Review

Integrated systematic review on educational strategies that promote academic success and resilience in undergraduate indigenous students

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S U M M A R Y

Background: Despite numerous recommendations by governments, researchers, and education policymakers the recruitment, retention and success of undergraduate indigenous students in higher education is not commensurate of the wider student population. There is minimal evidence of valuing indigenous worldviews and perspectives in curricula, and effectiveness of educational strategies to strengthen indigenous student success rates in completing undergraduate studies.
Objectives: To conduct an integrative systematic review of educational strategies to promote academic success and resilience in undergraduate indigenous students.
Methods: Major databases of Scopus, ProQuest, Informit and Web of Science were searched. Inclusion criteria were peer reviewed research articles from scholarly journals that referenced indigenous, aboriginal, First Nation or Māori students in undergraduate programs in higher education. The search was limited to English language and studies conducted from 1995 to 2014.
Results: The search yielded 156 research papers which reduced to 16 papers that met the inclusion criteria. The included papers were critiqued from a standpoint theory approach that reflects feminism, cultural respect, and humanism. Much of the literature describes issues, and provides qualitative analyses of experiences, but empirical evaluations of interventions are rare.
Conclusions: There was a gap in current research evaluating strategies to improve indigenous student success and resilience. Key strategies for indigenous student success are multi-faceted, layered support, underpinned by the principles of respect, relationships, and responsibility. Implications for nursing and midwifery education, research and health care practice are outlined.

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Introduction

Globally, there is little question that education can be transformative towards 'closing the gap' agenda and improving the socio-economic position of indigenous peoples (Hossain et al., 2008; Pechenkina et al., 2011; Rossingh and Dunbar, 2012). The negative impact of colonisation on the health and wellbeing of indigenous peoples around the world is indisputable. In countries like Australia, New Zealand (NZ) and Canada, health disparities between indigenous and non-indigenous people are well documented (Australian Institute of Health and Welfare, 2015; New Zealand Ministry of Health, 2014; Government of British Columbia, 2013). Alongside numerous reports of health disparities are recommendations about the essential role indigenous health workers have in the provision of healthcare to their own people. However, in order to improve health outcomes and establish parity for indigenous peoples in

leadership roles across all health professions, higher education must be seen as a natural pathway.

Despite the myriad of recommendations, education providers continue to struggle to demonstrate valuing the world views and perspectives of indigenous peoples in flexible, responsive and inclusive ways (Behrendt et al., 2012). There is a dearth of evidence around educational strategies that address the adverse academic experiences of indigenous students. The purpose of this review is to examine available research on effective educational strategies that support indigenous student success in undergraduate programs in higher education.

Indigenous Student Success in Undergraduate Programs

An analysis of data from the Commonwealth Department of Education (2012) Canadian Government (Government of British Columbia, 2013) and the United States of America (USA) (CHiXapkaid, Inglebret & Krebill-Prather, 2011) indicates that little has changed over the last decade to address poor indigenous student outcomes. In

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Australia, for example, there has been little change to participation rates with only 1.2% of all commencing higher education students identifying as indigenous (Commonwealth Department of Education, 2013). In New Zealand although participation rates have increased from 11% to 13% for Māori students and 13% to 16% for Pasifika students, these groups are still under-represented compared to their non-indigenous peers (29% versus 54%) (Curtis et al., 2012). Furthermore, less than 50% of commencing indigenous students complete their undergraduate programs, compared with 72% for non-indigenous students (Asmar et al., 2011).

The transition to higher education for indigenous students can be difficult (Oliver et al., 2013). Page, DiGregorio and Farrington (1997) found that educational strategies that support success had various characteristics. Successful strategies acknowledged students' indigenous culture; recognised students as novice university learners, prioritised family support for students, and encouraged participation in study groups. Research has also found that indigenous students are more likely to succeed in universities where acknowledgement is given to the importance of sharing responsibilities, partnerships, and the establishment of indigenous education support units (IESUs) (Oliver et al., 2013).

In New Zealand the national government has stated its responsibility to work collaboratively with indigenous communities to effect change (New Zealand Government, 2014). By embedding strategies into legislation to improve student outcomes, the State acknowledges the rights of indigenous people and recognises the economic benefits to individuals and society from improved levels of education (New Zealand Government, 2014). Such strategies have been making small increases to indigenous student participation levels in higher education but are yet to show marked increases in successful completion rates (New Zealand Government, 2014).

