acute awareness of culpability" (West et al., 2009). For some students, this distress is obviously considerable and the support they require extensive. As described by Nakata et al. (2008, p. 141), the "content, knowledge and perspectives issue, clearly cause frustration, alienation, and/or emotional entanglement for Indigenous students studying in disciplines". There appears to be no easy solution or ready fix to help overcome this distress. We believe that awareness of the potential problem means the supervisor is more likely to be prepared and recognise the need for support when it arises. The supervisor must also assist the student to engage with the discourse of the discipline while remaining cognisant of their need to maintain their own Indigenous standpoint.

Many of the newer qualitative research approaches presuppose a redistribution of power. Approaches such as biography, phenomenology and ethnography have attempted to shift the power relationship within research by minimising the distance and separation in the researcher-participant relationship (Karnieli-Miller et al., 2009). Indigenist research methodology similarly requires a power shift. For the students, this meant they became engaged in an ongoing struggle to be true to their commitment to the participants whilst completing the requirements of the research and the degree. For example, the approach necessitates a power shift back to the

participants around issues such as the direction of the research and how the work is reported. This requires careful consideration, planning and flexibility. Using an Indigenous approach also meant the ethical requirements for working with Indigenous people were more challenging and required they confront issues such as who has the "right to know" and the "right to speak" about particular issues (Laycock et al., 2009). These are complex issues for all involved.

Utilising emerging methodologies also involves risk taking; risk that the academy and the examiners will accept the work. Working on the boundaries or in the borderland spaces, as this is so aptly termed by some (e.g., Clandinin & Rosiek, 2007; Kincheloe, 2001), means taking risks while attempting to make sense of outside fields (Kincheloe, 2001). This is always a risk within the academic discipline, especially when you are relatively alone in borderland spaces. Ways that can assist the students and the supervisor in this regard include attendance at conferences on the methodology and/or the creation of opportunities to meet with esteemed scholars in the field; joining networks and establishing groups where like minded students can discuss issues; co-supervising students or forming groups of students with similar interests; and organising co-presentations and paper writing (Kincheloe, 2001). What we have learned from our experience we want to share with others who will no doubt follow. We believe that Indigenous students must consider the following as they plan their research journey:

- if there is not an Indigenous supervisor available, make sure the proposed non-Indigenous supervisor is aware of Indigenous ways of knowing and has a reasonable understanding of Indigenous culture;
- be sure the non-Indigenous supervisor can adequately support you through the decolonising process or identify other people who can;
- make sure the Indigenous or non-Indigenous supervisor is someone with whom you can feel comfortable and in whom you can place your trust;
- ensure the approach you choose for the research is appropriate for the issue yet also one that values and respects Indigenous knowledge and espouses a liberatory intent;
- find other Indigenous students who are going through this process and work together.

Non-Indigenous supervisors must:

- ensure they have a sufficiently deep understanding of Indigenous culture and belief in their ability to work effectively with the student;
- be prepared to support the students through all of the difficult times; there will be many of these from our experience;

- have, or be prepared to develop, an intricate knowledge of qualitative and Indigenous research approaches;
- be prepared to take the risk of working in emerging research approaches.

In our case, we have worked together as a group to establish our own knowledge and explore our limits, create shared resources and understandings, and collectively develop new ways of researching that value Indigenous ways of knowing and being. We have also been privileged to be part of a research project at our tertiary institution funded under the National Health and Medical Research Council (NHMRC) Building Indigenous Capacity scheme, which also offered support, resources, dialogue, and the opportunity to collaborate with Australian Indigenous scholars.

■ Conclusion

We are very aware that many have trodden this path before us and that many others will follow. Our aim in the paper was to offer insights from our journey of applying the learnings of our Indigenist research predecessors; those who carved the path often at great personal cost. We know we stand on the shoulders of those who have written before us and acknowledge the help and refuge we have found in their work. While their work may not be so evident in the health sciences context, it is important to us to leave the reader with an appreciation of the value of engaging with Indigenist approaches within this context. We believe Indigenist research is not only an imperative for Indigenous researchers but also a gift which offers new methodologies, creative approaches to research, more rigorous ways of conducting research, emergent and innovative approaches, opportunities to help resolve the academic contradiction, and importantly, ways to liberate Indigenous people from the oppressive forces of colonialism.

■ Acknowledgements

We acknowledge the generous support of the Building Indigenous Research Capacity (BIRC) NHMRC grant at James Cook University.

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■ About the authors

Vicki Saunders is a descendant of the Gunggari peoples (Mitchell, Queensland). A member of the Collaborative Research into Empowerment and Wellbeing (CREW) group in Far North Queensland, she is also a member of the James Cook University led Building Indigenous Research Capacity (BIRC) team. Her main research interests are in the area of Indigenous mental health with a particular focus on empowerment, wellbeing and recovery. She is currently completing her PhD entitled "Gaining two way understanding of recovery from Aboriginal people living with a diagnosis of mental illness" through James Cook University.

Roianne West is a descendant of the Kalkadoon people, born and raised on her grandmother's ancestral lands in North-West Queensland. Roianne has extensive experience in Indigenous health and education and maintains a strong connection to community with a commitment to increasing the Indigenous nursing workforce in Australia.

Kim Usher has a background in mental health nursing, nursing education and workforce development. She has considerable experience in the area of Indigenous nursing students, their educational requirements, and retention in the health and nursing workforce. Her research interests also reflect her clinical background in mental health, qualitative methodologies, and the health workforce, although much of what she does today includes the interests of her numerous Higher Degree Research students.

As outlined in the previous manuscript the researchers believe that using an Indigenous research methodology is not only an imperative for Indigenous researchers but also a gift which offers new methodologies, creative approaches to research, more rigorous ways of conducting research, emergent and innovative approaches, opportunities to help resolve the academic contradiction, and importantly, ways to liberate Indigenous people from the oppressive forces of colonialism. Undertaking the journey of discovery that is a necessary part of the process, is however traumatic as explained in the manuscript.

3.9 Design

A mixed methods design was chosen as the most suitable way to undertake the study. Mixed methods studies are appropriate when it is necessary to explore both objective and subjective areas in order to answer the research questions and when the research questions cannot be answered sufficiently by a single approach (Morse & Niehaus, 2009). Basically, mixed method research is the combination of quantitative and qualitative approaches in one study, where the joining together of the two approaches is considered a better way to understand a problem than if either approach was undertaken alone (Creswell & Plano Clark, 2007; Elliott, 2005; Tashakkori & Teddlie, 2003). Mixed methods designs are considered stronger designs than ones that use a single approach only, as the supplemental component is thought to enrich understanding and enhance validity (Morse & Niehaus, 2009).

As indicated in this chapter, a researcher's worldview affects his or her standpoint and thus his or her preferred approach to research. Hence, before beginning a mixed methods study it is important to decide whether the research study is driven by the qualitative or quantitative

perspective, as this influences how the study is conceived and conducted (Hesse-Biber, 2010). One approach, referred to as the theoretical drive, will always drive the research (Morse & Niehaus, 2009). The drive is determined by the research question. In this study, the research was driven from an emancipatory qualitative perspective as the work is underpinned by a critical Indigenous position. This position seeks to understand not just the numbers of Indigenous nursing students who complete, but also examine the factors, both openly visible and hidden, that may interfere with that process while also seeking to bring about a change to the status quo.

Transformative mixed methods are useful when a researcher is using an emancipatory, collaborative, change oriented theoretical framework designed to advance the needs of an underrepresented or marginalised group in society (Creswell & Plano Clark, 2011). In particular, the transformative approach is especially important for people who experience discrimination and oppression and is useful for the ‘...study of the power structures that perpetuate social inequalities’ (Mertens, 2010, p. 4). Australian Indigenous people are one such group. Mertens (2007) explains that transformative research frameworks can be used with any of the current mixed methods designs, as it is the transformative intent of the study, or theoretical position of the researcher, that makes the difference.

The following paper outlines the approaches used to inform the mixed methods design, including the selection of the specific methods towards a transformatory approach to the research study. Importantly, this paper extends the current argument that claims the use of a transformatory methodology informing a mixed methods design is possible, adding that the same can be said of an Indigenous methodology.

3.10 Publication 4 – “Resubmission” Journal of Mixed Methods Research

3.11 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 4: West, R., Usher, K., Foster, K., & Stewart, L. (2012) (Resubmission). An Indigenous mixed methods study of undergraduate Indigenous student participation in nursing. <i>Journal of Mixed Methods Research</i> , JMMR-11-066.R1.				
Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 3 Methodology and methods</i>	An Indigenous mixed methods study of undergraduate Indigenous student participation in nursing	Resubmitted March 2012 <i>Journal of Mixed Methods Research</i>	West (40%) Usher (30%) Foster (20%) Stewart (10%)	2.219
<u>Declaration by co-authors</u>				
The undersigned hereby certify that:				
The above declaration correctly reflects the extent of the candidate’s contribution to the work and the extent of contribution of each co-author;				
They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;				
They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;				
There are no other authors of the publication according to these criteria;				
Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and				
The original data are stored at the following location and will be held for at least five years from the date indicated below:				
Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.			
Candidate signature	Print Name	Date		
	Roianne West	23/03/2012		
Signature 1		Date		

	Kim Usher	23/03/2012
Signature 2	Kim Foster	Date 23/03/2012
Signature 3	Lee Stewart	Date 23/03/2012

Title: An Indigenous mixed methods study of undergraduate Indigenous student participation in nursing.

Abstract

Strategies to ensure improved health outcomes for Indigenous Australians include increasing the number of Indigenous nurses in the workforce. However, the numbers of Indigenous nurses entering the workforce remains low. Indigenous people long history as the subjects of research has lead to a reluctance to participate. In order to undertake meaningful research with Indigenous people we conducted a project from a position that values Indigenous people and their ways of knowing. The paper describes the tenets of Indigenous research methodology and demonstrates how we used this approach to drive a mixed methods study which aimed to explore the factors related to Indigenous student enrolments, progression, and completions in Australian university pre-registration nursing courses.

Key words: Indigenous mixed methods; Indigenous research methodology; Indigenous nursing students; Dadirri;

Introduction

Despite their right to equal health status, Indigenous people from countries such as Australia, Canada and New Zealand, suffer health disparities when compared to non-indigenous populations within their countries (United Nations, 2007). It is well known that Indigenous Australians have higher levels of ill health and mortality than their non-indigenous counterparts (Paradies, Harris & Anderson, 2008). For the years 2005-2007, life expectancy at birth was estimated to be 67 years for Australian Indigenous males and 73 years for Indigenous females, representing a difference of 11.5 and 9.7 years, respectively, when compared with all Australians (AIHW, 2011). Further, Australian Indigenous people experience endocrine, metabolic and nutritional disorders at 6-7 times the rate of non-indigenous Australians and cardio vascular disease rates are higher again. Indigenous male death rates due to external causes such as accidents are more than three times those of non-indigenous males, and 80% of the mortality gap between Indigenous and non-Indigenous Australians is attributed to chronic disease (AIHW, 2011).

The healthcare of Indigenous people in Australia is much more complex than health and socio-economic disadvantage; it is linked to institutional racism where Indigenous people are the subject of victim blaming and negative stereotyping, where health services continue to deliver culturally inappropriate care based on the Western biomedical model, and access to services is often limited (Sherwood, 2009; Durie, 2001; McCreanor & Nairn, 2002). Nurses, as the largest members of the health workforce, have an important role to play in

addressing this critical issue. Strategies to ensure Indigenous Australians receive higher quality and more culturally safe healthcare include increasing the number of Indigenous nurses in the workforce (INEWG, 2002; Goold & Usher, 2005; XXXXXX, 2010; Goold, 2011; Bryant, 2011), and ensuring that non-indigenous nurses are better prepared to deliver culturally safe care (Cioffi, 2005; Noble et al., 2009). Indigenous nurses are in a unique position to improve the health of Indigenous people; “They have the expertise and experience in Indigenous health issues as well as deep understanding of culture, spiritual and community needs” (Bryant, 2011, p. 8). Indigenous nurses are also committed to caring for their own people (Stuart & Nielsen, 2011), and understand the reluctance of Indigenous Australians to access mainstream health care services or receive treatment from non-indigenous health workers (Paradies et al., 2008). Ideally, the numbers of Indigenous nurses in the nursing workforce should be similar to the representation of Indigenous people in the Australian population (approximately 2.4%) but this is not the case and current estimates indicate the numbers of Indigenous nurses remains around 0.8% (XXXX, 2010; Bryant, 2011). In order to overcome the problem a threefold increase in the number of Indigenous nurses and midwives is needed (Bryant, 2011).

Unfortunately, even though the numbers of Indigenous students entering nursing in the last few years has increased significantly, the numbers entering the workforce remains low because of poor retention and low course completion rates (Rigby, Duffy, Manners & Latham, 2011; XXXXXX, In press). In order to better understand the reasons behind the lack of Indigenous student completions in undergraduate nursing courses at a rate in keeping with commencements, we developed the current study. In doing so, we were aware

that Indigenous people have long been the subjects of research, which has led them to develop a deep suspicion of research and researchers, and a reluctance to participate in research (Humphery, 2001). This is because Indigenous Australians, as other Indigenous groups, have come to realise that research has not only served to perpetuate ongoing racism and colonialism, but has failed to value Indigenous ways of knowing and being in the world (Smith, 1999; Sherwood, 2010). As explained by Okolie (2005, p. 253), a “...research method and knowledge system that pejoratively dismisses that which it cannot explain as mere myth or narrative (negatively defined) can hardly be considered unbiased and complete.” As a result of this deep concern about Western forms of research, the Australian Indigenous Research Agenda (Henry et al., 2002) was instigated. This called for a challenging of traditional forms of research and for the adoption of more progressive kinds of knowledge development that privilege the diversity of Indigenous experience (Rigney, 1999; Rigney, 2002). In particular, Rigney (1999, p. 114) calls for research methods that “...strengthen the struggle for emancipation and the liberation from oppression” and which contribute to self-determination. The intent of research undertaken from this perspective is directed towards social justice with the purpose of overcoming power imbalances, domination, and marginalisation experienced by some underrepresented members of society (Sweetman, Badiee & Creswell, 2010). The aim of this paper is to describe the tenets of Indigenous research methodology used in the study and demonstrate how we used the approach to drive a transformative concurrent mixed methods study that aimed to explore the factors related to Indigenous student enrolments, progression, and completions in Australian university pre-registration nursing courses. The quantitative phase involved the collection and analysis of statistical data related to Indigenous nursing student

enrolments, attrition, progression and completions, and the qualitative phase explore student and academic perspectives of barriers to and strategies for success. In this study, the lead researcher (Author 1) is an Indigenous nurse researcher, and an advisory group guided the study with Indigenous elders and senior researchers. The design of the study, and rationale for this approach, is discussed below.

An Indigenous research methodology and mixed methods

In order to undertake meaningful research with Indigenous nurses and staff, we needed to conduct the research from a position that valued Indigenous people, their knowledge, and their input to the research study while also recognising the importance of a social justice, advocacy, or transformatory intent (Creswell & Plano-Clark, 2010). In other words we were determined to avoid a situation where our research continued the search for understanding of an issue of importance to Indigenous people by using an approach that failed to respect or acknowledge that Indigenous ways of seeing and being in the world are different (Kovach, 2009). We chose to use an Indigenous methodology which necessarily infers a transformative or emancipatory intent because Indigenous research is based on respect for Indigenous knowledges, a desire to change the status quo, and intent to overcome methodological discrimination (Kovach, 2009). In our case, we not only wanted to bring to the notice of the academy the issues related to failure to complete courses by Indigenous students but also wanted the stories of successful students, those who have overcome adversity, to be heard. In this way we propose there is an opportunity to bring about change in the academy through the impact on staff interviewed and by the release of manuscripts and reports with the potential to empower people to change. In addition, we

also hope that interviewing the students and asking them to focus on their success will have helped to empower them to see themselves in a new and different way; as those capable of success and capable of changing the health of their people through their future efforts. The adoption of a qualitative phase that incorporated the Dadirri method of guiding data collection was also considered pivotal to the intent of the study. Qualitative research privileges no single practice over another; it is the role of the qualitative researcher as *bricoleur* to piece together the best design to conduct the research (Denzin & Lincoln, 2003). Hence the dadirri was chosen because it is based on respect for relatedness and relationships; a key component of Indigenous epistemology (Wilson, 2008).

Why an Indigenous research methodology is necessary

According to Okolie (2005), Western research methodologies perpetuate the creation of “others” by inferiorising, delegitimizing and excluding groups such as non-Euro-American peoples, women, homosexuals, and people who are disabled. In the process, these groups are pathologised as social problems (Okolie, 2005). As a result, it has become “...easier to ‘blame’ clients for their health problems than reflect on the real causes” (Sherwood, 2009, p. 1). We argue the same is true of much of the past research of Australia’s Aboriginal and Torres Strait Islander peoples. Western research methodologies were created for the study of Western rational, industrial, colonising/dominating society (Okolie, 2005; Kovach, 2009). Therefore, those same research approaches and research methods are not necessarily suited to the study of peoples who relate to the world differently because of their different

social locations and different worldviews that ultimately translate to different lived experiences. The Western knowledge system tunes out to the knowledges and ways of knowing that has served the “others” for centuries and refuses to give it any credibility (Okolie, 2005; Kovach, 2009). As a result, Indigenous scholars such as Rigney (1999), Smith (1999), Martin (2003), Fredericks (2007), Wilson (2008), Kovach (2009), Sherwood (2010), and Chilisa (2012), encourage Indigenous researchers to look for new anticolonial epistemologies and methodologies to reconstruct their knowledges and cultures as they strengthen their struggle for emancipation. Wilson (2008) encourages the development of new Indigenous ways of doing research as he claims the mere act of inserting an Indigenous perspective into an existing paradigm is not effective as it fails to remove the underlying epistemology and ontology upon which the paradigm is built. Indigenous methodologies differ inherently from existing Western methodologies as they “...recognize a relational existence that promotes relations among people, the living and the nonliving, the environment/land, and the cosmos...All perspectives agree to ethical principles that nurture harmony among people and to a relational accountability that emphasizes responsibility of the researchers and the participants to each other and the rest of the community, reciprocity, and rights of the researched to knowledge produced” (Chilisa, 2012, p. 122). As a result, it is recommended that Indigenous researchers adopt Indigenous methodologies for their research (Kovach, 2009).

Indigenous methodology and a mixed methods design

Transformative mixed methods are claimed to be useful when a researcher is using an emancipatory, collaborative, theoretical framework designed to advance the needs of an

underrepresented or marginalised group in society (Creswell & Plano-Clark 2010). In particular, the transformative approach is especially important for people who experience discrimination and oppression and useful for the “...study of the power structures that perpetuate social inequalities” (Mertens 2010, p. 4). Australian Indigenous people are one such group, and in the current study, this included Indigenous nursing students, the majority of whom were women. Mertens (2007) explains that transformative research frameworks can be used with any of the current mixed methods designs, as it is the transformative intent of the study, or theoretical position of the researcher, that makes the difference. The advantages of using a transformative approach to mixed methods research has been outlined by Creswell and Plano-Clark (2010, p. 99) as follows:

- The researcher positions the study within a transformative framework and an advocacy or emancipatory worldview.
- The research helps to empower individuals and bring about change and action.
- Participants often play an active, participatory role in the research.
- The researcher is able to use a collection of methods that produces results that are both useful to community members and viewed as credible to stakeholders and policy makers.

Mertens (2011, p. 196) challenges researchers to consider whether mixed methods research could be transformatory. She asks researchers to consider how mixed methods can “...support the furtherance of human rights or social justice...engage appropriately with different members of the...community, service providers, administrators, policy makers....include reciprocity in the design....leave the community better off...provide a

platform for authentic engagement between the researcher and the community”. She also challenged researchers to consider ways to support and include the voices of the participants, reveal different versions of reality, and contribute to positive social change.

However, we believe Indigenous research methodology, although sharing some similarity in its aims, is not the same as transformative research; although transformative studies are often focused on marginalized groups such as Indigenous peoples they remain a Western form of research guided by Western epistemologies. Furthermore, while on the surface they may appear to have some of the same qualities and characteristics, the underlying principles of each approach differ. For example, as argued by Kovach (2009, p. 30), Western and Indigenous inquiry can only walk together so far as each is underpinned by a different language system inquiring into the nature of tribal language, and in addition, Indigenous methodologies are guided by tribal epistemologies, such as interaction and interrelatedness, animate, cyclical and spiritual (Kovach, 2009), which are not the same as Western knowledge. However, when the use of both qualitative and quantitative approaches is considered necessary to make the answer more complete, mixed methods designs are most useful (Creswell, 2007). The underpinnings of a transformative mixed methods design seems a good fit as the intent of the current research is to empower participants or members of a community: Indigenous nursing students. However, we argue that, given the focus of the study was on Indigenous students, an Indigenous methodology where the study questions could be answered more completely by adopting both quantitative and qualitative approaches is more appropriate. Mixed methods studies will always be ‘driven’ by one approach; otherwise paradigms become confused and messy. Hence, the dominant

paradigm should fit with the researcher's worldview, as this is the origin of the question (Morse & Niehaus, 2009), and determines how the project is conceived and conducted (Hesse-Biber., 2010). In this research, the dominant research paradigm was interpretive/qualitative, and the theoretical drive was Indigenous research methodology.

How we conducted a mixed methods project informed by an Indigenous research methodology

The current study aimed to understand why completions by Australian Indigenous nursing students have not kept pace with the increasing enrollments and why Indigenous students continue to have much lower successful completion rates in nursing when compared to non-indigenous students. We are concerned about this outcome as our nurses are critical to improving the health outcomes of our people. The research questions were:

1. What are the national commencement numbers, progression, attrition, and completions rates for Indigenous nursing students since the publication of the final report of the Indigenous Nurse Education Working Group (INEWG, 2002) when compared to non-indigenous nursing students?
2. What are the factors identified by Indigenous nursing students and academics as enablers to successful course completion?
3. What are factors identified by Indigenous nursing students and academics as barriers to successful course completion?

4. What strategies are perceived as resulting in improved completion rates as identified by Indigenous nursing students and academics?

To uncover the issues facing these nurses required an in-depth interview, where nurses could share their stories. We also knew it was critical to analyse Government data about nursing student enrollments, progressions, attrition and completions to draw a more complete picture of the current situation. In addition, as an Aboriginal Australian woman, the lead researcher considered it important for the research to be conducted from an Indigenous perspective that values Indigenous peoples' knowledge. In other words, in addition to an interpretive theoretical drive, the study also had an Indigenous theoretical drive. As highlighted previously, the Indigenous perspective respects the Indigenous worldview, which was in-keeping with the standpoint position of the researcher.

Design

We chose a concurrent mixed methods approach to conduct the study (see Figure 1). This approach collects both types of data at the same time and then analyses and integrates the data to reveal the findings.

Data collection

Prior to data collection, a research advisory group was formed. Key Indigenous nurses and educators were invited to join the group. The group provided advice on the research questions, data collection methods, and reviewed the data analysis and study findings. The inclusion of this group was considered pivotal to an Indigenous approach to mixed methods research. We collected quantitative statistical data from the Department of Education,

Employment and Workforce Relations (DEEWR), Higher Education Statistics Unit, collected annually from all higher education institutions, which were purchased for use in the study. Data from 2002 to 2008 (the latest year available at the time of analysis) were reviewed for information specific to Indigenous nursing students. We also conducted interviews with eight students enrolled in third year of a nursing undergraduate degree at four Queensland universities, and interviews with key stakeholders such as academics and support persons at Queensland universities that conduct nursing undergraduate degree courses.

Due to our awareness that Indigenous people have been bombarded by research, especially research conducted *on* them, and being mindful that interviews can be interpreted as patronising and condescending (Okolie, 2005), the interviews were conducted using the Dadirri approach. The philosophy of Dadirri is a “way of being with people” named by Miriam Rose Ungunmerr-Baumann, an Aboriginal woman from the Daly River, Northern Territory, Australia (Atkinson, 2002). As claimed by Atkinson (2002), Dadirri is a way of life that encompasses practices associated with the importance of community, reciprocity, reflectivity, and trustworthiness. Ultimately, Dadirri means listening to and understanding the self in relationship to others; the notion of truly listening to others is pivotal to the method (Atkinson, 2002). The essence of Dadirri encompasses practices that recognise the importance of community, the need for reciprocity where the researcher and participant/s share something of themselves, and understanding of the need for trustworthiness because people must hold knowledge that is important to another person (Atkinson, 2002). These are all consistent with the tenets of Indigenous research approaches. Further, research based

on Dadirri acknowledges the need for research that empowers Indigenous people through a process of deeper and deeper listening and understanding (Atkinson, 2002). The use of the Dadirri approach requires the researcher to cast aside pre-conceived ideas, take the time needed to get to know the participant, be prepared to share something of themselves, and act in a way that engenders trust (Atkinson, 2002). Dadirri can be used by Indigenous researchers to facilitate the conduct of research that is mindful of the notions of reciprocity and respect (West, Stewart, Foster & Usher, In press).

Data analysis and integration

The quantitative data were analysed using descriptive statistics. Data were extracted and analysed for commencements, progression and attrition, and completion trends assuming Equivalent Full Time Student Load (EFTSL). Data was taken from the time of commencement to completion of degree. This measure has been used extensively in similar situations and is useful because it can be readily determined with a high level of accuracy (Sheridan & Pyke, 1994). Qualitative interview data were analysed firstly using content analysis, and then narrative analysis. Content analysis, a common approach to qualitative data analysis, is defined as a process of coding and identifying themes or patterns (Hsieh & Shannon 2005). In this study content analysis was used with the student and academic interviews to identify barriers and strategies perceived by the participants. Narrative analysis was then used separately with the student interviews to explore successful completions by Indigenous students. A modified form of Emden's eight step approach to narrative analysis was used (Emden, 1998). Narrative analysis is a good fit with research that has a critical intent as in this study as the making of meaning through the process of

storytelling can not only be important ways of dealing with macro-social oppression but also has the potential to contribute to the transformation of the oppressor (Connelly & Rosiek, 2007)

Integration of data in mixed methods study is important and the researcher must decide how they will integrate their data (Hesse-Biber, 2010). In this study we collected and analysed both quantitative and qualitative data simultaneously. We then combined both data sets in an attempt to unravel the complexities of the situation. Importantly, we remained aware of the need to conduct the integration and analysis in ways that recognised the potential for power relationships, that voices are often polluted and affected by power relations, and how different forms of oppression subjugate people (Okolie, 2005) (see Table 1 for an example of how the integrative thread was realised). Each research question was analysed from multiple perspectives looking for an integrative thread that held the ideas together.

Insert Figure 1: Integration of data (about here)

Results

Our results indicated that although Indigenous students are entering nursing courses at greater rates than ever before, their completion rates are not improving at a similar rate. In fact, Australian Indigenous nursing student completion rates have consistently been around 30% less than that of non-indigenous nursing students for the last 7 years (XXXXXX &

XXX, In press). In addition we found that Indigenous nursing students identify the following barriers to completion: Lack of cultural safety in Schools of Nursing including whilst on clinical placement; lack of academic preparedness; lack of personal attributes; perceived lack of support strategies or engagement with them; the characteristics of the nursing programs themselves ie mode of delivery; and academics' lack of awareness of the unique needs of Indigenous nursing students. The staff and students also identified a number of success strategies including: connecting with other Indigenous students, staff and university support, an inclusive pedagogy as a resilience strategy, and, strategic partnerships between schools and Indigenous units. The narratives revealed stories that supported the barriers and strategies identified in the content analysis.

Discussion

Our research was designed to shed light on how Indigenous students perceive the university nursing experience and what factors they contribute to their success or failure. All researchers need to grapple with the relevant issues related to their project. For us it was important that the research was not only conducted in an ethical way that was respectful of Indigenous people, but also that it was conducted in a way that valued Indigenous epistemology. It was therefore pivotal that we conducted the research fully aware of the potential for power differences. Even though the first author, an Indigenous academic, collected the data, the participants were still considered vulnerable, not just because they were students but because they were also Aboriginal and Torres Strait Islander students. It was also essential to consider whether the research had the potential to be transformative – i.e. to make a change to the problem. Could we tell these students that this work would

make a change in course completions for those to follow? We believe policy makers and others will use the findings from this research to begin a process of change that will eventually help to overcome the current disadvantage faced by Indigenous nursing students in the current system. We will ensure the policy makers are aware of the study outcomes by lobbying key government officials, university leaders, and nurse academics. As the first evaluation of the outcomes of the pivotal 'Getting em n keeping em' Report (2002), which reported on a study of Indigenous student participation in undergraduate nursing courses across Australia 2000-2002, we propose the results of this study will be used to empower change in the future. As explained so clearly by Dei (2005), anti-racism or decolonising research means challenging and rupturing the very structures within which we work on a day-to-day basis. Unfortunately, the history of research means that there is mistrust on the part of potential participants. However, decolonising research approaches, such as the Indigenous methodology employed in this project, help to challenge the colonial and imperial relationships evident in the topics studied and the privileged methodologies; the decisions about who is allowed to speak and whose voice is heard; and, how research is validated and legitimated (Smith 1999). This research has challenged these dominant forces through the application of an Indigenous methodology and by the choice of the dadirri data collection technique and analytic processes that ensured the stories of the Indigenous students were heard.

In response to criticism about the lack of emancipatory intent in mixed methods research, the transformative approach arose (Sweetman et al. 2010), in a similar way that Indigenous

research arose because of criticisms of Western ways of research failure to address the needs of disenfranchised communities (Sherwood, 2009). Both the transformative and Indigenous research methodology recognise the importance of studying issues such as power, oppression, and domination (Sweetman et al. 2010). The combination of a mixed methods study with an Indigenous research methodology, we argue, has supported and strengthened with the conduct of this study that aimed to redress some of the disadvantages faced by Australian Indigenous nursing students in the current tertiary education system. In undertaking the study we were cognisant of the importance of participant and community involvement, and the goal of change that must result from all forms of transformative research. The Indigenous researcher, Author 1, must have sufficient familiarity with community to determine the relevant agency of diversity. They also have an obligation to bring the voices of the less powerful into the research (Mertens, 2010).

Conclusion

Further research is required to help determine the best way to address the institutional racism and educational disadvantage obvious within Schools of Nursing and the Australian health system if we are to truly improve Indigenous health outcomes. Indigenous mixed methods approaches offer the potential to address inequities by uncovering not only their existence but also the power structures that help to perpetuate them (Mertens, 2010). Armed with the knowledge resulting from this study related to the university preparation of Indigenous students and with the suggestions for the development of specific cultural

strategies for dealing with racism, both institutional and personal, a foundation for better outcomes for students can be laid. As a result, higher numbers of Indigenous students will complete nursing courses and be available in the health system to provide culturally appropriate and sensitive care to Indigenous people and contribute towards ‘closing the gap’ in the current health disparities.

Indigenous researchers recognise that research undertaken by the dominant group will always serve and be biased in favour of that group (Okolie, 2005); the question is not so much about the method used to collect the data, but more about the theoretical drive of the research, the types of questions asked, and for what purposes. Indigenous mixed methods researchers must ensure that the process of the research is collaborative and engaging, values the Indigenous perspective and voice (Dei, 2005), and contributes to the social good (Mertens, 2011).

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Re-submission

Figure 1: Integration of Data

Integration of Data of Barriers And Enablers That Impact On Successful Indigenous Nursing Student Completions In Australia As Identified By Students and staff: A Narrative Inquiry		
QUAN Results	QUAL Results – Thread <i>Culture</i>	
	CONTENT ANALYSIS	NARRATIVE INQUIRY
<p>Completion Rates</p> <p>NIA 64.6%</p> <p>IA 36.3%</p> <p><i>28.3% difference</i></p>	<p>Students</p> <p>Barrier Feeling Culturally unsafe Frequency 187 of 554</p> <p>Enabler Connecting Indigenous Nursing students Frequency 241 of 374</p> <p>Staff</p> <p>Barrier Cultural Obligations “They were cultural issues. But nobody understood. The students didn’t understand that it was culture and the academics didn’t understand and the clinical nurses didn’t understand that the problem was culture. But because of that enormous difference <i>between</i> the cultures, those students were labeled as ineffective or bad or incompetent or whatever else”. (T11 p.9)</p> <p>Enabler Indigenous Academics - “to see somebody up there as an example of what they can achieve has got to be really important. Because so many of them come in with the feeling, “I don’t know what I’m doing here, I don’t really think I can manage this. I don’t think I’m good enough to do this”, and having an Indigenous Academic there, I think helps to convince them that it is possible, somebody can do this; if she’s done it well maybe I can do it”. (T11, p3)</p>	<p>Students only</p> <p>Barrier “I haven’t met any other Indigenous nursing students. I was the only Murri student in tutorials and lectures a lot of times. I find I try to fit in with the rest of the group – it’s not easy. At times I feel isolated”.</p> <p>Enabler Sub plot - “The healing strength through connections”</p> <p>“I felt welcome at the Indigenous support unit...and because blackfellas, eh, when you come here, they’re interested in where you come from and who your family are, and suddenly you find you’re connected some way and that you’re a long way from home, from country but here that connection here – here are my family. And that’s what keeps me here that you get the support”</p>

As outlined in the previous manuscript, mixed methods studies can be conducted in a variety of ways. For example, they can be conducted sequentially, simultaneously or have two types of research with one embedded in the other (Creswell, 2003; Hesse-Biber, 2010). In this study a concurrent mixed methods study was undertaken (See Figure 3.1).

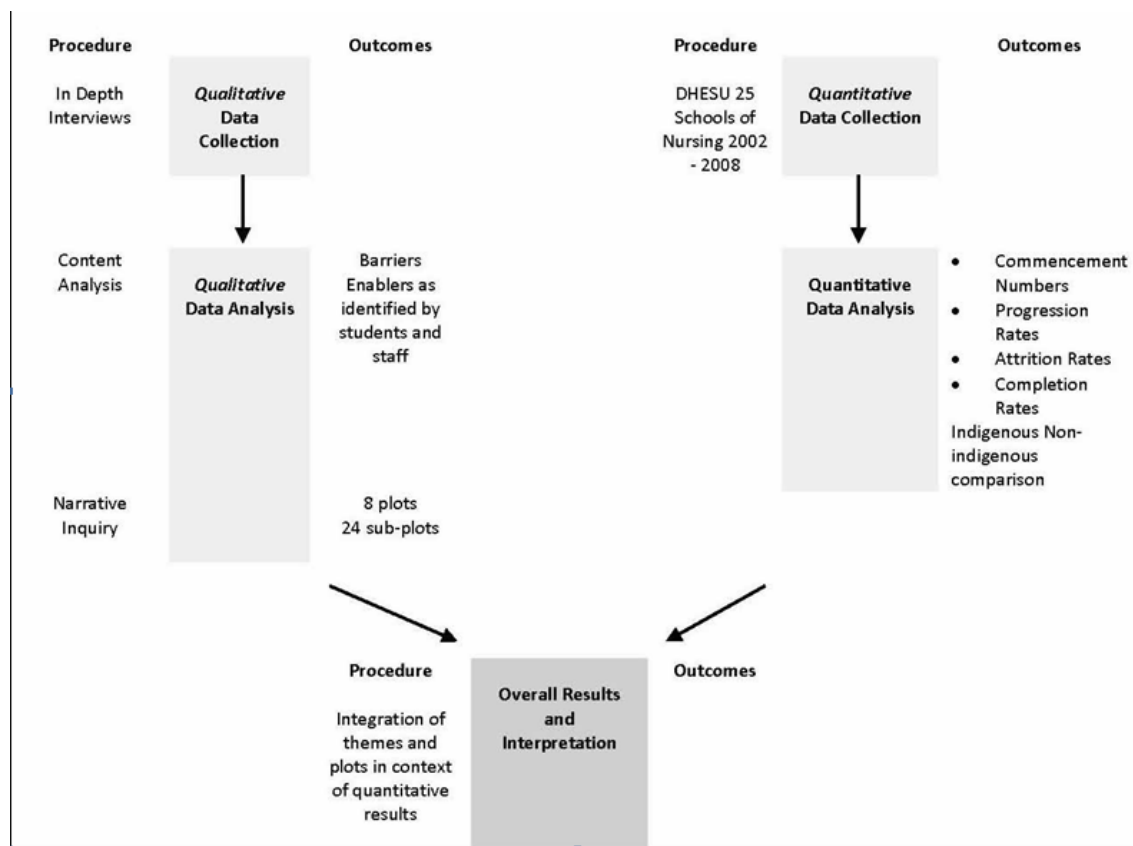


Figure 3.1 Diagrammatic Overview of a Concurrent Mixed Methods Design

Reference: Department of Employment Education and Workplace Relations Higher Education Statistics Unit (DHEsu), 2008

3.12 Approach

3.12.1 Sample

A convenience, purposive sample was used for the qualitative data collection. Convenience samples are appropriate when people who have particular knowledge are sought (Morse & Niehaus, 2009). This sampling approach is common in qualitative studies (Streubert-Speziale & Carpenter, 2003). The sample size was eight students and fifteen academics from four Queensland universities as outlined above.

