An international comparison of indigenous peoples’ experiences of entering tertiary education

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Abstract

Effective entry into tertiary education is a challenge that is continually being investigated in various parts of the world. For indigenous peoples, the aspirations and challenges that affect their entry into mainstream tertiary institutions are largely distinct. This paper explores the findings of current literature surrounding the motivation and entry of indigenous students into mainstream tertiary education. Empirical data from Aotearoa New Zealand and secondary data from Australia and the United States of America were compared. The factors that impacted on indigenous students as they effectively navigated the pathway to tertiary study were considered. The key conclusions that emerged suggested that positive self-concept and identity, an integrated approach of role models and mentors, and career decisions based on better outcomes are significant to the effective entry of indigenous peoples into tertiary education.

Keywords

tertiary education, indigenous peoples, motivation, Māori, Aboriginal Australians, Native American

Introduction

Many indigenous groups are benefiting from their participation in tertiary education (Durie, 2011; Meyer, 2005). While some have established their own tertiary institutions, many continue to seek the opportunities provided by mainstream colonialist tertiary education.

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Tertiary education is primarily used in this paper as a term to include universities, colleges, higher education and postsecondary education that are founded by the mainstream colonialist group, and predominantly non-indigenous tertiary institutions. The purpose of this paper is to compare and contrast the findings of the current literature surrounding the motivation and effective entry of indigenous students into mainstream tertiary education in an international context. This investigation is not limited to entry into tertiary education via secondary school, but acknowledges other pathways, particularly because there is a dearth of literature on the entering of indigenous peoples into tertiary education. Furthermore, this validates the various pathways to tertiary education. This research sits within the wider concern of reaffirming the educational rights of all indigenous peoples through restoring and reviving indigenous spirituality, cultures, languages, homelands, social systems, economic systems and self-determination (United Nations, 2008; World Indigenous Nations Higher Education Consortium, 2002). Three of the founding indigenous peoples of the World Indigenous Nations Higher Education Consortium—Māori from Aotearoa New Zealand, Aboriginal peoples from Australia and Native Americans of the United States of America (USA)—will be investigated in this paper. Literature pertaining to Aboriginal Australians is primarily investigated; however, some of the data in this literature include Torres Strait Islanders. These groups have been selected as there is a larger body of literature pertaining to these indigenous peoples particular to this research area (Canadian Council of Learning, 2006). There is also an opportunity to compare experiences of Māori in Aotearoa New Zealand with other indigenous groups in both the Southern and the Northern hemispheres.

Durie (2011) notes that “while there are significant differences in the circumstances of indigenous peoples in various parts of the world, there are also commonalities in experiences and world views” (p. 157). One of the historical commonalities of these three indigenous groups is that indigenous educational pedagogy and content has been subdued by largely English colonisers (Mudrooroo, 1995; Walker, 2004; Wilkins & Lomawaima, 2002). There has also been a resurgence of autonomy and self-determination among these indigenous peoples over the last few decades (Mudrooroo, 1995; Walker, 2004; Wilkins & Lomawaima, 2002). Collaboration of information and experiences has led to considerable change for these indigenous groups and continues to be of benefit to their communities (Durie, 2011; Maaka & Fleras, 2005; Smith, 1999; United Nations, 2008).

This paper will initially present a brief review of the general literature on the factors that influence entering into tertiary education and a background on the three previously mentioned indigenous peoples. The approach used to investigate the comparative factors of indigenous groups in this field will be discussed. This paper will then present the findings from a study exploring the factors that motivate young Māori to pursue a university degree in Aotearoa New Zealand (Cumming-Ruwhiu, 2012). These findings will then be compared with comparable literature for Aboriginal peoples in Australia and Native Americans in the USA. A discussion section will then compare and contrast these findings, highlighting the key themes. The key conclusions and implications for those involved with the entering of indigenous students into tertiary education will be presented.

General literature—Factors influencing entering tertiary education

There has been an increasing amount of investigation into the decision-making of prospective students for tertiary education. The literature shows that the numbers of Māori, Aboriginal Australians and Native Americans
participating in tertiary education have doubled in recent years (Bosse, Duncan, Gapp, & Newland, 2011; DiGregorio, Farrington, & Page, 2000; Ministry of Education, 2005). However, these increases are largely in shorter and lower qualification courses. Furthermore, in comparison to their respective national averages, they continue to have lower attainment. Recent and upcoming research continues to inform government and local strategies to address these concerns (American Indian College Fund, 2013; American Indian Higher Education Consortium, 2004; Behrendt, Larkin, Griew, & Kelly, 2012; Ministry of Education, 2010).

