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Supporting Australian Torres Strait Islander and Aboriginal nursing students using mentoring circles: an action research study

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Supporting Australian Torres Strait Islander and Aboriginal nursing students using mentoring circles: an action research study

Abstract

Attempts to recruit Aboriginal and Torres Strait Islander students into nursing degrees have made minimal impact on the number of registered nurses working in Australia's health care sector. Yet increasing the number of Indigenous nurses remains one of the most important objectives in strategies to close the health gap between Indigenous and non-Indigenous people. Poor retention of Aboriginal and Torres Strait Islander students in a Bachelor of Nursing Science degree offered in far north Queensland, Australia, indicates the need for a different approach to support and retain Indigenous students. This action research study used a decolonizing methodology and was conducted at a satellite university campus in a remote Torres Strait Island community. Researchers trialled the use of a mentoring circle to support and retain nursing students and interviewed mentors and mentees about their experiences. Grounded theory methods were used to analyse the data. Findings indicated a growth in participant students' emotional intelligence as a result of participating in a mentoring circle. Students developed confidence, formed a group identity, better-negotiated the university environment, became more effective communicators and supported one another through difficulties. The mentoring circle model improved students' university experience and its use should be considered by tertiary educators working with Indigenous students.

Keywords

Nurse; education; mentor; remote; Indigenous; student; emotional intelligence

Introduction

Improving the health of Indigenous populations requires greater representation of Indigenous people in health service industries (Felton-Busch, Solomon, McBain, & De La Rue, 2009; Goold, 2006; West, Usher, & Foster, 2010). Identifying and implementing anticipatory and tailored strategies for under-represented student groups supports student retention and success rates (Crosling, Heagney, & Thomas, 2009). The authors report findings from an action research study undertaken with Aboriginal and Torres Strait Islander students enrolled in a Bachelor of Nursing Science (BNSc) at the remote satellite site of a main university campus. The aim of the study was to identify, describe, implement and evaluate contextually-relevant student learning support strategies using a mentoring circle model.

The model consisted of two skilled mentors facilitating regular group meetings, activities and discussions with study participants. Using an action research design informed by decolonizing methodology, researchers aimed to achieve four objectives: 1) for students to describe and define success in the context of higher degree study at a very remote site; 2) to collaboratively-design a suite of student-driven and evaluated support strategies specific to a very remote site; 3) to identify and describe contextual enablers for student success; 4) to identify and describe contextual barriers to student success. Throughout the course of the study three action research cycles occurred relating to environment, identity and emotional intelligence. Data sources included artefacts generated from mentoring circle meetings, semi-structured face-to-face interviews with Aboriginal and Torres Strait Islander nursing students and semi-structured telephone interviews with mentoring circle facilitators. Analysis of the study findings was guided by the emotional intelligence framework formulated by Kooker et al (2007). Concluding comments incorporate recommendations for future

mentoring circles and initiatives to develop emotional intelligence that would benefit all students within undergraduate nursing education programs.

Background

This study centred on a project undertaken at a satellite campus in the Torres Strait in far north Queensland, Australia. The Torres Strait is a culturally and geographically-diverse region which stretches to Australia's north-eastern international border (Torres Strait Regional Authority, 2012). The region takes in several Aboriginal communities on Australia's Northern Peninsula and more than 100 islands, 18 of which are home to most of the Torres Strait Islander population. There are five traditional island groupings, and English and three main Creole languages are spoken there (Torres Strait Regional Authority, 2012). Approximately 7500 people live on the islands and 2300 people live on the mainland of the Northern Peninsula (Australian Bureau of Statistics, 2011).