The sampling process in the quantitative phase of the research was also convenience sampling. The data available from DHESU was collected and analysed for the years 2002-2008 (the latest available at the time of writing the thesis was 2008) (DHESU, 2009a, 2009b, 2009c, 2009d). Twenty-five of the thirty-nine schools of nursing in Australia qualified for the quantitative component of the study and four of the seven schools of nursing in Queensland qualified for the qualitative component of the study.

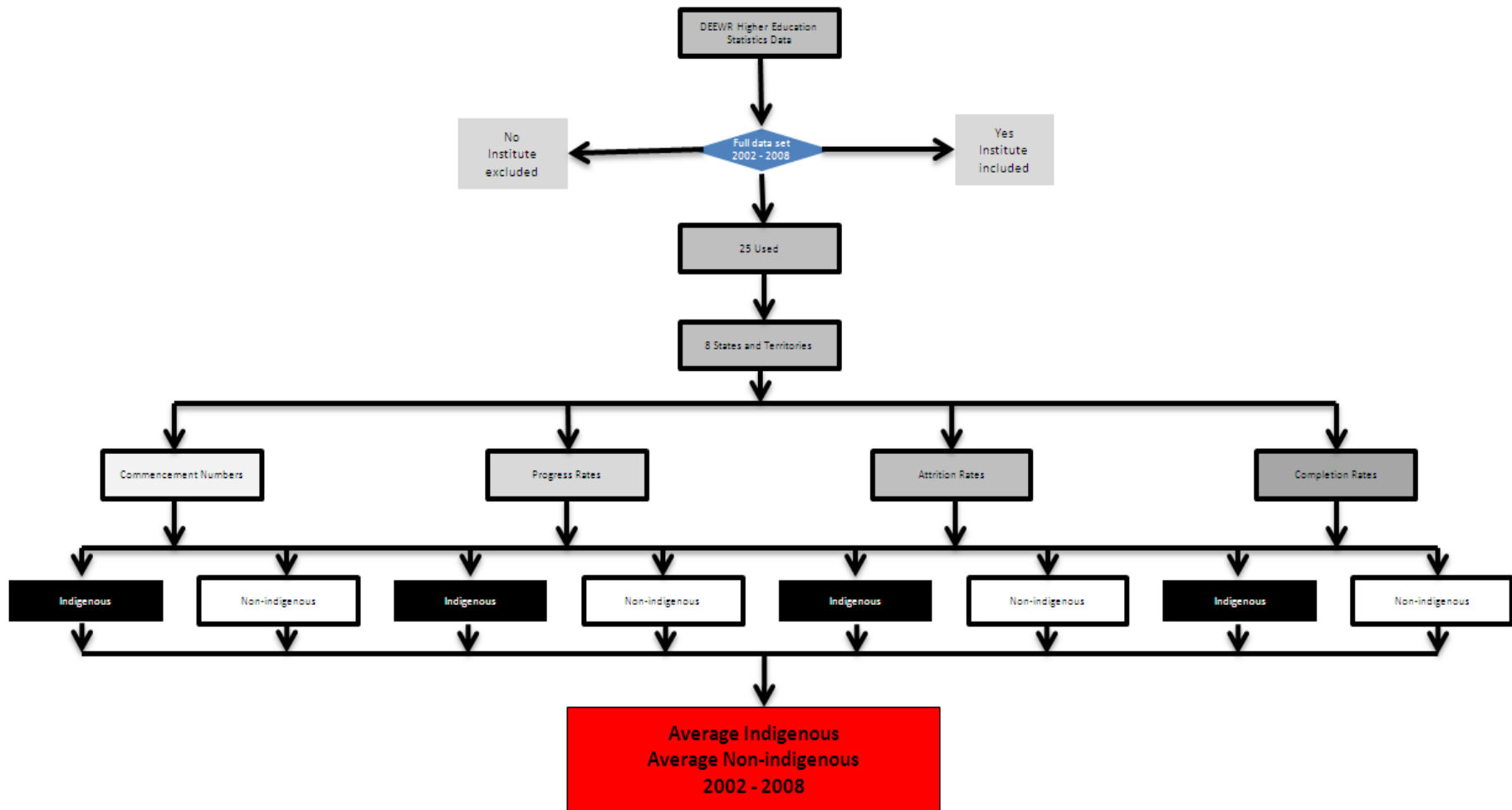


Figure 3.2: Quantitative Data Process Map

3.12.2 Selection of Participants

All third year Indigenous nursing students enrolled at the four qualifying schools of nursing in Queensland universities were considered potential participants. Students were invited to take part in the study by way of advertisements and word of mouth, and the researcher interviewed those who volunteered. Eight students volunteered to be interviewed for the study. Interviews were also conducted with academics, both Indigenous and non-Indigenous and also included course coordinators and heads of schools. In total, fifteen staff were interviewed.

3.12.3 Indigenous Reference Group

An Indigenous reference group was formed to guide and inform the research and the researcher. The six members included Indigenous academic and Indigenous registered nurses from various clinical areas such as primary health care, clinical care, and policy development. An Indigenous elder was also an integral member of the group. The terms of reference were developed in conjunction with the group and included issues such as attention to Indigenous cultural protocols, ethical considerations and guidance on issues identified by the participants. Meetings with the group were held by teleconference.

3.13 Data Collection

3.13.1 Site Visits

Site visits were conducted to each of the qualifying university schools of nursing in Queensland. During these visits data was collected about the current curriculum, numbers of

Indigenous students, and other relevant information. Interviews were also conducted with Indigenous nursing students who volunteered and academics that held relevant positions in the Schools and were willing to be interviewed.

A critical dimension of the search for Indigenous knowledge involves the insight Indigenous people brings to the study as colonised people (Smith, 1999). 'In privileging the first perspective models of Indigenous qualitative research method, we not only provide processes to keep our Indigenous identities and knowledges safe but also provide space for hope and the potential of moving forward to the realisation of a non-colonial research future' (Rigney, 1997, p. 115). The vehicle to ensure this occurred in this study was in-depth interviewing using the Dadirri approach, undertaken with a convenience sample of consenting Indigenous students enrolled in the pre-registration nursing program in the identified Schools.

Interviews are a common practice in qualitative research (Streubert-Speziale & Carpenter, 2003). Because of the importance of postcolonial research providing a space in which the colonised 'other' can refocus on their own experience (Chilisa, 2012), the interviews with Indigenous participants were conducted utilising the Dadirri approach; a deep contemplative listening to another in a reciprocal relationship (Atkinson, 2000). This approach '...is a principle of inter-personal relations central to the cultures of Aboriginal nations...it is, yet, an obligation in common to contemplate, in real time, everything that you hear - to self-reflect as you listen, and then, tellingly, to act on what you've registered.' (Gabb & McDermott, 2007, p. 5). The Dadirri method requires that the researcher situate themselves within an Indigenous universe. This means they must let their SELF be known, become familiar and transparent. For example, the researcher revealing something of themselves, like clarifying some-one

traditional country, language/family group and position within the kinship system. This is the Indigenous way of introduction and acknowledgement of obligations and commitments and rules of social engagement, which cuts through the professional exterior to the ordinary person underneath (Gabb & McDermott, 2007). The interviews with students used an informal open questioning style otherwise known as ‘yarning’ within Indigenous circles, which is consistent within an Indigenous research framework. Interviews with non-Indigenous participants adopted a conversational approach, also commonly used in qualitative research (Streubert-Speziale & Carpenter, 2003).

Each interview took approximately 1-2 hours to complete and included questions such as ‘what do you think are the factors involved in the high numbers of Indigenous student completions from this School?’ The interviews were all conducted in a private and conducive environment that was selected or approved by the participant. All interviews were audio-taped, transcribed verbatim and turned into text.

The next manuscript offers an overview of the importance and usefulness of Rigney’s (1997) Indigenist Research Methodology (one specific approach to Indigenous research) and the Dadirri approach, and discusses the links between Dadirri and the work of Freire and Habermas, two earlier research theorists also driven to develop different ways of researching people by their concern for marginalised and disempowered groups.

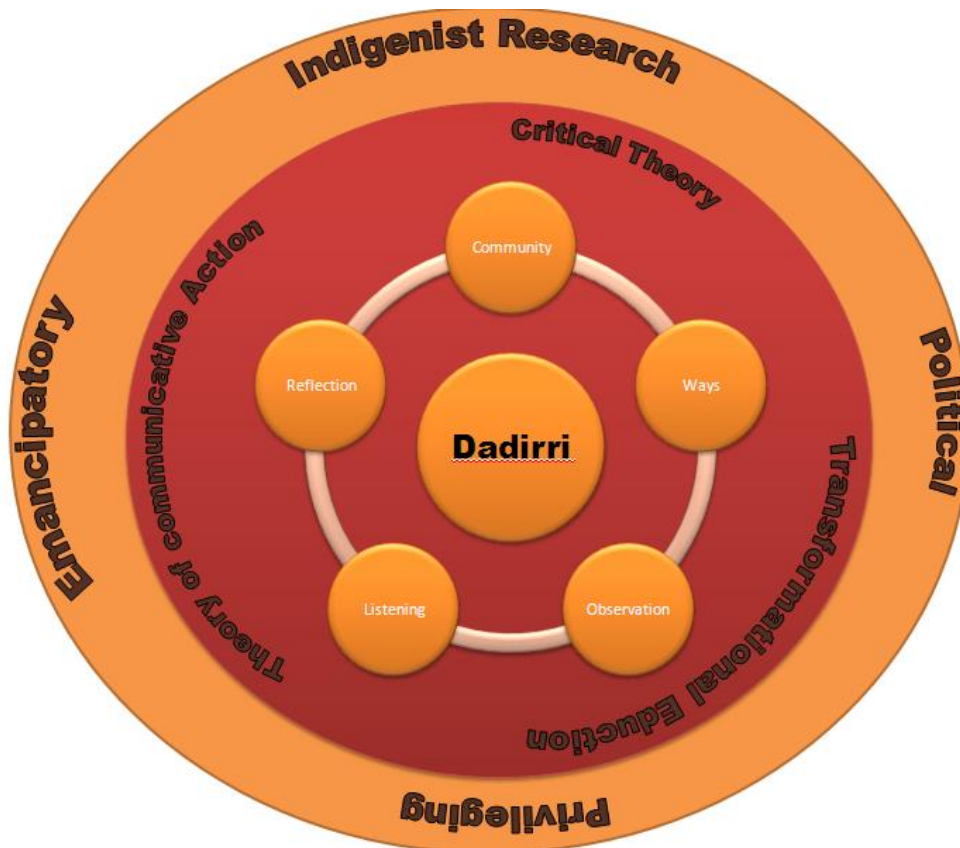


Figure 3.3: Indigenist Research Model

3.14 Publication 5 – ‘Published’ Qualitative Health Research

3.15 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows:

Publication 5: West, R., Stewart, L., Usher, K. & Foster, K. (2012). Through a critical lens: Indigenist research and the Dadirri method. *Qualitative Health Research* (Accepted for publication).

Thesis	Article	Publication Details	Author Contributions	Impact Factor
Chapter 3: Methodology and methods	Through a critical lens: Indigenist research and the Dadirri method.	Accepted: January 2012 <i>Qualitative Health Research</i>	West (50%) Stewart (20%) Usher (20%) Foster (10%)	2.264

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	L Stewart	Date 23/03/2012
Signature 2	Kim Usher	Date 23/03/2012
Signature 3	Kim Foster	Date 23/03/2012

Qualitative
Health Research

Through a critical lens: Indigenist research and the Dadirri method

Journal:	<i>Qualitative Health Research</i>
Manuscript ID:	QHR-2011-0300.R4
Manuscript Type:	Research Article
Keywords:	Aboriginal people, Australia, nursing, nursing, cross-cultural

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Manuscripts

Review

Abstract

Indigenous scholars have addressed the problematic nature of research by adopting methodologies that fit well with their communities and that relate effectively and culturally with how knowledge is shared to give indigenous people a voice. In this article, we discuss dadirri, an indigenous research method and way of life, as a vital research framework, connecting it to other relevant political and critical methodologies such as Freire's transformative education process and Habermas' theory of communicative action. In doing so, we illustrate how this methodology provides a significant framework for indigenous researchers undertaking liberatory studies that promote change.

Keywords

Aboriginal people, Australia; critical methods; health care, culture of research, cross-cultural

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3 Indigenous peoples have long suffered from the imperialism and colonialism of the modern
4 world. In many cases, they have been displaced and become minorities in lands where they once
5 held traditional ownership. This displacement has often made them merely subjects of research.
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8 As a result, although indigenous peoples around the world have often been in the position of the
9 researched, they have seldom been “the initiator, manager or co-investigator of research”
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15 (Rigney, 2006, p. 32).
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18 The aboriginal and Torres Strait Islander peoples of Australia have become extremely
19 critical of the research undertaken on their communities (Humphery, 2001). The indigenous
20 people of Australia, in particular, recognize that research has not only served to perpetuate
21 ongoing racism and colonialism, but has also failed to value indigenous thinking and worldviews
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24 (Martin, 2003; Sherwood, 2010; Smith, 1999). Smith (1999) explains that “Western research
25 brings to bear on any study of indigenous peoples, a cultural orientation, a set of values, a
26 different conceptualization of such things as time, space, and subjectivity, different and
27 competing theories of knowledge, highly specialized forms of language, and structures of
28 power”. (p. 42)
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39 Using research methods that are culturally relevant and safe can be difficult when
40 academia claims that valid and rigorous research can only be produced through the dominant
41 ways of knowing, quantitative study, and the silencing nature of positivism. Therefore,
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44 identifying the best method for researching indigenous peoples can be difficult, especially within
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46
47 the health sciences where quantitative and positivist research practices and theories have
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50 historically prevailed. The practices and theories embedded within western knowledge traditions
51 uphold only the assumptions of its paradigm (Saunders, West, & Usher, 2010).
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4 As Sherwood (2010) pointed out, “the field of indigenous health research is littered with
5 experts [*sic*] who write from a cultural hegemonic approach” (p. 98). The current war against
6 indigenist research is fought on many levels, as indigenous people find their voices and discover
7 truths in their ongoing battle against racism. Although the war continues, some battles have been
8 won: “. . . the field of indigenous health research has been transformed over the past two
9 decades, especially in terms of how researchers are expected to act towards and co-operate with
10 indigenous communities and organisations” (Humphery, 2000, p. 3). This transformation can, in
11 part, be attributed to external political factors impacting indigenous rights, including land and
12 human rights, such as the continued advocacy of the National Aboriginal Community Controlled
13 Health Organisation of research processes owned and honored by the indigenous people
14 (Sherwood, 2010).
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29 The Indigenous Research Reform Agenda in Australia has been implemented because of
30 the concerns raised by the indigenous people (Henry et al., 2002), promoting a profound,
31 although still imperfect, shift in research ethics. Rigney (1999, 2001) described and defined the
32 challenging of traditional forms of research by indigenous scholars as “indigenism.” The aim of
33 indigenism is to adopt more progressive knowledge using methods that acknowledge the
34 diversity of indigenous experiences.
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44 Indigenism conceptualized a methodological reform using a variety of approaches that
45 advocate research compatible with indigenous experiences, interests, and aspirations. Rigney
46 (1999) expounded on the importance of this reform: Indigenous peoples must look to new
47 anticolonial epistemologies and methodologies to construct, re-discover, and/or reaffirm their
48 knowledges and cultures. Such epistemologies must carry within them the potential to strengthen
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3 the struggle for emancipation and the liberation from oppression. If we understand this, we
4
5 understand the need to seek other examples of liberatory epistemologies. (p. 114)
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8 Rigney (1999) claimed that because indigenous people are no longer satisfied with the
9
10 current types of research, they must demand research designs that advocate for their self-
11
12 determination and liberation and are defined and controlled by indigenous communities. In this
13
14 article, we contribute to the continuing dialogue and critique on indigenist research and against
15
16 the sole use of traditional Western scientific methodologies. We suggest drawing on certain
17
18 aspects of these traditional research methods only to facilitate indigenist methodology. In doing
19
20 so, we seek to promote research that includes both Western research methodology and indigenist
21
22 assumptions and perspectives. Specifically, we connect *dadirri*, simultaneously an indigenous
23
24 way of life and a research methodology, to elements of critical theory. We compare *dadirri* to
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26 Freire's (1972) transformative education process and Habermas's (1984) theory of
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28 communicative action, to promote the development of indigenous methodologies.
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34 The methodological approach described in the article represents the capacity for
35
36 achieving the principles described by Rigney as indigenous research methodology (IRM).
37
38 Moreover, we demonstrate how this approach is consistent with the goals of the emerging
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40 agenda for reform of research involving the indigenous peoples of Australia and addresses the
41
42 need for a culturally sensitive research methodology (Smith, 2005). Nursing research is at the
43
44 forefront of other health disciplines in the adoption of qualitative research approaches that
45
46 acknowledge the subjectivities and meanings of experiences. However, to date, there has been
47
48 little research on the use of the indigenist approach in the context of health education and health
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50 care.
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55 **Why an Indigenist Research Agenda?** 56 57 58 59 60

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3 Historically, tensions between indigenous peoples and the broader research community have
4 primarily been related to issues of power and control, and the constructions of the indigenous
5 people are problematic. Specifically, these issues involved control over outputs of research.
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8 Rigney (2006) claimed that reform is necessary to address this issue and to strengthen the voice
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10 of indigenous peoples with regard to research. Methodological reform is one way of addressing
11
12 the power and control struggles between the broader research community and indigenous
13
14 peoples.
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21 According to Rigney (2006), research undertaken from an indigenous perspective is
22 informed by three fundamental principles: involvement in resistance as the emancipator
23 imperative; political integrity; and giving privilege to indigenous voices. Finding the appropriate
24 method for conducting research on indigenous peoples is challenging for researchers and
25 research students, but especially for researchers who are themselves indigenous (Saunders et al.,
26 2010). Some researchers might find it suitable to work within the dominant western paradigm,
27 but we found that many indigenous peoples find such methods unsuitable because they
28 perpetuate assumptions contradictory to indigenous views (Saunders et al., 2010). However, as
29 emphasized by Sherwood (2010), recognizing and professing a worldview different from
30 dominant views is not easy.
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45 The dominant worldview claims to be the only view; in Australia this worldview shapes
46 the knowledge of the indigenous people and attacks their cultural identity through very subtle
47 forms of colonization (Lavalley & Poole, 2010; Rigney 1997). However, although the diversity
48 of aboriginal ontological and epistemological frameworks is recognized in indigenism, it does
49 not necessarily promote the radical adoption of different theoretical and/or methodological
50 research approaches. A distinguishing feature of indigenism is that the indigenist scholar refers
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3 we can give to our fellow Australians. In our language this quality is called *dadirri*. It is inner,
4
5 deep listening and quiet, still awareness. *Dadirri* recognizes the deep spring that is inside us. We
6
7 call on it and it calls to us. This is the gift that Australia is thirsting for. It is something like you
8
9 call contemplation . . . and I believe that the spirit of *dadirri* that we have to offer will blossom
10
11 and grow, not just within ourselves, but in our whole nation”. (Ungunmerr-Baumann, 2002)
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15 Atkinson (2002) pointed out that *dadirri* is more a way of life than a methodology. For
16
17 the researcher, it encompasses practices that recognize the crucial role of the community;
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19 reciprocity, where both the participants and researcher share with each other something of
20
21 themselves; and the trust of the people in the other person (Atkinson, 2002). Reflexivity is vital
22
23 here, because “*Dadirri* means listening to and observing the self as well as, and in relationship
24
25 with, others” (Atkinson, 2002, p. 19). Reflexivity requires that “the researcher critically
26
27 examines their actions through each stage of the research process” (Usher, Foster, & Stewart,
28
29 2008, p. 284). Humphery (2001) suggested that the “ethos of reflection” in aboriginal health
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31 research mirrors the rise of a similar movement that reflects research practices in other
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33 disciplines. Reflexivity is an essential process in reshaping research methodologies to address the
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35 elements of the Indigenous Research Reform Agenda and implementing the principles of
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37 Rigney’s (1999) indigenist research.
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43 Dadirri encompasses the role of spirituality in aboriginal culture (Tse, Lloyd,
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45 Petchkovsky, & Manaia, 2005). Vital to its understanding is the notion that truly listening to
46
47 others is at the core of spirituality. This contradicts contemporary behavior where the pace of life
48
49 results in less than effective dialogue, and where people focus on cognitively preparing their own
50
51 response rather than truly understanding the speech and feelings of the person with whom they
52
53 are communicating. In contrast, *dadirri*, as described by Ungunmerr-Baumann, is about taking
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3 the time: “there is nothing more urgent that we have to hurry for” (Ungunmerr-Baumann, 2002).
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5 Indeed, according to the Ngangikurungkurr people, “We cannot hurry the river. We have to
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7 move with its current and understand its ways” (Ungunmerr-Baumann, 2002).
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10 Atkinson (2002) explained that even though dadirri is a language of the
11
12 *Ngangikurungkurr* people, “the activity or practice of dadirri has its equivalent in many other
13
14 Indigenous groups in Australia” (p. 15). Some indigenous researchers have been employing the
15
16 equivalent of dadirri in their practice. Research on Australian indigenous people using the
17
18 principles of dadirri will help promote indigenous research methodology. From a practical
19
20 research perspective, dadirri has been described as “a process of listening, reflecting, observing
21
22 the feelings and actions, reflecting and learning, and in the cyclic process, re-listening at deeper
23
24 and deeper levels of understanding and knowledge-building” (Atkinson, 2002, p. 19). This
25
26 process involves participants engaging in a rich and meaningful communication with each other,
27
28 which enables them to better understand themselves, which itself is a goal of critical theory.
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34 At first, dadirri might resonate with features of participatory action research (PAR)
35
36 (Reason & Bradbury, 2006). However, we believe that although dadirri encapsulates a similar
37
38 philosophy to PAR, it stands alone from PAR. To avoid confusion, we could consider dadirri as
39
40 an example of PAR. Scholars such as Evans et al. (2009) combined PAR and indigenous
41
42 methodologies, but we hold a different view. Such combinations might be problematic in the
43
44 development of indigenous methodologies because they might promote the view that indigenous
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46 methodologies cannot credibly stand alone. In this article, we discuss dadirri as a methodological
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48 approach and a critical lens for data analysis. We believe that by allowing indigenous
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50 methodologies to develop independently, we can avoid the inadvertent “colonization” that occurs
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52 when combining them with Western methodologies. This task is essential in our acceptance of
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3 diverse worldviews (Kincheloe & Steinberg, 2008). Indeed, Kovach (2009), emphasizing the
4 need for methodologies that are wholly and inherently indigenous, warned that “. . . those who
5 attempt to fit tribal epistemology into Western cultural conceptual rubric are destined to feel the
6 squirm” (p. 31).
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14 In the tradition of earlier indigenous scholars (e.g., Ungunmerr-Baumann, 2002), we base
15 indigenist research on the concept of *dadirri* and connect it to elements of critical theory,
16 specifically to Freire’s (1972) transformative education process and Habermas’s (1984) theory of
17 communicative action, to promote it as an independent indigenous methodology. It is crucial to
18 note that both Freire and Habermas lived and worked in oppressive regimes. Their philosophies
19 emerged from their experiences in colonized Brazil and the reign of Nazi Germany, which
20 parallel the experiences of the indigenous Australian people during the colonization of Australia.
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30 **Dadirri and the Critical Pedagogy of Freire**

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33 Our use of *dadirri* as a methodological approach to research is guided by the work of Freire
34 (1972), who believed that the knowledge and the wisdom of oppressed groups provide the most
35 credible solutions to issues affecting their lives. His philosophy is concerned with adult
36 education or androgogy; however, the principles on which his work is based are applicable to
37 *dadirri*. Freire’s (1972) major thesis concerns humanization: “concern for humanization leads at
38 once to the recognition of dehumanization, not only as an ontological possibility but as an
39 historical reality” (p. 20). We view *dadirri* as humanizing for indigenous people, whose
40 continued struggle against losing humanity because of colonization and oppression might be
41 thwarted by the dehumanizing Western research methodologies.
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54 For Freire and Ungunmerr-Baumann, true dialogue is at the heart of communication and
55 occurs based on the equal relationship among people. Like Freire, we believe that people can
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3 free themselves from oppression through education, which is integrated in the research process.
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6 We extend Freire's beliefs as follows:
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- 8 • Revolutionary change comes from the communities, not from the oppressors. This might
9 be achieved by empowering communities during the research process.
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- 11 • Participants are partners and not merely subjects of researchers.
12
- 13 • The researcher and the researched are subjects of their own world and engaged in
14 transformational change together.
15
- 16 • The researcher and the researched subjects share their knowledge of the world with each
17 other and solve problems together.
18

19 Dadirri is a practice of deep listening and acceptance; in the context of research, it is a
20 method that enables working with indigenous people and allowing their voices to be heard. Like
21 Friere's transformational education process, dadirri allows for the problematization of what is to
22 create a space for what can be. As Freire (1972) explains: "thematic investigation becomes a
23 common striving towards awareness of reality and self, thus making it a starting point for the
24 educational process or for cultural action of a liberating character" (p. 79).
25
26

27 **Critical Theory and Indigenous Methodology**

28 Critical theory is the theoretical framework preferred by Australia's indigenous people.
29

30 Sherwood (2010) mentioned that "the critical researcher is one who uses their work to critique
31 the social, cultural and political environment" (p. 110). Rigney (1997) adopted tools from critical
32 theory and critical social sciences to inform what he calls indigenist research, which coincides
33 with his vision of a more just world. Similarly, we acknowledge that critical theory is a
34 radicalized epistemology in that it is overtly political in intention, fits the agenda of a liberatory
35 epistemology, and advocates for those most oppressed in society.
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3 Indigenist research originated from the traditions of critical theory, which is guided by
4 the goal of liberating people from domination, powerlessness, and oppression (Rigney 1997).
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8 Critical researchers are keenly aware of the need for community members and research
9
10 participants to take control of their futures and to undertake research that foster emancipation,
11
12 democracy, and community empowerment, while addressing power imbalances to give those
13
14 previously marginalized a voice (Lincoln & Guba, 2003). In this manner, research is an endeavor
15
16 that is unashamedly political and closely aligned with the development of critical consciousness.
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21 Critical theory emerged around the 1920s when fundamental questions regarding
22
23 knowledge and power were articulated in social movements originating from post-World War I
24
25 Germany and the oppression and annihilation of the Jewish people in Europe leading up to the
26
27 Second World War. Speaking on the indigenous people of New Zealand, Smith (2005) explained
28
29 how events such as the protests over the Treaty of Waitangi encouraged questions regarding the
30
31 connections between power and research: “Such questions were based on a sense of outrage and
32
33 injustice about the failure of education, democracy and research to deliver social change for
34
35 people who were oppressed. These questions related to the relationship between knowledge and
36
37 power, between research and emancipation, and between lived reality and imposed ideals about
38
39 the Other” (p. 165).
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45 As critical theorists remind us, the production and presentation of knowledge within
46
47 certain ideologies sustains power relations, helplessness, and inequalities, which work to further
48
49 marginalize particular groups of people (Anderson, 2004). Freire, a critical theorist, was mostly
50
51 concerned with how oppressed people can become accepting of their position and eventually
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53 internalize their own oppression (Fay, 1987). He believed that eventually, the oppressed adopts
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55 the values of the oppressor and yearns to be like them. Critical theorists believe that privileged
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3 groups are interested in maintaining the status quo for their own advantage (Kincheloe &
4
5 McLaren, 2005).
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8 Critical theorists aim to uncover the underlying meaning of knowledge (Freundlieb,
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10 Hudson, & Rundell, 2004). They are politically motivated to draw attention to the injustices
11
12 within society and raising people's awareness of these inequities. In other words, they aim to
13
14 make people aware of the injustices and to encourage debate and discussion on these issues to
15
16 promote dissatisfaction with oppression. Thus, open communication, using which previously
17
18 hidden power imbalances can be exposed, is an important component of critical theory
19
20 (O'Mahony & Donnelly, 2010). Acknowledging oppressive forces means that an individual's
21
22 own subordination offers a better opportunity for upheaval and change (Kincheloe & McLaren,
23
24 2005). Ultimately, as with indigenous research, the end result of all critical theory research is
25
26 transformative change for social justice (O'Mahony & Donnelly, 2010).
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32 Critical theories have been used extensively in exploring health care issues related to
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34 culture, race, ethnicity, and socioeconomic determinants (Anderson, 2006; Carspecken, 1996;
35
36 O'Mahony & Donnelly, 2010; Stewart & Usher, 2007; Stewart & Usher, 2010). Linked to its
37
38 focus on issues of power, oppression, inequities, and disadvantage, the critical lens has been
39
40 useful in revealing how gender, class, race, and historical factors affect an individual's health
41
42 (O'Mahony & Donnelly, 2010). "Critical theory, however, cannot succeed in studying
43
44 indigenous health if it is not " localized, grounded in the specific meanings, traditions, customs,
45
46 and community relations that operate in each indigenous setting" (Denzin & Lincoln, 2008, p. 6).
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48 Furthermore, the resulting research methodologies must be reflexive, ethical, critical, respectful,
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50 and humble (Denzin & Lincoln, 2008, p. 6).
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3 Rigney (1997) adopted the tenets of critical theory in his proposal of indigenist research.
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5 However, there are some potential difficulties with this proposition. For example, unmodified
6
7 critical theory can potentially perpetuate the indigenous person as an outsider unable to speak for
8
9 themselves (Vicary & Bishop, 2005). In addition, the notion of oppression incorporates that of
10
11 “privileged position” where only researchers and not participants are considered able to
12
13 recognize oppression. This is supported by the notion of “false consciousness” and critical
14
15 theorists’ view that individuals are unable to reveal oppression through their storytelling. Clearly,
16
17 this is a presumptive view that contradicts what critical theorists are fighting against.
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22 **Dadirri and Habermas’s Theory of Communicative Action**

23
24 The principles and functions of dadirri, which have been articulated in English by Ungunmerr-
25
26 Baumann (1993), underpin the development of indigenist research and are central to the research
27
28 methodology discussed in this article. The principles and functions of dadirri are outlined below:
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- 31
32 • Dadirri involves knowledge and consideration of the community and the diversity and
33
34 uniqueness each individual brings to the community.
- 35
36 • It encompasses ways of relating and acting within the community.
- 37
38 • It is a non-intrusive observation or quiet, aware, watching.
- 39
40 • It is deeply listening.
- 41
42 • It is a reflective, non-judgmental consideration of what is and heard.
- 43
44 • Based on what is learned from listening, it is a purposeful plan to act informed by
45
46 wisdom and the responsibility that comes with knowledge.
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52 As we emphasized, the basic tenets of critical theory, although clearly significant to the
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54 development of indigenist research methodology, must be adopted with caution. Nevertheless,
55
56 following previous scholars, we have adapted Habermas’s project to indigenous methodology.
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Post-colonial theorist Bhabha (1994) extended Habermas's theory to fit his work on the psychopathologies associated with colonization, noting the complexity of the historical contingencies brought on them. Even though critics of Habermas rightly have argued that his theories neglect to consider oppressed peoples in developing and developed countries, we contend that they form the basis for the type of critical pragmatism referred to by Forester (1993). In this manner, the theory of communicative action informs research in learning organizations such as health faculties in Australian universities or Australian health care systems to reveal distorted communication and thereby provide a platform for positive change.

Habermas developed his theory to determine how social order is possible. His theory is comprised of two integrated parts—the difference between communicative action and other (less desirable) types of action, and his discussion of the concepts of “lifeworld” and “system,” which encompass the actions in which social beings engage. Like *dadirri*, this theory visualizes a world where people (actors) communicate with each other both verbally and non-verbally to reach an agreement about themselves and their actions in the world. This “level playing field,” according to Habermas, is possible when people interact as a community of equals, engaging in open discourse with each other, in an environment of trust where all are heard.