The literature shows that a number of factors contribute to the decision-making process of prospective tertiary education students (Bloomer & Hodkinson, 1997; Leach & Zepke, 2010; Nguyen & Taylor, 2003; Payne, 2003). There are, however, a number of models used to explain decision-making (Leach & Zepke, 2010). One frequently used model focuses on predisposition (family background, degree of self-belief, nature of schools attended), search (exploration of post-school options), and choice (entry status, course availability, costs and rewards are in balance; Stage & Hossler, 1989). The general literature surrounding entering into tertiary education provides various findings about the factors that influence student choice. Socio-economic status is arguably the strongest predictor of tertiary education (Cabrera & LaNasa, 2000; Chalmers, 2001; Choat, 1998; Looker & Lowe, 2001; O’Dowd, 1996; Stage & Hossler, 1989). In addition, families’ experience in tertiary education is also shown to have a strong impact on student decisions (Cabrera & LaNasa, 2000; Chalmers, 2001; Nguyen & Taylor, 2003; Parente, Craven, Munns, & Marder, 2003; Payne, 2003). Information sharing about tertiary education options is shown to be most effective through interpersonal relationships, while mass marketing is overrated (Brennan, 2001; James, Baldwin, & McInnis, 1999; Lilley, 2010). The literature on the effects of schooling and teachers as factors are mixed. Some show that teachers have a little influence on students’ decisions (Keller & McKeown, 1984; Lilly, Armitage, & Thomas, 2000), while others show that teachers are very influential, particularly for “non-traditional” or low socio-economic status students (Bishop, Berryman, Cavanagh, & Teddy, 2009; Bland, 2002; Boyd & McDowall, 2003; Boyd, McDowall, & Ferral, 2006; McRae, Macfarlane, Webber, & Cookson-Cox, 2010; Meyer, McClure, Weir, Walkey, & McKenzie, 2009). As expected, academic achievement is another influential factor in the effective entry and transition to tertiary education (Jeffries, 1997; Maani, 2000; Nguyen & Taylor, 2003).

**Background—Indigenous peoples investigated**

This section provides a brief overview of some of the relevant historical, geographical and political backgrounds of the three indigenous groups that will be considered for this paper: Mäori, Aboriginal Australians and Native Americans.

**Mäori—Aotearoa New Zealand**

The experience of Mäori in Aotearoa New Zealand, in relation to education, differs from other indigenous groups in three significant respects: population distribution, the Treaty of Waitangi and leadership (Durie, 2011). The Mäori population is 15.4% of the total Aotearoa New Zealand population and this is likely to rise to 20% by the year 2051 (Durie, 2011; Statistics New Zealand, 1996, 2012). There are also over 65 separate Mäori iwi (Statistics New Zealand, 2006). Another unique experience of Mäori was the signing of the 1840 Treaty of Waitangi that has, only in recent decades, had significant implications for education policy in Aotearoa New Zealand (Durie, 2011). Furthermore, there has been effective Mäori
leadership in education for more than a century (Durie, 2011; Walker, 1996).

Aboriginals—Australia

Aboriginal Australians and Torres Strait Islanders make up 2.5% of the total Australian population as of 2011, with the majority in the State of New South Wales (172,600) and the largest proportional population in the Northern Territory (27%; Australian Bureau of Statistics, 2011). There are about 500 separate clans and 170 different language communities (Havemann, 1999). Aboriginal Australians are relatively less urbanised than Māori, living in remote or rural regions, and they have a high population growth rate as well as a younger population (Papillon & Cosentino, 2004). Statistics display Aboriginals with poorer health, educational achievement and progression, and a higher unemployment rate in comparison with the Australian national average (Papillon & Cosentino, 2004).

Native Americans—USA

Native Americans and Alaska Natives make up 1.7% of the total USA population (Norris, Vines, & Hoeffel, 2012, p. 3), with larger proportions in the states of California (13.9%), Oklahoma (9.2%) and Arizona (6.8%; Norris et al., 2012, p. 8). This paper focuses on the Native Americans and Alaska Natives in the USA and does not include literature pertaining to Native Hawaiians for the purposes of this paper. However, the author acknowledges their status as distinct indigenous peoples within the USA. There are 566 federally recognised Native American and Alaska Native tribes. Forty-four percent of the Native American and Alaska Native population live on reservations while the remaining live in urban environments (Indian Affairs, 2014; Musaus, 2010). Native Americans and Alaska Natives also have a significantly younger population, higher poverty rates, significantly lower education levels and considerably worse health problems in comparison with the national USA average (Papillon & Cosentino, 2004). The relationship of Native Americans with their government includes nation-to-nation treaty making, forced assimilation and, more recently, a time of growing autonomy and self-determination (Wilkins & Lomawaima, 2002).