In 2003 the university commenced delivery of a Bachelor of Nursing Science degree (BNSc) at a newly-established, very remote satellite campus on Thursday Island, which is the administrative hub of the Torres Strait. At its inception the nursing program was described as a "novel and robust" (Usher, Lindsay, & Mackay, 2005, p. 440) way to increase the number of Indigenous nurses caring for and working with their community members. It was believed the on-site approach "would provide a more supportive environment and lead to better Indigenous retention outcomes" (Usher, Lindsay, & Mackay, 2005, p. 439). Improved training and retention of Indigenous nursing students has long been recognized in Australia and internationally as one part of a multi-faceted approach to lift the health and well-being of Indigenous people (Commonwealth of Australia, 2007). Despite calls for greater representation of Indigenous nurses in the healthcare system and Goold's (2002) recommendations to achieve this ends, little progress has been made in Australia to redress the balance (West, et al., 2010).

The substantial gap between the health of Indigenous and non-Indigenous Australians has been documented extensively (Australian Indigenous Health InfoNet, 2012) with the Council of Australian Governments signing an agreement in 2007 to *'Close the Gap'* in six key areas. (Coalition of Australian Governments, living document). In 2011, figures showed some improvements had been made to Indigenous health statistics but that Aboriginal and Torres Strait Islander people were still more likely than non-Indigenous people to die younger, have diabetes, develop diseases of the heart, lungs and kidney, and require treatment for a communicable disease. For this group of Australians, infant mortality is higher; average birth weights are lower (Australian Indigenous Health InfoNet, 2012).

Aboriginal and Torres Strait Islander people represent 2.5 per cent of Australia's general population (Australian Bureau of Statistics, 2011) but remain underrepresented in health service industries, accounting for 0.2 per cent of the health workforce. Just 9 per cent of those workers hold a bachelor or higher degree (Australian Institute of Health and Welfare, 2012). Statistics from the Torres Straitbased BNSc initiative reflect this struggle to increase numbers of Indigenous health professionals. In the past decade the university has enrolled 68 students in the BNSc program in the Torres Strait. There have been four graduates (Leete, 2013). It is a statistic that indicates a need for more intensive, context-specific support strategies tailored for this group of students. Rigby et al (2010-2011) found "processes which promote resilience and well-being are critical to improving Indigenous higher education outcomes" (p. 23).

The support strategy identified for trial in this study was mentoring circles – a model which combines the psychosocial and professional benefits of hierarchical, one-on-one mentoring with those gained from group work (Huizing, 2012). Palermo et al (2011) list some benefits of group work as the development of trusting relationships, reflective practice, and gains in professional competency. The mentoring circle developed for this study fits a one-to-many model, as described by Huizing (2012) in which an experienced and skilled mentor is grouped with several less-experienced participants to facilitate regular meetings, activities and discussion.

The mentoring circle aimed to enable the participants – mostly Aboriginal and Torres Strait Islander students - to identify tailored strategies in a safe, culturallyappropriate and supportive environment which would make a difference to their lives as nursing students. As there is little information about these types of learning and teaching strategies being used with Torres Strait Islander students in tertiary education, this study will make a substantial contribution to the body of knowledge about this issue.

Theoretical Framework

Emotional intelligence is described by Goleman (1998) as "the capacity for recognizing our own feelings and those of others, for monitoring ourselves and for managing emotions in ourselves and in our relationships" (p. 317). Emotional intelligence is an important concept in nursing work and is closely-linked to the nurse-patient interpersonal relationship. It is also important for nursing students because scholarly success and persistence with university studies is linked to well-developed social management, emotional skills and resilience (Keefer, Parker, & Wood, 2012). The capability to manage emotions and develop emotional intelligence

requires the student nurse to develop a range of strategies that can be described using domains and competencies from the Emotional Intelligence Framework (Goleman, 2001). These domains include self-awareness, social awareness, self-management and social/relationship management (Goleman, 2001). Each domain has identified skills and competencies. For example, the self-awareness domain requires the person to recognize their own emotions and their effect on others, while also recognizing their personal strengths and limits (Kooker, et al., 2007).