As researchers, we find this theory of social order useful as a lens through which the participants and the researcher, having taken *dadirri* as fundamental to the research, can overcome the so called “strategic communication” that occurs in a system that has colonized a lifeworld, rendering communication as more about “political struggles concerning power and authority, cultural negotiations over identities, and social constructions of the ‘problems’ at hand” (Forester, 1992, p. 47) rather than about the quiet listening (Ungunmerr-Baumann, 2002) and understanding that constitutes *dadirri*. Communicative action enables the identification of

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2
3 many of the problems in indigenous health research, where the researcher can apply the theory to
4 facilitate the emancipation of oppressed people. According to Habermas, in the process of
5 enlightenment there can only be participants (as cited in Finlayson, 2005).
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10 There are a number of synergies among the dadirri approach, indigenous research, and
11 critical theory, influenced by Habermas's (1984) notion of a system colonizing a lifeworld and
12 the resulting alienation. Dadirri, at its deepest level, is the search for understanding and meaning.
13 It is listening and learning at its most profound level, more than just listening by the ear, but
14 listening from the heart (Atkinson, 2000). Fundamental to dadirri is the necessity for
15 personal/social interaction; continuity among the past, present and future; situation or place; and
16 spiritual or indigenality. Connections to the psychopathologies described by Habermas (as cited
17 in Outhwaite, 1994) can be readily seen (and for our purposes, this means when these elements
18 are missing from indigenous research). The concept of a lifeworld is about the continuity of
19 tradition, the social integration of peoples, and the transmission of generalized competencies for
20 action from generation to generation (Outhwaite, 1994). When these elements of the lifeworld
21 are lost through colonization, loss of meaning and associated psychopathologies result.
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39 Habermas (as cited in Finlayson, 2005) stated that when the personal, social, and cultural
40 processes that sustain a lifeworld collide with the processes of a system, the system focuses on
41 the outcomes and successes. For example, constructing a problem in terms of indigenous
42 university students and their lifeworld as opposed to the university as a system can shed light on
43 the social and educational issues indigenous people confront every day. Crossley (2005)
44 emphasized that "Indigenous cultures are destroyed and with them go both the narrative
45 structures that lend meaning to people's lives and the normative frameworks they live by" (p.
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4 Freire shared some of Habermas's views on power and domination and proposed a
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6 "communitarian alternative [where] power is relational, characterized by mutuality . . . Power
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8 from this perspective is reciprocity between two subjects, a relationship not of domination, but of
9
10 intimacy and vulnerability" (as cited in Christians, 2003, p. 233). In Dadirri, the principle of
11
12 reciprocity shapes the dialect between the researchers and the researched and is informed by the
13
14 responsibilities that come with knowing and living dadirri (Ungunmerr-Baumann, 2002). The
15
16 principle of reciprocity reflects dadirri, Freire's work, and Habermas's theory of communicative
17
18 action. We maintain that the principles associated with dadirri are consistent with Habermas's
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20 view that "a critical social theory must acknowledge that a genuinely emancipated society is one
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22 in which individuals actively control their own lives, through an enhanced understanding of their
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24 material and psychosocial circumstances" (Scambler, 1987, p.166).
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30 Research on indigenous people, based on indigenous methodology, encompasses the
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32 following:

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34 • obtaining permission from the communities involved to work with them as research
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36 partners;
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38 • honoring the principle of reciprocity by sharing information with all those involved;
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40 • acting with sincere integrity toward the stories that are shared;
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42 • viewing research as an educational transformative process, with the transformation not
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44 imposed by researchers, but rather coming from the communities in partnership with the
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46 researchers;
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48 • honoring the lifeworld of the communities including its oral traditions and appreciating
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50 the role of storytelling in the research process;
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- guarding against the imposition of values by the researchers or the inadvertent recreation of the notion of “other” and behaving as oppressors; and
- avoiding “forms of cultural action with which . . . [oppressors] manipulate people by giving them the impression that they are being helped” (Freire, 1972, p. 111).

From a practical perspective, dadirri, as a research methodology, will continue to inform indigenous research as indigenous scholars continue to develop indigenous research methodologies. The purpose of our contribution, based on our own research with indigenous nurses, is to inform nursing knowledge regarding research, practice, education and leadership. Dadirri provides a safe platform for the voices of indigenous nursing students and their stories and is becoming increasingly popular with both indigenous and non-indigenous Australian scholars as an alternative to traditional methodologies. At its core, dadirri aims to ensure that the diverse voices are not only heard but also valued, and that new ways of understanding are created. The connections between dadirri and the aspects of critical theory (see Table I) might further provide a framework for enlightenment for indigenous scholars, not only in Australia but from around the world, in their continuing emancipatory research.

INSERT TABLE I ABOUT HERE

Conclusion

Dadirri provides a vital framework for linking critical theory with reflective practice in developing a sound indigenous research framework. Such a framework can be used by indigenous scholars in their research in ways that empower both the researchers and the participants. By connecting critical elements of Western methodology to indigenous research, researchers will be able to tackle issues on oppression more effectively. Rigney (2001) maintained that it is possible to become aware of and move away from the causal tendencies of

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2
3 “racialized” practice. We hope that the method described herein will help indigenous researchers
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5 overcome the restrictions of “racialized” methods, which is important in the continuing battle
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7 against oppression.
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For Peer Review

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Table I. Connections between Dadirri and Critical Theories

Dadirri	Freire	Habermas	Research Process
Deep listening; reflecting	Dialogue; reflection and action	Life world; genuine communication to arrive at common goals	Narrative
Community	Transformation; coming from community	Community: Cultural reproduction Social integration Socialisation	Permission from community
Reciprocity (storytelling)	Teacher and students as partners	Equal say by all in communication	Researcher and participants are equals
Equal interaction	Learners as “subjects” (not objects); transforming agents of their world	Socialisation (transmission of generalized competencies for action)	All are “coresearchers”
Returning resources to community to empower community	Critical thinking; problematizing; problem posing and solving	Social integration (stabilization of group identities, solidarity in transformation)	Knowledge gained belongs to the community
Enough slowing of time:	We can wait: “If there is hope, we	Time to communicate, not “strategic,	Storytelling; open interviews

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“We don’t like to can wait.” parasitic, success-
hurry.” orientated speech”

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As outlined in the previous publication, it is possible to develop an Indigenous research methodology respectful of my people informed by some of the theoretical underpinnings of current Western methodologies.

3.16 Data analysis

3.16.1 Quantitative Data

Analysis of data was undertaken using descriptive statistics. Data were extracted and analysed for commencement progression, attrition and completion trends assuming Equivalent Full Time Student Load (EFTSL). Attrition and progress rates were already calculated by DHES. The data is time lapsed, that is data is taken from the time of commencement to completion of degree. This measure has been used extensively in similar situations and is useful because it can be readily determined with a high level of accuracy (Sheridan & Pyke, 1994). However, such a measure does not account for the variation in commencements, that is, variation from full-time and part-time, and does not account for any periods of leave taken that might impact upon the time taken to completion. Unfortunately more accurate measures of completion that recognise the nature of commencements are more complex and the information required is difficult to attain.

3.16.2 Qualitative Data

All qualitative data was analysed using content and narrative analysis. A common approach to qualitative data analysis, content analysis is defined as a process of coding and identifying themes or patterns. There are three types of content analysis: conventional, summative and directed. In conventional content analysis the coding categories are derived directly from the

data. In summative content analysis the process involves counting and comparisons. The directed approach, on the other hand, starts with a theory as a guide to the analytic process (Hsieh & Shannon, 2005).

Used in the past primarily as a quantitative research approach, it is sometimes referred to as a quantitative type of qualitative analysis. Qualitative content analysis primarily focuses on language as communication, paying particular attention to the content or contextual meaning of the text. However it goes beyond merely counting words, to examine language intensely in order to classify large amounts of text efficiently with the goal of understanding the phenomenon of interest (Hsieh & Shannon, 2005).

A summative approach was used in this study. Summative content analysis usually begins with identifying and quantifying certain words or content. The quantification is not initially an attempt to infer meaning but to explore usage. The summative process then goes on to where the codes are interpreted to discover underlying meaning. In this way, the counting process allows for interpretation of the associated context (Hsieh & Shannon, 2005). A key distinguishing feature of content analysis is the use of a set of consistent codes to designate data segments, and a process where the codes are typically counted and frequencies determined to get a sense of the data (Morgan, 1993).

Using a summative approach to content analysis, the analytic process in this study involved searching the transcripts for items related to barriers and strengths, bringing the codes together in themes and sub themes, and then counting identified themes across the transcripts to identify the frequency each occurred (Ziegert, Fridlund, & Lidell, 2007). Using numbers in this way, also called quantizing qualitative data (Onwuegbuzie & Johnson, 2006), can help

to strengthen the internal generalisability of conclusions, provide a check against analytic bias, and help to present evidence to support interpretations (Maxwell, 2010).

Narrative analysis of the student interviews was also performed as a secondary analysis. The details of the process used are outlined in detail in the manuscript titled: 'Creating walking tracks to success: A narrative analysis of stories of successful course completion by Indigenous Australian nursing students' and is contained in Chapter Four.

3.17 Ethical Clearance

Ethical clearance to conduct the study was sought and received from the James Cook University Human Research Ethics Committee (HREC) and the HRECs of the included universities, as required. The following National Health and Medical Research Council (NHMRC) guidelines were adhered to:

National statement on ethical conduct of research involving humans (2007).

Values and ethics: Guidelines for ethical conduct in Aboriginal and Torres Strait Islander health research (2003).

Keeping research on track: A guide for Aboriginal and Torres Strait Islander peoples about health research ethics (2005).

Participation in the study was voluntary. Potential participants were provided with an information sheet and those who chose to continue were asked to sign a consent form. All participants were informed of their right to withdraw from the study at any time and were assured that all attempts would be made to keep their identity anonymous in the thesis and any resulting presentations or publications.

Particular emphasis was placed on the Values and ethics in Aboriginal and Torres Strait Islander health research guidelines (2003). There are six values at the heart of these guidelines: RECIPROCITY, RESPECT, EQUALITY, RESPONSIBILITY, SURVIVAL AND PROTECTION, and SPIRIT AND INTEGRITY. Outlined below are the measures taken to demonstrate how these values were adhered to:

The principal investigator is of Aboriginal descent and has worked extensively in Aboriginal and Torres Strait Islander communities effectively and successfully.

Principal investigator will attended the following compulsory workshops:

- School of Indigenous Australian Studies (SIAS) Research Protocols for Working with Aboriginal and Torres Strait Islander Peoples 27 March, 2009.
- Graduate Research School Postgraduate Research Skills Program compulsory Research Conduct and Ethics 15 April, 2009.

The Cultural Mentor for the research project was Professor Yvonne Cadet-James, an Indigenous woman who is also the James Cook University Aboriginal and Torres Strait Islander Human Ethics Advisor.

Adherence to and promotion of:

- The NHMRC Road Map: A Strategic Framework for Improving Aboriginal and Torres Strait Islander Health through Research (2004).
- NHMRC Values and ethics: guidelines for ethical conduction in Aboriginal and Torres Strait Islander Health Research (2003).

- NHMRC Keeping Research on Track a Guide for Aboriginal and Torres Strait Islander Peoples about Health Research Ethics (2005).
- National Statement on Ethical Conduct of Research Involving Humans (National Health and Medical Research Council et al., 2007).

The principal investigator is a team investigator on a NHMRC Indigenous Research Capacity Building Grant. This provides a forum at which twice a year research can be showcased and critique received from Indigenous peers with particular emphasis on ethical considerations.

The development of a reference group (including elders) to guide and inform the research with consideration of ethical issues specifically identified in the terms of reference.

3.17.1 Reciprocity

The proposed research contributed to the advancement of the health and wellbeing of participants and communities by identifying successful strategies for and also barriers to Indigenous nursing student course completion. Such knowledge will assist in improving outcomes for Indigenous nursing students and ultimately indigenous people and the nursing profession.

The research links to community, regional, jurisdictional and international health priorities and responds to needs articulated by Aboriginal and Torres Strait Islander peoples – National and International Nursing Council priorities, and the NHMRC Road Map – Strategic Framework for Improving Aboriginal and Torres Strait Islander Health through Research.

I ensured the research was modified as necessary, in accordance with participating community values and aspirations, and incorporated the need for flexibility in accordance with Indigenous community protocol by using practical methods in the time plan for the research. This approach was underpinned by the establishment of the Indigenous reference group to safeguard and ensure that the research meets participating community values, aspirations and protocols. Furthermore, as a researcher I have extensive experience of working with local Indigenous communities and have a thorough understanding of the need for flexibility and adaptability, in accordance with adherence to the values and aspirations of community for effective mutual outcomes.

The proposed research will enhance the capacity of communities to draw benefit, beyond the life of the project, through the development of skills and knowledge or through broader social, economic or political strategies at local, jurisdictional, national or even international level. It is envisaged that the research outcomes will inform:

Individuals – should the Schools of Nursing in Australia adopt the outcomes of the research this will enhance Indigenous individuals' experience in the undergraduate nursing environment. As a result of increased number of Indigenous students having positive experiences in an undergraduate nursing setting, this would increase the likelihood of Indigenous students completing the programs. Therefore, university becomes a genuine and realistic opportunity for Indigenous people contemplating undertaking nursing studies.

Schools of Nursing – by contributing to factors involved in successful Indigenous pre-registration nursing student completions in Queensland

Community – a two pronged approach for community outcomes and an increase in nursing completions and a larger Indigenous nursing workforce.

3.17.2 Respect

The study responds to the diversity, specifically the decision making processes of Aboriginal and Torres Strait Islander peoples and communities, through the formation of the Indigenous reference group and employment of a part-time research assistant at each site. The Building Indigenous Research Capacity (BIRC) scholars also assisted with this process but the confidentiality of the participants was maintained. The study also valued the individual and collective contribution of Aboriginal and Torres Strait Islander peoples by including, valuing and acknowledging their participation in personal interviews and questionnaires, their collective contributions through undergraduate nursing students, and the analysis of research data as a collective contribution based on individual experiences.

The appropriate agreements about ownership and rights of access to Aboriginal and Torres Strait Islander Peoples' intellectual and cultural property(s) was negotiated with key organisations at each research site. Outcomes of the research will be disseminated in adherence with community and cultural protocol relevant to each site.

3.17.3 Equality

Prior to the commencement of the research process, local Indigenous reference groups and participating organisations were met to discuss all aspects of the research process and develop a research agreement identifying roles and responsibilities, methods of engagement, cultural protocols, method of data collection and analysis, distribution of reports and representation on publications and presentations. This was done with recognition of the need for an equal voice in the process given the diversity of the people involved, their worldviews and cultural values and beliefs. Agreements were reviewed regularly as part of the ongoing engagement process and issues were addressed to ensure sustainability.

All communication was in plain language as this was considered a respectful way of clarifying that the information was understood and participants were given adequate time to consider information and options for informed decision making.

3.17.4 Responsibility

The measures following are identified to demonstrate transparency in the exchange of ideas and in negotiations about the purpose, methodology, conduct, dissemination of results and potential outcomes/benefits of research. These measures include: the ethics application, experienced and qualified cultural mentor, Indigenous reference group and Aboriginal and Torres Strait Islander research assistants, and by adherence to and ongoing review of the research agreement. All qualitative data was taken back to participants to ensure accuracy.

3.17.5 Survival and Protection

The research project contributes to the social and cultural bonds among and between Aboriginal and Torres Strait Islander families and communities by working within the complex social organisation, including kinship and clan relationship structures. Safeguards against the research project contributing to discrimination or derision of Aboriginal and or Torres Strait Islander individuals or cultures include the project being led by an Aboriginal researcher, supported by an experienced and qualified cultural mentor, employing Indigenous research assistants, guidance by Indigenous reference groups, use of elders and support from local communities.

The proposal contributes to the opportunity for Aboriginal and or Torres Strait Islander peoples to better advocate for or enjoy their cultural distinctiveness through the project's aim to increase the Indigenous nursing workforce. An increased Indigenous workforce will empower individuals, communities and families to appreciate their distinctiveness as well as raise awareness within and throughout the broader community.

3.17.6 Spirit and Integrity

The principal researcher has undertaken significant initial negotiation and liaison with the selected sites and communities involved, including the University of Southern Queensland School of Nursing and Indigenous Education Support Unit, Centre for Aboriginal and Islander Studies (CAIK); Queensland University of Technology School of Nursing and Indigenous Education Support Unit Oodgeroo; Central Queensland University School of Nursing and Indigenous Education Support Unit, Nulloo Yumbah; James Cook University

School of Nursing Midwifery and Nutrition, the Indigenous Health Unit and the School of Indigenous Australian Studies at James Cook University; and the Griffith University School of Nursing and Midwifery and Indigenous Education Support Unit, Gumurrii. Ongoing engagement with all stakeholders resulted in a research agreement prior to the commencement of the project. This included participants' cultural, spiritual and social cohesion including timeframes.

This research recognises and acknowledges the diversity of Australian Aboriginal and Torres Strait Islander peoples' cultures, including the mechanisms through which communities make decisions, and in conduct and reporting ensures adherence to and awareness of informal and formal leadership structures, traditional owners and custodians, clan and family groups and other organisational structures.

Personal integrity was demonstrated by the researcher's Aboriginality and work/community experience, use of cultural mentor and Indigenous reference groups, and respect for Indigenous epistemology.

3.18 Secondary Outcomes

The study has developed and refined theoretical and methodological perspectives such as the application of Dadirri, the usefulness of transformatory mixed methods designs, and the appropriateness of Indigenous research approaches for nursing research.

In addition, the conduct of the study provided research training and capacity development for an Indigenous PhD candidate working with mentors and experienced researchers on the project. The outcome is a PhD prepared clinician and academic leader for nursing; especially Indigenous nursing.

3.19 Summary of chapter

In this chapter I have provided an overview of the methodology and methods used in the study, including an explanation of an Indigenous research methodology and how it was used with a mixed methods design. The chapter further described the framework and methods used as the components of the concurrent mixed methods study. The chapter included three peer reviewed manuscripts that addressed particular aspects of the methodology and methods. The following chapter describes the qualitative findings of the study.

Chapter 4. Qualitative findings

4.1 Introduction

This chapter presents the in-depth qualitative findings from the study. It includes two key manuscripts that address the questions in the qualitative phase of the study. Specifically, this chapter addresses the data collected from the interviews with the students and academic staff at the four participating universities.

4.2 Content Analysis

Figure 4.1 provides a summary of the results of content analysis process undertaken and outlines the themes identified by the Indigenous nursing students and academics. Interestingly, as shown in the summary of the themes identified by Indigenous nursing students and academics, the findings from both groups were similar with the only exception being the frequency of which each theme occurred. The themes identified also had the ability to be both an enabler and or a disabler dependent on the context and the individual student.

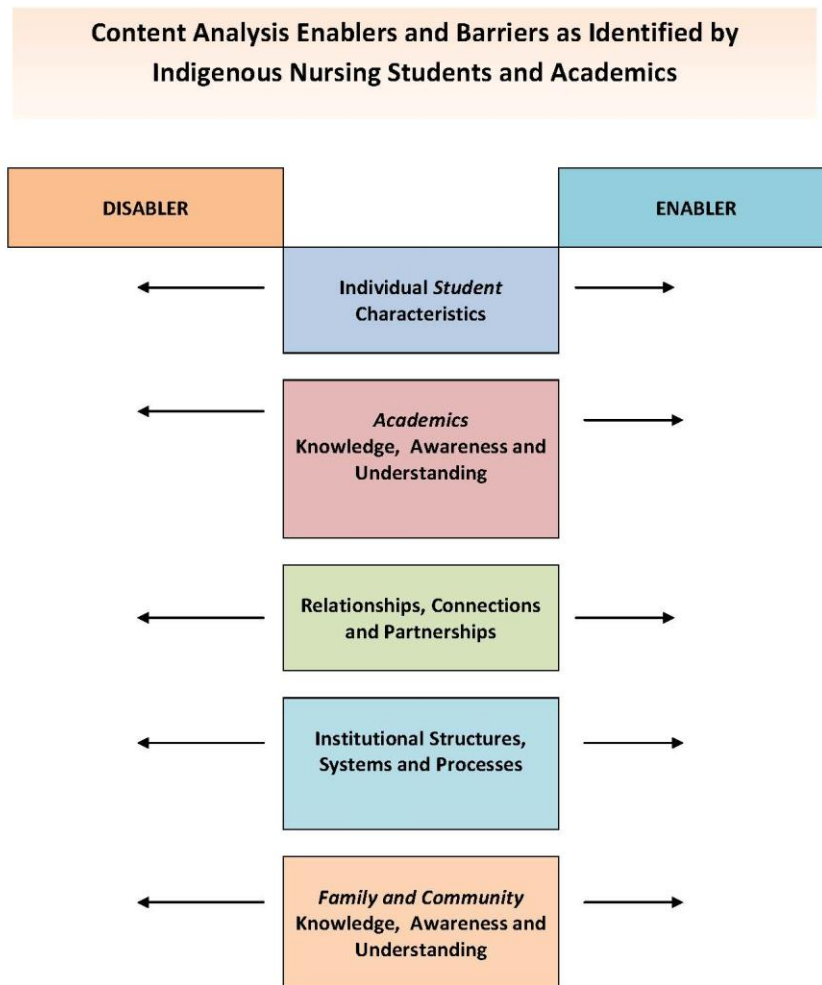


Figure 4.2: Content Analysis Themes as identified by Indigenous Nursing Students and Academics

The following manuscript presents the findings from the interviews with academics whom were asked questions related to their perceptions of the barriers to, and support strategies for, Indigenous nursing student success. Fifteen academics volunteered to be interviewed in the study and their views are expressed in the manuscript.

4.3 Publication 6 – “Under Review” Qualitative Health Report

4.4 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows:

Publication 6: West, R., Usher, K., Foster, K. & Stewart, L. (2012). (Under Review) Academic staff perceptions of factors underlying program completion by Australian Indigenous nursing students. *Qualitative Health Report*.

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 4 Qualitative findings</i>	Academic staff perceptions of factors underlying program completion by Australian Indigenous nursing students	Submitted February 2012 <i>Qualitative Health Report</i>	West (40%) Usher (20%) Foster (30%) Stewart (10%)	2.264

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	Kim Usher	Date 23/03/2012
Signature 2	Kim Foster	Date 23/03/2012
Signature 3	L. Stewart	Date 23/03/2012

Academic Staff Perceptions of Factors Underlying Program Completion by Australian
Indigenous Nursing Students

Roianne West, Kim Usher, Kim Foster, Lee Stewart

Author Note (Brief biography)

Roianne West, Ph.D candidate is the Nursing Director for Indigenous Health with Queensland Health, Townsville Health Service District. Roianne is a registered Nurse with a Masters in Mental Health Nursing and strong professional interest in the development of a culturally competent nursing and Midwifery workforce.

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Kim Foster is an Associate Professor Mental Health Nursing at Sydney Nursing School, The University of Sydney, and Adjunct Associate Professor at James Cook University.

Lee Stewart is the head of School at the School of Nursing, Midwifery & Nutrition at James Cook University. Lee is a registered nurse and midwife and has consulted and published and has consulted extensively with the World Health Organization and AusAID in the areas of nursing leadership and management, clinical/risk management in the health care environment, nursing and midwifery education, and health workforce issues in developing countries.

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Abstract

A well-trained and culturally safe nursing workforce is critical to reducing the poor health outcomes of Australia's Indigenous people. While Indigenous students are now enrolling in Australian tertiary undergraduate nursing courses in increasing numbers, their completion rates remain lower than those of non-Indigenous students. Many barriers limit the completion rates of Indigenous nursing students. While the research around those barriers is important and must not be downplayed, it is vital to also focus on successes and work towards understanding why some students manage to succeed despite the barriers they face. This paper provides the findings of a qualitative study undertaken to explore academic staff perceptions of factors enabling successful course completions by Indigenous nursing students from universities in Queensland, Australia. Given that this is one of the few published studies in this area, the findings provide important understandings that contribute to the body of knowledge about Indigenous nursing student recruitment, retention, and completion. The paper reveals perspectives of successful completions as described by academic staff. In order to increase the number of Indigenous nurses in Australia, strategies as suggested by staff include appointing Indigenous nursing academics; partnerships between nursing schools and Indigenous Education Support Units, and developing and implementing cross-cultural awareness programs specifically tailored for academics in tertiary nursing schools.

Keywords: academic staff, Indigenous undergraduate nursing students, completion rates, strategies, qualitative study

Academic Staff Perceptions of Factors Underlying Program Completion by Australian Indigenous Nursing Students

A well-trained and culturally safe nursing workforce is paramount for reducing the poor health outcomes of Australia's Indigenous people and to ensure that care is delivered in a culturally appropriate way (INEWG Report, 2002; Goold & Usher, 2006; West, Usher, & Foster, 2010). While Indigenous students are now enrolling in Australian tertiary undergraduate nursing courses in increasing numbers, their completion rates remain lower than those of non-Indigenous students (Authors under review). We are aware that many barriers stand in the way of the success of these students, which may account for the anomaly in program completion by Indigenous students. For example, Indigenous students have reported barriers to their success in nursing programs such as financial concerns, difficulty adjusting to the university system, family commitments, and difficulties with the learning demands (Usher, Lindsay, Miller, & Miller, 2005a; Usher, Cook, Miller, Turale, & Goold, 2005b). Indigenous students also tend to be older and have more family and social responsibilities and dependents than their non-Indigenous classmates do (Devlin, 2009).

In recognition of the need for an increased Indigenous nursing workforce and the barriers faced by Indigenous nursing students numerous national and state government and nursing organizations have developed strategies to ensure an increase in the number of Indigenous nurses. For example, scholarships to help Indigenous nursing students overcome financial hardships have been implemented through schemes such as the Commonwealth Undergraduate Rural and Remote Nursing Scholarships (CURRNS). Ten of the 30 scholarships are designated for Indigenous nursing students. Similarly, the Queensland Health Rural Scholarship Scheme

(QHRSS) has specific nursing scholarships of which a number are designated for Indigenous nursing students (Usher et al., 2005a). More recently, the Commonwealth Indigenous Cadetship Support (ICS) Program of Queensland Health has been successful in setting aside 80 cadetships for Indigenous nursing students in Queensland.

While the research around the barriers faced by Indigenous nursing students is important and must not be downplayed, Devlin (2009) challenges us to focus instead on success and to work towards understanding why some students manage to succeed despite the barriers they may face. Devlin (2009) identifies the need for evidence-based evaluation of current courses and qualitative in-depth exploration of the experiences of successful Indigenous students and graduates. This is reinforced by Smith, McAlister, Tedford-Gold, and Sullivan-Bentz (2011), who acknowledge that we have yet to identify how to offer experiences and contexts that foster success for these students. While research to date has explored the experiences of Indigenous students, little research has been undertaken to explore perspectives of the academic staff responsible for developing and implementing nursing courses in terms of the factors they believe are relevant to Indigenous nursing students' success. In the following paper, we provide the findings of a qualitative study undertaken to explore academic staff perception of enablers of successful completion by Indigenous nursing students.

Approach

The study used an Indigenist approach, which is respectful of Indigenous knowledge and belief systems. Saunders, West, and Usher (2010) contend that Indigenous people have an obligation to conduct research in ways that respect their values and traditions. Indigenist and other critical researchers are cognizant of the need for communities to take control of their

futures and seek to undertake research in ways that foster emancipation, democracy, and empowerment while at the same time seek to redress the power imbalances so that those who were previously marginalized can find their voice (Lincoln & Guba, 2003). As explained by Kincheloe and McLaren (2003), in this way, researchers openly admit their intent to struggle for a better world for all. Indigenist research is defined as "...research by Indigenous Australians whose primary informants are Indigenous Australians and whose goals are to serve and inform the Indigenous liberation struggle to be free of oppression and to gain power" (Rigney, 1997, p. 120).

This study was part of a larger, mixed-methods study undertaken to explore the factors involved in Indigenous nursing student enrolment and completion. Academic staff perceptions of the factors involved in successful Indigenous nursing student completions was explored in this qualitative phase.

Participants

Purposive sampling was used to recruit 15 academic staff members who play a role in supporting Indigenous nursing students in the final year of an undergraduate nursing course in Queensland. Academics were drawn from five Queensland universities. Participants included two male and 13 female academics ranging in age from 32 years to their early sixties. Academic levels of experience ranged from 1 to 20 years in university settings, as well as many more years of experience as nurses in clinical environments. Seven of the academics identified themselves as Indigenous and the remaining eight were non-Indigenous. Academic roles included heads of schools, academic advisors, first-year coordinators, and Indigenous student support roles (see Figure 1).

The participants were recruited through advertising, recommendation, and word of mouth by their colleagues. Data saturation occurred where after interviewing 15 participants, the same information was being heard, and interviews were discontinued.

Ethical Considerations

Ethical approval was received from the relevant Human Research Ethics Committees of the participating universities and, importantly, met the requirements for research with Indigenous Australians, which included the National Health and Medical Research Council (2003) *Values and Ethics in Aboriginal and Torres Strait Islander Health Research* guidelines, of which there are six principles that guide the researchers. These are reciprocity, respect, equality, responsibility, survival and protection, spirit and integrity. Participants were provided with an information sheet and provided written informed consent if they agreed to be interviewed. The participants were reminded that they could stop the interview at any time without any repercussions. Pseudonyms were allocated to all transcripts to ensure confidentiality and all data were stored securely during the research process.

Interviews

Data were gathered through in-depth, semi-structured interviews. Interviews were from one to two hours long and included questions related to staff perceptions about what enhanced student success in the program and strategies that helped students to succeed. Interviews were conducted by the first researcher at a time and place chosen by the participant. All interviews were audio-taped with consent, transcribed verbatim, and stored for analysis.

Data Analysis

Data were analyzed using content analysis. Content analysis, a common approach to qualitative data analysis, is defined as a process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). This study used it to identify factors that enhanced student success. Interview transcripts were de-identified and coded for enablers of success. The iterative coding process resulted in identification of five enablers of student success. Data were managed utilizing the qualitative software analysis package NVivo. NVivo was used to classify, sort, and arrange information; including the frequency of codes and themes (See Table 1); and to examine relationships in the data (See Table 1).

Rigor and Trustworthiness

Trustworthiness was enhanced by regular meetings of members of the research team to discuss the themes as they emerged. Rigor was supported by the purposeful inclusion of participants who had experience with the phenomenon under investigation, an important consideration when the aim is to gain an in-depth understanding of a phenomenon, and by the keeping of an audit trail that can be followed by others (Roberts & Priest, 2006).

Results

The factors involved in student success were organized into five major themes and related sub-themes as outlined in Table 1. Major themes are (i) individual student characteristics; (ii) institutional structures, systems, and processes; (iii) relationships, connections, and partnerships; (iv) family and community knowledge, awareness, and understanding; and (v)

academics' knowledge, awareness, and understanding. In the following themes, participants are identified as either non-Indigenous academics (NIA) or Indigenous academics (IA).

Insert Table 1 here

Individual Student Characteristics

During the interviews, academics most frequently identified the theme of *individual student characteristics* as enabling Indigenous nursing student success in completing a tertiary undergraduate nursing program. The theme encompasses four sub-themes: (i) motivations for choosing nursing, (ii) students' personal attributes, (iii) life and work experiences, and (iv) timing.

The model in figure 2 was derived from the words that the academics used throughout the interviews when asked what they thought contributed to students' successful progression. The staff felt that student motivations for choosing nursing were very important to their success. For some students it was a personal obligation to give something back to their people. One participant said, "*... he felt that he wanted to give something back to his people... his people had believed in him enough to trust him to do something positive and he wasn't going to let those people down.*" (NIA)

Another said,

There was another student ... she'd been a health worker for such a long time, and she wanted to be able to do more. And she thought being a nurse she could, and she wanted to do it because she's an elder and she wanted to set an example, a role model for younger people. (NIA)

Others thought being the first from their family was strong motivation for students' success: "*For some of them, it's that pride, being the first one in the family to get a university degree.*" (IA)

Staff thought that personal attributes, such as student attitude towards being a student and the strength of their Indigenous identity, contributed to students' resilience, helped them overcome racism, and enhanced their ability to become independent learners. Attributes included persistence and determination, belief in themselves, being independent and organized, and having initiative.

Guess they've gotta [sic] have that belief in themselves that if they ask for help they can do it. So then, in that sense too, they've got to have faith in the institution that help is forthcoming if they ask for it and that, plus their resilience will get them over the line.

(NIA)

For some students, it was the strength of who they were as an indigenous person that staff considered helped keep moving forward in their studies. "*They've actually embraced their culture, embraced who they are, and they believe in themselves.*" (NIA)

Critical to the success of Indigenous students, irrespective of the available support, was timing. This included the timing of undertaking the nursing course and studying in relation to their family and community roles and responsibilities. Timing also extended to the complexity of their social needs such as housing, income, and childcare, and the personal health of the students, their families, and communities. "*There's [sic] certain social reasons ... they've just been on struggle street, you know, emotionally for so long that it becomes overwhelming. And sometimes, time is the only thing that helps*" (IA).

Institutional Structures, Systems, and Processes

Academic staff identified *institutional structures, systems, and processes* as the second most frequent theme. Staff recognized how the structures, systems, and processes of the university could enable Indigenous students as they undertook a nursing degree. The theme encompasses four sub-themes: (i) Staff leadership, (ii) teaching and learning, (iii) policy and procedures, and (iv) support from the system.

Leadership from the university, including faculty and administration is an important factor in student success. The stories shared by participants indicated that staff perceive that the importance of the school and other senior staff as influencing the outcomes for Indigenous students. This included acknowledgement of, and respect for, students' dignity. Support from all academic levels was critical to Indigenous students' success. One academic spoke of the vital support from university deans:

The Dean of the department is obvious in the support that she wants Indigenous students to get. And we have a joint head of department and they're obvious in what they want for Indigenous students. So there's [sic] a lot of support for the Indigenous students to succeed. In fact, it's very hard for them to fail, if everything is set up and they take advantage of everything it would be pretty hard to fail. (NIA)

Teaching and learning as a factor in students' success refers to culturally inclusive teaching and learning practices along with embedding Indigenous content into the curriculum. Academics' consideration of different student learning styles was an important issue. One

academic also identified the importance of understanding the significance of culture in learning.

“It is so powerful. Culture determines how you learn....” (NIA)

The importance of including Indigenous knowledge and recognizing the importance of Indigenous ways of knowing and Indigenous culture was also raised by participants. *“One of the things with nursing when we looked at the embedding, it’s all the way through... every subject, every unit, Indigenous parts are embedded in it... it’s not just that ‘tag on’.”* (IA)

The inclusion of Indigenous health, knowledge, and culture in specific course units was considered important recognition for Indigenous nursing students. The need for integrating Indigenous health, knowledge, and culture into the curricula was highlighted:

I would like to see it integrated, because then it takes away that stigma that Indigenous health is one issue and health for the rest of the world is this issue... I think what should be done is it’s put in context. (NIA)

While staff recognized the importance of academic policy and procedures, they also acknowledged the need for flexibility in relation to indigenous students, in relation to assessment processes, alternative progression, and the variation in study loads. One academic stated:

The system needs to be made as flexible as they can be. And to assess people as their situation is – not some generic idea of what ‘an Indigenous student’ ideally needs. What does this student need? Where are they coming from? What’s likely to be the kinds of hurdles and difficulties that they’re going to face? For some of them it might be academic skills, others it might be just having time and space to study. (NIA)

Relationships, Connections, and Partnerships

The staff considered five key relationships, connections, and partnerships to facilitate student completions. They included those between (i) nursing schools and the Indigenous Education Support Units (IESUs); (ii) Indigenous nursing students and other students (Indigenous and non-Indigenous nursing students and other Indigenous students); (iii) Indigenous nursing students and Indigenous and non-Indigenous academics; (iv) Indigenous nursing students and the wider university; and, (v) Indigenous nursing students and industry.

The importance of relationships, connections, and partnerships in the successful completion of Indigenous nursing students was captured by one non-Indigenous academic:

I think a critical mass of students that are confident and articulate students who can help the less confident ones and metaphorically hold their hand, and the serious emphasis in my view, on working with – not just the Indigenous support officer – but the Indigenous Education Support Units, the faculty and its support services and so on is what's going to make the difference. (NIA)

A further important factor in regard to Indigenous nursing student completion rates was the relationship between nursing schools and the Indigenous Education Support Units. All of the universities in this study had an Indigenous Education Support Unit. The units provided support to Indigenous students, helped create a network of Indigenous students and academics, and provided an Indigenous presence on university campuses.

We are involved in every aspect of the university, and the schools of nursing need to appreciate what we do, for the success of their program. (IA)

One non-Indigenous academic identified that successful progression at their university depended heavily on the relationship between the Indigenous Education Support Unit and the school of nursing.