Approach

As an extension of Cumming-Ruwhiu's (2012) thesis entitled “Te Ara Manukura”, the title of this paper, “Ngā Ara Manukura”, loosely translates to the many pathways of leaders. This paper considers the distinctive pathways that indigenous peoples take to effectively enter into tertiary education and illustrates the collective experiences between and within indigenous peoples of the globe. There were three groups compared: Māori, Aboriginal Australians, and Native Americans and Alaska Natives. The Māori case study focused on empirical data, while the other two case studies derived from secondary literature about the entering of indigenous people into tertiary education.

A primary set of data from the context of Māori within Aotearoa New Zealand was used to make comparisons with relevant literature from indigenous contexts in Australia and the USA. Cumming-Ruwhiu (2012) examined the factors that motivate young Māori to pursue a university degree in Aotearoa New Zealand. Kaupapa Māori methodology (Smith, 1999) directed the research project; that is, Māori knowledge, epistemologies and tikanga were privileged in the formation, interpretation and production of the research thesis. A theoretical framework, “Te Manu Tukutuku”, was developed to illustrate the fundamental principles applied within the research (Cumming-Ruwhiu, 2012). Qualitative data was gathered through semi-structured interviews with 11 young Māori university students. This method was employed to gain a deeper understanding of
participants’ perspectives and ensure that their autonomy over their contribution to the research is maintained. Considerable secondary data surrounding Māori in this subject area strengthened Cumming-Ruwhiu’s (2012) study and will be revisited within this paper to endorse the findings.

Literature surrounding Aboriginal Australians and Native Americans was largely in the form of secondary data, primarily journal articles, books and webpages. Due to a dearth of literature pertaining to young indigenous peoples’ experiences in this area, the search was broadened to include entering of all age groups to tertiary education. Literature pertaining to various pathways was considered, but the majority were entering from secondary school.

Findings from the literature

Māori—Aotearoa New Zealand

Cumming-Ruwhiu’s (2012) results were categorised under the two key research questions:

1. What are the factors that motivate young Māori to pursue a university degree?
2. What are the expected outcomes of young Māori that will occur as a result of pursuing a university degree?

The findings under each question were also summarised into two key themes that were in line with a kaupapa Māori methodology: whakawhānaungatanga and rangatiratanga. Furthermore, Cumming-Ruwhiu (2012) discusses how intrinsic and extrinsic motivational orientations were exhibited in the findings.

Whakawhānaungatanga, in relation to motivational factors, are the strong positive relationships that were significant motivators in the journey of young Māori to university. Positive role models are crucial in the motivation of young Māori to go to university (Bishop & Berryman, 2006; Bishop et al., 2009; Bosmann-Watene, 2009; Cumming-Ruwhiu, 2012; Jefferies, 1997; Kay, 2008; McRae et al., 2010; Meyer et al., 2009; Reid, 2010). This is particularly true for teachers and family members. For example, one participant stated that “teachers are the main reason why I’m at uni[versity] today … they go that extra mile to help me” (Cumming-Ruwhiu, 2012, p. 45). For some participants, friends, colleagues and partners were also significant motivators, with few participants discussing career advisors and school principals as significantly motivating them (Cumming-Ruwhiu, 2012; Kay, 2008; Reid, 2010; Taurere, 2010).

Rangatiratanga was signified by examples of personal autonomy, strength and leadership of the individual, which is exercised in the social context of collective identity (Macfarlane, Glynn, Grace, Penetito, & Bateman, 2008). One participant stated that “my strength is from the group, which is from my family, from my teachers and from everyone else, but I am self-motivated to stick in there and keep going” (as quoted in Cumming-Ruwhiu, 2012, p. 63). The key findings under this theme were that personal skills and attributes were accredited to the collective effort (Kay, 2008); school achievement and retention is important (Cabrera & LaNasa, 2000; Harker, Slade, & Harker, 2001; Jefferies, 1997; Stage & Hossler, 1989); and their Māori identity is a key factor (Katene, 2004, as cited in Bosmann-Watene, 2009; Durie, 2003; McRae et al., 2010; Penetito, 2004) to Māori students’ motivation to go to university.

The second research question relates to the expected outcomes that motivate young Māori to pursue a university degree. The findings related to this question were also grouped under the two key themes of whakawhānaungatanga and rangatiratanga.