Methodology and methods

This study used an action research design underpinned by decolonizing methodology. Tuhiwai Smith (2012) states that

Indigenous methodologies tend to approach cultural protocols, values and behaviours as an integral part of methodology. They are 'factors' to be built into research explicitly, to be thought about reflectively, to be declared openly as part of the research design, to be discussed as part of the final results of a study and to be disseminated back to the people in culturally appropriate ways and in a language that can be understood. (p.16)

The team of researchers responsible for designing and implementing this study is a mix of non-Indigenous and Indigenous academics, student support workers and alumni. The study was conceived by non-Indigenous academics in response to indicators of poor student retention but Indigenous and Torres Strait Island team members finessed the research design and were responsible for its eventual implementation. Student participants interacted exclusively with the Torres Strait-based and Indigenous researchers, who were alumni and student support officers. The remainder of the research team, Indigenous and non-Indigenous academics, provided support for team members who were facilitating the mentoring circle and generating

data on-site at the campus. This support included regular video conferenced team meetings. In these meetings, researchers conducted an iterative process of concurrent data generation and analysis to refine the structure and conduct of the mentoring circle meetings. On-the-ground researchers recounted and reflected on the stories shared by student nurses about their university lives, and reflected on their personal experiences of conducting research in the Torres Strait with Indigenous students with the rest of the team. This process ensured the study continued to progress in a supportive and culturally-appropriate way.

Evidence presented in the findings section of this study provides examples of how the students' cultural heritage and values provided a platform for their actions. It would have been easy for academic members of the research team to fly in and 'take over' the mentoring circle with helpful suggestions and ideas based on pedagogical 'evidence' for practice. This was never the intent of the study design and the research team established agreed-upon principles that safe-guarded against such an eventuality. The notion of having 'hands-off' members of the research team was, therefore, implicit in the research design and allowed the student group to dictate the direction of the research with mentors who were culturally sensitive to their needs. Artefacts were generated as a result of strategies which students and local research design was chosen to meet the research aims because the experts in this study were the student participants.

Action research was developed in the 1940s by social psychologist Kurt Lewin to link social action to social problems. Lewin developed a cycle of planning, acting, observing and reflecting on action that forms the basis of action research today (Schwandt, 2007). This study was conducted from March 12 to November 30, 2012

and used mentoring circles as a vehicle to drive the action research cycles. Student participants identified common issues, discussed these within the group, devised strategies for action, implemented these strategies and reflected on the outcomes. They also considered how actions and outcomes from previous mentoring circle meetings impacted on their student experience.

The student cohort was informed of the planned action research study at the commencement of semester one. The Indigenous Student Support Officer held a face-to-face information session about the study on campus. Written information sheets and consent forms were provided to students at the information session. Students' questions about the study were answered at this point. Of a total of 12 students attending classes on campus, 11 provided written consent to participate in the study, which included permission for their images to be used as part of the reported data set. The University Ethics Committee granted approval for this study (H4469).

The BNSc is taught over two semesters. During the 12 weeks of semester one student participants met four times. Additionally, students were accompanied by the remote site facilitator to a residential block at the main university campus where extra activities were undertaken as part of the mentoring circle study. During the 10 weeks of semester two, students again met four times. Each mentoring circle meeting lasted between one and one-and-a-half hours. The mentors planned activities for each mentoring circle meeting with the aim of stimulating discussion within the group and developing a shared identity as university students. Overall, the meetings were loosely-structured and included sharing food. The format of each mentoring circle included feedback on actions from the previous meeting and activities to build on these outcomes.

A data set was generated with participants that consisted of 68 artefacts. Included in the data set were facilitator notes from the mentoring circle meetings, outcomes of activities, worksheets, posters, graphic designs for a student shirt, interview transcripts, and minutes from the research team meetings. Artefacts were numbered and imported into NVivo, a computer software program for qualitative data analysis. Grounded theory methods of data analysis (Birks & Mills, 2011) were used to code and categorise the data set. Each artefact was open-coded by a research assistant. The research team conducted intermediate coding during a data analysis workshop conducted via video-conference between Cairns and the Torres Strait. Initial open codes were discussed by the team and recoded if agreed upon by the group. Codes were grouped into action research cycles with the assistance of diagramming. Following this workshop, a storyline was developed by the chief investigator and circulated to the research team for their input. From the storyline the theoretical code of emotional intelligence was identified and data analysis progressed to advanced coding where the theorization of each action research cycle was further refined.