“...It depends again on the relationship with the Indigenous Education Support Unit and the academics that are in that particular school on that particular campus.” (NIA)

At some universities, Indigenous Education Support Units are the first point of contact within the university for Indigenous student issues. The academic went on to say that the units were also the university’s connection to the wider Indigenous communities. The units facilitate the connection of students to family through such strategies as family picnics and other social gatherings. For the nursing schools that had an Indigenous nursing academic, there were clear delineations of roles between them and the Indigenous Education Support Units in supporting students’ progression. A non-Indigenous academic eloquently describes this:

There’s a difference between what an Indigenous nursing academic can do and what the Indigenous Education Support Unit can do. The Indigenous Education Support Unit provides support – really critical and important support – but I think having the academics, who are part of the academic department who are nurses who are teaching nursing and they are Indigenous is really important. They do things that the Indigenous

Education Support Unit can't do. (NIA)

The connections and support between Indigenous nursing students and other students, including other Indigenous nursing students were also considered important enablers. Other important connections included the relationship between Indigenous nursing students and Indigenous academics, which was described as unique. One Indigenous student support officer identifies the importance of having someone “neutral” outside of the School of Nursing, for students to be able to talk to:

I think it's on that personal thing, you know, the personal relationship that's been built... because we're Murri, we're blackfellas... You gotta [sic] have that relationship with them for them to open up and talk to you...but it could be something little like that has been blown out of proportion, but to get to find out what that is, you gotta [sic] have that relationship. (IA)

The relationship between Indigenous nursing students and non-Indigenous academics was also critical to Indigenous nursing student success. A non-Indigenous academic shares his experiences:

Initially, they're almost always shy and reserved. I have to make a concerted effort to encourage them to talk to me and interact with me, and – I assume – until I win their trust, once that hurdle is over or crossed, then that works well... they need a different sort of relationship with the lecturers to non Indigenous students... I think their expectations

of academics is different, and it's not the sort of relationship that you normally find in an Anglo-Celtic university, which is most academics; fairly rigid about how much they'll give of themselves, how much time they're prepared to put into each student... I have a common debate about the meaning of equity. So many academics really think that equity means treating every student exactly the same. And that disadvantages the students who are different, particularly Indigenous students. So they won't give that extra bit to an Indigenous student because they think it's unfair on the non-Indigenous students, and they can be a bit resistive towards academics who do give it as well... Indigenous students are different. I think they learn differently and I particularly think they need a much more personal relationship with the academics for them to actually learn. (NIA)

Participants considered that the relationship between Indigenous and non-indigenous academics often determined the success of the programs.

Academics were also clear that there was the need for Indigenous students to be connected to the wider university services and that there was sometimes a tendency for Indigenous students to restrict their contact to Indigenous services.

I know we've got an identified support unit, and I know we've got an Indigenous academic, and I know we've got the Indigenous nursing support person, but somehow all of those things have to be maybe made more obvious to students, such as they want to use the support. A lot of the support in the university goes unused. (NIA)

Family and Community Knowledge, Awareness, and Understanding

Family and community knowledge, awareness, and understanding was least frequently referred to as having the ability to be both an enabler and a disabler of Indigenous nursing student success in the university. However, these factors were considered significant enablers by staff. The theme encompasses four sub-themes: (i) understanding the university, (ii) support, (iii) obligations and responsibilities, and (iv) complex social issues.

Staff considered how well the family and community understood the university as an important enabler for student success. It was also helpful for the academic or support staff to understand the student's background. *"Some of the family might not understand what the kids are going through, because of their own education, but they're so proud and they want their kids to get through."* (IA)

Family and community support was considered pivotal to Indigenous nursing student success. This included the family and community having an appreciation of the demands placed on the student by the university and by the family and community responsibilities and the potential for this to impact their studies.

There seems to be a big factor in terms of family support. If the family says, "we really want you to go to university it's really important that you succeed and that you get in," those students will generally succeed... That's a really big factor, the family and community support. (NIA)

Academics' Knowledge, Awareness, and Understanding

The knowledge, awareness, and understanding of both Indigenous and non-Indigenous academics of cultural considerations for Indigenous nursing students, in particular the potential

for these to impact students' academic performance was an important enabler and consisted of three sub-themes: (i) Indigenous academics' knowledge, awareness, and understanding; (ii) non-Indigenous academics' knowledge awareness, and understanding; and (iii) ways forward.

Both Indigenous and non-Indigenous academics identified that it is incumbent upon Indigenous Nursing Academics to support, mentor, and lead the Indigenous students *and* their non-Indigenous colleagues. They considered that Indigenous nursing academics provide a distinctively different role to non-Indigenous academics. *"A non-Indigenous academic could give the support...but they wouldn't have the same understanding of Indigenous issues"* (NIA). *"It gives them inspiration. Feeling honored that they are being taught by an Indigenous person, it's unique"* (NIA).

An Indigenous nursing academic is personified as an Indigenous person, a member of the nursing academic team, and a registered nurse. This brings a unique and innate knowledge, awareness, and understanding of the issues that impact the Indigenous nursing students. A non-Indigenous nursing academic stated, *"The Indigenous nursing academic can talk from a lived experience point of view, rather than the rest of us, which can say, 'Well, I've worked with Indigenous people, but I haven't lived it.'"* (NIA)

The Indigenous nursing academic was seen to provide guidance, mentorship, and leadership to students through challenging times, situations, and experiences. *"I try and keep them focused on the positives of study; that they're going to have stress in their life anyway, but this is a good stress that actually leads to somewhere good."* (IA)

Staff also perceived the value of an Indigenous nurse academic to include helping students navigate the systems and processes of the university, to provide support and leadership.

They also helped non-Indigenous staff understand Indigenous culture and history. Non-Indigenous academics discussed the importance of developing their awareness and understanding of Indigenous culture and history. This was considered an important strategy to understand Indigenous nursing students and in turn helped them to succeed.

[Academics need to] do their own reading, get up to speed on history-based relations in Australia and then start talking about specific issues and the way in which that history manifests itself in education and things that happen in their education. So they get that real sense of what's gone on before and what's their role in it. (NIA)

Non-Indigenous academics also discussed the importance of recognizing that Indigenous issues are not the same as multicultural issues. *“It's not multicultural, it's [a] totally different issue. Multiculturalism is one issue – working with Indigenous students is a totally different issue in that you've got to consider different history, where they're coming from” (NIA).*

Some non-Indigenous academics discussed the importance of understanding the concept of equity and the potential for the academic's level of understanding to impact their ability to appropriately address the unique needs of students.

Make sure that their awareness and knowledge is continually reviewed and that they don't box us in, box all of our students ...because everybody is not the same. We actually probably cross a lot of equity groups... low socio-economic, Indigenous, female ... the more characteristics you have, of an equity group, the more needs that are required. (IA)

Academics indicated that leadership by Indigenous nursing academics (and Indigenous nurses in general) was important to ensure that the issues pertaining to Indigenous nursing recruitment, retention, and completion remained on the agenda. A non-Indigenous academic stated:

Indigenous nurses are needed in Indigenous health. You can have as many white, yellow, brindle people working with Indigenous people, but unless you have Indigenous nurses working with Indigenous people... you can have an understanding, but you don't actually understand where the person is coming from. (NIA)

It was agreed by all the academics that the successful progression and completion of Indigenous nursing students was an important issue. They shared three strategies based upon their experiences. These included a commitment from every academic in the nursing school towards supporting students; ensuring there was an appropriate person such as an Indigenous support academic in a key position to guide the Indigenous students and non-Indigenous academics in creating a culture in the department that Indigenous completions was everyone's responsibility.

Discussion

Historically, the relationship between Indigenous and non-Indigenous Australians has been fragmented, which has led to tensions on many levels and in many environments, including the university system. As a result, Indigenous students often find themselves in conflict with the practices and procedures of the educational institution (Yurkovich, 2001). However, the staff interviewed in this study considered that effective leadership and sound academic policies and

practices could help the Indigenous students, as could effective teaching and learning practices, and appropriate support. Others have previously criticized the university environment as detrimental to Indigenous student success (Iwasiw, Goldenberg, & Andrusyszyn, 2009; Usher et al., 2005; Turale & Miller, 2006). Unfortunately, research has indicated that Indigenous students often feel pressured to change their personal values to accommodate the needs of the university, which is considered oppressive (Dickerson, Neary, & Hyche-Johnson, 2000), and academics are often uncertain about whether the students should conform to the academic culture or whether they should accommodate the needs of the students (Dickerson & Neary, 1999). However, Indigenous secondary school students have reported that their success is facilitated by culturally aware teachers (Yurkovich, 2001; Curran, Solberg, LeFort, Fleet, & Hollett, 2008) and effective and appropriate support (Evans, 2004). Therefore, the findings in this study are consistent with previous literature on factors that influence Indigenous students' success at university.

The individual characteristics of the Indigenous students, particularly their motivation for choosing nursing as a career and determination to complete a nursing degree, were identified as paramount to success. While previous research has identified characteristics involved in success, such as family, individual students factors, and educational preparation (Anonson, Desjarlais, Nixon, Whiteman, & Bird, 2008; Martin & Kipling, 2006; Usher, Lindsay, Miller, & Miller, 2005), this study is the first to identify the importance of motivation for undertaking nursing as a significant predictor of student success. In addition, the participants outlined the importance of the students' own Indigenous identity and how that facilitated their progress through the system. Universities have been criticized in the past because of such issues as racism, discrimination, and stereotyping (Adams et al., 2005; Evans, 2004; Martin & Kipling, 2006; Usher et al., 2005), and it is reasonable to suggest that students with a stronger sense of self-identity would be better able

to handle these issues. Weaver (2001) reported that many Indigenous nursing students received no validation of their cultural identity and Yurkovich (2001) suggests that Aboriginal students who enter Western educational environments “become devastatingly aware that their cultures, values, beliefs, and practices are in contradiction with many practices of the educational culture” (p. 268). The presence of culturally appropriate supports to compensate for this lack of cultural validation is critical in education institutions (Anonson et al., 2008; Martin & Kipling, 2006; Turale & Miller, 2006; Usher, Cook et al., 2005; Usher, Lindsay, Miller et al., 2005). This enabler has been further validated in this study and includes relationships, connections, and partnerships with other Indigenous nursing students, Indigenous academics, and Indigenous Education Support Units to provide cultural validation. These findings also indicate that Indigenous nursing academics are more critical to this process as they are seen to embody similar values, beliefs, and practices as those of the Indigenous nursing students as well as those of the education institution.

The importance of creating a welcoming and supportive tertiary academic environment has also been discussed elsewhere (Usher et al., 2005; Weaver, 2001; Yurkovic, 2001). Relationships, connections, and partnership are critical elements of creating a welcoming and supportive environment towards Indigenous nursing students’ successful completion of nursing courses. Evans (2004) takes this further when he states that success among Aboriginal students could be further enhanced by efforts from faculty members to create personal, trusting relationships with students. This study found that partnerships between schools of nursing and Indigenous Education Support Units are paramount. Indigenous Education Support Units provide the linkages to students’ families and communities and are set up specifically to support Indigenous students across the university. However, historically, Indigenous Education Support

Units were set up to assist Indigenous students taking Indigenous courses. More recently, Indigenous students are enrolling in “mainstream” courses and Indigenous Education Support Units and schools of nursing in this study appear to adjusting to what this partnership entails. Specifically, how to share and coordinate roles and responsibilities in regard to Indigenous nursing student support is crucial. This area of Indigenous nursing student support is relatively new and continually evolving; therefore, schools of nursing and midwifery must ensure that they work together to benefit Indigenous nursing students and to ensure successful progression.

Anecdotally, some academics in this study believed that they produced better student outcomes because of the partnership between the school of nursing and Indigenous Education Support Unit. Another critical connection was that between Indigenous nursing students and Indigenous academics. The presence of an Indigenous nursing academic was considered to have the potential to significantly reduce the tension that can exist between Indigenous students and non-Indigenous academics and the system. However, it seems that it is more than just a presence that is having such a positive impact on successful Indigenous nursing student completion. The relationship that exists between the Indigenous nursing academic and Indigenous nursing students is a connection that allows for a “safeness” for the student that would not necessarily be established between non-Indigenous academics and Indigenous nursing students. Indigenous academic staff with a strong knowledge of community was cited by Adams (2005) as an important factor for student success and one that contributes to a culturally safe environment. Other authors confirm that Aboriginal representation in nursing education provides role models to students (Anonson et al., 2008; Malatest, 2002; McBride & Gregory, 2005) and mentors (Malatest, 2002; Martin & Kipling, 2006; McBride & Gregory, D. 2005; Usher, Cook et al., 2005) who act as advisors to students and who reflect general equity (Malatest, 2002).

The knowledge, awareness, and understanding of university systems and processes by family and community were important considerations for Indigenous nursing students' successful course completion. The support was greater for students whose family and community had a keen understanding of university requirements. Conversely, students whose families and communities had a lesser understanding of university requirements placed a greater burden upon the student. Students' personal attributes combined with academics' awareness of family and community obligations and responsibilities greatly contributed to the successful completion of nursing programs by Indigenous nursing students.

One key component of institutional structures, systems, and processes as an enabler of successful completion was Indigenous course content. Evans and Greenberg (2006) suggest that Aboriginal nursing student success is in part related to programs that reflect their students' cultural context. Others suggest this can be achieved through curricula that is relevant to the life experiences of Aboriginal students, and course content that addresses Indigenous culture, history, and health (Gregory, Pijl-Zieber, Barsky, & Daniels, 2008; Usher, Lindsay, Miller et al., 2005; INEWG, 2002; Yurkovich, 2001). There is evidence in this research to support these statements.

Limitations

The academic staff in this study played a significant role in supporting Indigenous nursing students. Their views may not be the same as those of other academics in nursing. The study only interviewed academics from Queensland. Academics from schools of nursing in other states and territories may have different perceptions regarding factors that enable Indigenous nursing student completion.

Conclusion

This paper reports academic and other university staff perceptions of enablers of successful completions by Indigenous nursing students in Queensland Universities. Given that these data have not formerly been described, the results provide a unique perspective and offer new understandings to add to the body of knowledge around issues impacting on Indigenous student retention and completion. Increasing the success of Indigenous students in undergraduate nursing course is pivotal as more Indigenous registered nurses has been identified as one strategy that will help to improve the health outcomes for Indigenous Australians. Interestingly, the state of completions in pre-registration tertiary nursing programs by Indigenous Australian students remains critically low when compared to non-Indigenous students. Also important, the paper reveals experiences of success as described by academics, and if we are truly aiming to increase the number of Indigenous nurses in Australia, the strategies suggested which have been drawn from the findings above need to be developed and implemented accordingly.

Recommendation 1: Appoint an Indigenous nursing academic in all schools of nursing with Indigenous students.

Recommendation 2: Develop partnerships between schools of nursing and Indigenous Education Support Units.

Recommendation 3: Develop and implement a cross-cultural awareness program specifically for academics in schools of nursing.

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Table 1

Factors Underlying Program Completion by Australian Indigenous Nursing Students as Identified by Academic Staff

Theme	Sub-themes	Frequency
Individual student characteristics	<ul style="list-style-type: none"> I. Motivations for choosing nursing II. Personal attributes for success III. Life and work experience IV. Appropriate timing 	244
Institutional structures, systems, and processes	<ul style="list-style-type: none"> I. University leadership II. Teaching and learning III. Policy and procedures IV. Support from university leadership 	170
Relationships, connections, and partnerships	<ul style="list-style-type: none"> I. Nursing schools and Indigenous Education Support Units II. Indigenous nursing students and other students III. Indigenous students and wider university resources IV. Indigenous students and academics V. Indigenous students and industry 	157
Family and community knowledge, awareness, and understanding	<ul style="list-style-type: none"> I. Family and community understanding of university II. Support from family and community III. Complex social issues IV. Family and community obligations and responsibilities 	127
Academics' knowledge, awareness, and understanding	<ul style="list-style-type: none"> I. Indigenous academics (nursing and others) II. Non-Indigenous nursing academics 	64

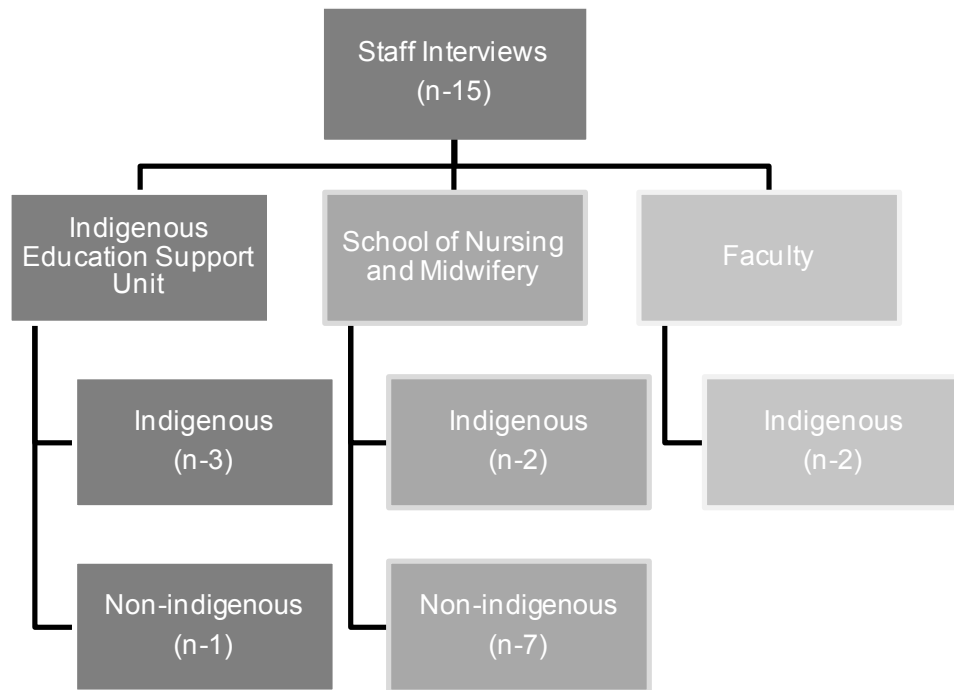


Figure 1. Staff interview map.



Figure 2. Sub-theme II model of student personal attributes for success.

The previous paper reported academics' perceptions of enablers of successful completions by Indigenous nursing students in Queensland Universities and makes the following recommendations:

- **Recommendation 1:** Appoint an Indigenous nursing academic in all schools of nursing with Indigenous students.
- **Recommendation 2:** Develop partnerships between schools of nursing and Indigenous Education Support Units.
- **Recommendation 3:** Develop and implement a cross-cultural awareness program specifically for academics in schools of nursing.

4.5 Narrative Analysis

A strengths-based approach to examine the factors that impact on successful completion of pre-registration nursing courses by Indigenous Australian nursing students was an important driver of this study as most previous studies have taken a deficit approach to study the problem. To further facilitate this process a secondary narrative analysis of success stories told by eight third-year nursing students were analysed and resulted in a collective story with the overarching plotline *Creating walking tracks to success (publication 6 - Creating Walking Tracks to Success: A narrative analysis of stories of successful course completion by Indigenous Australian nursing students)*. Six threads of experience emerged from the analytic process:

1. Making a difference
2. Valuing Indigenousness
3. Healing strength of connections

4. Resisting racism
5. Embracing support
6. Persevering towards completion and are further elaborated on in the manuscript.

As the manuscript only includes snippets from these narratives, Appendix A provides a copy of the six Core Stories that arose from the narratives:

- Core Story 1 - Liza “*An Aboriginal Women Warriors Journey*”
- Core Story 2 - Rhea “*Sacrificing For A Brighter Future*”
- Core Story 3 - Kim “*For the Greater Good*”
- Core Story 4 – Isabella “*It’s My Time and Failure Is Not an Option*”
- Core Story 5 – Stacey “*Exceeding Own Expectations*”
- Core Story 6 – Debbie “*Success in Isolation*”

Figure 4.2 provides a matrix of how the core stories and plot lines were derived during the analytic process.

	LIZA	RHEA	ROSS	ISABELLA	SHERRY	MEGAN	EMILY	LACEY
PLOT → Sub-Plot ↓	<i>An Aboriginal Women Warriors Journey</i>	<i>Sacrificing for a brighter future</i>	<i>For the greater good</i>	<i>It's my time failure is not an option</i>	<i>Exceeding her own expectation</i>	<i>Success in isolation</i>	<i>Strengthening identity through education</i>	<i>Successful progression in a Culturally safe space</i>
Making a difference	✓	✓	✓	✓	For your own reasons	For your own reasons	✓	✓
Valuing of Indigenous identity	✓	✓	✓	✓	✓	Flying under the radar with Indigality	✓	✓
The healing strength of connections	✓	✓	✓	✓	✓	Doing it on your own	✓	✓
Resisting racism and oppression	✓	✓	✓	✓	✓	✓	✓	✓
Embracing support	✓	✓	✓	✓	✓	Doing it on your own	✓	✓
Persevering towards completion	✓	✓	✓	✓	✓	✓	✓	✓

Figure 4.2 Creating Walking Tracks to Success: A narrative analysis of stories of successful course completion by Indigenous Australian nursing students

The following manuscript outlines the narrative process undertaken and reveals the plot lines developed from the narratives and discusses the narratives in relation to the current literature.

4.6 Publication 7 - “Re-submission” – Nurse Education Today

4.7 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows:

Publication7: West, R., Foster, K. & Usher, K. (Re-submission). Creating Walking Tracks to Success: A narrative analysis of stories of successful course completion by Indigenous Australian nursing students. *Nurse Education Today*.

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 4 Qualitative findings</i>	Creating Walking Tracks to Success: A narrative analysis of stories of successful course completion by Indigenous Australian nursing students	Resubmitted March 2012 <i>Nurse Education Today</i>	West (50%) Foster (30%) Usher (20%)	1.442

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name Roianne West	Date 23/03/2012
Signature 1	Kim Foster	Date 23/03/2012
Signature 2	Kim Usher	Date 23/03/2012

Creating Walking Tracks to Success: A Narrative Analysis of Stories of Successful Course Completions by Indigenous Australian Nursing Students

Roianne West, Kim Foster, Kim Usher, Lee Stewart

Abstract

Indigenous Australians are more likely to die prematurely. One strategy to improve this situation is to increase the participation of Indigenous people in the health workforce, and to that end, Indigenous nurses play a critical role. Although the numbers of Indigenous students undertaking tertiary nursing courses are increasing, completion rates have not. In this qualitative study, we adopted a strengths-based approach to explore the factors involved in successful completion of pre-registration nursing courses by Indigenous Australian students. A narrative analysis of success stories by eight third-year nursing students resulted in a collective story with the overarching plotline *Creating walking tracks to success*. Six threads of experience emerged: Making a difference, Valuing Indigenousness, Healing strength of connections, Resisting racism, Embracing support, and Persevering towards completion. Key success factors included resilient attributes, including building supportive connections and having positive expectations of the future, along with sustained institutional support from Indigenous nurse academics and clinicians. Development of tailored resilience-building training for Indigenous nursing students and appointment of Indigenous academics in Schools of Nursing that include such students may facilitate future successful completions in other programs.

Keywords: Indigenous, nurses, narrative analysis, resilience, students

Introduction

Indigenous Australians have a high risk of premature death from chronic illnesses such as cardiovascular disease, cancer, and diabetes (AIHW, 2008). It has been argued that the health of Indigenous Australians can be improved by increasing their participation in the health workforce (Schwab and Anderson 1999; Usher, Miller, Lindsay, Miller, O'Connor, Turale, and Sellen 2003; Usher, Miller, Turale, and Goold 2005; Peiris, Brown and Cass 2008; West, Usher, and Foster 2010; Bryant, 2011; Goold, 2011). Nurses represent almost 50% of the health workforce globally, increasing to almost 55% in Australia (Productivity Commission 2006; WHO, 2006). In 2009, 1,605 employed nurses were identified as Aboriginal and/or Torres Strait Islander, representing approximately 0.6% of nurses with Indigenous status (AIHW, 2011). In 2002, the Indigenous Nursing Education Working Group (INEWG, 2002) called for a national approach for strategies to increasing the number of Indigenous graduates from mainstream tertiary nursing programs, which has resulted in an increase in numbers entering courses. However, program completion rates have not kept pace with increased enrolments, and remain consistently lower for Indigenous nursing students compared to non-Indigenous students (DEWR, 2009; Authors, 2010, In press).

Indigenous nursing students face similar challenges to other Indigenous students in the tertiary system (Lane, 2009). However, financial hardship, institutional racism and academics who lack awareness and understanding of kinship responsibilities, are barriers to successful course completion (INEWG, 2002; Usher et al. 2003). Issues relating to lack of academic preparedness have also been identified as having a significant impact on retention (Schwab and Anderson 1999; Usher et al., 2003; Usher et al., 2005; Peiris, Brown and Cass 2008)

Data on Indigenous and non-Indigenous university student commencement, attrition, progression, and completion numbers from 2002 to 2007 reveal only a third of Indigenous students completed higher education degrees (33%; range, 18.4%–49.5%) compared to over half of non-Indigenous students (56%; range, 40.7%–64.5%). For nursing degrees, these differences were even greater, with less than a third (30%; range, 16.2%–47.4%) of Indigenous students completing, compared to over two-thirds (65%) of non-Indigenous students (DEEWR 2009; Authors In press).

This qualitative study, part of a larger mixed-methods study, sought to understand the factors involved in successful completion of pre-registration nursing courses by Indigenous Australian nursing students.

Design

The mixed methods study included the collection and analysis of government statistical data on student course enrolments, retention, progression, and completions followed by interviews with third-year nursing students. The results of the quantitative phase have been described previously (*see* Authors, 2010).

Ethical considerations

Human Research Ethics Committees of the five participating universities in Queensland, Australia, granted approval. The National Health and Medical Research Council Values and Ethics in Aboriginal and Torres Strait Islander Health Research guidelines (2003) for conducting research with Indigenous people were adhered to. The eight values central to the guidelines include reciprocity, respect, equality, responsibility, survival, protection, spirit, and integrity, and provided guidance in the conception, design, and conduct of the research. Interview participation was

voluntary, informed consent was obtained and participants were reminded that they could stop the interview at any time. Codes were allocated to interview transcripts to ensure confidentiality, and all data were securely stored.

Methods

Eight third-year nursing students were purposively recruited via newsletters, flyers, and word-of-mouth. Interviews, conducted using the Dadirri approach, took between 1 and 2 hours and were conducted by the first author, an Indigenous nurse, at a time and place chosen by the participants. The Dadirri technique encompasses practices associated with the importance of community, reciprocity, reflectivity, and trustworthiness (Atkinson, 2002). These principles are echoed in the tenets of Indigenous methodology and other emancipatory research approaches (Chilisa, 2012). The interviews were semi-structured and in-depth, containing questions such as “What are your experiences as an Indigenous nursing student?” “What factors do you think helped you to successfully progress through the course?” and “What strategies support Indigenous nursing students and result in better retention and completion rates?”

Narrative analysis

Interviews were recorded and transcribed verbatim, and initially analyzed using a modified version of Emden’s (1998) approach (i.e., within-case narrative analysis) (Reissman, 2008). In keeping with emancipatory research approaches, during analysis relevant interviewer comments were retained, as they were an integral part of the Dadirri interview conversation. Sub-plots within each participant core story were then compared and contrasted (i.e., across-case narrative analysis) (Reissman, 2008). In the subsequent phase of analysis, reported in this paper, narrative threads (Chan et al.,

2006) were developed from collated sub-plots, and an overall plotline and collective story of experiences of successful course completion was constructed. The research team met regularly throughout the analysis to discuss emergent findings, which enhanced trustworthiness.

Results

All eight participants were Indigenous women aged 25–35 years enrolled for between 2.5 (accelerated degrees)- to 8-years. Most were the first in their family and community to obtain a university degree. Five students had children, three were working part-time, and two were studying and working full-time.. Two had partners, and seven came from a rural and/or remote area.

***Creating walking tracks to success*—a collective story of nursing course completion**

The overarching plotline for the collective story of successful participant completion was *Creating walking tracks to success*. These included six threads of experience: (i) Making a difference, (ii) Valuing Indigenousness, (iii) Healing strength of connections, (iv) Resisting racism, (v) Embracing support, and (vi) Persevering towards completion.

(i) Making a difference

This theme describes the strong motivations and imperatives underlying participant decisions to study nursing, and their drive to complete the course. Motivations included wanting to make a difference to their family, their respective communities, and wider Indigenous communities. Participants wanted to support the health of their people and show other Indigenous people that it is possible to complete a tertiary degree.

Some participants were fortunate to have strong role models working in Indigenous health: family members who had dedicated their lives to this cause. These participants viewed nursing as their way of making a difference to the health of their community. This translated to acknowledging themselves as a role model, not only for family, but also for other students and community:

I chose nursing because I wanted to help my people and my mum's been in Indigenous health for 42 years.

For other students, their decision to do nursing was simply opportunistic:

I didn't always want to do nursing. It wasn't until I did the Indigenous Bridging Course that I had a tutor that chatted with me about which direction I wanted to go and she suggested nursing.

(ii) Valuing Indigenousness

A strong thread throughout participant stories was the value of their Indigenousness, including the valuing of them as Indigenous people by the university and healthcare systems. Participants spoke of the importance of education being inclusive of Indigenous culture and health issues, and how this was culturally validating for students, strengthening their sense of self. The inclusion of Indigenous content helped them to realize the importance of health professionals in the healthcare of Indigenous Australians and validated their reasons for choosing nursing. By studying Indigenous health content, some students learned a lot about themselves and their culture:

The Indigenous health unit for me is learning about yourself because in the media it's different, they portray it differently. Here it's statistically. I would rather they talked about it than not. It's no good not putting the statistics out there because if that's the worst health in the country, then put it up. Let it be known.

All participants particularly valued having access to Indigenous academics during their course:

The Indigenous nursing academic taught us ... having that person who I could network with, just in our first lab, for me, having her do it just made me feel like, hello, here's a Murri nurse teaching all these non-Indigenous people here, and myself. So something's gotta be right here. It was deadly!

It was also important to participants that the non-Indigenous academics valued their Indigenousness:

I've got to know certain staff who are mentors for Indigenous students and you can see that they give you that time, that support, ... and were available for me and take my Indigenous background into consideration and understand me ... that respect.

Clinical placements in students' hometowns were also considered an opportunity to learn about and appreciate Indigenousness:

It was worth doing a placement up home ... I felt at home there ... It was great. I just wanted to because I know I want to go up there nursing one day. I wanted to feel what it was like up there working with my mob [people].

(iii) Healing strength of connections

Throughout their stories, the thread of participants' relationships and connections was strong. Having affirming and supportive relationships with peers, family, the community, and culturally appropriate support at university was particularly important. Students drew strength from these connections, which they used to help overcome challenges, such as racism.

An important source of connection was with Indigenous students, staff, and Indigenous support units. Participants acknowledged that identifying these people was important to creating a family-like environment within the institutional structure of university:

I used the facilities at the Indigenous support unit ... once I felt welcome at the unit, and because blackfellas [Indigenous Australians, ay, when you come here, they're interested in where you come from and who your family are, and suddenly you find you're connected some way. You're a long way from home, from country, but here, that connection here, they're my family. And that's what keeps me here that you get the support...

Participants also responded strongly to the presence of Indigenous clinicians and Indigenous nursing academics, when available:

It's not every day you see Indigenous registered nurses ... when I meet them I feel not alone, I feel inspired, and I just feel strong and also my confidence, it boosts my confidence.

Healing connections were reciprocal, as participants also embraced the opportunity to give back, mentor, and support and lead other Indigenous students. They felt that they were contributing to each other's progress:

A couple of Indigenous students started this year. We sort of, all of us third years, put 'em underneath our wings and started giving them a hand and giving them some nice comments, such as "if you're struggling, come and see us."

Non-Indigenous students were also an important source of connection, particularly those from other cultural backgrounds, although some participants reported feeling isolated from their peers at times:

Even before me and another Indigenous student linked up ... I had a lot of white ones here that I hooked up with. And I've still got them too, we check up on one another.

However, participants struggled with managing competing cultural, family, and study obligations, and found it challenging to maintain both their connections with family and their other commitments. Explaining the importance of family and community cultural obligations to non-Indigenous academics could be difficult, due to a lack of understanding and/or the inflexible nature of institutional policies:

There were heaps of times when my family stuff could have interrupted my studies, but I haven't taken any time off Uni. No time ... I should be taking time

off. It's disrespectful, it's bad, and it's constantly distracting my studies. It's hard missing funerals and missing being there for family when they're sick. That's very hard. Every time a family member dies, probably every month or second month, I struggle. I don't know if it's the correct term but I get spiritually distressed all of the time and it's particularly around funerals. I struggle having to be here when I know I should be home. I'm suffering 'cos I'm the one missing out on all of this.

Students used various strategies to maintain connections with family, including phone and online social networking:

I yarn to my mob at least a couple of times a week, have a good laugh. Facebook is good. I get to see my family. I check almost every day going through my photos of kids, my nephews and nieces and grannies. Sit down and have a little cry.

(iv) **Resisting racism**

Racism was a common thread throughout participant stories. Students described a range of responses when confronted with racism. This included racism relating to prejudice from others because of their race or skin color, and institutional racism, including the policies and practices of the universities and healthcare institutions.

Personal racism often related to ignorance of aspects of Indigenous culture:

The [other] students always ask stupid questions like, "Oh, what do you call a snake in Aboriginal language?"

Students also found that their Indigenous identity was questioned and perpetuated by the stereotype of what a "real" Aborigine looks like (e.g., dark-colored skin), along

with the confusion surrounding notions of Indigenous intelligence and the stereotype that views all Aboriginals as “dumb”:

You know like, I'm not dark, dark. I'm lightly tanned and they go, "Oh, I thought you were Asian or something." Like they go, "you're Aboriginal and you're third-year uni?" I'm like, "yeah, you know, we do have brains too you know."

As Indigenous students, participants were outnumbered and often inappropriately considered the expert on all things Indigenous:

...there's not many of us and there are so many issues in Indigenous health that they're actually keen for your perspective. That's a good thing in a way, but it's bad because I can see the temptation that because there's not many of us that you have to be the Super Black Person. All these different health teams wanting you to work for them and you sort of feel inclined, or maybe obligated, to go and fix this problem.

Some students strategically responded to racism and learned to choose their battles. Other students provided an insight into where they believed the racism emanated from:

I think you have just got to be more understanding that people don't have that knowledge and that's not necessarily their fault—because it doesn't get taught

in schools ... at the end of the day it doesn't get taught in schools—and what you don't know, you don't know ... and it helps to have a little laugh.

(v) Embracing support

A range of support sources was available to participants throughout their course, and they acknowledged that their ability and willingness to embrace this support was pivotal to successful course completion. University support came from the IESUs, study skills courses, and, most importantly, the Indigenous Tutorial Assistance Scheme. Underpinning this was support from family, community, and peers, and financial support received during the course, including that given by employers, scholarships, and cadetships.

In order for the support to be useful, participants have to choose to accept it, and to use it as and when needed. At the beginning of their course, some participants were aware of their study skills and knowledge limitations, including mathematics and academic writing. They had returned to study at a mature age and knew that an improved grasp of the appropriate academic skills would be important:

I went to all the Learning Teaching Support Unit classes in the beginning. They had classes on lectures, taking notes and writing assignments, so I went to all of those, and it's for all the university and everybody rocked up to it. They also had a beginner's course there for chemistry that I did in my first year.