Whakawhānaungatanga, in this sense, focused on the building and maintaining of relationships as a result of gaining a university degree. The findings under this theme showed a strong premise of tauutuutu and making new
social connections as a positive expected outcome of gaining a university degree. Tauutuhighlighted the motivational factor of giving back to those who had made a significant contribution to their lives, but also to others in their community and the broader communities. For instance, a participant stated, “[I] want to give back to all those that helped me be who I am, as well as help other people” (as quoted in Cumming-Ruwhiu, 2012, p. 66).

This theme showed expected outcomes of individual excellence, leadership, ownership and prestige in the context of collective identity (Macfarlane et al., 2008). One of the findings was exploring new horizons as an individual and as a member of a greater collective, such as their whānau, communities or wider Māori society (Mitchell, 2009; Webster, Warren, Walsh-Tapiata, & Kiriona, 2003). Other significant expected outcomes that were shown in the findings were related to the desire to be challenged, learning and knowledge, and greater employment and life prospects (Bevan-Brown & Taylor, 2008; Cunningham, Fitzgerald, & Stevenson, 2005; Leggatt-Cook, 2008; Te Puni Kōkiri, 2003). One participant, for example, stated, “I didn’t want to work in a factory job forever. I knew [that] if I wanted to have a good job, and good pay, I had to go to uni and get the qualifications” (as quoted in Cumming-Ruwhiu, 2012, p. 68). Furthermore, the findings showed considerable examples of both extrinsic (external) and intrinsic (internal) motivating factors, although extrinsic motivators were shown to be more prevalent (Cumming-Ruwhiu, 2012).

There were five key recommendations that emerged from the findings (Cumming-Ruwhiu, 2012). The first recommendation outlined was the need for young Māori to be supported by key role models to gain self-determination over their own career aspirations and decisions. The second recommendation was that teachers need to provide positive, encouraging and holistic relationships with their students because they have a significant role in the decisions of students post-school. Thirdly, whānau need to be supported to have a purposive role in their child’s tertiary education. Fourthly, young Māori should be encouraged to feel secure in their Māori identity. Fifthly and finally, it was recommended that young Māori have opportunities to lead and be challenged in order to enhance Māori student experiences of entering tertiary education.

Aboriginals—Australia

While the literature about experiences of entering tertiary education of Aboriginal Australians was limited, there was some comparable literature. The key themes that emerged from these sources were altruistic career choices and community benefit (DiGregorio et al., 2000; Hossain, Gorman, Williams-Mozely, & Garvey, 2008; Parente et al., 2003), gaining self-determination for communities (DiGregorio et al., 2000; Nugent, 1992), being role models (DiGregorio et al., 2000) and the importance of establishing and maintaining relationships with academic and general staff members (Hossain et al., 2008; Munns & Parente, 2003). In addition to these themes, challenges of effective entry into tertiary education were often discussed; these included racism (Buckskin, 2001; DiGregorio et al., 2000; Hossain et al., 2008; Parente et al., 2003), dominant failure discourse (Chesters et al., 2009; Parente et al., 2003), negative self-concept (Buckskin, 2001; Chesters et al., 2009; Parente et al., 2003), home/family obligations (Parente et al., 2003), inadequate career advice (Chesters et al., 2009; Munns & Parente, 2003; Parente et al., 2003), poor understanding of pathways (Buckskin, 2001; Munns & Parente, 2003), tertiary academic expectations (Parente et al., 2003), financial expenses (Munns & Parente, 2003; Parente et al., 2003), early pregnancy, and social issues such as peer pressure, substance abuse and dysfunction in the family (Hossain et al., 2008; Parente et al., 2003). These themes are discussed below.

One of the most common themes found
in the Australian literature was the altruistic behaviour of Aboriginals when it came to the career choices and decisions about university. In comparison to their non-indigenous counterparts, Aboriginal students were more likely to be motivated to study and gain employment in areas that helped their own or other indigenous communities, or the broader community, as opposed to financial rewards (DiGregorio et al., 2000; Hossain et al., 2008; Parente et al., 2003). DiGregorio et al. (2000) emphasised that for Aboriginal students, “‘academic success’ was defined not only in terms of individual benefits (e.g., earning a credential or getting high marks), but also in terms of community benefits (e.g., being skilled to meet the needs of the community)” (p. 302). Some Aboriginal university students recognised themselves as role models for their children and members of their community (DiGregorio et al., 2000).

Linked to the altruistic nature of Aboriginal career decisions is their desire to be more involved in the decision-making that occurs in their communities. DiGregorio et al. (2000) discussed how Aboriginal students were aware of the gaps in the current system and believed that they should be more involved in decision-making that affects their community. Similarly, Nugent (1992) found that Aboriginal students were motivated by gaining self-determination for their communities.