Findings

The mentoring circle was a safe place in which students could network, talk and solve problems. When students began the degree program they were ill equipped – practically and emotionally – to deal with the foreign university *environment*, describing their degree program as a 'frustration' or 'a struggle'. Through mentoring circles, students formed a *group identity* and, through these supportive relationships, students' *emotional intelligence* developed, as did their abilities to manage the physical and environmental difficulties they encountered. Mentoring circle participants began to manage their studies in a different way. Instead of perceiving

study to be a struggle to overcome or a burden to bear, mentoring circles helped students to better negotiate their surroundings and frame the experience as a challenge to meet or a worthwhile goal to achieve. Three action research cycles, illustrated in Figure 1, occurred during two semesters.

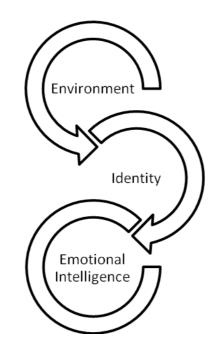


Figure 1: action research cycles

As recorded in the minutes of the first three mentoring circle meetings, students identified a number of pragmatic *environmental* issues impacting on their ability to function effectively in the university setting. Environmental issues had two aspects: physical and cognitive. Physical issues included access to the computer laboratory, building facilities, textbooks, scholarships, tutors, printing and photocopying. As well as access problems, students were having difficulty finding study spaces and coping with air-conditioning breakdowns. These physical issues were resolved through discussion during the mentoring circle, resulting in actions to remove barriers and solve problems. For example: keys were allocated to allow for easier access to facilities out of office hours.

Staff and students also identified cognitive skills required to function in the university environment. These skills included time management, prioritizing tasks, learning how to use a computer, accessing and navigating the online learning platform and finding ways to communicate effectively with other students. One-on-one coaching was used to support students to learn how to navigate the online learning platform. Students developed posters for their shared study space to remind everyone to be respectful of each other and not "…have your social discussions in the computer room" (Artefact 41, line 319) As well, the mentoring circle facilitator developed a computer basics booklet with students, which was placed next to each terminal in the laboratory. The group also introduced a feedback box. Peer-to-peer communication skills developed strongly during this cycle of action. In many ways, the first cycle of resolving environmental issues was akin to 'clearing the decks' before the students began to face up to the emotional demands of becoming a university student.

At the final meeting of Semester 1, there was a noticeable turn in the topics discussed in the mentoring circle meetings. Students began to share their experiences of balancing paid employment, study and family.

"(We are)...trying to bring some ideas together of having work support the staff that are studying. I think that's something that came up in these mentoring groups, because we all work and we're all trying to [do] both at the same time... the mentoring circle brings out... the ideas and the opinions of everybody else." (Artefact 32, Line 76)

Just prior to this meeting, the majority of students participating in the mentoring circle, along with their local facilitator, had visited the main campus for a residential. Here they connected with the Indigenous Student Support Officer who led the first three meetings on the island. It was at this point that the mentoring circle group moved into the second identified cycle - forming an *identity*. The group formed bonds and developed deeper levels of trust and communication after sharing the experience

of travelling away from the island. Together they caught public transport, shared accommodation, experienced specialized teaching sessions and were guests for lunch at the Indigenous Health Unit.