All students agreed that it was critical to be proactive in seeking and gaining the support they needed. In particular, literacy in information technology and access to computers, printers, and a culturally safe study area were beneficial to completion:

It was a struggle in the beginning because I didn't know much about the Internet ... it was a problem being computer literate. I had to learn, and the Internet was new to me. I found it a struggle at first with writing and just knowing how to start. I just wish I would've had my tutor at the beginning.

Seven of the participants received some form of financial support, which was integral to their ability and motivation to complete the course:

In terms of having a scholarship and the cadetship, that's really made me put my head down because I know that I've contracts to abide by.

(vi) Persevering towards completion

The ability to persevere and persist “against all odds” was evident in all the participant stories. When confronted with issues that could have been detrimental to successful progression, such as racism and failure in assessments, participants found ways of dealing with them. They persevered to achieve their desired outcome and were unwilling to give up:

First year was challenging only because I didn't know the structure of how it worked. Until I got over first and second year I felt was the toughest, as in deaths in the family. Academically wise it was a bit tougher too. This year, third

year I feel it's the year. I feel really comfortable, I know I'm nearly there; the light's getting a little bit brighter... I feel good. You know, the shoulders are going up and the chest is puffing out and I feel like I'm nearly there. That I've achieved something big, within my family and for myself personally, I feel really good about it because it's been the biggest goal in my entire life so far and it's just the beginning.

I want to pass, like, that's all I ever wanted really, but after my second year, it was like "failure is not an option."

The Indigenous nurse academic was identified by all students as a critical catalyst for instilling in them the belief and attitude that they could successfully complete their course and move into the next phase of their nursing career.

Discussion

The specific objectives of this study were to describe Indigenous students' experiences of enablers for success and develop a narrative of the student experience. Unlike previous studies, the focus was on factors involved in successful course completion by Indigenous students, rather than simply on retention issues. This unique investigation, undertaken from a strengths-based focus, provides several key findings. The focus on success is in keeping with the sentiments of Devlin (2009), who encourages the adoption of a positive stance when attempting to understand why some Indigenous students manage to succeed, despite the barriers they face. It is therefore difficult to ascertain the synergies between the findings of this study and

those of previous research because the latter have focused on the barriers to recruitment and retention, rather than on evidence of success.

Nonetheless, financial hardship, identified as a major concern in previous studies (Usher et al., 2003 and Smith et al., 2011), was less of an issue in the present study as seven of the eight students were in receipt of financial assistance. Thus, earlier policy initiatives to enable provision of financial support to Indigenous students (Department of Employment Education Workplace Relations, Indigenous Cadetship Support) appear to have been a factor that underscored their ability to remain in the course until completion. In this study, individual student characteristics, coupled with guidance and support from Indigenous and non-Indigenous academics, seemed to determine how students overcame challenges, such as family obligations and institutional racism.

Racism, one of the most pervasive and debilitating barriers to successful course completion (Weaver, 2001; Yurkovich, 2001; Labun, 2002; Malatest, 2002; Adams et al., 2005; Martin and Kipling, 2006) was also identified by participants. Racism manifests through ignorance, stereotypes, assumptions, and positions of power and privilege. The students in this study displayed great restraint and resilience in dealing with incidents of racism. They had developed ways to address racism that empowered, rather than disempowered, themselves and others. This is a positive finding and suggests that strategies for resisting racism may be of benefit to other Indigenous students.

An interesting finding was that the knowledge, awareness, and understanding of Indigenous culture and history shown by the academics, including non-Indigenous

academics, was an enabling factor as opposed to a barrier as identified in former literature (Usher et al, 2005). Further, unlike previous studies (Usher, Lindsay, Miller, and Miller, 2005; Martin and Kipling, 2006; Anonson, Desjarlais, Nixon, Whiteman, and Bird, 2008) academic readiness was not identified as a major issue in this study, as students were more academically prepared or embraced support to enhance their academic skills. Thus, university strategies to support the academic readiness of the broader student body may also have benefited these Indigenous students. The support offered by institutions, specifically IESUs and Teaching and Learning Units, and academics, provides the scaffolding that Indigenous students required.

A key finding unique to this study is the personal attributes of the participants, including their perseverance through difficulties, their determination to overcome challenges, and the importance of their life and work experience prior to the course. These attributes can be understood as evidence of personal resilience, which, as outlined in their stories, includes the ability to overcome challenges and build personal strengths such as supportive relationships and positive expectations of the future (Jackson et al., 2007).

We recommend the strengthening of partnerships between nursing schools and IESUs be considered by universities. We further recommend the appointment of an Indigenous academic in nursing schools that include Indigenous individuals. The ability to access suitably qualified and proactive Indigenous academics at university in this study was vital to addressing many student challenges. Indigenous leadership is important for designing a future for which Indigenous people can aspire. Translating

that into practical strategies employed by academics within their institutional place of work is the challenge for long-term sustainable capacity building. Development and implementation of resilience-building training tailored for Indigenous nursing students is a further positive and innovative strategy which Schools of Nursing could engage.

Study limitations

While the number of participants in the study was small, the eight students do represent a third of Indigenous nursing students who graduated in 2009 from all Queensland universities. The location of the study in Queensland means that Indigenous students in other states and territories of Australia may have different experiences. Further, the study included only female students so male students may have a different experience.

Conclusion

This study has highlighted the voices and collective story of successful course completion by one group of Indigenous nursing students, and has identified several factors that are vital to this success. If we are to increase the number of Indigenous nurses in the future and contribute towards improving health outcomes for Australia's Indigenous people, we need to ensure that Indigenous students have a successful progression through the tertiary system.

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Under Review

The previous paper privileged the voices and collective story of successful course completion as told by Indigenous Australian nursing students. The manuscript identified several factors that are vital to success that must be considered in the future if we are to increase the number of Indigenous nurses in the future as a way of improving health the outcomes for Australia's Indigenous people.

4.8 Summary of chapter

This chapter presented the qualitative findings of the study. It includes two key manuscripts that helped address the qualitative questions of the study and discussed their findings in relation to the current literature. The next chapter presents the mixed methods results from the process of merging the quantitative and qualitative data.

Chapter 5. Mixed methods results

5.1 Introduction

This chapter presents an overview of the merged results of the study. A manuscript is included as the primary evidence for this chapter. The manuscript offers an overview of the project, presents both the quantitative and qualitative results, and describes the process of integrating of all data.

The following manuscript focuses on the integration of the quantitative and qualitative data.

5.2 Publication 8 – “Re-submission” Collegian

5.3 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 8 West, R., Buttner, P., Foster, K., Usher, K., & Stewart, L. (Re-resubmission). Indigenous Australians’ participation in pre-registration tertiary nursing courses: a mixed methods study. Collegian, COLL – D – 11 – 00030.R1.				
Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 5: Mixed methods results</i>	Indigenous Australians’ participation in pre-registration tertiary nursing courses: a mixed methods study.	Resubmitted March, 2012 <i>Collegian</i>	West (50%) Buettner (20%) Foster (10%) Usher (10%) Stewart (10%)	0.822
<u>Declaration by co-authors</u>				
The undersigned hereby certify that:				
The above declaration correctly reflects the extent of the candidate’s contribution to the work and the extent of contribution of each co-author;				
They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;				

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.	
Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	Petra Buttner	23/03/2012
Signature 2	Kim Foster	Date 23/03/2012
Signature 3	Kim Usher	Date 23/03/2012
Signature 4	Lee Stewart	Date 23/03/2012

Indigenous Australians' participation in pre-registration tertiary nursing courses: A mixed
methods study

Roianne West, Petra Beuttner, Kim Usher, Kim Foster, Lee Stewart

Abstract

Developing a well-educated Indigenous nursing workforce is one way to improve the poor health outcomes of Indigenous Australians. The 2002 report by the Indigenous Nurse Education Working Group called for an increase in Indigenous nurses in the health workforce commensurate with the representation of Indigenous people in Australia. This concurrent mixed methods study investigated Indigenous participation in pre-registration tertiary nursing courses in Australia. The quantitative phase involved analyzing national data on Indigenous nursing student commencement numbers, attrition, progression, and completion rates compared to non-Indigenous students. A key finding was that the national average completion rates were 36.3% for Indigenous nursing students and 64.6% for non-Indigenous nursing students—an average difference of 28.3%. In the qualitative phase, Indigenous nursing students and academics from four universities were interviewed about their perceptions of the barriers to, and strategies to enhance, Indigenous nursing student completions. Indigenous nursing students and academics identified barriers to completion, which were similar to those in previous literature. Success strategies, however, revealed the importance of individual student characteristics; academics' knowledge, awareness, and understanding; relationships, connections, and partnerships; institutional structures, systems, and processes; and, family and community knowledge,

awareness, and understanding. This paper offers an overview of the integration and interpretation process that makes up the final phase of a mixed methods study.

Key words: Indigenous, undergraduate, nursing students; attrition; barriers; strategies.

Re-submission

Introduction

The life expectancy of Australians is among the highest worldwide; however, the life expectancy of Indigenous Australians is among the lowest worldwide and Indigenous Australians continue to experience poorer health and higher death rates than non-Indigenous Australians (AIHW, 2008). This issue has prompted the Australian government and Indigenous health leaders to sign a statement of intent towards achieving equality of health status and life expectancy for Indigenous Australians within a generation (Shadow Report, 2010). One way proposed to achieve equality of health status is a well-educated, culturally capable Indigenous nursing workforce (Goold, 1995; INEWG Report, 2002; Usher et al., 2005; West, Usher, & Foster, 2010). West et al. (2010) contend that along with the required clinical skills expected of all nurses, Indigenous nurses can contribute to improved quality of care and health outcomes by aligning their clinical skills and cultural skills. Indigenous nurses have the potential to improve access to health services for Indigenous people by ensuring that services are culturally safe and respectful of Indigenous peoples' needs. The presence of Indigenous nurses in the nursing workforce has the ability to enhance the relationship between non-Indigenous nurses and Indigenous Australians. Working together in partnership, Indigenous nurses can role model culturally safe care to their non-Indigenous colleagues. This strategy has the potential to reform health care practice delivered by nurses (West et al., 2010).

Background

Over the last decade, numerous Australian government initiatives facilitated an increase in university nursing commencements and completions in response to the global nursing shortage, ageing nursing workforce, and attrition from the profession (Preston, 2009). While the numbers of registered nurses in the wider nursing workforce has increased over the last few years (Lane, 2009), the number of Indigenous registered nurses remains low compared to their non-Indigenous counterparts (AIHW, 2010). In 2002, the Indigenous Nurse Education Working Group (INEWG) reported that 24 of the 33 Australian schools of nursing had an Indigenous student participation rate that was lower than the Indigenous representation in the Australian population; only four schools actually achieved a representative proportion or better of Indigenous nursing students. Unfortunately, six years later, the most recent figures available (DHESU, 2008) (Department of Employment Education and Workplace Relations Higher Education Statistics Unit) indicate that this trend remains largely unchanged (See Table 1). In 2008, of the 253,616 registered nurses in Australia, only 971 or 0.4% identified as Indigenous (AIHW, 2010). In the same year, only 198 Indigenous people commenced nursing pre-registration tertiary courses in Australia, which corresponded to 1.71% of overall student commencements. This rate was well below the 2.7% Indigenous representation in the Australian population (AIHW, 2010). Further, in 2008 the number of qualifying schools with a representative proportion or better of Indigenous nursing students remained at four (DHESU, 2008).

Strategies aimed at increasing the number of Indigenous nurses commencing pre-registration tertiary courses include the Puggy Hunter Memorial Health Scholarship and the Australian

Government Undergraduate Nurse Scholarships. The Department of Education, Employment, and Workforce Relations (DEEWR) also offers an Indigenous nursing cadetship. In return for the cadetship, the students are contracted to undertake 60 days of paid clinical experience per year at a designated health service and expected to progress through their studies successfully (DEEWR Higher Education Report, 2008). Some state and territory health services have set numerous targets for improved Indigenous representation and have developed Aboriginal and Torres Strait Islander Nursing and Midwifery Strategies. One district health service for example, argues that the percentage of Indigenous nurses in the total nursing workforce should reflect the percentage of Indigenous people in the district's service area (Townsville Health Service District, 2010). Some states have appointed Indigenous Nursing Advisors to lead strategy implementation in partnership with their respective tertiary sectors.

Given the need to improve the health of Indigenous Australians, and the importance of access to culturally appropriate and knowledgeable caregivers, the low number of Indigenous nurses is in need of urgent attention. To date, however, neither Indigenous student enrolment and completion of pre-registration nursing courses nor the strategies that enable student success have been explored in depth. This mixed methods study aims to address these issues.

The study

Aim

This study aimed to investigate Indigenous students' participation in pre-registration tertiary nursing courses in Australia with specific emphasis on commencement numbers, attrition, progression, and completion rates. It also explored the factors that students and academics' identify as barriers to enablers of completion by Indigenous nursing students.

Method

Design

The present study used a concurrent mixed method design (Creswell & Plano Clark 2011). The research questions were:

1. What are the national commencement numbers, progression, attrition, and completions rates for Indigenous nursing students since the publication of the final report of the Indigenous Nurse Education Working Group (INEWG, 2002) when compared to non-Indigenous nursing students?
2. What are the factors identified by Indigenous nursing students and academics as enablers to successful completion of courses?
3. What are factors identified by Indigenous nursing students and academics as barriers to successful course completion?
4. What strategies are perceived as resulting in improved completion rates as identified by Indigenous nursing students and academics?

In this paper I have focused on the integration of the quantitative and qualitative data; the final and critical phase of good mixed methods study (Creswell & Plano-Clark, 2011).

Data integration

The available Department of Education Employment and Workforce Relations Higher Education Statistics Unit (DHESU) data (2002–2008) on national nursing student commencement numbers, progression, attrition, and completion rates was collected and analyzed to reveal the differences between Indigenous and non-Indigenous students. At the same time, the analysis of the DHESU data, audits of characteristics of qualifying Queensland universities were undertaken along with interviews with Indigenous nursing students and academics. The interview data was analyzed utilizing content analysis to identify barriers to, and strategies for success as identified by Indigenous nursing students and key academics. These final themes are a synthesis of the staff and students content analysis. A secondary narrative analysis of student interview data was also conducted to reveal student stories of successful completions. Student narratives revealed the following narrative threads: making a difference; valuing Indigenousness; the healing strength of connections; resisting racism; embracing support, and persevering towards completion. Table 2 provides an overview of how the data was integrated.

Sample

In the quantitative phase, the DHESU data was collected on nursing student commencement numbers, attrition, progression, and completion rates for 2002 – 2008. This resulted in a sample of 25 out of 39 (65%) schools of nursing in Australia. Typically, a pre-registration tertiary

nursing course in Australia is expected to take three years of full-time study or six years of part-time study. Therefore, only those universities that had nursing schools in place in 2002 were included in the analysis. Those universities with interstate campuses were also excluded, as it was not possible to attribute the data to an individual state until after 2002.

In the qualitative phase, a purposive sample of 8 Indigenous third-year nursing students and 13 academics from four Queensland (QLD) universities were interviewed. The eight students interviewed represented 33.3% of the available sample size (there were 24 Indigenous, third-year nursing students in QLD in 2009 (Office of the Chief Nursing Officer, Graduate Nurse Online Recruitment)).

Participants

Only Queensland schools of nursing were included in the qualitative phase due to budgetary constraints. Third-year students were strategically sought for interview as they were deemed to have already demonstrated an increased likelihood of completing compared to students in years one and two. All participants were Indigenous women aged between 25 and 35 years and were either employed as Indigenous health workers or had a family member who was one. The timeframe within which they were completing their course ranged from two-and-a-half through to eight years depending upon whether they were taking an accelerated course of study or part-time study. Most students were the first in their family some in their community to obtain a university degree. Five of the eight students were of a mature age with children: three of these worked part-time and two worked and studied full-time. Seven came from a rural and/or remote area. Academics that played a significant role in supporting Indigenous students were also invited

to be interviewed and included five Indigenous and eight non-Indigenous academics working either in the school of nursing or Indigenous Education Support Units (IESUs). The academics ages ranged from 25 to 60 years of age and their years of experience varied from one to over 20 years of clinical and academic experience including roles as a Head of School through and Indigenous Support Officer.

Data collection

Quantitative data were sourced from the DHESU, an annual comparative study of all higher education institutions. Institutions access the data to determine their annual progress and compare their performance with other providers. Data from 2002 to 2008 (the most recent data available at the time of analysis) were reviewed for trends specific to Indigenous nursing students, and compared to non-Indigenous nursing students' participation in pre-registration tertiary courses. Qualitative data were collected in the same period and included audiotaped, in-depth, individual semi-structured interviews ranging from 45 minutes to 120 minutes. During the interviews, students and academics were asked about their perceptions of barriers to successful completion of the programs and strategies they considered to facilitate completion.

Ethical issues

The University Human Research Ethics Committee (HREC) approved the study. HREC approval was also obtained from the four Queensland universities involved in the qualitative component of the study. Recruitment was undertaken by way of posters and word of mouth through the IESUs

and schools of nursing. All students and academics interviewed were provided with an information sheet, and when they agreed to participate, were asked to sign a consent form. All data were de-identified by the researcher and stored securely. As all students and some academics were Indigenous, the ethical principles for working with Indigenous people were adhered to during the study (National Health and Medical Research Council (2003) *Values and Ethics in Aboriginal and Torres Strait Islander Health Research* guidelines). Measures were taken to ensure that the six values at the heart of the NHMRC guidelines—reciprocity, respect, equality, responsibility, survival and protection, and spirit and integrity—were adhered to and respected. For example, (i) the principal investigator is an Aboriginal woman who has worked extensively in Indigenous communities; (ii) the principal investigator attended workshops on ethical practice with Indigenous people and on Research Conduct and Ethics; (iii) a cultural mentor, appointed for the period of the study, is an Indigenous academic and the university Aboriginal and Torres Strait Islander Human Ethics Advisor; and (iv) the formation of an Indigenous reference group (including elders) guided and informed the study.

Data analysis

Descriptive statistics were used to analyze the quantitative data. Descriptive statistics is the speciality of quantitatively describing the main features of a collection of data with an aim to summarize a data set, which in this case was the DHESU data set. Data were extracted and analyzed for commencements, progression, attrition, and completion trends assuming Equivalent Full Time Student Load (EFTSL). Progress and attrition rates were already calculated by DHESU as follows. Progress rate for year (x) is the proportion of actual student load (EFTSL) for

commencing a bachelor course in year (x) for units of study that are passed divided by all units of study completed (passed + failed + withdrawn). Attrition rate for year (x) is the proportion of students commencing a bachelor course in year (x) who neither complete nor return in year (x + 1). The researchers calculated completion rates. The data are time-lapsed and taken from the time of commencement to completion of degree. This measure is useful because it can be readily determined with a high level of accuracy (Sheridan & Pyke, 1994). However, it does not account for altered progression, such as potential periods of leave and full- or part-time study that may impact the time taken for completion. Unfortunately, we were unable to attain more accurate measures of progression, attrition, and completion rates that recognize the complex nature of Indigenous participation in tertiary courses.

Individual interviews were transcribed verbatim, de-identified, and managed using NVivo 8. Data were analyzed using content analysis—a process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). Using an iterative coding process, we coded for barriers and strategies to completion by students and academics. Qualitative codes were then *quantitized* (Onwuegbuzie & Burke Johnson, 2006), or counted, as a way of determining the frequency of each code or theme. The process of quantizing qualitative data helps improve internal generalizability and support interpretations (Maxwell, 2010).

Quantitative results

Student commencement numbers

Table 1 provides an overview of commencements across the period, including Indigenous parity, for all states and territories. A total of 64,504 students commenced a pre-registration tertiary nursing course in Australia during the timeframe, and of these 1,000 (1.5%) identified as Indigenous. Indigenous parity varied across commencement numbers between states and territories and averages calculated across the period, with the highest parity noted in Tasmania (1.5%), and lowest parity shared by Victoria and Australia's Capital Territory (ACT) at 0.3%.

Table 1 near here in text

Student progression rates

Figure 1 provides an overview and comparison of progression rates between Indigenous and non-Indigenous students. The rates fluctuated across years, with the only consistency being the gap between Indigenous and non-Indigenous student progression. Progression rates varied between states and territories and averages calculated across the period, with the highest progression rate noted in the ACT (85.9%) and the lowest in the Northern Territory (NT) (54.9%).

Figure 1 near here in text

Student attrition rates

Figure 2 provides an overview and comparison of attrition rates between Indigenous and non-Indigenous students. Average attrition rates for the period were 29.6% for Indigenous nursing students and 19.5% for non-Indigenous nursing students—an average difference of 10.1%. Attrition rates varied between states and territories and averages calculated across the period, with the highest attrition rate in the NT (40.7%) and the lowest in Victoria (15.1%).

Figure 2 near here in text

Student completion rates

Figure 3 provides an overview and a comparison of completion rates between Indigenous and non-Indigenous students. The national average completion rates were 36.3% for Indigenous nursing students and 64.6% for non-Indigenous nursing students; an average 28.3% difference. Completion rates varied between states and territories and averages calculated across the period, with the highest in Tasmania (57.0%) and the lowest in the NT (21.3%).

Figure 3 near here in text

Qualitative results

There are five major themes—each with a set of related sub-themes—that students and academics identified as important factors to Indigenous nursing student success. The five major themes are (i) individual student characteristics; (ii) academics' knowledge, awareness, and understanding; (iii) relationships, connections, and partnerships; (iv) institutional structures, systems, and processes; and (v) family and community knowledge, awareness, and understanding. Analysis of the interviews revealed that the identified themes had the potential to be both barriers and enablers depending on the context and the individual student. For the purpose of this paper and to answer the overall research question, we have focused on the themes as enablers of success.

Data integration

The available Department of Education Employment and Workforce Relations Higher Education Statistics Unit (DHEU) data (2002–2008) on national Indigenous nursing student commencement numbers, progression, attrition, and completion rates was collected and analyzed to reveal the differences between Indigenous and non-Indigenous students. Narrative analysis of student interview data was also conducted to reveal student stories of successful completions.

The following section discusses each of the key findings in relation to factors and strategies supporting successful Indigenous nursing student completions. Table 2 provides an overview of how the data was integrated. This final step of data integration is often overlooked or poorly addressed in many mixed methods studies and the uptake of the integration phase of mixed methods studies has developed slowly since the introduction of mixed methods design (Creswell & Plano Clark, 2010).

Individual student characteristics

During the interviews, the most frequently identified theme was that of individual student characteristics as a factor enabling Indigenous nursing student success. The theme includes four sub-themes: (i) motivations for choosing nursing, (ii) students' personal attributes, (iii) life and work experiences, and (iv) timing. The paramount factor for enhancing Indigenous student completion was harnessing and strengthening individual student characteristics. Successful students had a strong desire to make a difference to the health outcomes of their culture and their communities. Some were following in the footsteps of a family member with experience working in Indigenous health and used this as motivation to overcome barriers.

Some participants thought that having confidence and strength in one's Indigenous identity further empowered students to meet challenges during their program. Participants discussed how students handled experiences of racism differently. Students displayed resilience and were aware of racism as it occurred, but "picked their battles" in seeking re-dress appropriately. Some students had developed strategies to handle negative experiences and continue in the university. Student participants revealed that when confronted with issues that might prove detrimental to their study, such as racism and family and or cultural obligations, they sought solutions rather than succumb to the potential barriers. Students adopted strategies of perseverance and persistence in the face of challenges. As one student stated, "the benefits of course completion for me, my family, and the community far outweighed any obstacles that might negatively impact on my progression."

Students who proactively accessed all available support were better placed to complete their programs. This included information, emotional, and practical support from the university, their families, communities, and peers, as well as the specific Indigenous support such as IESUs, study skills courses, and the Indigenous Tutorial Assistance Scheme.

Students who were better able to utilize their life and work experiences in the university setting, including the "timing" of when they chose to study in relation to other aspects of their life, including family and community responsibilities, were better positioned to progress successfully

through program completion. Successful completion was also strongly dependent on students' initial motivations for enrolling in nursing. This is captured in the following:

Academic

"...He felt that he wanted to give something back to people...he described it to me as, his people had believed in him enough to trust him to do something positive and he wasn't going to let those people down."

Student

"To make a difference...to go home...my intention is to get my nursing degree and then I've got something to offer my community...my whole life I've wanted to do that."

Academics' knowledge, awareness, and understanding

The second most frequent enabling factor for successful completion was knowledge, awareness, and understanding of both Indigenous and non-Indigenous academics. The theme included two sub-themes: (i) Indigenous academics' knowledge, awareness, and understanding and (ii) non-Indigenous academics' knowledge awareness. Both Indigenous nursing students and academics identified Indigenous nursing leadership as critical to providing culturally safe mentorship, leadership, and support. This was seen to assist students to navigate university systems and processes for Indigenous nursing students *and* their non-Indigenous colleagues. Both Indigenous nursing students and academics identified the importance of developing their awareness and understanding of Indigenous culture and history and an understanding of concept of equity in the context of Indigenous nursing including implementing special measures until such a time that completion rate equality exists. These issues are seen in the following statements:

Academic

"The Indigenous nursing academic can talk from a lived experience...rather than the rest of us, which can say, 'well, I've worked with Indigenous people, but I haven't lived it'."

Student

“To have black academics there...seeing other people having gone through it...it’s inspiring. The ability to see the light at the end of the tunnel...other people have done it – it is possible.”

Relationships, connections, and partnerships

The third most enabling factor of Indigenous nursing student success was that of relationships, connections, and partnerships. Five aspects were considered most critical: (i) nursing schools and the IESUs; (ii) Indigenous nursing students and other students (Indigenous and non-Indigenous nursing students and Indigenous students in other programs); (iii) Indigenous nursing students and Indigenous and non-Indigenous academics; (iv) Indigenous nursing students and the wider university; and, (v) Indigenous nursing students and the industry. Creating sustainable relationships, connections, and partnerships at the university, in the community, and family enabled the students towards completion. This was especially important for Indigenous students, as relationships and connections are the foundation of their culture.

An important success factor was the strength of the relationship between nursing schools and the ESUs. Participants identified that the IESUs provided support to Indigenous students, provided a network of Indigenous students and academics, provided an Indigenous presence on university campuses, and represented and provided connections to Indigenous communities on University campuses. The importance of this role is highlighted in the following:

IESU Academic “We are involved in every aspect of the university. Schools of nursing need to

appreciate what we do, for the success of their program. Because the success of students and we focus on Indigenous students, is dependent on the support network.”

Student

“I used the facilities at the Indigenous support unit...and because blackfellas, ay, when you come here, they’re interested in where you come from and who your family are, and suddenly you find you’re connected some way. You’re a long way from home, from country, but here, that connection here, they’re my family.”

The connections and support between Indigenous nursing students and other students, including other Indigenous nursing students, were also considered important enablers. Other important connections included the relationship between Indigenous nursing students and Indigenous academics, which was described as unique. The relationship between Indigenous nursing students and non-Indigenous academics was also critical to Indigenous nursing student success. Participants considered that the relationship between Indigenous and non-Indigenous academics often determined the success of the programs. Participants were also clear that there was the need for Indigenous students to be connected to the wider university services and that there was sometimes a tendency for Indigenous students to restrict their contact to Indigenous services.

Institutional structures, systems, and processes

The fourth most enabling factor of Indigenous nursing student success was institutional structures, systems, and processes. This included four sub-themes: (i) Staff leadership, (ii) teaching and learning, (iii) policy and procedures, and (iv) support from the system.

Leadership and support from the university, including faculty and administration, was identified as an important factor in student success. The stories shared by participants indicated that the importance of senior staff, who were viewed as having significant potential to influence the outcomes for Indigenous students. This included acknowledgement of, and respect for, students' culture. As indicated in the following statements from a non-Indigenous academic and an Indigenous student:

Academic

“The Dean of the Department is very obvious in the support that she wants Indigenous students to get. Also, we have a joint head of department and they're very obvious in what they want for Indigenous students. So there's a lot of support for the Indigenous students to succeed. In fact, it's very hard for them to fail. If everything is set up and they take advantage of everything it would be pretty hard to fail.”

Student

“It was the processes that we know, that everybody is answerable to somebody else, and you just do something that good that they can't knock it back. We need to know that stuff. Everybody needs to know it, not just us.”

Family and community knowledge, awareness, and understanding

The final enabling factor of Indigenous nursing student success was that of the family and community knowledge, awareness, and understanding. The theme included four sub-themes: (i)

understanding the university, (ii) support, (iii) obligations and responsibilities, and (iv) complex social issues. Participants stated that family support is critical. As one non-Indigenous academic said, “There seems to be a big factor in terms of family support. If the family says, we really want you to go to university it’s really important that you succeed and that you get in, those students will generally succeed.”

Family and community support was also considered pivotal to Indigenous nursing student success. This included the family and community having an appreciation of the demands placed on the student by the university, and by their family and community roles and responsibilities, and recognizing the potential for this to impact their successful progression. This is captured in the following:

Academic

“...If the family is knowledgeable about what the student’s required to do and we can be knowledgeable about the student’s family situation and what background they come from the greater the likelihood of the student succeeding...”(NIA)

Student

“...They don’t understand any of it, and we wouldn’t talk about it, but they do understand that I’m away doing something that’s going to be beneficial. But we don’t sit around yarning about it.”

Discussion

Nationally, the track record for nursing schools recruiting and retaining Indigenous nursing students varies substantially across states and across years. While the annual number of commencements for Indigenous registered nursing students has increased across the period of this study (2002–2008) from 101 (1.35%) in 2002 to 198 (1.70%) in 2008, the percentage of Indigenous students represented in commencement figures remains well below the Indigenous representation in the Australian population. It is important to note that the Indigenous population relative to the non-Indigenous population has increased by 12.8% between 2001 and 2006 (ABS, 2009). The 1,000 Indigenous students who commenced pre-registration tertiary nursing courses in Australia between 2002 and 2008 represented only 1.6% of the total student commencements, well below the target of 2.7% set by the Indigenous Nurse Education Working Group in 2002. Disappointingly, the difference in completion rates is the most outstanding of all indicators between Indigenous and non-Indigenous nursing students during the period studied. Unfortunately, Indigenous nursing student completions remain well below that of non-Indigenous students (almost 30%) and the situation did not change across the period of the study.

The Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework (2002, p. 3) aims “to transform and consolidate the workforce in Aboriginal and Torres Strait Islander health to achieve a competent health workforce with appropriate clinical, management, community development, and cultural skills to address the health needs of Aboriginal and Torres Strait Islander peoples supported by appropriate training, supply, recruitment and retention.” This strategy is based on the principles outlined in the National Strategic Framework for Aboriginal

and Torres Strait Islander Health 2003–2013, in which one of the objectives is to increase the number of Aboriginal and Torres Strait Islander health professionals working across all professions including nursing. One of the ways suggested by INEWG (2002) to support this is to set targets and develop incentives to ensure that the number of graduates per year from selected university courses is representative of the Indigenous proportion of the Australian population.

From the results of our analysis, it appears there has been no real growth in Indigenous nursing student participation rates in pre-registration tertiary courses over the past decade when considered in relation to Indigenous Australian population growth for the same period (ABS, 2009). Given these results, neither a substantial increase in the Indigenous nursing workforce is likely in the foreseeable future, nor is the achievement of recruitment and retention targets set by some state government policies. This presents a serious issue, especially as participation in the health disciplines by Indigenous people has been noted as one way to improve Indigenous health (Schwab & Anderson, 1999; Peiris, Brown, & Cass, 2008; Usher et al., 2003, 2005; West et al., 2010). The evidence provided by the current study suggests that there is a shortage of Indigenous nurses, but to date, no nationally agreed-upon targets have been set and the issue remains unchallenged.

The analysis of the DHESU data for individual universities revealed that while some schools of nursing were commencing large numbers of Indigenous students, their completion rates were inconsistent with the commencements. This situation is not new and the issues surrounding this have been well recognized (Lane, 2009; West et al., 2010).

Barriers to completion identified by the participants in this study were similar to those identified in previous studies (INEWG, 2002; Goold & Usher, 2005; Usher et al., 2003; Usher et al., 2005) except in regard to finances, which has been alleviated to an extent by the scholarships instigated since the INEWG Report (2002). Participants indicated that some academics lacked understanding of cultural obligations and responsibility and raising their awareness could improve the outcome for future students. Other students identified that they felt excluded from school processes and their Indigenousness was not valued. However, as an enabler, connecting with other students meant being able to share experiences and lessons learned.

Students identified strategies for success as increasing opportunities for Indigenous nursing students to be “connected.” Students described feeling stronger when they were part of a network of Indigenous nursing students and felt that being connected minimized feelings of cultural isolation and increased their ability to overcome experiences of racism and stereotypes from academics and other students. Most students felt they would benefit from having alumni and Indigenous nurse leaders share their experiences. As this is the first study to focus on successful Indigenous nursing completions, these findings provide new information that can be incorporated into existing policies and practices in schools of nursing and universities throughout the country.

Limitations

The results of this study need to be interpreted with caution. Using the Indigenous identifier in national datasets presents issues that have been previously recognized. For example, we know

that not all Indigenous people identify as such, which can lead to unreliable data. The quantitative analytic approach taken does not account for varying types of commencements. Anecdotal evidence suggests Indigenous nursing students tend to transfer universities and have alternate progressions through nursing courses. States and territories with smaller numbers have also affected the results. For example, Tasmania and the NT have only one university each that met the criteria for inclusion and, in some universities, the student numbers were small, for example, where one student enrolling and completing equals a 100% completion rate. Qualitative interviews were only conducted in Queensland due to budgetary constraints. It is possible that other Indigenous students and academics in other states and territories may have had different experiences and perspectives.

Conclusion

This paper presents the results of a mixed methods study of Australian Indigenous pre-registration tertiary nursing commencements, progression, attrition, and completion rates between 2002 and 2008, and student and academic perceptions of barriers to and strategies for success. Given the DHESU data have not previously been described elsewhere, the results offer a new understanding of the overall state of current participation in pre-registration tertiary nursing courses by Indigenous Australian students. The paper also reveals that while commencement numbers and completion rates have increased overall, the gap between commencement numbers progress, attrition, and completion rates for Indigenous and non-Indigenous students remains wide, and has not narrowed despite a range of initiatives introduced in an attempt to address this issue. Student and academic interviews revealed that barriers to completion continue to be fairly

constant except for financial issues, which have been resolved to some extent by institutionalized programs. Strategies for success included connecting with other Indigenous students, making the most of partnerships and supports, and inclusive approaches to education. It is important that these strategies be considered in future policy and practice in Australian universities and schools of nursing.