Another common finding for Aboriginals was that a good self-concept is vital in setting and attaining aspirations of indigenous students (Parente et al., 2003). However, many studies highlighted a strong theme amongst Aboriginal students with negative self-concepts (Buckskin, 2001; Chesters et al., 2009; Hossain et al., 2008; Parente et al., 2003). Parente et al. (2003) discussed how Aboriginal high school students were pessimistic about completing school and considered future success to be controlled by factors external to themselves. They also identified that indigenous students had a strong belief that indigenous people are not as intelligent as their non-indigenous peers (Parente et al., 2003). Chesters et al. (2009) attributed these attitudes and educational transition experiences to the dominant failure discourse experienced by the majority of indigenous students, regardless of their capabilities and aspirations.

The role of effective relationships was also discussed within the literature. Family, teachers, career advisors and peers were discussed in the literature as both positively and negatively affecting Aboriginal experiences of entering tertiary education. Families valued and provided strong support for their education, wanting them to have opportunities for the future; however, in many cases parents could only give uninformed advice (Munns & Parente, 2003). Parente et al. (2003) also highlighted challenges that family caused for Aboriginal students, such as home and cultural obligations (funerals, cultural celebrations and child care), family dysfunction and domestic violence. In Munns and Parente’s (2003) study, there was a common determination among all indigenous students’ interviews that they would not turn out like others who had rejected or been “beaten by the system”. Looking for a better life was a powerful force holding them at school.

Teacher relationships, as well as teacher judgements and expectations, were also shown to be important. For instance, teachers were not found to strategically help Aboriginal students plan their subject choices with career options in mind (Munns & Parente, 2003). Consequently, many Aboriginal students were not necessarily on the right track for their chosen career path. The few Aboriginal students that entered into senior years at school experienced a new “respect” from their teachers; however, Munns and Parente (2003) note that despite this, “there is still much work to do on raising teacher expectations given their strong continuing influence on subject choice and career paths” (p. 14). The need for positive relationships extended through transition to tertiary education institutions. Hossain et al. (2008), for instance, highlighted the importance of establishing and maintaining relationships...
with academic and general staff members in tertiary education institutions.

The literature showed that career advisors have a significant role in the career choices and transition experiences of Aboriginal students to tertiary education (Chesters et al., 2009; Munns & Parente, 2003; Parente et al., 2003). Chesters et al. (2009) found that the majority of career counsellors surveyed in their study could not effectively provide student-centred, culturally appropriate career advice to Aboriginal students interested in medicine or another health science. Other studies also found that a lack of appropriate career advisors was a barrier to Aboriginal students’ career choices and experiences of entering tertiary education (Chesters et al., 2009; Munns & Parente, 2003; Parente et al., 2003).

On a community and societal level, racism was unfortunately highlighted as a common experience for Aboriginal students (Buckskin, 2001; DiGregorio et al., 2000; Hossain et al., 2008; Munns & Parente, 2003; Parente et al., 2003). This occurred in personal lives as well as their relationships with the indigenous and wider community. Other challenges that were identified in the literature for Aboriginal students included young pregnancies, substance abuse, being in trouble with school and the authorities, high tertiary academic expectations (Parente et al., 2003), giving up cultural support (Munns & Parente, 2003) and financial expenses (Munns & Parente, 2003; Parente et al., 2003). Some studies also showed the negative influence of peers as a barrier to undertaking further education. There was peer pressure to leave school when friends did (Parente et al., 2003) and to “dumb down” their successes amongst friends in order to maintain the status quo (Hossain et al., 2008).

There was also a poor understanding of career pathways and not seeing a clear relationship between formal schooling and employment. Buckskin (2001) and Munns and Parente (2003) found that Aboriginal students often restricted themselves to one pathway, rather than making choices that would provide multiple pathways. Support for their career decision was then a reactive process through advice from family, teachers and career advisors, rather than proactive assistance. This is “highly inadequate in the fragile school-to-career environment” (Munns & Parente, 2003, p. 11). However, Munns and Parente (2003) also noted that students showed “tenacity and resourcefulness in finding out about their school-to-work paths” (p. 15).