The consolidation of the mentoring circle group's identity was also assisted by an activity instigated by facilitators in earlier meetings. Students designed a polo shirt as a physical expression of group identity. Early sketches of the design drew upon the cultural heritage of the students and the history of the university on the island. Old and new elements were incorporated into the final design (Figure 2), which was an expression of student solidarity and their sense of belonging. The polo shirt was more than a tangible representation of the group's identity; it demonstrated that, by working together, students could achieve results and produce something useful. Membership in the group became a source of pride and differentiated nursing students as part of an 'elite group' (Artefact 41, line 375). The students began inviting other students to meetings.



Figure 2: Student-designed polo shirt design

The third cycle was increasing **emotional intelligence**. Having formed a group identity, students began to take more responsibility to ensure relationships remained harmonious and productive. Students examined their motivations to study nursing, questioned the effectiveness of their study strategies, looked at their strengths and weaknesses and considered alternative ways to achieve their goals. They began speaking to each other about more personal issues and sought out peers in their mentoring circle when they needed help to solve a problem. The data from the third cycle was analysed using the emotional intelligence framework cited by Kooker et al (2007) which divides emotional intelligence into four domains of self awareness, self management, social awareness and social/relationship management. In this study, students' emotional intelligence growth was noted predominantly in the areas of self awareness, social awareness and relationship management.

Self Awareness

A person with well-developed self-awareness has an accurate picture of their own strengths and weaknesses, strong self confidence and can recognise their emotions and the effect these emotions have on others (Kooker, et al., 2007). Selfawareness was put in the spotlight by the mentor when she invited participants in the fifth mentoring circle meeting to 'map' their lives. In developing the resource (artefact 47) the mentor put 'me' firmly in the middle in an effort to help students better conceptualise the pressures, stresses, joys and practicalities of their lives. She described the resulting conversations as 'a very open discussion on the challenges of being a student, and the balances between work commitments, home commitments and study schedules.' (artefact 54) "Part of it is simply acknowledging that these issues are true and real and have an effect on your ability to study ... and in amongst that awareness, not necessarily have that family commitment and business as a scapegoat." (Artefact 41, line157-159)

The supportive environment of mentoring circles gave students a more realistic view of what they could expect from themselves when it came to study. Students began to identify and address gaps in their knowledge and skills. One student acknowledged her limits, saying she found it difficult to explain aspects of her life (Artefact 25, line 24). Another spoke of one of her strengths as a willingness to speak up and express opinions, and help others to do the same (Artefact 21, line 20). As students became better at practical skills like time management and researching, and at articulating their ideas and feelings, self-confidence grew. The confidence evident when students spoke with their peers, however, was not so noticeable when they spoke to people outside the island or to lecturers during video-conferencing. "I can't ask questions (on) video conferencing cos everyone will be looking at me." (Artefact 64). Students decided to stop embarrassment and fear from getting in the way of their learning. Some students wanted to build their confidence to stand up tall and others wanted to look at alternative ways they might use to have their questions answered. Together, they designed a series of posters with the catchery, 'Don't be Shame!", which were put up in the lecture rooms. (Artefacts 14, 15, 16, 17, 18)]

Social awareness

Social awareness is the ability to empathise with people and take an interest in their concerns. It also covers one's ability to meet the needs of customers and fit into organizational settings (Kooker, et al., 2007). By sharing their stories in mentoring circles, students came to understand each other better, and to see how pooling knowledge and experience could benefit one and all in the group. This social awareness produced both practical and emotional benefits. Students knew where and to whom they could turn for help (and often, that was to each other) and they felt less isolated and alone. Empathy and understanding grew. "It's nice to know that you're in a group with people doing the same thing and everybody's at the same place and you're not the only one struggling." (Artefact 27, line 12)

Early in the research study, mentors noticed some students were unwilling to or unaware of how to seek help or make needed changes. As meetings progressed, students realized they could help themselves and others. As one mentor explained, students with concerns would "whisper that they did not want to say anything bad but..." (Artefact 31, line 128) then explain their problem. As time passed and organizational awareness grew, students would "come and tell them what to do or what they want." (Artefact 41, line 309)