Re-submission

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Table 1: National Commencement Numbers in Australian Pre-registration Nursing Tertiary Courses 2002–2008; Indigenous/Non-Indigenous Comparison including Indigenous Percentages

STATE	2002		2003		2004		2005		2006		2007		2008	
	NIA	% IA	NIA	% IA	NIA	% IA	NIA	% IA	NIA	% IA	NIA	% IA	NIA	% IA
QLD	1614	2.2%	1515	2.5%	1607	3.5%	1791	2.3%	1898	2.3%	2233	3.0%	2297	3.9%
WA	723	0.4%	643	0.5%	692	1.2%	829	0.5%	928	1.3%	421	0.5%	767	1.4%
VIC	1924	0.8%	1685	0.7%	1959	0.8%	2210	0.9%	2355	1.3%	2335	1.0%	2504	0.9%
ACT	111	0.0%	112	0.0%	104	1.9%	111	0.0%	151	1.3%	152	1.3%	137	1.5%
NT	182	3.3%	193	3.1%	181	2.8%	331	3.3%	326	2.5%	426	2.6%	464	1.5%
NSW	1874	1.5%	2081	1.6%	2155	1.7%	2795	1.4%	2975	1.0%	3243	1.4%	3108	1.4%
TAS	228	1.3%	214	0.9%	268	2.2%	238	1.7%	346	2.6%	349	2.9%	1078	0.5%
SA	851	0.9%	972	1.0%	948	1.5%	1147	0.6%	1221	1.1%	1222	1.4%	1280	1.5%
TOTAL	7507	1.4%	7415	1.4%	7914	1.8%	9452	1.3%	10200	1.4%	10381	1.7%	11635	1.7%

Figure 1: National Student Progression Rates in Australian Pre-registration Tertiary Nursing Courses 2002 – 2008

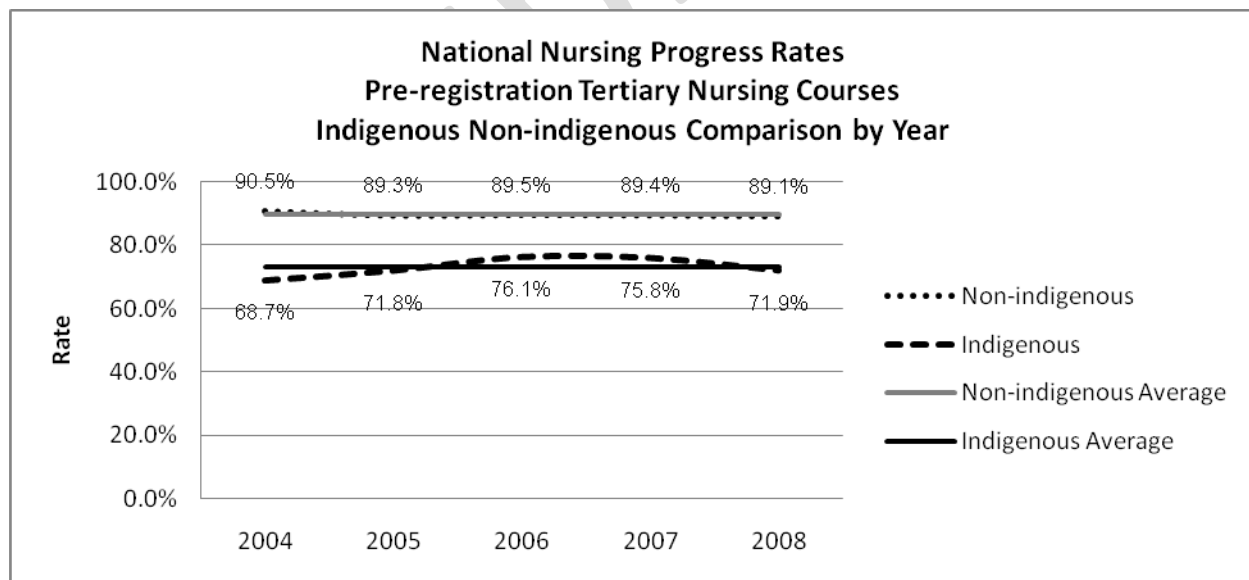


Figure 2: National Student Attrition Rates in Australian Pre-registration Tertiary Nursing Courses 2002–2008

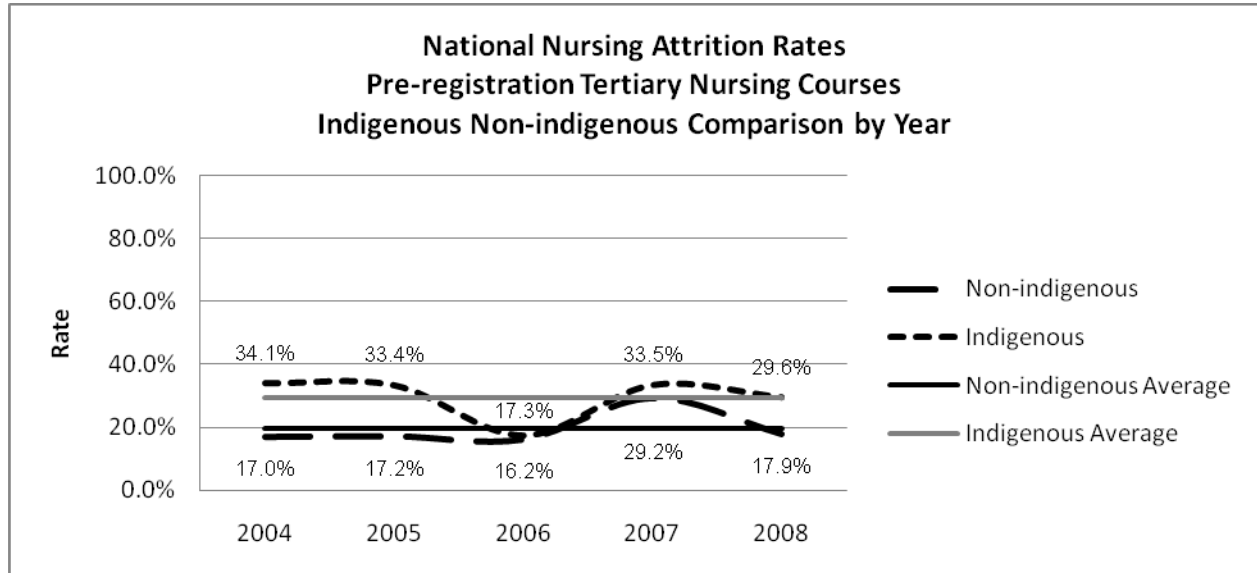


Figure 3: National Student Completion Rates in Australian Pre-registration Tertiary Nursing Courses 2002–2008 by Year

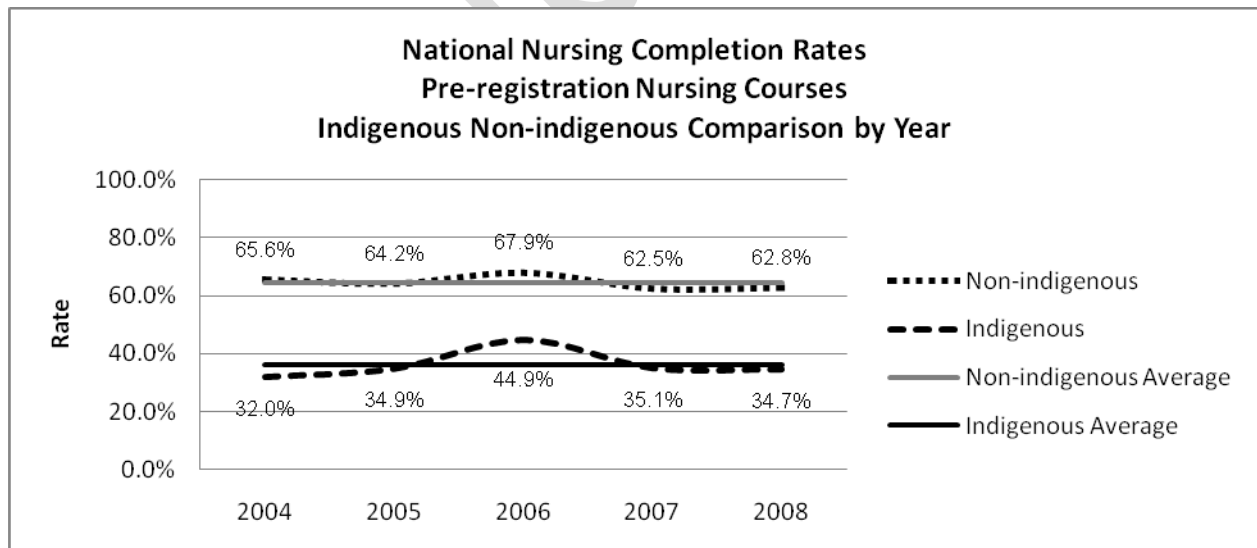


Table 2: Integration of key findings from both data sets

QUAL Findings			QUANT Findings
	Academic Content Analysis	Student Content Analysis	
<p>Finding 1 Individual student characteristics (n - 459)</p>	<p>“...he felt that he wanted to give something back to people...he described it to me as, his people had believed in him enough to trust him to do something positive and he wasn't going to let those people down.” (NIA)</p>	<p>“To make a difference. ...to go home...I figured that, I had to offer something...my intention is to get my nursing degree and then I've got something to offer my community...my whole life I've wanted to that.”</p>	<p>Commencements Details 2002 (n-29) – 2008 (n-58) Shift 50% improvement</p>
<p>Finding 2 Academics knowledge awareness and understanding (n - 273)</p>	<p>“The Indigenous Nursing Academic can talk from a lived experience...rather than the rest of us, which can say, 'well, I've worked with Indigenous people, but I haven't lived it'.”(NIA)</p>	<p>“To have black academics there...seeing other people having gone through it. It's inspiring. The ability to see the light at the end of the tunnel. Other people have done it – it is possible.”)</p>	<p>Progression Rates Details 2002 (7%) – 2008 (7.36%) Shift .36% improvement</p>
<p>Finding 3 Relationships, connections and partnerships (159)</p>	<p>“We are involved in every aspect of the university and so they also need to appreciate what we do, for the success of their program. Because the success of students and we focus on Indigenous students, is dependent on the support network.” (IA)</p>	<p>“I used the facilities at the Indigenous support unit...and because blackfellas, ay, when you come here, they're interested in where you come from and who your family are, and suddenly you find you're connected some way. You're a long way from home, from country, but here, that connection here, they're my family.”</p>	<p>Attrition Rates Details 2002 (18.63%) – 2008 (29.54%) Shift 10.91% improvement</p>
<p>Finding 4 Institutional structures systems and processes (n - 157)</p>	<p>“The Dean of the Department is very obvious in the support that she wants Indigenous students to get. Also, we have a joint head of department and they're very obvious in what they want for Indigenous students. So there's a lot of support for the Indigenous students to succeed. In fact, it's very hard for them to fail, if everything is set up and they take advantage of everything it would be pretty hard to fail.” (NIA)</p>	<p>“It was the processes that we know, that everybody is answerable to somebody else, and you just do something that good that they can't knock it back. We need to know that stuff. Everybody needs to know it, not just us.”</p>	<p>Completion Rates Details 2004 (32.0%) – 2008 (34.7%) Shift 2.7% improvement</p>
<p>Finding 5 Family and community knowledge and awareness and understanding (n - 64)</p>	<p>“by the same token, if the family is knowledgeable about what the student's required to do and we can be knowledgeable about the student's family situation and what background they come from....” (NIA)</p>	<p>“Yeah, they are. They don't understand any of it, and we wouldn't talk about it, but they do understand that I'm away doing something that's going to be beneficial. But we don't sit around yarning about it.”</p>	

NB. Quantitative results refer only to the Indigenous nursing students

n = represents the frequency of which themes occurred

NIA – Non-indigenous

IA – Indigenous

The previous paper presented the results of the mixed methods study of Australian Indigenous pre-registration tertiary nursing commencements, progression, attrition, and completion rates between 2002 and 2008. It further discussed the Indigenous Australian nursing students and academic perceptions of barriers to and strategies for success. The paper reveals that while commencement numbers and completion rates have increased overall, the gap between commencement numbers progress, attrition, and completion rates for Indigenous and non-Indigenous students remains wide. Strategies for success included;

1. connecting with other Indigenous students;
2. making the most of partnerships and supports and
3. inclusive approaches to education

All important in future policy and practice in Australian universities and schools of nursing.

5.4 Summary of Chapter

This chapter presented an overview of the results of the mixed methods study. It included a manuscript as the primary evidence for this chapter. The manuscript offered an overview of the project and presents both the quantitative and qualitative results, and the integration of all data.

Chapter 6. Discussion and Data Integration

6.1 Introduction

This chapter provides an overview of the integration and interpretation process that comprises the final phase of a mixed methods study. The analysis of mixed methods designs includes analysing the quantitative and qualitative data separately using appropriate analytic techniques, and then ‘mixing’ the data to provide the final integration. Known as inferences, the conclusions are thus drawn from within the quantitative and qualitative findings, as well as across them (Creswell & Plano Clark, 2011). This final step of integration of the data is often overlooked or poorly addressed in many mixed methods studies, and the uptake of the integration phase of mixed methods studies has developed slowly since the introduction of the mixed methods design (Creswell & Plano Clark, 2011).

In this study, the data were initially analysed separately, as outlined in Chapter Three, then merged as suggested by Creswell and Plano Clark (2011) for a concurrent mixed methods design. To help demonstrate the merging of the data, five Tables (one for each theme) are included below to demonstrate how each data set was merged and considered for interpretation. The outcomes of this process are then discussed with regard to the broader literature.

As argued throughout this thesis, a well-educated Indigenous nurse workforce is one way to help improve the poor health of Indigenous Australians. As a pivotal part of the largest group of the health workforce, Indigenous nurses have a great potential to

help reduce the gap between the life expectancy of Indigenous and non-Indigenous Australians. The Indigenous Nurse Education Working Group Report (2002) called for an increase in the number of Indigenous nurses in the health workforce commensurate with the representation of Indigenous people in the Australian population. The issues relating to Indigenous participation in nursing have been researched for some time, especially in relation to primary, secondary, and tertiary education of Indigenous students in general. The low rates of Indigenous nursing student completions, and the factors impacting on Indigenous students in the health disciplines in general, have come into the spotlight in recent times (Goold & Usher, 2006; Hunter & Schwab, 1998; Hunter & Schwab, 2003a, 2003b; Indigenous Nursing Education Working Group, 2002; Schwab & Anderson, 1999; Usher et al., 2003; West et al., 2010a).

Previous scholars have identified a range of factors involved in the poor retention rates and disappointing educational outcomes of Australia's Indigenous health and nursing students, and have found that these outcomes were impacted by issues such as personal problems, financial concerns, cultural inappropriateness of academics and courses, insufficient educational preparation, and other social issues. While these factors in themselves are challenging and pose serious barriers to students' likelihood of success, it appears that this lack of resources is not inevitable. Some schools of nursing have developed ways to assist students that are more effective than others, evidenced by their Indigenous student completion rates (West, West, West, & Usher, 2010b). Obviously some schools of nursing are able to unravel the issues involved in Indigenous student failure to progress, and have developed courses that facilitate

successful completions. Perhaps, as suggested by Nakata (2004), educators need to look beyond the issues that challenge Indigenous learners in particular, and recognise that these challenges intersect with teaching and learning issues - issues associated with the Indigenous content and the value of Indigenous knowledge - and perspectives in the academy. The attrition of Indigenous students from courses may be related to any of the previously stated issues, in addition to the teaching and learning issues surrounding the treatment or exclusion of Indigenous knowledge and content in courses (Nakata, Nakata, & Chin, 2008). This is interesting, as a call to include Indigenous content in nursing curricula was one of the key recommendations of the INEWG (2002). In fact, the 'Getting em n keepin em report' (Indigenous Nursing Education Working Group, 2002) specifically called for the inclusion of Indigenous history, culture and health as standalone subjects in all nursing courses. While there is evidence to suggest this has occurred to some degree (Usher et al., 2003), and that many schools have included Indigenous health content in nursing courses, perhaps the solution to the problem at hand is not as simple as this strategy appears to suggest. Importantly we must remember that the '...oppressive forces that shape us have formed the identities of both the powerful and the exploited. Without an analysis of this process we will never understand why students succeed or fail in school' (Kincheloe & Steinberg, 2008, p. 146). This statement by Kincheloe and Steinberg (2008) is pivotal in the context of this study. In taking a critical stance from which to explore the factors involved in successful completions as well as the barriers faced by Indigenous students, I have intentionally aimed to transform perspectives on the issue. The aim of this transformative concurrent mixed methods study, undertaken using an Indigenous research methodology, was to uncover the current state of Indigenous nursing student success in tertiary courses rather than to focus on failures or barriers.

We know that the barriers Indigenous students face when they enter the education system, whether it is at the elementary, primary, or tertiary level, are not that dissimilar. Therefore, this unique study was undertaken from a strengths-based focus and, as a result, provides several key findings on the factors involved in successful nursing student completions. The focus on success is in keeping with the sentiments of Devlin (2009), who encourages the adoption of a positive stance when attempting to understand why some Indigenous students manage to succeed despite the barriers they face. The study emerged as a result of my experiences as a nursing student and a nursing academic. These experiences had caused me to become concerned about the alienation of Indigenous students within the current nursing education system and the ongoing failure of many students who attempted to become registered nurses. Given the importance placed on increasing the numbers of Indigenous registered nurses, the growing numbers of Indigenous students falling by the wayside greatly troubled me and led me to undertake the study.

Each of the following research questions were addressed in the concurrent phases of the study; (Creswell & Plano Clark, 2011):

1. What are the national commencement numbers, progression, attrition, and completions rates for Indigenous nursing students, when compared to non-Indigenous nursing students, since the publication of the final report of the Indigenous Nurse Education Working Group (2002)?
2. What are the factors identified by Indigenous nursing students and academics as enablers to successful completion of courses?
3. What are factors identified by Indigenous nursing students and academics as barriers to successful course completion?

4. What strategies are perceived as resulting in improved completion rates as identified by Indigenous nursing students and academics?

Each of these questions has been addressed in previous chapters. In this chapter I have focused on the integration of the key quantitative and qualitative findings: integration is the final and vitally important phase of good mixed methods studies (Creswell & Plano Clark, 2011).

6.2 Integration of data

The available Department of Education, Employment and Workforce Relations Higher Education Statistics Unit (DHESU) data (2002-2008) on national Indigenous nursing student commencement numbers, progression, attrition, and completion rates was collected and analysed to reveal the differences between Indigenous and non-Indigenous students (Department of Education, 2009a, 2009b, 2009c, 2009d). The analysis of this data is presented in the manuscript embedded in Chapter Five. At the same time as the analysis of the DHESU data, visits and audits of Queensland universities who had been conducting undergraduate nursing programs since 2002 were undertaken. As part of the university visits, interviews were conducted with eight Indigenous third year nursing students and fifteen academics from four out of a potential eight universities. The interview data was initially analysed using content analysis to identify barriers to and strategies for success as identified by Indigenous nursing students and key academics. Narrative analysis of student interview data was also conducted to reveal student stories of successful completions. The content analysis of student and academic interviews, and the narrative analysis of student interviews, are presented in Chapter Four in two separate manuscripts. An overview

of the content analysis of student and academic interviews is also presented as part of the manuscript in Chapter Five.

The study results reveal that while commencement numbers and completion rates for Indigenous nursing students have increased overall nationally, the gap between the commencement numbers, progression, attrition and completion rates for Indigenous compared to non-Indigenous students remains wide and in need of urgent attention. In particular, completion rates have remained stagnant, with a 30% difference between Indigenous and non-Indigenous student completion rates. While more Indigenous students have commenced nursing courses since 2002, their completion rates have not kept pace with the increase in commencements, and the difference between Indigenous and non-Indigenous student completions remains wide (See Chapter Five for further information).

Barriers previously identified by students were similar to those identified over the last few years except for financial obstacles, which were less of a concern to the students interviewed in this study. The following themes, discussed and integrated below, emerged from the content analysis of student and staff interviews. Analysis of strategies for successful nursing student completions revealed the importance of:-

1. Individual student characteristics;
2. Academics' knowledge, awareness and understanding of Indigenous issues and issues faced by Indigenous nurses;
3. Relationships, connections, and partnerships;
4. Institutional structures systems and processes; and

5. Family and community knowledge, awareness and understanding (see Chapter Five for a complete overview).

Student narratives revealed the following narrative threads:-

1. Making a difference;
2. Valuing Indigenousness;
3. Healing strength of connections;
4. Resisting racism;
5. Embracing support; and
6. Persevering towards completion (see Chapter Five for the manuscript related to the narrative analysis).

The following section discusses each of the key findings in relation to factors and strategies identified as supporting successful Indigenous nursing student completions and Figure 6.1 provides an overview of the data integration across all sets of findings. to Table 6-10 provide quotes from interviews for each theme and subsequent sub-themes for both Indigenous nursing students and academics, demonstrating the integration of the two sets of analysis.

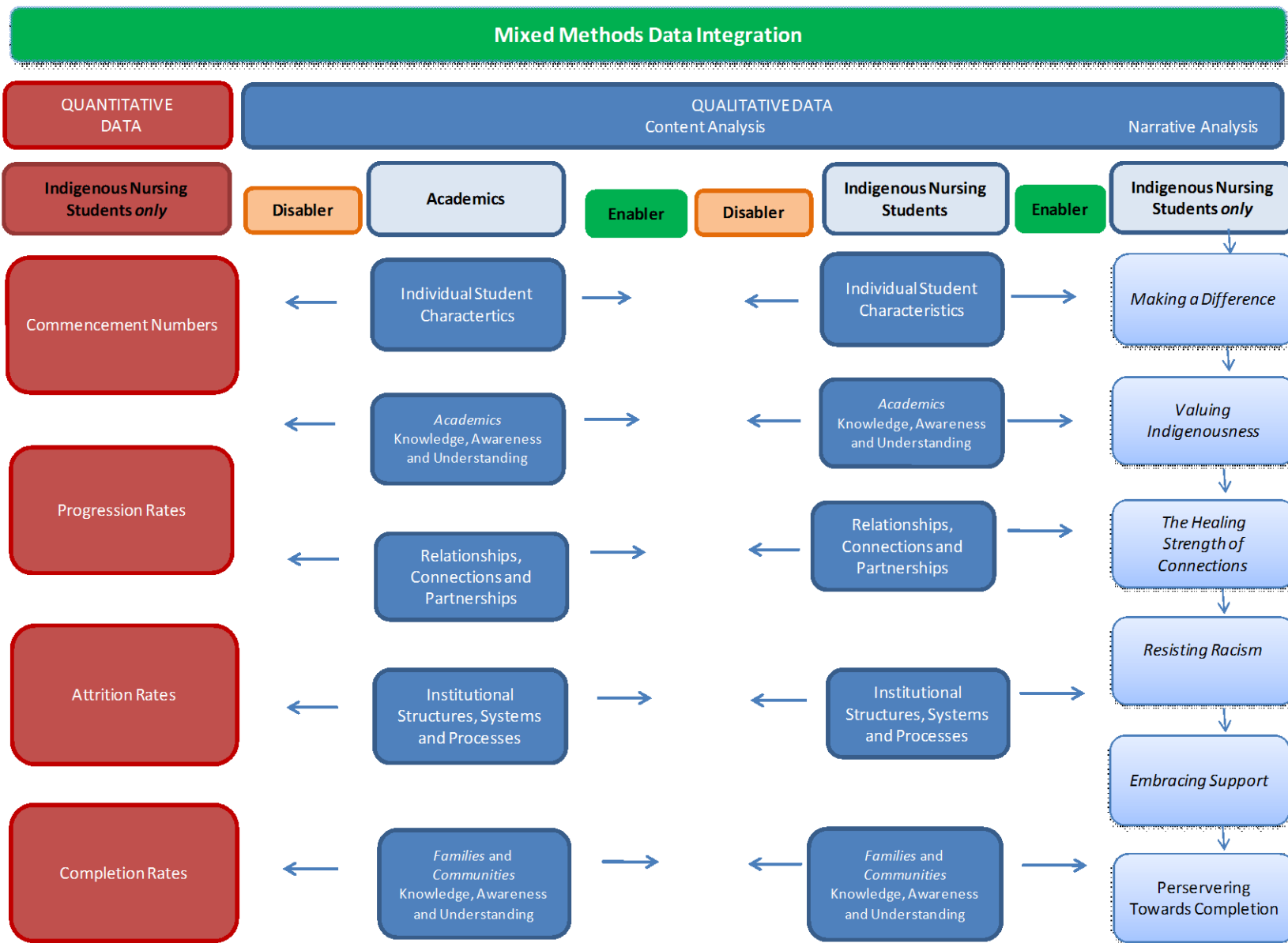


Figure 6.1: Mixed Methods Data Integration Map

6.2.1 Individual Student Characteristics

A key finding unique to the study is the importance of individual students' characteristics for success. In particular, students' motivations for choosing nursing as a career, and their determination to complete the nursing degree were identified by participants as paramount to success. Evident in the analysis of both the academic and student interviews, this finding highlights the students' strong sense of obligation to their community as a primary reason for undertaking nursing and a key reason that successful students persevered despite facing considerable challenges. This finding was also evident in the narrative analysis of student stories, and comprised an important component of the narrative thread; 'Making a difference'. The students' strongest motivation was to make a difference for their family, their respective communities' and for the wider Indigenous community. The students' overwhelming aspiration and drive to help their people was motivated mostly by their intimate understanding and awareness of the poor state of Indigenous health. Importantly, this study is the first to identify the key role of motivations for undertaking nursing as a significant predictor of student success.

Most students in this study also identified timing as a critical element to their success. For some students this was their second, third, and even fourth attempt at the nursing degree. They acknowledged that the timing 'was not right' on their previous attempt for a number of different reasons. They acknowledged they had been much more prepared this time around. Some academics also identified timing as being important and acknowledged that in their experiences the overall "readiness" of the student was pivotal. Some universities 'normalised the issue of timing and recognised the

complexities of some Indigenous students' lives. They enabled the switching of study modes, reduction of study loads, withdrawing and re-enrolling, through flexible use of University processes. Most importantly, in these universities students weren't made to feel that altered progression was in any way a sign of failure. In this study the time each student took to complete their degree was a crucial element to students' successful progression and completion. This finding is unique to this study and not identified in previous literature on Indigenous nursing student recruitment and retentions.

Personal, work and life experiences, and the manner in which the students integrated these experiences with their university experience was a further important component of successful students' characteristics. The study revealed that students who came to university with more varied life experiences often displayed resilience to challenges, and a greater awareness of, and understanding of issues such as navigating how to e new and different systems.

Previous research has identified the importance of individual student characteristics in successful Indigenous student course completions both in general and specific to nursing, including family, individual student factors, and educational preparation (Anonson, Desjarlais, Nixon, Whiteman, & Bird, 2008; Martin & Kipling, 2006; Usher, Lindsay, Miller, & Miller, 2005a), However in this study the issue of educational preparation, such as foundation maths, English and science skills, did not occur frequently enough to have been identified as a theme on its own. However it was considered a sub-theme within the overall theme of individual student characteristics. Educational preparation is a complex issue and variation in secondary educational

preparation is relevant to this issue as discussed by Lane (2009). If children are well educated through secondary schooling their lives have been found to take a different path (Lane, 2009). They have greater choice as to how to live their lives and to decide on career paths; an expected democratic right in a society such as Australia.

In the last few decades tens of thousands of Indigenous Australians have shown their support for mainstream education as a way of progressing their opportunities in life and have graduated from universities into professional occupations. For example, between 1990 and 2008, approximately 60,000 Indigenous people commenced tertiary studies; and 20,000 graduated (Lane, 2009). However, Lane (2009) draws attention to the important differentiation between Indigenous students from urban mainstream society whose parents are employed and speak English, and those from rural, remote or welfare dependent backgrounds with no, or limited, English. These varying levels of disadvantage amongst Indigenous Australians are an important consideration in the results of this study, as varying education preparation and background, social advantage and disadvantage and the families' experiences, and family experience with tertiary education or not, were all evident in the stories of the students interviewed. As Lane (2009) identifies, more than 540,000 Indigenous Australians work and live in mainstream Australia, in comparison to those subsisting on welfare in remote communities (70,000) or urban ghettos or country towns (145,000). The mainstream Indigenous population works, and owns or is increasingly buying or renting homes.

Like many other disadvantaged socio-economic groups, these families want their children to attend university so that they may eventually find secure professional

employment. However, a huge difference exists between families in this Indigenous population and those living welfare-dependent lives in remote areas, city ghettos, and country towns. These Indigenous children experience extremely poor education delivery combined with the problems and false expectations engendered by welfare dependence (Lane 2009; Nakata, 2008). However, those Indigenous students from disadvantaged backgrounds who do succeed at the tertiary level have mainly entered the ‘caring professions’; they have been influenced by family and community role models to do so and tend to seek employment in the public sector, particularly in education, health and welfare, and in Indigenous organisations. Many of these graduates have been limited in their professional lives as their work has been directed towards working in Indigenous specific situations such as Indigenous communities and organisations. For some, this has been discouraging and led to their attrition from the relevant profession and movement to areas for which they are over-qualified such as the trades and retail (Lane, 2009). This factor is particularly relevant to the students interviewed in this study as some were from rural communities where their educational preparation for university had been limited, while others were from urban areas and their educational background had been vastly different.

Unique to this study was the identification of how the students dealt with experiences of racism during their degree. Both academics and students identified the issue of racism as significant. This is particularly evident in the narrative thread “resisting racism”, where students displayed great restraint and resilience in dealing with incidents of racism when they did occur. Australia has a history of racism and discrimination, evident in racist policies such as the ‘White Australia’ policy. However,

despite the evidence, denial of racism pervades popular discourse on race relations and results in an absence of critical analysis of the current situation, and perpetuation of the status quo (Mapedzahama, Rudge, West, & Perron, 2011).

Many of the students had developed ways to address racism that empowered rather than disempowered them. For example, students were discriminating and used strategies such as 'stepping back' from the situation rather than confronting it, while at other times they would tackle the problem head on and go to the relevant people to report adverse racism situations. These attributes, evident in the students' narratives, can be understood as evidence of personal resilience; where resilience is considered the ability to overcome challenges and build personal strengths in the face of adversity (Jackson, Firtko, & Edenborough, 2007). This finding fits with those of Walker (2005) who studied black university students in South Africa. She found that black people make strategic decisions about when to resist racialized hierarchies. Similarly, Mapedzahama, Rudge, West and Perron (2011) report that black migrant nurses reclaim agency by actively resisting and challenging racist stereotypes.

In addition, the students' Indigenous identity was identified as giving them the strength and ability to deal with and overcome many of the challenges they faced, such as family obligations and responsibilities, institutional racism, and being an Indigenous nursing student within the university system. The strength of students' Indigenous identity was revealed as an important component of the narrative thread of "Valuing Indigenousness". Universities have been criticised in the past because of issues such as racism, discrimination and stereotyping (Adams et al., 2005; Evans, 2004; Martin &

Kipling, 2006, Usher et al., 2005), and this study indicates these continue to be a problem for some Indigenous students. In order to resist racism, this study found that having a strong sense of cultural self-identity is an effective counter- attribute. Table 6-1 provides evidence of the content analysis process and integration of data from the Indigenous nursing students and academics under the theme of *Individual Student Characteristics*.

Table 6-2 Content Analysis Integration Indigenous Nursing Students and Academics – Individual Student Characteristics

(i) Individual Student Characteristics		
Academics	Sub-themes	Indigenous Nursing Students
<p>“... he felt that he wanted to give something back to people... he described it to me as, his people had believed in him enough to trust him to do something positive and he wasn't going to let those people down”. (T20, NIA)</p> <p>“For some of them, its that pride being the first one in the family to get a university degree”. (T4, IA)</p> <p>“There was another student ... she'd been a Health Worker for such a long time, and she wanted to be able to do more. And she thought being a nurse she could do that...” (T20, NIA)</p>	<p>Motivations for Choosing Nursing</p>	<p>“To make a difference. ..to go home...I figured that, I had to offer something...my intention is to get my nursing degree and then I've got something to offer my community... my whole life I've wanted to that”. (T2)</p>
<p>“guess they've gotta have that belief in themselves that if they ask for help they can do it. So then, in that sense too, they've got to have faith in the institution that help is forthcoming if they ask for it and that, plus their resilience will get them over the line”. (T7, NIA)</p> <p>“We've had some exceptional Indigenous students. I probably have found, those that are absorbed into the cohort that 'fit in'... that mix with the other students on an equal basis, that are independent in their learning are the ones that really succeed”. (T1, NIA)</p> <p>“They've actually embraced their culture, embraced who they are and they believe in themselves”. (T1, NIA)</p>	<p>Personal attributes for success</p>	<p>“Determination. Commitment. You've got 14 weeks ... what's 14 weeks out of the year”. (T6)</p> <p>“I think you just got to be more understanding that people don't have that knowledge and that's not necessarily their fault... and what you don't know, you don't know and it helps, to have a little laugh”. (T8)</p> <p>“...I'm going to experience racism in my nursing career anyway, so. You just have to learn to deal with it”. (T15)</p> <p>“...there's not many of us and there are so many issues in Indigenous health that they're actually keen for your perspective. That's a good thing in a way, but it's bad because I can see the temptation that you have to be the Super Black Person. All these different health teams wanting you to work for them and you sort of feel inclined, or maybe obligated, to go and fix this problem”. (T2)</p> <p>“At handover time, they said something about this patient...she was from an Aboriginal community and they have their own little ideas about Aboriginal communities... what am I to say</p>

		<p>anything? Because I'll have the six nurses at me ...and I'd be the one who ...failed my clinical...I'm not scared to pipe up but other times you just gotta step back". (T3)</p> <p>"I got myself proactive at those things ... and how to download lecture notes and all that. I even used the facilities here at the Indigenous Education Support Unit. I like the computer, but that was a problem being computer literate and the internet was new to me". (T19)</p> <p>"... I found assignment writing at the start hard, but the last couple of years ... um, it hasn't been too bad. My biggest problem is being a bit too much of a perfectionist: I don't think it's good enough, so ... yeah, I just take a chance and hand them in". (T3)</p> <p>"I just think that failing is not a nice feeling, so you just pick yourself up, that's more motivation" (T15)</p> <p>"I just got rid of the negative things... distractions, had friends who didn't go to uni and social life, but then I think my mindset just changed and I thought, "well, if I really want this, I'll do it and I'll do what I have to do" even if that means sacrificing things and understanding that it comes with the package..uni was my priority – I put that ...First before anything else... if I was really stuck I'd ask for help other than that, I just get it in an do it". (T15)</p>
<p>"it's that individual and character and personality. It's how mature they are and how they approach it". (T22, IA)</p> <p>"I think older students are better at dealing with the bureaucracy and dealing with their right to ask and their right to have an answer". (T7, NIA)</p> <p>"The encouraging thising that there are more Indigenous students, particularly younger Indigenous students who are going through the course without interrupting". (T3, NIA)</p>	<p>Life and work experience</p>	<p>"I think just, growing up a little bit, cos now I kinda realise that I've got to get serious about it, whereas back when finished the Indigenous bridging program I was still young I was in social an party mode and just had my friends, boyfriend, so that was a distraction. Yeah, pulled me head in...". (T15)</p> <p>"I've been struggling thinking, I should have went straight into nursing – like I'm getting a bit long in the tooth ... But I used to think I had wasted most of my adult life working when I should have been out getting a degree. But this year after doing that Mental Health placement I finally realised that all of that experience is for the better" (T18)</p>
	<p>Appropriate timing</p>	<p>"It's taken me a few years but obviously I wasn't ready back then, and everything happens for a reason and so now it's my time to finish it and I'm gonna finish". (T15)</p> <p>"I had a pretty rough patch with nursing ...I did start it, but I failed a lot of subjects and I just had outside distraction s... I wasn't really committed to it I just went off the rails a bit and then I went part time and then I gave it up because I was working and only kind of went back three years ago and passed everything since then....". (T15)</p>

6.2.2 Academics' Knowledge, Awareness and Understanding

A further key finding, also identified in prior literature on Indigenous nursing student experience (Goold & Usher, 2006; Indigenous Nursing Education Working Group, 2002; Usher et al., 2003, 2005a; West et al., 2010a), is academics' lack of knowledge, awareness, and understanding of Indigenous culture and related issues. In this study however, being an Indigenous person, a member of the nursing academic team, and a registered nurse, appeared to bring unique knowledge, awareness, and understanding of the issues impacting on Indigenous nursing students. This was not apparent with the non-Indigenous academics (Anonson et al., 2008; Malatest et al., 2002; McBride & Gregory, 2005). The findings from this study indicate that Indigenous nursing academics provide a distinctively positive role for Indigenous students. They serve as cultural mentors who motivate, inspire, support, guide, and lead Indigenous students. While some might argue this could also be achieved by most non-Indigenous nursing academics, it seemed from the findings that the Indigeneity of the Indigenous academics afforded them knowledge of, and ability to support Indigenous students' experiences and needs that was distinct from that of non-Indigenous academics.