Native Americans—USA

There was a large amount of literature related to the participation of Native Americans in tertiary education; however, few studies were specifically targeted to the effective entry into tertiary education. There were some, however, that will provide insight into this topical area and are somewhat comparable to the Aotearoa New Zealand and Australian indigenous contexts. Personal support was one of the most common themes found in the literature. This included support and mentoring from family (Bosse et al., 2011; Jackson & Smith, 2001; Katz, Oneal, & Paul, 2011; Katz, Smart, & Paul, 2010; Terenzini et al., 1994), teachers and faculty (Bosse et al., 2011; Jackson & Smith, 2001; Katz et al., 2010; Makomenaw, 2012; Pavel & Inglebret, 2007; Reeves, 2006) and peer groups (Bosse et al., 2011). Other key themes that emerged include altruism (Jackson & Smith, 2001; Katz et al., 2011), academic preparation (Bosse et al., 2011; Katz et al., 2011; Katz et al., 2010; Makomenaw, 2012; Pavel & Inglebret, 2007; Reeves, 2006) and peer groups (Bosse et al., 2011). Other key themes that emerged include altruism (Jackson & Smith, 2001; Katz et al., 2011), academic preparation (Bosse et al., 2011; Katz et al., 2011), motivation and self-confidence (Bosse et al., 2011; Katz et al., 2011), and themes that highlight challenges, such as racism and dysfunction in families (Jackson & Smith, 2001; Katz et al., 2011; Makomenaw, 2012).

Many studies discussed the importance of family for the successful entry of Native American students (Bosse et al., 2011; Jackson & Smith, 2001; Katz et al., 2011; Katz et al., 2010; Terenzini et al., 1994). Bosse et al. (2011)
noted that students were more likely to successfully transition from high school to tertiary education if their families held high expectations of them, promoted the importance of education and were active in their high school experience. Family then gave continued support while students were studying in tertiary education (Bosse et al., 2011). Jackson and Smith (2001) highlighted a range of connections between students and their families that influence their experience of entering tertiary. They discussed family pressure to perform academically and stay close to home, as well as family financial problems, family conflict and family encouragement. Family encouragement was largely related to family members who had graduated from tertiary education or who were successful in a particular career. Students who had relationships with family members like this expressed greater self-confidence and more assurance about career choice (Jackson & Smith, 2001).

The literature clearly shows the significance of teachers and faculty members who invest time and have meaningful relationships with Native American students to enhance Native American students’ persistence and experiences entering tertiary education (Bosse et al., 2011; Jackson & Smith, 2001; Katz et al., 2011; Katz et al., 2010; Makomenaw, 2012; Pavel & Inglebret, 2007; Reeves, 2006). Bosse et al. (2011) found that connections with other adults who mentor Native American students outside of their families were important, particularly for those who did not have strong family support. In Jackson and Smith’s (2001) study regarding Navajo students, they found that these students would benefit greatly from access to individuals from their culture who had or are having positive experiences in tertiary education. This correlates with Makomenaw’s (2012) study. In a study that investigated Native Americans’ and Alaska Natives’ careers in nursing, Katz et al. (2010) highlighted the need to provide Native American and Alaska Native students with role models and mentors to support them. Furthermore, their study identified that becoming role models would also be a motivational factor for Native Americans and Alaska Natives to go to tertiary education (Katz et al., 2010).

Some studies also found altruistic motivators for Native Americans’ decisions about tertiary education (Jackson & Smith, 2001; Katz et al., 2011). Jackson and Smith (2001) discussed the conflicts that emerge for Native American students who have to leave their homeland to be successful, yet maintain their traditional connection to the tribe, land and culture. These students would restrict their career options in order to maintain strong ties to the reservation. Katz et al. (2011) reported on Native American students’ desire to help others, including those in their tribe. Many participants in their study wanted to take up health care jobs as they experienced issues within the system such as racism and a lack of trust (Katz et al., 2011).

Bosse et al. (2011) and Katz et al. (2011) also highlighted the need for strong academic preparation, motivation and self-confidence. While Katz et al. (2011) found that the majority of participants and their families expected to go to university, participants also had doubt in their ability to deal with the university challenges. Bosse et al. (2011) found that resilience, self-confidence and self-motivation were necessary characteristics for university success. Self-motivation was also often related to social support networks, such as family and friends. Regrettably, Native Americans’ and Alaska Natives’ progress through education was shown to be restricted by both racism and dysfunction in the family and this was consistent with previous research (Jackson & Smith, 2001; Katz et al., 2011; Makomenaw, 2012).

Discussion

This section will compare and contrast the findings related to the experiences of entering into tertiary education of Māori, Aboriginal...
Australians and Native Americans in the international literature discussed above.