Critical Framework for This Review

Traditionally, systematic reviews in education use a structured framework to critique interventions, measures and tools. For example, Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) (Moher et al., 2009) and Critical Appraisal Skills Program (CASP) (CASP, 2014) were considered but deemed to not be culturally appropriate for the current review. An alternative framework of analysis was therefore developed and included components of feminism (Harding, 2004), indigenous (Martin, 2008; Moreton-Robinson, 2013), and cultural (Bilic, 2012) standpoint theories and is entitled "Reframed Standpoint Theory" for the purpose of this review.

Reframed Standpoint Theory

A standpoint theory framework allows for flexibility and validation of the participant's voice (Martin, 2008). A combination of feminist, indigenous and cultural standpoints was used to inform the current framework. Feminist standpoint theory emerged during the 1970s and 1980s from feminist critical theory and focused on the connection between the production of knowledge and practices of power (Harding, 2004). It was also presented as a mechanism towards empowerment of oppressed groups, valuing their experiences and legitimising difference (Harding, 2004). More recently indigenous researchers have begun to develop a standpoint theory that reflects their indigenous cultures (Moreton-Robinson, 2000; Martin, 2008). Moreton-Robinson (2000) in her early discourse represented an indigenous standpoint of Australian feminism, giving voice to indigenous women, challenging the dominance of 'whiteness' and exposing this as a position of power and privilege. Both Martin (2008) and Moreton-Robinson (2013) present a paradigm towards cultural safety by using the concepts of ontology (ways of being) epistemology (ways of knowing) and axiology (ways of doing).

As two of the authors are non-indigenous researchers, consideration of these elements was deemed to be an important process in critiquing

the studies in this review. The paradigm of cultural safety had its beginnings from a colonial context in response to the poor health of Māori people in New Zealand. Cultural safety places an obligation on the practitioner (such as a nurse, midwife, or educator) to provide care whilst recognising and respecting difference. The cultural safety paradigm also addresses power relationships between provider and user of the service. The person receiving the 'care' determines the extent to which they feel safe (Papps and Ramsden, 1996). With cultural safety in mind the non-indigenous authors aimed to conduct a culturally safe integrative systematic review of the literature, whilst acknowledging their place of privilege and power and as outsiders trying to look in.

From a cultural safety paradigm perspective, standpoint theory is an appropriate framework from which to consider issues that stem from the tension between the dominant higher educational culture and indigenous or First Nations students. The application of feminist, indigenous and cultural standpoints allow for an interpretive flexibility when reviewing the literature while giving voice to participants from the included studies. Bilic (2012) used a standpoint theory as a framework for her research into the tensions between women's and cultural rights. Six elements of standpoint theory were used to scrutinise this issue; strong objectivity, double consciousness, heterogeneous women's experience, representation of other, reflexivity, and navigating outsider/inside status within research. In the current review, these six elements have been integrated under the headings of: 'ways of being' including representation of other, 'ways of knowing' including heterogeneous women's experience and 'ways of doing' including strong objectivity, double consciousness, reflexivity and navigating outsider/insider to critique the included papers (Martin, 2008; Moreton-Robinson, 2013).

Search Procedure

A search of four databases: Scopus, ProQuest, Informit and Web of Science were conducted between October 2014 to January 2015. A search of Google Scholar was also undertaken to locate any other relevant material from conference reports, government reports and other significant documents. Reference lists of all retrieved articles were scanned manually. The search was limited to English language and studies published from 1995 to 2015.

The inclusion criteria were: peer reviewed research articles from scholarly journals that referenced indigenous, aboriginal, First Nation or Māori students. The most commonly used term in research with 'First Peoples' is indigenous. It is with the utmost respect that this term is used in this review whilst acknowledging that indigenous people in different countries have their own preferred identity, for example, Aboriginal and Torres Strait Islanders in Australia, Māori in New Zealand, and First Nations in Canada.

The search terms were used individually and in combination (including and/or) and applied to the title, abstract and body of all works. The search was conducted sequentially using the data base search engines and combinations of key search terms. These results are presented in Table 1 (search results). After applying all search terms sequentially 156 articles were located across all four databases; a filter was applied to remove any that did not focus on higher education. This final search revealed 24 research papers and 11 Government reports which were saved into a standard software tool for managing citations and references (Endnote X7). Government reports were used for reference purposes only. The remaining articles were evaluated to assess relevance according to the search criteria and reveal duplication. Fifteen articles were excluded during this process. Reference lists were scanned and a further three papers were retrieved and a manual search resulted in four more papers.

Results

The results are presented according to elements of the Reframed Standpoint Theory in regards to 'ways of being' 'ways of knowing' and 'ways of doing'. A total of 16 research papers met the inclusion criteria