Page and Asmar (2008) discuss the nature, scope, and intensity of Indigenous academic support roles. They identify two sides of Indigenous teaching: disciplinary pedagogy, and student support. In the study, many Indigenous academics saw their support role as absolutely intrinsic to their teaching. For them, their students were their community. This finding suggests that prioritising student support is seen by many Indigenous academics as an intrinsic dimension of Indigenous teaching, and essential for student

success. In this study, Indigenous academics were indeed in a unique situation, and their commitment to culture and community was particularly strong.

Non-Indigenous academics have many demands on their time and student support may be seen as an additional burden (Poorman et al., 2002; Rhodes & Jinks, 2005). Therefore, creating specialist Indigenous nurse academic support positions within Schools of Nursing may help to recognise the time-intensive support required for students from disadvantaged backgrounds. Acknowledgment of this is critical to the success of these positions and can result in better educational outcomes for students. Interestingly, non-Indigenous academics are often uncertain about whether students should conform to the academic culture of universities, or whether universities should accommodate the needs of Indigenous students (Dickerson & Neary, 1999). However, Indigenous students have reported that culturally aware teachers facilitate their success (Curran, Solberg, LeFort, Fleet, & Hollett, 2008; Yurkovich, 2001), and offer effective and appropriate support (Evans, 2004).

It appears from this study that the mere presence of an Indigenous nurse academic has potential to significantly reduce the tension that can exist between Indigenous students and non-Indigenous academics and the institution. However, it is more than just their presence that seems to be having a positive impact on successful Indigenous nursing student completions. In this study the relationship between the Indigenous nursing academic and Indigenous nursing students was a connection that created a feeling of safety in the student that did not seem to occur between non-Indigenous academics and Indigenous nursing students. Adams et al. (2005) argue that an Indigenous academic

with a strong knowledge of community is an important factor for student success as it contributes to a culturally safe environment. Other authors confirm that Indigenous Australian representation in nursing education provides role models to students (Anonson et al., 2008; Malatest and Associates, 2002; McBride & Gregory, 2005), and mentors (Gregory, 2005; Malatest and Associates, 2002; Martin & Kipling, 2006, Usher et al 2005b) who act as advisors to students and reflect general equity (Malatest et al., 2002).

The major finding in relation to Indigenous nurse academics in this study, was that the ability to access suitably qualified and proactive Indigenous academics at university was vital to addressing many of the challenges identified by the study participants. The students in this study required leadership, mentorship and support to navigate the challenges that interface between them and the university system. Translating this finding into practical strategies that can be employed by academics within their institutional place of practice is the challenge for long-term sustainability of Indigenous nursing student completions.

The importance of creating a welcoming and supportive environment for Indigenous students in a university setting has also been identified previously (Usher et al, 2005b, Weaver, 2001; Yurkovich, 2001). This includes the relationships Indigenous nursing students have with other students (Indigenous and non-Indigenous), partnerships with industry, and connecting with the wider university resources. Evans (2004) takes this further when he states that success for Aboriginal students could be further enhanced by

effort from academics to create personal, trusting relationships with students (Evans, 2004).

In this study, the partnership between Schools of Nursing and Indigenous Education Support Units was also integral to Indigenous student success. Indigenous Education Support Units provide linkages to students' families and communities and are set up specifically to support Indigenous students across the university. Historically, however, Indigenous Education Units were established to support Indigenous students who were doing Indigenous courses. More recently, Indigenous students are enrolling in "mainstream" courses and the Indigenous Education Support Units and Schools of Nursing are adjusting to this partnership (Usher et al.2005b). In particular, the roles and responsibilities in regards to Indigenous nursing students are being negotiated and re-defined. Based on this study's findings, we recommend that partnerships between Schools of Nursing and Indigenous Education Support Units be developed in all universities with Indigenous nursing students. Opportunities need to be created and capitalised on so students have the opportunity to "connect" with each other, regardless of the degree they are studying. Indigenous nursing students also need to be exposed to, and encouraged to utilise, wider university resources.

In the context of this research, Walsh (1998) further states that a family with a shared internal value system ie. Indigenous nursing students are able to feel a connection as family and community. Indigenous nursing students in the University are the family and community. Once an understanding and awareness of this cultural system and process, is respected by non-Indigenous academics and utilised in their relationships

and connections with Indigenous nursing students and the development of support strategies community it can be a critical enabler towards Indigenous nursing student success. Table 6-3 provides evidence of the Content Analysis data Integration of the Indigenous Nursing Students and Academics theme of *Academics' Knowledge, Awareness and Understanding*.

Table 6-4 Content Analysis Integration Indigenous Nursing Students and Academics – Academics' Knowledge, Awareness and Understanding

(ii) Academics' Knowledge, Awareness And Understanding		
Academic	Sub-themes	Indigenous Nursing Students
<p><i>"The Indigenous Nursing Academic can talk from a lived experience...rather than the rest of us, which can say, "well, I've worked with Indigenous people, but I haven't lived it."(T1, NIA).</i></p> <p><i>"There's a difference what an Indigenous Nursing Academic can do and what the Indigenous Education Support Unit can't do". (T11, IA)</i></p> <p><i>"It gives them inspiration. Feeling honoured that they are being taught by an Indigenous person, it's unique". (T13, IA)</i></p> <p><i>The main factor is the support they're getting from an Indigenous academic. The perception I believe from the students is there's somebody who knows and understands, so therefore they feel supported". (T14, IA)</i></p>	<p>Indigenous academics (nursing and others)</p>	<p><i>"I think we got a lot of support, the Indigenous lecturers really advocate for us to get through and really supportive...". (T15)</i></p> <p><i>"to have black academics there...seeing other people having gone through it..It's inspiring. The ability to see the light at the end of the tunnel. Other people have done it – it is possible". (T18)</i></p> <p><i>"I find having black academics there more supportive than having all these other strategies..." (T18)</i></p> <p><i>The Indigenous Nursing academic taught us...having that person who I could network with, just in our first lab, for me, having her do it just made me feel like, hello, here's a Murri nurse teaching all these non Indigenous people here, and myself. So something's gotta be right here. It was deadly!". (T4)</i></p> <p><i>"It's not every day you see Indigenous RNs... when I meet them I feel not alone, I feel inspired, and I just feel strong and also my confidence, it boosts my confidence". (T1)</i></p>
<p><i>"It's not multicultural, it's totally different issue. Multiculturalism is one issue – working with Indigenous students is a totally different issue in that you've got to consider different history, where they're coming from". (T 21, NIA).</i></p> <p><i>"It's everybody's responsibility, retention is everybody's responsibility". (T12, IA)</i></p> <p><i>"Our success is built on the success of the department and the buy-in from every academic, and the accountability of every academic in the department, and that does come from the head. I think any School of Nursing would be successful if it becomes that". (T 12, IA)</i></p>	<p>Non-Indigenous nursing academics</p>	<p><i>"I find them very approachable very flexible and understanding so if you've ever got a problem they'll address it straight away". (T15)</i></p> <p><i>" I find them very flexible really. If you just email and or talk and say, "Look I'm not going to be here, I've got a funeral" I think a lot of them had some contact with Murriss somewhere along the line". (T16)</i></p> <p><i>"The way they taught and the way they extended the branch to us..." (T16)</i></p> <p><i>"It was nice to know that she respected, and valued my feelings and how I felt at the time. It was good to know that. If the subject co-ordinator had have reacted in another way I possibly would have got the shits with the whole uni and left". (T18)</i></p> <p><i>"we had a lady who worked down at the</i></p>

		<p><i>hyperbaric chamber in Brisbane, she invited us down there...just us Murri mob.....we're special [laughs]. The fact that she had some Murri clients in there...so that was really good". (T16)</i></p> <p><i>"I've got to know certain staff who are mentors for Indigenous students and you can see that they give you that time, that support and you know, and were available for me and take my Indigenous background into consideration and understand me...that respect". (T1)</i></p>
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6.2.3 Relationships, Connections and Partnerships

Having strong and supportive personal relationships and connections was a further factor that was pivotal to students' successful completions. Academics and students identified connecting with other Indigenous students, Indigenous academics and the Indigenous Education Support Units as an enabler towards successful completion. The value of connections was evident in the narrative thread of 'Healing strength of connections', and in the content analysis theme of 'Individual student characteristics' that included students' personal attributes. Having affirming and supportive relationships with peers, family and community, and culturally appropriate support at university, were key sources of support. Students' drew strength from these connections and used this to help overcome challenges such as racism. Social support and personal connections are resilience factors identified by Walsh (2008).

The concept of resilience was originally developed by studying the positive adaptation of children under adverse circumstances (Rutter, 1987) and has relevance in the context of academic outcomes for Indigenous nursing students. In the context of this research, Walsh (1998) further states that a family has a shared internal value system, which helps Indigenous nursing students to feel a connection with the family and community. In relation to Indigenous Canadian nursing students, Kulig et al. (2010) identify the importance of relationships between individuals (ie teacher and student, Elder and community member) and the necessity of support programs to enable a successful transition to university. These factors were evident in this study, and this finding highlights the importance of development and maintenance of key relationships for Indigenous Australian nursing students' successful progression. Indigenous Australians

have complex social structures based on kinship, family and community relationships, which determine obligations and behaviour towards each other. Understanding and respecting Indigenous Australians' relationships and connections is critical to developing strategies that continue this cultural process throughout the university. Once an understanding and awareness of this cultural system and process is respected by non-Indigenous academics and utilised in their relationships and connections with Indigenous nursing students, the development of support strategies will be adopted as a means of enhancing Indigenous student success.

In this study, the students' ability to identify and access practical and financial support provided by the University was a further essential factor for completion. The universities' support for Indigenous students specifically came from the Indigenous Education Support Units (IESUs), study skills courses, and most importantly, the Indigenous Tutorial Assistance Scheme (ITAS). Underpinning this was the support received from family, community, and peers, and the financial support received during the course, including from employers, scholarships, and cadetships. This study shows that when students actively pursued support structures their likelihood of success increased. Practical student support is frequently cited as important for student success (Levett-Jones, Lathlean, Higgins, & McMillan, 2009; Poorman, Webb, & Mastorovich, 2002; Robshaw & Smith, 2004), however the term itself, and its uptake by students, is rarely made explicit (Cameron, Roxburgh, Taylor, & Lauder, 2011).

The students' ability to persevere and persist against all odds was evident throughout the findings. This included their apparently innate ability to rise above and deal with

adversity and challenges when confronted with issues that could have been detrimental to their success, such as racism and failure in assessments. They persevered to achieve their desired outcome and were unwilling to give up. This is the first study to identify these characteristics in Indigenous nursing students. Perseverance and determination are however identified in the broader literature on resilience as characteristics that can support individuals' ability to overcome challenges (Bonanno, 2004; Bonanno, 2005; Jackson et al., 2007). DiGregorio, Farrington & Page (2000) also found Indigenous students demonstrate incredible determination to succeed. They remind us that in order for this determination to be maintained, a positive learning environment, that validates culture and supports learning, must be provided. Table 6-5 provides evidence of the Content Analysis of the data Integration of the Indigenous Nursing Students and Academics theme of *Relationships, Connections and Partnerships*.

Table 6-6 Content Analysis Integration Indigenous Nursing Students and Academics – *Relationships, Connections and Partnerships*

(iii) Relationships, Connections And Partnerships		
Academics	Sub-themes	Indigenous Nursing Students
<p><i>"I think what everybody needs to be aware of – you know where all in our own little offices and our own little worlds – but the Indigenous Unit is spread out. We are involved in every aspect of the university and so they also need to appreciate what we do, for the success of their program. Because the success of students and we focus on Indigenous students, is dependent on the support network". (T13, IA)</i></p>	<p>Nursing schools and Indigenous Education Support Units</p>	<p><i>"I used the facilities at the Indigenous support unit... and because blackfellas, ay, when you come here, they're interested in where you come from and who your family are, and suddenly you find you're connected some way. You're a long way from home, from country, but here, that connection here, they're my family. And that's what keeps me here that you get the support...". (T19)</i></p> <p><i>"I didn't have my tutor for that first block ...I'm happy I got my tutor now". (T19)</i></p> <p><i>"Every day we just come every day to the Indigenous education Support Unit...honestly it is so good. It was the reason I passed – I couldn't get through uni without it. Not just the admin, but the staff as well – they'd ask how you were going and if there was anything wrong. If you had any concerns you'd go to them and they'll do what they could. The Indigenous education Support Unit is the best". (T21)</i></p> <p><i>The Indigenous Education Support Unit... is huge. I don't think that many people realise how good it is". (T You don't have to wait at the library to get on the computer, it's really quiet, you got your fridge, and you can bring your lunch in and There's a couch, like I've slept on the couch before. Had a little nap.</i></p>

		<p>You can organise after hours entry with security. We've been here at 7 o'clock for exams. If there was no Indigenous education support unit I think I'd be home a lot more. But then I wouldn't study. I only study when I come to uni.</p> <p>I, 100% can say, I wouldn't pass without the Indigenous education support unit. It offers you support in such a way like, not just for computers and stuff – you've got a whole room there where you can sit and study. Yeah, it's a good place to meet and just ... gets you in the mood for uni and ...Gets you in the mindset for it ...And empowering like – the art on the walls, and yeah, I think when, they're like family, when you want to just disappear for a while ... someone will be giving you a phone call to see where ...So it's like a family.</p>
<p>"I think a critical mass of students that are confident and articulate students who can help the less confident ones and metaphorically hold their hand, and the serious emphasis in my view, on working – not just with the Indigenous support officer – but the Indigenous Education Support Units, the faculty and its support services and so on is what's going to make the difference". (T3, NIA)</p> <p>"...it's also the support of each other. There's some-one there, that may not have always had that connection with some of the other Indigenous students, but they have a relationship with other students as well". (T4, IA)</p>	<p>Indigenous nursing students and other students</p>	<p>Yeah, "you gotta have that support person. Even before me and another Indigenous student linked up.. I had a lot of white ones here that I hooked up with. So it was whoever was in my group, but just to sit down and have that talk and say, "what do you think about this?" ... I've still got them too, we check up on one another". (T16)</p> <p>"I see another student whose non-Indigenous... the rest are Indian, there's one Filipino and another one from China and me being Aboriginal...well we're multicultural". (T1)</p> <p>"grab a friend that's doing the same thing. And stick with them. – it would help if you could get someone who's done it before – you need to have those mentors". (T16)</p> <p>"I've had some great previous students who've been here and I get feedback from them and it has helped me". (T19)</p>
<p>"The Indigenous Education Support Unit is our Indigenous Support area here for all Indigenous students enrolled at the university. But they don't supply academic support as such, and they don't supply counselling support, they're just a basic ... there's computers over there, there's a student support officer". (T12, IA)</p> <p>"at the Teaching and Learning Centre they can go and do extra maths tute if they want to for Med calcs".(T12, IA)</p>	<p>Indigenous students and wider university resources</p>	<p>"in the beginning I went to all the teaching and learning support unit classes. They had classes on lectures, Taking notes and writing assignments, so I went to all of those – and it's for all the university". (T16)</p> <p>"before I started the nursing degree I did the library database session and that put me steps in front of the other students". (T18)</p> <p>"there's been times where I've use the Financial Assistance here through the university...". (T19)</p>
<p>"There's a difference between what an Indigenous Nursing Academic can do and what the Indigenous Education Support Unit can do. The Indigenous Education Support Unit provides support- really critical and important support – but I think having the Academics, who are part of the academic department who are nurses who are teaching nursing and they are Indigenous is really important. They do things that the Indigenous Education Support Unit can't do". (T11, NIA)</p> <p>"The importance... in the students support is ensuring that the student and the lecturer build that relationship... I think its cultural safety</p>	<p>Indigenous students and academics</p>	<p>...in the beginning she was really stand offish she didn't know where we were coming from... we persevered...until she read our story and then she appreciated it, she said, "I know what you's are doing now... because she knows where we were coming from because we had to prove that. She knows that we're fair dinkum". (T4)</p> <p>You gotta keep in contact with your lecturers, if something comes up. Don't be scared to use the email or whatever. T16</p>

<i>myself". (T13, IA)</i>	Indigenous students and Industry	<p><i>"A lot of my work colleagues are supportive. I work with a lot of physiotherapists and OT's as well, and they've been very supportive as well. My line manager is supportive". (T16)</i></p> <p><i>"that's nice with nursing. You have your family and then you're becoming a part of this nursing family. You're now part of this bigger thing and you've got this sisterhood of nursing". (T2)</i></p>
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6.2.4 Institutional Structures, Systems and Processes

A key finding in relation to institutional structures, systems and processes is the need for flexibility in consideration of the varied and complex levels of disadvantage experienced by some Indigenous nursing students. University structures, systems and processes were revealed within the narrative threads of ‘Valuing indigenusness’ and ‘Embracing support’. In the study, participants indicated the difficulties they experienced navigating the systems and processes around enrolment, applying for credit or leave, and accessing support. When people feel the system and its processes are alienating, they are often overwhelmed and become less likely to engage (Usher et al. 2005b).

Integral to Institutional Structures, systems and processes is the need to include Indigenous culture, history and health in nursing curricula. Previous authors have been critical of the failure to include accurate information about Australia’s Indigenous people in health and nursing curricula (Indigenous Nursing Education Working Group, 2002). Nevertheless, progress to date seems to indicate that newer approaches to Indigenous student learning that take into account their unique culture, could result in increased academic success for Indigenous students (Orchard, Didham, Jong, & Fry, 2010). Orchard et al. (2010) describe the Integrated Nursing Access Program (INAP) implemented in Canada, which was designed for Inuit students wanting to complete a

Bachelor of Nursing program. The authors used what they described as a phenomenological approach to learning anchored in the learners' cultural roots. A key underpinning of the course was the notion that learners' pre-existing assumptions would be transformed into new meanings and enhanced understanding of self as they developed an evolving comprehension of nursing knowledge and skill acquisition (Orchard et al., 2010). The INAP model appears to have provided a 'bridge' between the current levels of Inuit learning, which may lead to future success in university studies for the Indigenous Inuit nursing students. The findings from the INAP program are critical to our understanding of the issues faced by Indigenous nursing students in Australia. The program offers a potential model that could be adapted and used to help overcome the challenges Indigenous nursing students' experience here.

A further key aspect of the institutional structures, systems and processes theme was Indigenous course content. Evans & Greenberg (2006) suggest that Aboriginal nursing student success is in part related to programs that reflect students' cultural context. Others suggest this can be achieved through curricula that is relevant to the life experiences of Aboriginal students, and with course content that addresses Indigenous culture, history, and health (Gregory, Pijl-Zieber, Barsky, & Daniels, 2008; Indigenous Nursing Education Working Group, 2002; Usher et al., 2005a; Yurkovich, 2001).

Development of a critical nursing curriculum in Australia that is both inclusive and respectful of Indigenous knowledge (Kincheloe & Steinberg, 2008) will ensure improvements in tertiary outcomes for Indigenous nursing students. As discussed in Chapter Three, an emancipatory or critical pedagogy seeks to expose the invisible

oppression that influences the way we are educated (Rose & Glass, 2008). Initially brought to the attention of educationalists through the work of Freire (1970), a critical pedagogy is aware of the hidden agenda, subtle domination, and practices of domination and oppression, and works to find ways to overcome them. Kincheloe and Steinberg (Kincheloe & Steinberg, 2008) describe their disappointment that Indigenous knowledge has been dismissed from academic curricula. They explain how a critical pedagogy recognises that there is no single, privileged way to see the world. Once teachers become conscious of the current mono-cultural and one-truth way of seeing the world, they will come to value and pursue new frames of reference in regard to their students and classrooms (Kincheloe & Steinberg, 2008). The inclusion of Indigenous content and ways of knowing within a curriculum is the beginning of this process. Nakata et al. (2008) surmise that while there have been some attempts by the academia to accommodate Indigenous students and the need to include relevant Indigenous content in courses, there has been less evidence of actual adjustments to curricula and pedagogy. As a result, this causes ‘...frustration, alienation and/or emotional entanglement for Indigenous students studying in the disciplines’ (Nakata et al., 2008, p. 141). Perhaps this is the case in nursing and if so, it may be that the schools that are more successful at Indigenising their curricula and incorporating inclusive pedagogy are those that have reported better retention and completion rates.

While the curricula of schools of nursing were not explicitly analysed in this study, it may be that the schools that have been more successful at Indigenising their curricula have a greater likelihood of success. The findings from this study suggest this is the case, as the schools with better success rates had Indigenised curriculum and/or

Indigenous academics. This is highly relevant to the current study findings, as Rigney (1999) also draws attention to the importance of utilising Indigenous philosophies as necessary for the development of a responsible and accountable Indigenous discourse that is theoretically sophisticated and responsive to the needs of the people. However, the challenge of supporting Indigenous nursing students to draw on their own experiences and develop an analytic position, while continuing to uphold an Indigenous standpoint as a way to expand the academic discourse, remains relatively unexplored (Nakata et al., 2008).

The notion of supporting Indigenous students to uphold an Indigenous standpoint and an Indigenised, critical pedagogy also fits with the claims from the Institute of Koori Education (2001, p. 21), which calls for critically reflective teaching practices. They suggest that Indigenous students have endured “systemic oppression” which has resulted in mediocre educational outcomes. But rather than continue to focus on these outcomes, they call for the examination of the institutions that perpetuate these outcomes. For nursing, this study’s findings suggest we need to ensure that undergraduate curricula adopt a critical pedagogy that problematises issues related to disadvantage, colonisation and oppression and recognises their link to the poor health and other issues impacting on Australian Indigenous people and other marginalised groups in society today. This study’s findings indicate that Indigenous nurse academics are integral to this process as they are seen by students to embody the similar values, belief and practices of both the Indigenous nursing students and of the education institution. Their role therefore is crucial to leading the development of an Indigenised curricula and pedagogy in nursing.

Historically, the relationship between Indigenous and non-Indigenous Australians has been fragmented. This has led to tensions on many levels and in many environments, including the university system. As a result, Indigenous students often find themselves in conflict with the practices and procedures of the educational institution (Yurkovich, 2001). Others have previously criticised the university environment as detrimental to Indigenous student success (Iwasiw, Goldenberg, & Andrusyszyn, 2009; Turale & Miller, 2006. Usher et al, 2005b). However, the Indigenous and non-Indigenous academics interviewed in this study considered effective leadership and sound policies and practices related to issues such as ‘special consideration’ can help the students, as can effective teaching and learning practices, and appropriate support. Weaver (2001), for example, explains that many Indigenous nursing students receive no validation of their cultural identity, and Yurkovich (2001) suggests ‘...Aboriginal students who enter Western educational environments become devastatingly aware that their cultures, values, beliefs, and practices are in contradiction with many practices of the educational culture’ (2001, p. 268). The presence of culturally appropriate supports to compensate for this lack of cultural validation is critical in educational institutions (Anonson et al., 2008; Martin & Kipling, 2006; Turale & Miller, 2006; Usher et al., 2005a).

This study’s findings are consistent with prior literature on the need for culturally sensitive policies and practices, and identified that culturally-specific support includes relationships, connections and partnerships with other Indigenous nursing students, Indigenous academics, and with Indigenous Education Support Units to provide cultural validation. However, the level of understanding of culture by academics and educationalists is itself problematic. The commonly perpetuated notion of culture

portrays it as a static concept with fixed qualities; known as an essentialist view (Gray & Thomas, 2006). It leans this way as culture is understood as something passed down through generations (Gregory, Harrowing, Lee, Doolittle, & O'Sullivan, 2010). In keeping with this hypothesis, students expect to be competent at caring for people from a variety of cultures just because they have learned the basics tenets of the different cultural groups. Within a critical pedagogy, on the other hand, culture is addressed under concepts such as stereotyping, institutionalised racism, and dominant group privileging; and the nurse-client relationship is viewed within the socio-political and historical forces that have contributed to the delivery of culturally inappropriate care (Browne & Fiske, 2001; Browne et al., 2009). This is known as the interpretive view (Gray & Thomas, 2006). Gregory et al. (2010), in an attempt to explore how nursing students understand culture, interviewed 14 nursing and 8 non-nursing students. The nursing student interviews revealed the unintended negative consequences of an essentialist view of culture, which indicates that nursing pedagogy continues to reinforce an essentialist notion of culture.

Table 6-7 provides evidence of the content analysis data Integration of the Indigenous nursing students' and academics' perceptions in relation to *Institutional Structures Systems and Processes*.

Table 6-8 Content Analysis Integration Indigenous Nursing Students and Academics – *Institutional Structures Systems and Processes*

(iv) Institutional Structures Systems And Processes		
<i>Academics</i>	Sub-themes	<i>Indigenous Nursing Students</i>
<p>"I'm also very lucky in my position where the Dean was my supportive and I could talk to him and he was very supportive of our nursing students, and he would do anything, if it meant giving or assisting them, financial assistance if it was necessary or whatever. He's a very fair man. I know that I can pick up the phone, he's in a higher position, and talk to him". (T4, IA)</p>	<p>University Leadership</p>	

<p><i>“The Deputy gave a Welcome to Country speech and acknowledged the actual students in their positions sitting in the hall...and these students were just like, “we are being noticed – we are not here just on the sidelines...so immediately, because of their acknowledgment – they became a part of the cohort, the system but also recognised and respected part of the cohort (T12, IA)</i></p>		
<p><i>“I think Murris’ would feels so proud, I think they would feel confident going through courses because it is about them..but them fellas are learning about blackfellas as well..I think if nurses go out with attributes of knowledge, understanding, awareness and being able to apply all of that in their discipline, in whatever they’re going to do, that they have the confidence that we’re going to close the gap together”. (T13, IA)</i></p> <p><i>“In the 1st year we just say to the students, “Just get a tutor, we’re not suggesting you’re not academically good enough to be here. What we’re suggesting that having a tutor will help you orient yourself to the expectations of the university, faster. Make your life easier, make you get better results. Quicker.” We’re not saying to students to get one because we think you’ll fail if you don’t. We’re saying to students , get a tutor – we want you to be the best you can be and ITAS is here to help you be the best you can be”. (T7, NIA)</i></p>	<p>Teaching and Learning</p>	<p><i>“The Indigenous health unit for me is learning about yourself because in the media its different, they portray it differently. Here it’s statistically. I would rather they talked about it than not. It’s no good not putting the statistics out there because if that’s the worst health in the country, then put it up. Let it be known”. (T4)</i></p> <p><i>“It’s definitely needed to be in the course, there should have been more of it. It’s definitely good and it eases some of the pressure off us as Murris to be expected to know everything”. (T2)</i></p> <p><i>“it was worth doing a placement up home... I felt at home there...It was great. I just wanted to because I know I want to go up there nursing one day. I wanted to feel what it was like up there working with my mob”. (T17)</i></p>
<p><i>“The system needs to be made as flexible as they can be. And to assess people as their situation is – not some generic idea of what ‘an Indigenous student’ ideally needs. What does this student need? Where are they coming from? What’s likely to be the kinds of hurdles and difficulties that they’re going to face? For some of them it might be academic skills, others it might be just having time and space to study”. (T5,N IA)</i></p> <p><i>“...all of this angst, all the student worrying, all of the emails flying around ... all that could have been avoided if the bureaucracy had just gone, “oh, I can see why this student didn’t get the chance to put their form in on time, absolutely you can put it in”. (T7, NIA)</i></p>	<p>Policy and Procedures</p>	<p><i>“at the end of the day, if the paperwork is there and she knocks it back, we just go above her. It was the processes that we know, that everybody is answerable to somebody else, and you just do something that good that they can’t knock it back. We need to know that stuff. Everybody needs to know it, not just us”. (T16)</i></p>
<p><i>“ The Dean of the Department is very obvious in the support that she wants Indigenous students to get. And also we have a joint head of department and they’re very obvious in what they want for Indigenous students. So there’s a lot of support for the Indigenous students to succeed. In fact, its very hard for them to fail, if everything is set up and they take advantage of everything it would be pretty hard to fail”. (T12, NIA)</i></p>	<p>Support from University leadership</p>	

6.2.5 Family and Community Knowledge, Awareness and Understanding

In previous literature, family and community knowledge, awareness and understanding of university expectations and demands has been identified as a potential barrier to success for Indigenous students (Cameron et al., 2011; Poorman et al., 2002; Usher et al., 2003). The participants in this study identified responsibility to family and cultural obligations as the most important obligation, which is consistent with that of most Indigenous cultures (Kovach, 2009). In this study, managing competing cultural, family and study obligations was an ongoing concern for all students. The family and cultural responsibility was heightened at times of sorry business (death in the family/community). This ongoing commitment exacerbates the dilemma for students who want to succeed at university but not to the detriment of their obligation and connection to family and community.

Families and communities' knowledge, awareness and understanding of university requirements were an important factor for Indigenous nursing students' successful completion of their courses. For students whose family and community had a greater understanding of university requirements, the support was greater, whereas students whose families and communities had a lesser understanding of university requirements seemed to place a greater burden upon the student. For example, some students realised that the sacrifices of time and obligations they made in order to succeed, such as time away from community and family and lack of time to attend important community business, were for the greater good of their families and communities. In addition, the

obligations and responsibilities placed on some students by families and communities were often lessened for the duration of their course in order to assist them to complete.

While previous authors have identified individual characteristics involved in successful study outcomes (Anonson et al., 2008; Martin & Kipling, 2006; Usher et al., 2005a), this literature has indicated that family, community and or cultural obligations and responsibilities often took precedence over university obligations and responsibilities (Andrew et al., 2008; Glossop, 2002; West et al., 2010a). In fact, family pressures have been termed ‘time thieves’ (Cameron et al., 2011) because of their tendency to rob students of time to devote to their studies. However, others have reported families as being an important source of support (Bowden, 2008; Green & Baird, 2009). In particular, family members with a background in nursing, and mothers in particular, are an important source of support for the student and for understanding the obstacles they face (Bowden, 2008). This study’s findings are therefore consistent with previous literature in respect to family and community responsibility. However, a strengths based approach to inquiry has revealed that it was individual students’ characteristics that often allowed them to transcend the potential pressures that could be placed upon them whilst undertaking their nursing courses. For example, most students were able to see that if they persevered with their studies through the pressures from family and community, the benefits of completion far outweighed the potential consequences from family and community. Table 6-9 provides an overview of the content analysis data integration of Indigenous nursing student and academics in regard to the theme of *Family and Community Knowledge, Awareness and Understanding*.

Table 6-10 Content Analysis Integration Indigenous Nursing Students and Academics – Family and Community Knowledge, Awareness and Understanding

(v) Family and Community Knowledge, Awareness and Understanding		
Academics	Sub-themes	Indigenous Nursing Students
<p><i>“by the same token, if the family is knowledgeable about what the student’s required to do and we can be knowledgeable about the student’s family situation and what background they come from...”. (T1, NIA)</i></p> <p><i>“Some of the family might not understand what the kids are going through, because of their own education, but they’re so proud and they want their kids to get through.” (IA)</i></p>	<p>Family and community understanding of university</p>	<p><i>“They know I’m studying Nursing but they don’t know anything about uni. It’s all very foreign”. (T18)</i></p> <p><i>“My older sister is pretty good. She’ll say, “that’s alright, we wrote a note, or we’re going to say something at the funeral.” But they usually give me a few days to make a decision first. They’ll ring up and say, “funeral’s next week”. And then I’ll call them back in a couple of days and say, “nah, I can’t” and then after a couple of days they’ll ring up and say, “it’s ok, we’ll do this.” (T18)</i></p> <p><i>“they’re pretty understanding which is good. When I first started uni, I needed like, a laptop and everyone put money in <u>..I’m</u> very lucky, like, the community is pretty understanding”. (T21)</i></p>
<p><i>“There seems to be a big factor in terms of family support. If the family says, we really want you to go to university it’s really important that you succeed and that you get in, those students will generally succeed. But there are other students whose family says, what the bloody hell’s university? What’s the good of that to you? It won’t fucking do you any good, why waste your time? Come back here and look after your mum or do whatever. Those students really, really struggle and they’re the ones that are likely to drop out. That’s a really big factor; the family and community support – or lack of it”. (T11, NIA)</i></p>	<p>Support from Family and community</p>	<p><i>“Yeah, they are. They don’t understand any of it, and we wouldn’t talk about it, but they do understand that I’m away doing something that’s going to be beneficial. But we don’t sit around yarning about it”. (T18)</i></p> <p><i>“I know that my family is here and that’s that’s the biggest thing for me: is that my family is here”. (T16)</i></p>
<p><i>“...some of our Indigenous students have been knocked down so frequently that I think when there’s’ a bit of pressure they just reflect on that and cave in...On the other hand, I’ve got students that fight fiercely through those issues”. (T12, IA)</i></p>	<p>Complex social issues</p>	<p><i>“I think what plays a part with me, I’ve broken that cycle, that domestic violence cycle, and gained back that confidence, that focus, more concentration, and that I want to complete this course. Now I’m on top of things. I had problems with my home circumstances one time but everything in the last three years have fallen into place for me. I got a lot better with my grades especially”. (T1)</i></p>
<p><i>“A lot of personal issues, family issues, went straight into nursing, bowed out. Various family issues I guess, and there’s nothing we could do to help with that. Went away... came back last year ... this year, has her family issues addressed. She’s much more ready”. (T13, NIA)</i></p> <p><i>“The major problem with getting enough Indigenous students to uni is ...they have too many demands on their time, if they’re a capable and functioning, happening person, everyone wants a piece of them. So, it makes it hard to concentrate on just me, it seems, you know, for them”. (T5, NIA)</i></p>	<p>Family and community obligations and responsibilities</p>	<p><i>“There were heaps of times when my family stuff could have interrupted my studies but I haven’t taken any time off Uni. No time... I should be taking time off. It’s disrespectful, it’s bad and it’s constantly distracting my studies. It’s hard missing funerals and missing being there for family when they’re sick. That’s very hard. Every time a family member dies, probably every month or second month, I struggle. I don’t know if it’s the correct term but I get spiritually distressed all of the time and it’s particularly around funerals. I struggle having to be here when I know I should be home. I’m suffering ‘cos I’m the one missing out on all of this”. (T18)</i></p> <p><i>“I yarn to my mob at least a couple of times a week, have a good laugh.</i></p>

		<i>Facebook is good. I get to see my family. I check almost every day going through my photos of kids, my nephews and nieces and grannies. Sit down and have a little cry". (T18)</i>
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6.3 Conclusion and Summaries regarding the findings

The potential for greater participation in the health workforce by Indigenous people as a way to contribute significantly towards closing the current gap in Indigenous health has been promulgated for some time. Given that nurses make up for the greatest percentage of the health workforce Indigenous nurses are critical to this strategy. Integration of the quantitative and qualitative data in this study found that individual student characteristics, coupled with guidance and support from Indigenous and non-Indigenous academics, determined how students overcame challenges such as the risk of cultural isolation, institutionalised racism, and family and community obligations.