A positive self-concept is important

Literature from all three indigenous groups highlighted the importance of students having a positive and good self-concept in order to have affirmative experiences with entering tertiary education (Bosse et al., 2011; Buckskin, 2001; Chesters et al., 2009; Hossain et al., 2008; Jefferies, 1997; Parente et al., 2003). Some attribute this to the dominant failure discourse experienced by the majority of indigenous students, regardless of their capabilities and aspirations (Bishop & Berryman, 2006; Bishop et al., 2009; Chesters et al., 2009; Tait, 1995). In Parente et al.’s (2003) study, Aboriginal school students were pessimistic about completing school and attributed future success to external factors. Interestingly, Bosse et al. (2011), Cumming-Ruwhiu (2012) and Kay (2008) found that personal skills and attributes were often accredited to the collective effort of those in their family and community.

Positive cultural identity

Having a strong cultural connection has been shown to have a paradoxical impact on indigenous students’ experience of entering tertiary education. The literature showed that while it is not essential for Māori to be steeped in traditional Māori language and culture to effectively enter into tertiary education, there is a need for Māori to have access to their culture and maintain their culture within tertiary institutions (Cumming-Ruwhiu, 2012; Durie, 2003; Ministry of Education, 2008; Penetito, 2004). In Cumming-Ruwhiu’s (2012) study, Māori tertiary students highlighted a strong desire to gain more knowledge about Māori language and culture. In the Native American literature, while having strong ties to their homeland and culture provided them with a strong identity and purpose, it was also shown to be a barrier to effective entry into tertiary education (Jackson & Smith, 2001; Katz et al., 2011; Katz et al., 2010). The conflicting messages for Native American students was highlighted as “leave the reservation and be successful, [or] … maintain their traditional connection to the tribe, land, and culture” (Jackson & Smith, 2001, p. 24). Gaining a tertiary qualification was seen as a choice that meant sacrificing cultural connections.

The role of effective relationships

Overwhelmingly, the literature across all three indigenous groups showed the significant role of effective and positive role models and mentors on affirmative experiences of entering tertiary education. The three key types of relationships highlighted by the literature were family, teachers or faculty members and career advisors. Findings across the literature of these indigenous groups also showed that students who did effectively enter into tertiary education also acknowledged their position as role models for their own family and communities (Cumming-Ruwhiu, 2012; DiGregorio et al., 2000; Jefferies, 1997; Katz et al., 2010).

Families were shown to be very influential in the effective entering of indigenous students into tertiary institutions, as well as their broader educational experience. Effective transition through the educational stages were fostered by families that valued and provided strong support for their education (Bosse et al., 2011; Cumming-Ruwhiu, 2012; Munns & Parente, 2003), held high expectations for them and were active in their high school experience (Bosse et al., 2011; Jackson & Smith, 2001). In at least the Māori and Native American literature, it was shown that family members who had graduated from tertiary education or who were successful in a particular career were encouraging influences to prospective tertiary students (Chalmers, 2001; Cumming-Ruwhiu, 2012; Jackson & Smith, 2001; Nguyen & Taylor, 2003). The negative effects of dysfunction within families, home
and cultural obligations, and financial problems were also highlighted throughout the literature (Jackson & Smith, 2001; Jefferies, 1997; Katz et al., 2011; Parente et al., 2003).

The literature investigated correlates strongly with a finding of the primary data (Cumming-Ruwhiu, 2012) that teachers and school faculty members who invest time in their students, have meaningful relationships with them, and have high expectations of them were shown to be highly significant in the transition experience of indigenous students (Bishop & Berryman, 2006; Bosmann-Watene, 2009; Bosse et al., 2011; Hossain et al., 2008; Jackson & Smith, 2001; Jefferies, 1997; Katz et al., 2011; Katz et al., 2010; Kay, 2008; Makomenaw, 2012; Mitchell, 2009; Munns & Parente, 2003; Pavel & Inglebret, 2007; Reeves, 2006). Bosse et al. (2011) and Cumming-Ruwhiu (2012) both found that this was particularly important for those who do not have academic role models within their family. Two Native American studies indicated the need for students to access stable mentoring relationships with other Native Americans who are involved and successful in tertiary education (Jackson & Smith, 2001; Makomenaw, 2012). This contrasts somewhat with literature in Aotearoa New Zealand that suggests that while the ethnicity of the educator is less important, teachers who have greater cultural competence, reject deficit theorising and have meaningful relationships with Māori students can provide increased success in education (Jackson & Smith, 2001; Makomenaw, 2012). This contrasts somewhat with literature in Aotearoa New Zealand that suggests that while the ethnicity of the educator is less important, teachers who have greater cultural competence, reject deficit theorising and have meaningful relationships with Māori students can provide increased success in education (Jackson & Smith, 2001; Makomenaw, 2012).