Self management

Self management is made up of a number of traits consisting of emotional self control, trustworthiness, conscientiousness, adaptability, initiative and internal drive (Kooker, et al., 2007). This was the area in which there was the least evidence of students' emotional growth. Some students said they were feeling less stressed because they had decided to make their studies a higher priority, thereby demonstrating emotional self control. "Stress is, I think, when you think about a lot of things, but if you're more focussed and you know what you're doing, you don't stress yourself as much ... I prioritise my stuff like the top of the list is my, my, my study, so that is the top" (Artefact 26, line 88)

Social/Relationship management

Students' growth was strongest in the area of social/relationship management. Social/relationship management includes leadership skills, networking, conflict resolution, wielding interpersonal influence, teamwork, collaboration, developing others' abilities, being a 'change catalyst' and sending clear and convincing messages (Kooker, et al., 2007). The most tangible example of this growth can be seen in students' comments about stressing to family and friends how important their study was to them. Students placed a high priority on study and sufficiently developed their influence tactics to make their wishes known to other people around them. This involved sending clear and convincing messages to family and friends about their decision to focus on study.

Students also began to develop leadership skills and act as a 'change catalyst', expressing a desire to invite local councilors to their mentoring circle meetings to talk about changes around campus and to tell the wider community about the activities in which they were involved. On a practical level, students also came to the realisation they could work together to solve many of their problems – a 'bolstering and development' skill. They used the mentoring circle as a forum in which to obtain advice. "…we can voice our opinion, then as a group, we discuss it together and come to a conclusion and we support and help each other in our mentoring circle group" (Artefact 22, line 27)

Throughout the study, the mentoring circles group became a 'halfway place' where students, who had felt helpless at times in the university environment, could develop emotional intelligence and competencies which allowed them to better cope and apply themselves to their studies. Mentoring circles became a place in which students could learn skills and see other viewpoints and apply their existing skills in new and unfamiliar settings.

Discussion

In recent years there has been a renewed interest in the use of group mentoring models to support people working in the health and medicine sectors (Caldwell, Dodd, & Wilkes, 2008; Palermo, et al., 2011) and as a teaching and learning tool for nursing students (Kostovich & Thurn, 2013). Researchers have found it to be a promising way to increase communication and cooperation skills, and to decrease the stress levels of students and clinicians alike (Fletcher, Leadbetter, Curran, & O'Sullivan, 2009; Slaski & Cartwright, 2003). The benefits described in these group mentoring studies equate to the growth of emotional intelligence. Similarly, this study found mentoring circles did support the growth of some aspects of participants' emotional intelligence. This, in turn, made students' university experience less stressful and more socially-satisfying. It will take time, however, to discover whether these outcomes will translate into improved student retention - one of the aims of this project.

The supportive learning environment of group mentoring has been recognised in the higher education sector as an effective way to improve student retention, particularly for minority groups and poorly-prepared university students (Haring, 1999; Shields et al., 2012). For example, in Alaska, a psychology professor noted Native students started to participate more in class and improve their academic results after she initiated an informal weekly 'catch-up' class which functioned in much the same way as a mentoring circle. She subsequently researched the preferred learning styles of participants and found the group learning setting to be a better fit for the students than the 'passive' learning style of lecturing (Wilson, 1997). Similarly, researchers in New Zealand changed their teaching practices after studying experiential group learning styles for Maori students in an economics course (Zapalska, Brozic, Dabb, & Keiha, 2002). The study is part of a bundle of New Zealand-based literature which seeks to solve the 'retention and achievement puzzle' in universities, particularly in relation to Maori students (Zepke & Leach, 2005).