Importantly, the study has privileged the voices and collective stories of Indigenous nursing students striving to complete a tertiary nursing course. Given this evidence has not previously been described elsewhere, these results are unique and offer a fresh understanding of successful course completions instead of the usual focus on barriers to completion. Overall, the state of completions in pre-registration tertiary nursing programs by Indigenous Australian students remains at a great disparity when compared to the success of non-Indigenous students. However, this study reveals stories of successful completions. If we are to increase the numbers of Indigenous nurses in the future to contribute towards improving Indigenous health outcomes, strategies recommended in this study need to be implemented to support students to

thrive rather than simply survive nursing courses. The following chapter provides the study's conclusions and recommendations for policy, education and research.

Chapter 7 - Limitations, Recommendations and Reflections

7.1 Introduction

This is the final chapter of the thesis; the last stage of the journey. The chapter provides an overview of the strengths of the study and addresses the key study limitations. Recommendations for education, practice, policy and research are made based on the study findings. The chapter ends with a final manuscript that offers my reflections of undertaking research using a decolonising methodology.

7.2 Strengths of the study

The combination of both quantitative and qualitative data within a mixed methods study is an important strength of this research. Mixed methods studies are enhanced when each phase of the study, or type of data, complements the other (Creswell & Plano Clark, 2011). In the case of this study, the integration of stages and data throughout the mixed method approach has helped to ensure this complementarity was achieved. Onwuegbuzie and Burke Johnson (2006, p. 58) recommend the mixed methods researcher must "...consciously and carefully assess the extent to which the weakness from one approach can be compensated by the strengths from the other approach and then plan and design the study to fulfill this potential"; they refer to this as *weakness minimization legitimation* (Onwuegbuzie & Burke Johnson, 2006, p. 58). I contend I have achieved legitimation in this study by undertaking different types of data collection and performing a variety of analytic processes.

The qualitative interviews with students and staff strengthened the overall outcome as the interview data helped to explain some of the findings of the quantitative data. Onwuegbuzie and Burke Johnson (2006, p. 58) refer to *conversion legitimation* where the data techniques lead to interpretable data of high inference quality. In the study attempts were also made to *quantitize* qualitative data where possible; see the article on qualitative content analysis in Chapter four for example. In addition, a range of qualitative analyses was performed in the study, including content analysis and narrative analysis.

The use of an Indigenous methodology was a particular strength of this study as it was consistent with the study topic and provided a philosophical and methodological lens through which the study was conducted. It was a novel methodological approach not used before with this topic or in conjunction with the study design/methods.

During the entire process of developing the study, conducting data collection, conducting data analysis, and writing up the study findings, journal manuscripts were developed and published. This has significantly strengthened the outcomes of the research because of the rigorous peer review process to which the manuscripts were subjected. Publishing also helped to disseminate the findings in a timely manner. This is a central consideration in a practice discipline such as nursing.

7.3 Study limitations

Participants for the qualitative interviews were drawn from one regional area, i.e. Queensland. It is entirely possible that participants in different geographical locations across Australia may have different experiences. Further, the participants in the study were recruited via media advertising, which may also have excluded potential participants with different experiences from those in the study.

Even though only eight students volunteered to be interviewed they represented one third of all potential third year nursing students in Queensland for 2009. Further, only female students volunteered to be interviewed all of which identified as being of Aboriginal descent *only*. Therefore, the perspectives on successful student completions represented in this study may not necessarily represent the perspectives of all Aboriginal and Torres Strait Islander nursing students. This paves the way for further research involving Aboriginal and Torres Strait Islander men and the experiences of Torres Strait Islander people who are nursing students.

7.4 Recommendations

7.4.1 Education

This research has challenged the current dominant views about Indigenous nursing student experiences within the tertiary system. Through the application of an Indigenous mixed methods approach and analysis of data, the voices of the students were heard. The results will be used to revise nursing courses to ensure that future indigenous students do not face the same disadvantage evident in my results. This research provides a foundation of evidence that can inform more effective targeted strategies to support Indigenous students in Schools of Nursing and health care systems

in the future. Such strategies will maximise the potential for Indigenous nursing students to successfully obtain health care qualifications and contribute to ‘closing the gap’ in morbidity and mortality for Indigenous people.

In particular, the findings from this study indicate that nursing curricula and education could benefit from development and implementation of Indigenous-specific course content and student support. The Tjrtamai program, delivered in Mount Isa to assist a group of local Indigenous rural and remote people to prepare for entry to nursing, is an example of what can be done to improve Indigenous nursing student recruitment and retention. Named the “*Tjirtamai*” program by the traditional landowners of the area, the program was offered in recognition of the challenges faced by Indigenous people when they enter educational health courses and as a way to increase the local number of Indigenous nurses. This program, while funded by the Government, had unprecedented support and involvement from the local Indigenous community. The program offered multiple exit points, assistance with financial and other recognised challenges for Indigenous students, and included preparation in basic literacy and numeracy. Of the 32 students who enrolled in the program, 26 completed. Of those participants, 18 have since enrolled in a Bachelor degree in nursing while another 6 enrolled in a Diploma of nursing (West, West, West & Usher, 2010). The course was community based in that it was taught outside of the usual setting. The facilitators manipulated the content to be more culturally inclusive and relevant. The program was very flexible and adapting continually to the individual students needs. The cohort model was one of the contributing success factors in that the students were able to support each other. The use of elders and traditional owners and Indigenous Academics provided the program

with credibility both within the VET sector and within the community sector. Programs like this ensure students are better prepared for entry to nursing at tertiary level and help ensure students have a smoother path through the university system.

7.4.1.1 Recommendation 1: Appoint an Indigenous nurse academic in all schools of nursing

It is recommended that Indigenous nurses be appointed as academics in Schools of Nursing across Australia. Given the support for the role of Indigenous academics that was evident in this study, this is a worthwhile strategy. It is recommended Indigenous academics be employed to teach into specific programs of relevance to the health of Indigenous people, to act as a support person for Indigenous nursing students, to encourage the appropriate inclusion of Indigenous content in curricula, to support the adoption of a critical approach to nursing curricula that is inclusive of culture and Indigenous ways of knowing and being in the world, and to act as role models for Indigenous students. Further, these positions are important for the provision of support and leadership for non-Indigenous academics.

7.4.1.2 Recommendation 2: Development and implementation of resilience-building training tailored for Indigenous nursing students

The Indigenous students in this study demonstrated resilience in the face of adversity. They were the students who had survived the program and persevered into the third year of the program. Given the importance of individual student characteristics that was evident in this study, the development and implementation of resilience-building training tailored to Indigenous nursing students is recommended as a positive and innovative strategy for Schools of Nursing to adopt. In particular, this training should

include specific cultural strategies for dealing with racism; both institutional and personal.

7.4.1.3 Recommendation 3: Develop partnerships between Schools of Nursing and Indigenous Education Support Units

Partnerships between Schools of Nursing and University Indigenous Education Support Units were identified as a critical strategy in the study findings, which ensured students were in receipt of both academic and cultural support. These partnerships are encouraged in every university with an Indigenous Education Support Unit that offers nursing across Australia.

7.4.1.4 Recommendation 4: Develop and implement a cross-cultural awareness program specifically for academics in Schools of Nursing

A further recommendation is the development implementation and evaluation of educational workshops for non-Indigenous nurse academics on the factors affecting Indigenous student retention, attrition and completions, as well as the issues faced by Indigenous nursing students in undertaking university courses. The workshops could also address the issue of effective learning and teaching approaches for use with Indigenous students. These workshops will offer important background and cultural information to help academics to recognise the issues facing Indigenous students and to respond to them more effectively. The workshops would also assist the academics to recognise the importance of Indigenizing nursing curricula.

7.4.1.5 Recommendation 5: Development of a critical nursing curriculum

The development and implementation of a critical nursing curriculum in Australia that is inclusive and respectful of Indigenous knowledge (Kincheloe & Steinberg 2008) will help ensure improvements in tertiary outcomes for Indigenous nursing students. This curriculum must critically examine issues such as colonization, racism and oppression, and how these impact on Indigenous peoples' health. Teaching using a critical Indigenous pedagogy means being inclusive of Indigenous student knowledge and encouraging Indigenous students to share the experiences they bring to the classroom.

7.4.1.6 Recommendation 6: Development of pathways from school through the VET sector and University sectors.

Programs such as the Tjirtamai initiative discussed above should be developed from school years 11 and 12, progressing into the higher education sector. The possibility for Indigenous students to complete health focused certificate program in their final years of high school, or for older adults to complete these programs prior to entering first the VET sector and then University nursing programs should be an option considered by all education providers across Australia.

7.4.2 Policy

Policy makers can be informed by, and use, the findings from this research to begin a process of change that will help to address the current disadvantage faced by Indigenous nursing students. I will ensure policy makers are aware of the study outcomes by lobbying key government officials, university leaders and nurse

academics. This is the first evaluation of the outcomes of the ‘Getting em n keeping em’ Report (2002), and the recommendations of this study findings will be used to:-

- i. Revision of Undergraduate nursing courses in Australia to ensure that future Indigenous nursing students do not face the same level of disadvantage evident in our results;
- ii. Targets for key indicators including enrolments, progression, attrition and particularly completion rates to be developed by all states, territories and nationally;
- iii. Development and implementation of a National strategy for the Recruitment and Retention of Aboriginal and Torres Strait Islander Undergraduate Nursing Student *entitled “Creating Walking Tracks to Success”* be considered by the Office of the Chief Nurse, Department of Health and Ageing; and
- iv. Development and implementation of an Indigenous nursing education model of excellence. Figure 1 demonstrates that a graduated implementation of each of the above six outlined strategies increases the likelihood of successful course completion by Indigenous nursing students. Success in the context of this research means the completion rates of Indigenous nursing students are equal to that of the non-Indigenous Nursing students.

7.5 Further Research

Further research is required to help determine the best way to address the institutional racism and educational disadvantage evident from this study within Schools of Nursing

and the Australian health system if we are to increase the Indigenous nursing workforce as a strategy towards improving Indigenous health outcomes in the future. This study paves the way for further research involving Aboriginal and Torres Strait Islander men and also the experiences of Torres Strait Islanders who are nursing students.

The continuation of this research to include a longitudinal study and analysis of course enrolments, progression, attrition and completion rates and the changing experiences of Indigenous nursing student's undergraduate nursing education.

As this study only interviewed students and academics in Queensland, further research should be undertaken to expand this study across Australia and explore the perspectives of students and staff on barriers and facilitators of successful course completion using a maximum variation sampling approach.

Model of Excellence Indigenous Nursing Completions

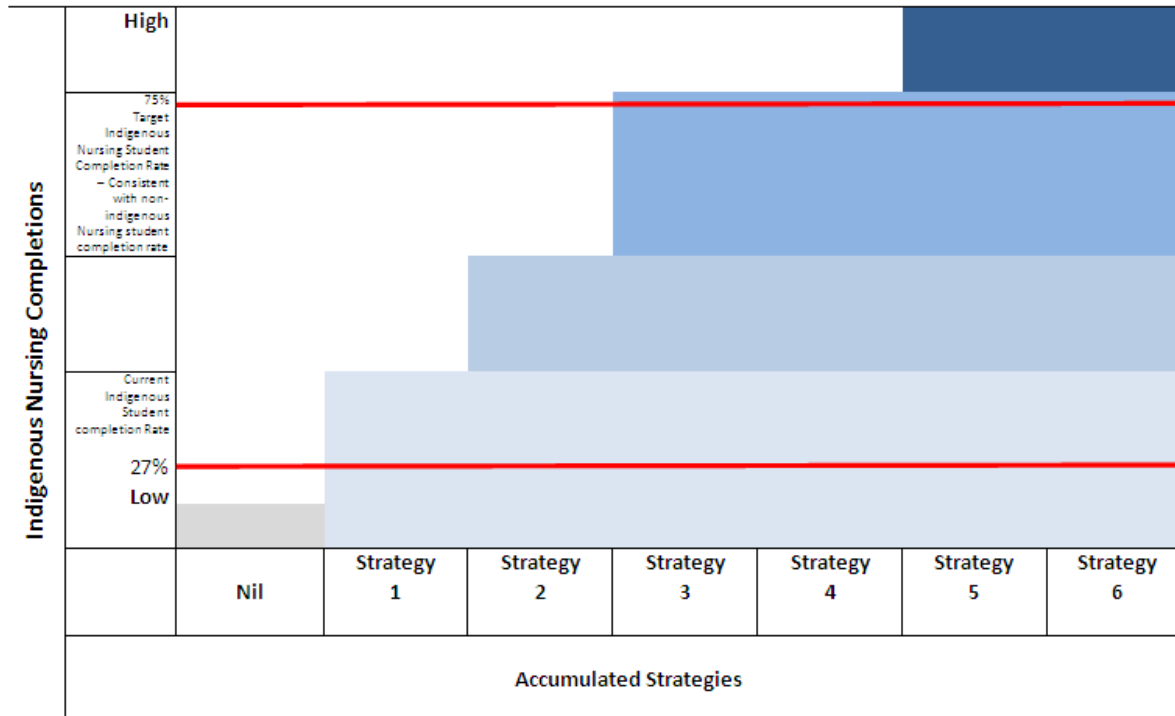


Figure 7.1: Indigenous Australian Nursing Education Model of Excellence

7.6 Final Reflections

Undertaking a research study that incorporates a decolonizing Indigenous research methodology and mixed methods has been challenging. The process raised many personal as well as theoretical issues during the conduct of the research. Reflection and the keeping of a log was an important aspect of the journey. Therefore, as an overview of the reflective process undertaken by the researcher, the following manuscript is presented.

The following manuscript discusses some of the issues related to being an insider and outsider in the research process.

7.7 Publication 9- “Submitted” Collegian

7.8 Declaration and Contribution Table

Declaration by candidate

The extent of candidate contribution to the following publication is as follows.

Publication 9: West, R., Usher, K., & Foster, K. (Under Review) Beyond a colonizing approach to research: Reflections from the other side. *Collegian* (COLL – D – 12 – 00007).

Thesis	Article	Publication Details	Author Contributions	Impact Factor
<i>Chapter 7: Limitations, recommendations and reflections</i>	Beyond a colonizing approach to research: Reflections from the other side	Submitted February 2012 <i>Collegian</i>	West (50%) Usher (30%) Foster (20%)	0.822

Declaration by co-authors

The undersigned hereby certify that:

The above declaration correctly reflects the extent of the candidate's contribution to the work and the extent of contribution of each co-author;

They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least part of the publication in their field of expertise;

They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

There are no other authors of the publication according to these criteria;

Potential conflicts of interest have been disclosed to (a) grant bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit; and

The original data are stored at the following location and will be held for at least five years from the date indicated below:

Location	School of Nursing, Midwifery & Nutrition, Townsville Campus, James Cook University.
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Candidate signature	Print Name	Date
	Roianne West	23/03/2012
Signature 1	Kim Usher	Date 23/03/2012
Signature 2	Kim Foster	Date 23/03/2012

Manuscript Number:

Title: Beyond a colonizing approach to research: Reflections from the other side

Article Type: Original Clinical & Educational Research

Keywords: Indigenous research; decolonizing; researcher reflections; insider/outsider

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Abstract: This paper explores the authors' experience of the decolonizing process, awareness of self as a mechanism for resilience, the benefits of an Indigenous voice in research and the Academy, the critical importance of relationships in the research journey, and the unique position of the researcher as both an insider and an outsider. We gained our experience in the course of a research project undertaken to explore why some Indigenous Australian nursing students succeed while others do not, which was positioned within an Indigenist research framework. The research engaged with Aboriginal and Torres Strait Islander people's knowledge and experience through a mixed-method transformative research design and the development of an innovative Indigenous research methodology. In undertaking the research, we attempted to look for ways that are respectful of Indigenous values and ways of knowing, recognizing the need to challenge the claims of Western-oriented research and its methodologies. An Indigenist research approach was critical to explaining why degree completions by Indigenous Australian nursing students have not been consistent with the increasing enrollments and helped provide an understanding of why Indigenous students continue to have much lower success rates in nursing when compared to non-indigenous students.

Abstract

This paper explores the authors' experience of the decolonizing process, awareness of self as a mechanism for resilience, the benefits of an Indigenous voice in research and the Academy, the critical importance of relationships in the research journey, and the unique position of the researcher as both an insider and an outsider. We gained our experience in the course of a research project undertaken to explore why some Indigenous Australian nursing students succeed while others do not, which was positioned within an Indigenist research framework. The research engaged with Aboriginal and Torres Strait Islander people's knowledge and experience through a mixed-method transformative research design and the development of an innovative Indigenous research methodology. In undertaking the research, we attempted to look for ways that are respectful of Indigenous values and ways of knowing, recognizing the need to challenge the claims of Western-oriented research and its methodologies. An Indigenist research approach was critical to explaining why degree completions by Indigenous Australian nursing students have not been consistent with the increasing enrollments and helped provide an understanding of why Indigenous students continue to have much lower success rates in nursing when compared to non-Indigenous students.

Key words

Indigenous research; decolonizing; researcher reflections; insider/outsider;

Introduction

Indigenous scholars enter the academy and undertake research for many reasons, including an opportunity to reclaim, protect, and nurture Indigenous culture. Knowledge systems and worldviews shape us, however, so that we come to accept the dominant view of the world (Ladson-Billings, 2003). As a result, Indigenous people have long been concerned about the way research serves to perpetuate the dominant view of the world, leading ultimately to the creation of “others” by inferiorizing, delegitimizing, and excluding such groups as non-Euro-American peoples, women, homosexuals, and the disabled. In the process, these groups are pathologized as social problems (Okolie, 2005). Rigney (2001; 2006) warns Indigenous people to be cautious: they are Indigenous people first and foremost; therefore, when conducting research, they must respect Indigenous values and ways of knowing while at the same time recognizing the need to challenge the claims of Western-oriented research and its methodologies (Saunders, West, & Usher, 2010). Unfortunately, Western research, used to justify colonization and the subjugation of Indigenous people (Dei, 2001), continues to dominate current ways of thinking and to perpetuate views of Indigenous people through colonial research ontologies, epistemologies, and axiologies which appear, at first glance, to be common sense (Rigney, 1997).

Indigenous researchers, therefore, must look for decolonizing approaches that offer ways to privilege Indigenous ways of knowing, to give voice to those who have been silenced (Saunders et al., 2010), and to propose different ways of understanding Indigenous people. Anti-racial or decolonizing research gives saliency and centrality to marginalized peoples’ perspectives, challenging exploitive relationships and the tendency for dominant research to pathologize, stereotype, label, and re-victimize marginalized people (Dei, 2005). As a result, Rigney (2001)

argues that we must ask ourselves whether we “can ... participate in Western science without reinventing the hegemonic colonial imagination about ourselves” (p. 7). It seems prudent, therefore, to suggest that we must find new ways and try new paths to ensure that the ways of the past are not carried into the future. However, as we struggle to free ourselves from the past we must go through a “decolonizing” process (Smith, 1999) where the researcher must face the traumas associated with colonization and its role in the denigration of Indigenous people (Kirmayer et al. 2007).

We were able to explore these theories on Indigenous research when we undertook a mixed-method research project that was located within an Indigenist Research Framework. By way of background for our readers, we offer a brief summary of the research in which we explored our theories of Indigenist research. We were interested in why degree completion by Indigenous nursing students has not kept pace with their increasing enrollment and why Indigenous students continue to have much lower success rates in nursing when compared to non-Indigenous students. However, we decided early on that undertaking the research by means of Western methodology would negate an Indigenist standpoint, reject Indigenous ways of knowing, and fail to recognize that the issue occurs within a social context. Critical and Indigenist researchers recognize that research undertaken by the dominant group will always serve and be biased in favor of that group (Okolie, 2005). Decolonizing approaches, on the other hand, challenge the colonial and imperial relationships evident in the topics studied, the privileged methodologies, the decisions about who is allowed to speak and whose voice is heard, and how research is validated and legitimated (Smith 1999). This paper explores the writers’ experiences of the decolonizing process, awareness of self as a mechanism for resilience, the benefits of an

Indigenous voice in research and in the Academy, the critical importance of relationships in the research journey, and finally, the unique position of the researcher as both an insider and an outsider. In this paper, we use the term *Indigenous* to refer to Australia's Aboriginal and Torres Strait Islander people.

It has been suggested that a well educated Indigenous nursing workforce is one way to improve the poor health of Indigenous Australians. The Indigenous Nurse Education Working Group Report (2002) called for an increase in Indigenous nurses in the health workforce commensurate with the representation of Indigenous people in the Australian population. The aim of our original transformative concurrent mixed-methods study was to uncover the current state of Indigenous nursing student success in tertiary courses using an Indigenist Research Methodology. The specific objectives were to describe Indigenous student experiences of barriers to and strategies for success, develop a narrative of the student experience, and describe the factors that academic and support staff often identify as barriers to or strategies for student success. The available Department of Education Employment and Workforce Relations (DEEWR) data (2002-2009) on national Indigenous nursing student commencement, progression, attrition, and completion rates, was collected and analyzed to reveal the differences in commencement, progression, attrition, and completion rates between Australian Indigenous and non-Indigenous students. Interviews were conducted with eight Indigenous students and 13 staff from Queensland universities. We used content analysis on the data to identify barriers to progression and strategies for success as identified by students and key staff. We also used narrative analysis on student interview data to reveal student stories of success.

The study revealed that although commencements and completion rates for Indigenous nursing students have increased overall nationally, the gap between completion rates for Indigenous and

non-Indigenous students remains wide and in need of urgent attention. Barriers identified by students have remained similar to those of the last few years except for financial obstacles, which were less of a concern to the participants interviewed. Strategies for success revealed the importance of being connected with other Indigenous students and making the most of available supports and partnerships. Student narratives revealed the following: the students enrolled in a nursing course because they wanted to make a difference; embracing support and the healing strength of connectedness. The study concluded that while little has changed since the landmark “gettin em n keeping em” [sic] report was released in 2002, which advocated for numerous changes to improve Indigenous nursing student retention and completion, there are stories of success that give us hope for the future.

Researcher Position

It was imperative from the outset to position ourselves as a research team. The principal researcher, also the lead author of this article, was an Aboriginal women, whereas the other members of the research team were non-Indigenous. Although they were experienced researchers and experts in their respective fields, they were guided by the principal researcher, the Indigenous reference group, a cultural Advisor that oversaw the research and the identification of cultural advisors for each of the research sites as well as the principles of Indigenist research. Identification of indignity, for example, is a critical aspect of Aboriginal culture and an accepted protocol supported by the writings of respected Australian Indigenous scholars, including Aileen Morten-Robinson (2004), Bronwyn Fredericks (2003), and Karen Martin (2007).

As an Aboriginal woman and as the lead author of both our previous study and this current research, I bring to the journey my knowledge and lived experiences that make me both an insider and outsider in the research process. I also come to the research journey as a registered nurse who has worked in the Indigenous health environment in many different contexts over the last 20 years. However, it was while making decisions about the best approach for our previous study that we realized the impact of conducting Indigenous research within the health sciences. This article explores what we learned during our study of Indigenous peoples.

The “Decolonizing” Process

Saunders, West, and Usher (2010) described the impact of the decolonizing process on Indigenous researchers through exploring the experiences of Indigenous research students. The authors described the trauma involved in coming to terms with the impact of colonization and its outcomes for Australia’s Indigenous people. Facing the reality of the trauma is required when the researcher chooses to use an Indigenist research approach. On this issue, West et al. (2009) said, “Once you recognise the ‘reality’ of the knowledge constructed about Indigenous peoples and the harm it causes, ‘doing’ research as you did before is no longer possible” (p.4. Saunders et al. (2010, p. 3) explained that new qualitative researchers who move away from the scientific or empirical approach for the first time must go through a process of “unlearning,” or letting go of bias and preconceived ideas; a similar experience occurs for Indigenous researchers who confront the reality of research dominated by Western ways of thinking. For them the process is referred to as decolonizing (Smith, 1999) because the researcher must address the traumas of colonization and recognize its role in the denigration of Indigenous people (Kirmayer et al., 2007). As a result, Dei and Asgharzadeh (2001) claimed that decolonization involves a struggle,

a conflict, and a changing social order. In terms of our own Indigenist research, the decolonizing process meant precisely that and even more; we had to make a choice to alter the way we looked at the process in order to get past it. As optimists, we chose to focus on the bigger picture, the end point, and we considered it an honor to be so privileged as to perhaps make a difference in the lives of Indigenous people. However, the journey was painful: at times we were overcome by the reality of the colonizing process that confronted us. Rigney (2001) stated that “[t]he Indigenous scholar’s acceptance of science does not necessarily mean that we embrace our historical exclusion from science, rather the contrary, it shows our passion for the act of discovery and the valuing of ideas that transforms our colonised world” (p. 10). It is this passion that led us forward.

However, the journey of research and discovery for Indigenous researchers is not a straightforward event but rather one fraught with much incongruence. Nakata (1998) called this process a journey of academic contradiction for Indigenous scholars and stated that “[i]n order to understand our own position better and to ultimately act to improve it we must first immerse ourselves in and understand the very systems of thought, ideas and knowledges that have been instrumental in producing our position” (p. 4). Rigney (1997) also recognized that although contemporary Indigenism acknowledges the power of science (research) to colonize, it also recognizes the role of science in the decolonization of Indigenous people’s lives. Such a journey is traumatic and deculturizing; for many Indigenous people, the journey of *academic contradiction* is extremely painful (Saunders, West, & Usher 2010). However, without such an intellectual journey, our contemporary problems and their solutions remain neither knowable nor

visible. Nonetheless, we would not be in the current historical moment of Indigenous epistemic revolution and scientific transformation without it (Nakata, 1998).

Awareness of Self

It is critical for all researchers to be aware of their own selves as researchers, which assists them in understanding the feelings subjects have about research (Dei, 2005). We claim that such awareness is even more important when the research participants are Indigenous and have historically been the subject of research that has been undertaken from a pathologizing position (Okolie, 2005). In order to help overcome this issue, researchers must become aware of their intentions and act in a way that takes account of the past denigration of Indigenous people through the research process. Furthermore, it is imperative for the researcher to act in ways that are collaborative and empowering in order to ensure positive outcomes. In our study, this meant remaining true to the principles of research with Indigenous people and being transparent with our intentions. When we thought about our role in the research, even though the lead researcher was an Aboriginal woman, we recognized our own tendency to frame the research and the findings in terms of our experiences rather than those of the participants. This research experience was the first time that all of the researchers had worked within the context of Indigenist research. For us to be successful, it was critical for us, deliberately and consciously, to recognize and overcome our own preconceptions and previous understandings of the issues in an attempt to honor the principles of Indigenist research, as elegantly defined by Rigney (1997). For example the researchers had to recognize and overcome their personal beliefs about doing research with Indigenous people to make their research successful.

An Indigenous Voice in Research and the Academy

Australian Indigenous people are now seeking to have a genuine and legitimate voice in research and in the interpretation of data rather than as mere producers of raw data. Instead, like Indigenous people in other countries, they want to be able not only to tell their stories, but also to analyze interpret them (Dei, 2005). The Indigenist Research Methodology we used to drive our project testifies to that intent. Indigenous people are constantly working towards the development of new and innovative ways to conduct research that values Indigenous people, recognizes and incorporates their worldviews, espouses their ways of knowing, and seeks to empower Indigenous people as an outcome of the research (Dei, 2005; Smith, 1999; Rigney, 1997, 2001, 2006). For us this meant adhering to guidelines as set down by the National Health Medical Research Committee, *Values and Ethics in Aboriginal and Torres Strait Islander Health Research, 2003*, which aims to provide guidance to researchers in the conception, design, and conduct of research. The six values at the heart of these guidelines are reciprocity, respect, equality, responsibility, survival and protection, spirit, and integrity. Therefore, in conducting our study, we responded to the diversity of Indigenous people, specifically to the decision-making processes of Aboriginal and Torres Strait Islander peoples, and collaborated with communities through the appointment of a cultural advisor as integral to the supervisory team and to the formation of the Indigenous reference group. The research process was also reviewed by the Building Indigenous Research Capacity (BIRC) scholars group at the university.

Respect for the inclusion of Indigenous people in the research process was also paramount. Thus, ensuring that the voice of the participant was heard in the research findings was foremost in our choice of semi-structured interviews and narrative enquiry as our analytic techniques. The research also acknowledged the individual and collective contribution of Aboriginal and or

Torres Strait Islander Peoples by including, valuing, and acknowledging their participation in personal interviews and the questionnaires, their collective contributions through undergraduate nursing students, and the analysis of the research data as a collective contribution based on individual experiences.

In addition, we consciously minimized the effects of difference blindness on and in the research process through our various personal and professional experiences, including Aboriginal researcher and registered nurse, in understanding the uniqueness of the diversity within Aboriginal and Torres Strait Islander culture. In the research process, the Indigenous reference group was charged with ensuring the minimization of difference blindness by incorporating the principle within the group's terms of reference.

In sum, our study engaged with Aboriginal and Torres Strait Islander People's knowledge and experience in order to give them a voice through individual interviews, questionnaires, a reference group, and the development of an Indigenist methodology. The approach provided an insight into Indigenous student experiences within tertiary nursing programs through the collection of Indigenous student narratives and provided an overview of the benefits and limitations of programs as identified by the students.

Relationships with Others

Another aspect of our Indigenist research was that as the researchers, we had to remain cognizant of whose voice is privileged. It was not our task to collaborate with participants merely to

validate our own research findings (Dei, 2005). Dei (2005) has explained that we must be aware of the academic tradition of racist, sexist, homophobic, and class bias, which has failed to inform learners of the complete history of ideas and events that have shaped, and continue to shape, human development. Therefore, we must look for new ways of knowledge generation, analysis, and dissemination to renegotiate crucial issues of power, control, and interpretive authority in research. To achieve this end, we ensured that our research was respectful of participating Indigenous community values, aspirations, and protocols by allowing a flexible time plan for our research. For example, we did not conduct student interviews at times of sorry business which is referred to as times of grief and loss in the western culture. The approach was validated by the establishment of an Indigenous reference group to safeguard and ensure that the research met participating community values, aspirations, and protocols. Furthermore, we already had extensive experience in working with local Indigenous communities and a thorough understanding of the need for flexibility and adaptability in adhering to the values and aspirations of these communities for effective mutual outcomes.

Building Trust

In order to develop trust with participants, the researcher must always be transparent to participants (Dei, 2005). Specific measures were identified during our study to demonstrate transparency in the exchange of ideas and in negotiations about the purpose, methodology, conduct, dissemination of results, and potential outcomes/benefits of research, including the ethics application, appointment of an experienced and qualified cultural mentor, formation of an Indigenous reference group, and adherence to and ongoing review of the research agreement. Provisions that were made for appropriate ongoing advice and review from the participating

community included mechanisms to monitor ethics standards and to minimize the likelihood of any unintended consequences arising from or after the research.

The research proposal demonstrated agreed-upon arrangements regarding publication of the research results, including clear provisions relating to joint sign-off for publication and the protection of individual and community identity, if appropriate. Individual and community identity was protected however, it is noted that because Indigenous nursing is a small community, a risk of identification is possible. All participants were assured of confidentiality; however, they were advised that because of the small numbers of Indigenous nurses, there might be the possibility of others knowing that they were involved in the research. Furthermore, as indicated by Dei (2005), researchers must also be held accountable for their actions. Therefore, we undertook significant initial negotiations and liaisons with the selected sites and communities involved and maintained ongoing engagement.

To summarize, by way of building trust, our research recognized the diversity of Australian Aboriginal and or Torres Strait Islander Peoples' cultures, including the mechanisms through which communities may make decisions; and in our conduct and reporting, we ensured adherence to and awareness of informal and formal leadership structures, such as traditional owners and custodians, clan and family groups, and other organizational structures.

Being an Insider

Foster et al. (2005) explained that when the researcher is an insider in the research environment, it is important to be aware of the potential for problems like assumption of knowledge and experience, and over-familiarity with the research participants.

However, Kusow (2003) challenged the notion of the insider and claimed that the insider/outsider debate as methodologically distinguishable categories cannot be supported empirically. In addition, the researcher and participant relationship cannot be determined *a priori* but is instead a status that needs to be continuously negotiated (Kusow, 2003). Thus, while we considered ourselves to be insiders, we remained aware that because of our involvement as researchers, we could also be seen by participants as outsiders to some degree and that our role would change during the process of the research according to the situation.

Conclusion

As the researchers in our project, our lead researcher being an Aboriginal woman, we learnt very quickly both the possibility of enlightenment that can come from research as well as the trauma that accompanies the decolonizing process and *academic contradiction* as discussed by Rigney and Nakata. Further, we came to respect the crucial nature of this process as part of an Aboriginal woman's research journey, especially since the research was meant to contribute to the development of solutions for the contemporary health problems faced by Indigenous Australians. In the construction of decolonizing approaches and within the safety of an Indigenist research framework, we moved towards the decolonization of ourselves. Pivotal to enduring and surviving this process—and included in our advice for future researchers in Indigenous health—is the power of deep reflection, self awareness, relationships, strength in one's identity and the end goal. The principal researcher realized that she is blessed with the skills and strength to endure this process and the realization that no matter how traumatic she perceived the process to be, it was not nearly as traumatic as the sacrifices made by those who

have gone before, who have allowed her to assume her privileged position as lead researcher. As an Indigenous researcher, she honors her ancestors by not allowing this somewhat traumatic process to stop her but rather to drive her and by contributing to the body of knowledge that will eventually bring about the decolonization of Indigenous people. As a research team, we acknowledge that while the lessons we shared in conducting our study will *not* entirely eliminate the impact of academic contradiction, we hope that they may in some small way minimize its impact for some of those who follow.

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The previous paper discussed the experiences of the lead researcher as an Aboriginal woman, lessons learnt as well as the trauma experienced in the decolonizing process. It further provided advice for future researchers in Indigenous health and identified strategies as follows:

- Power of deep reflection;
- Need for self awareness;
- Critical need for relationships;
- Strength in one's identity and
- Focussing on the end goal.

7.9 Summary of Chapter

This chapter has provided an overview of the strengths of the study and identification of study limitations. It further offered key recommendations for education and policy. The chapter made suggestion for future research in the area and provided a final manuscript that offered reflections from the researcher undertaking decolonising research.

7.10 Summary of thesis

To increase the numbers of Indigenous nurses in the future in an attempt to help improve Indigenous health outcomes, strategies need to be urgently designed and implemented to address the current commencement, progression, attrition and completion rates of Indigenous nursing students in Australia. It may seem a huge task to increase the Indigenous nurse workforce we must remember that others have achieved such an outcome. The numbers of Indigenous doctors in Australia, for example, has increased substantially over the past few

years. It is my dream that one day Indigenous nurses will be rightfully reflected in the Australian nursing workforce and takes on the important role of improving the outcomes for our people. The thesis adopted an Indigenous methodology as the theoretical underpinnings of the study. As a result, respect and acknowledgement of Indigenous culture, knowledge and ways of being in the world, are reflected in the thesis and the outcome of the research.

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