In Australia, researchers have noted a clash which can occur when Indigenous Australian students enter the 'foreign' university culture (Usher, Lindsay, Miller, & Miller, 2005). This has serious impacts on student retention and participation in higher education (DiGregorio, Farrington, & Page, 2000; Rigby, et al., 2010-2011; Sonn, Bishop, & Humphries, 2000). A number of Australian studies into improving Indigenous student outcomes and retention have focused on two main issues: what is being taught and who is teaching. Researchers have been asking if the content is culturally-relevant, and if teachers are themselves Indigenous, or have sufficient cultural understanding and knowledge to relate well to Indigenous students (Rigby, et al., 2010-2011; Usher, Miller, Turale, & Goold, 2005). There has been less literature looking into how students are being taught. There is little documentation, for example, about group mentoring models being used with Aboriginal and Torres Strait Islander students in Australia to improve retention, as has been the case in places like Alaska and New Zealand (Wilson, 1997; Zapalska, et al., 2002). Working in a circle, however, is a learning method historically used in Indigenous Australian cultures which continues to be relevant today (Begoray & Bannister, 2008).

Mentoring circles encourage participants to develop and maintain useful relationships and to engage in reflective thinking. Meetings provide participants with a forum in which they can solve problems together and share ideas (Palermo, et al., 2011). Researchers in this study noted the emotional skills and competencies which students developed by participating in group mentoring did not extend to competencies in all four domains of emotional intelligence. Emotional growth was more concentrated in three of the four domains. There was clear evidence of students' growth in self awareness, social awareness and social management – more specifically, in their abilities to understand their own strengths and limitations, to manage the systems and processes of the university, to empathise with others and to work together effectively. In the fourth domain of self-management, however, researchers could find less evidence of participants' growth. The question needs to be asked, 'Do mentoring circles develop the 'right' emotional traits and intelligences needed to encourage persistence and success in study?'

Low emotional intelligence scores are common to many people who drop out of university. Students with high general emotional intelligence are more likely to succeed or stay at university (Parker, Hogan, Eastabrook, Oke, & Wood, 2006; Qualter, Whitely, Morley, & Dudiak, 2009). Certain emotional traits and specific emotional skills can be used to predict which students are more likely to persist with their studies. If students deal well with stress and/or have a supportive network of friends, they are more likely to stay at university (Keefer, et al., 2012). These particular traits were developed within the group learning framework of mentoring circles which was employed in this study. Parker (2006) also identified adaptability and self-awareness as traits common to students who persist at university. In this study, self-awareness was a skill where much development was noted. Limited evidence could be seen, however, that students became more adaptable in their approach to their studies. As adaptability has been identified in research as an important emotional skill for university students, this skill may need to be honed or explicitly taught to increase students' ability to successfully complete their degree.

On considering the literature about mentoring groups and about emotional intelligence in nursing and higher education, there are a number of directions further studies or initiatives may take. Turning the group mentoring into a subject in its own right is one such direction, an approach documented in Kostovich & Thurn (2013). Incorporating such a subject into the degree program might mitigate some of the time restrictions which prevented some students from participating fully in the mentoring circle program. Alternatively, group mentoring may be considered as a teaching strategy to be used in tutorial sessions. Another direction future initiatives may take could be to include specific emotional intelligence training in the mentoring circle activities. Fletcher et al (2007) assert that some aspects of emotional intelligence can be taught and existing emotional intelligence can be developed. This may lead to a more purposeful and directed development of emotional skills and intelligences.

Conclusion

A mentoring circle is one way forward for universities to support Indigenous students to achieve their academic goals and graduate. Students who participated in this action research study perceived many benefits in the model, particularly in relation to the collegial and supportive networks students formed by joining the mentoring circle. Mentors noted students' increased confidence and communication skills and the way participants built their abilities to study and manage their time in the foreign university culture. Many of the practical and emotional barriers which were making study difficult – family, community and work pressures - were brought into the open in the mentoring circle and addressed by students. To improve Indigenous student retention, educators must look at what is being taught, who is

teaching and how it is being taught. Mentoring circles falls into the latter category. By offering culturally-appropriate support to Indigenous students, universities may succeed in creating an environment which is less foreign for Aboriginal and Torres Strait Islander students.

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