Further motivational factors

The indigenous groups investigated consistently highlighted the altruistic nature of their career choices. Indigenous groups were more likely to be motivated to study and gain employment that would support their family, their community or the broader community (Cumming-Ruwhiu, 2012; DiGregorio et al., 2000; Hossain et al., 2008; Jackson & Smith, 2001; Katz et al., 2011; Parente et al., 2003). Some studies also found that indigenous peoples were motivated by gaining and maintaining self-determination within their community (DiGregorio et al., 2000; Katz et al., 2011; Nugent, 1992). Indigenous peoples wanted increased involvement in the decision-making in their communities as they saw limitations to the current systems in place.

Examples of the power of avoiding negative life outcomes were shown in both the Māori and the Aboriginal Australian literature (Cumming-Ruwhiu, 2012; Munns & Parente, 2003; Terenzini et al., 1994). Participants in these studies showed a common determination to avoid undesirable lifestyles that they or those around them were portraying.

Although the literature was often based on a positive approach to indigenous students entering tertiary education, the challenges that affect indigenous groups were also highlighted in the literature. Racism, substance abuse, dysfunction in the family, deficit theorising, financial issues and peer pressure were highlighted as the
key challenges across the indigenous groups (Bishop et al., 2009; Buckskin, 2001; Cumming-Ruwhiu, 2012; Hossain et al., 2008; Jackson & Smith, 2001; Jefferies, 1997; Katz et al., 2011; Makomenaw, 2012; Munns & Parente, 2003; Parente et al., 2003). The literature pertaining to Aboriginal peoples also emphasised that Aboriginal students often restrict themselves to one job pathway rather than making choices that would provide multiple career pathways (Buckskin, 2001; Munns & Parente, 2003). However, in some instances Aboriginal students showed “tenacity and resourcefulness in finding out about their school-to-work paths” (Munns & Parente, 2003, p. 15).

Conclusion

The comparative analysis highlighted significantly more commonalities than differences. From a comparative study of the literature, three conclusions have evolved that contribute to a greater understanding of indigenous students entering tertiary education.

1. Positive self-concept and identity

As the literature shows, having a positive self-concept and cultural identity has a considerable impact on how indigenous students approach the education system. This paper further highlights the need to reject deficit theorising and focus on student success and potential. Deficit theorising needs to be challenged at a local, national and international level. Furthermore, family and cultural obligations can inhibit indigenous students’ commitment to tertiary education, particularly those who are geographically at a distance from mainstream tertiary institutions. However, tertiary institutions that actively provide an environment that accepts and promotes the cultural needs of indigenous students, as identified by indigenous faculties and students, can subdue some of these issues. Similarly, as stated before, family involvement in career exploration will increase the likelihood of indigenous students being able to maintain family and cultural ties.

2. Integrated approach of role models and mentors

The role of effective relationships with mentors and role models is imperative for the effective entry into tertiary education. Relationships with family, educators and career advisors were shown to have great influence. Therefore, an integrated approach by these key groups is needed (Hodgetts, 2009). While family usually have the cultural competence and provide ongoing support, they sometimes have less understanding of the education system and lack successful educational role models. Likewise, teachers and career staff have a greater understanding of the education system and career pathways and have the potential to be an educational role model. However, many need to continue to develop their relationships with, and expectations of, indigenous students and empower them to maintain self-determination over their own educational and career pathway. The findings of this paper are also helpful because they suggest how staff members in tertiary institutions can better understand the challenges for indigenous students created by the institution and provide them with more effective information and support. Greater involvement by family in the career exploration would also lay the foundation for family support as well as maintain the family and cultural connections for indigenous students in tertiary education.

3. Career decisions based on better outcomes

Career decisions of the indigenous peoples investigated were shown to be motivated by the collective benefit, as well as some avoiding negative lifestyles. The findings also showed that indigenous students limit their career
opportunities and fail to have a clear career strategy or “back up” plan. Having multiple career pathway opportunities needs to be encouraged by supporting students to make decisions that provide greater options and opportunities in their future.

The conclusions from this study have implications for indigenous communities, schools, educators, career advisors, tertiary institutions, social workers and government departments. This paper brings forward greater insight into how mainstream tertiary institutions are both part of the problem and part of the solution. It provides a greater understanding of how indigenous students may become further engaged with school or employment and be able to effectively navigate their pathway to tertiary study and beyond. It also challenges future work in this area to focus less on the deficit theory and focus rather on the aspirations and positive steps forward for educational advancement for indigenous peoples. While indigenous groups have great diversity between and within them, there are common experiences and aspirations that make comparative discussion important. Future research could include insight from more indigenous groups, as well as include collaborations from different indigenous researchers.

**Glossary**

<table>
<thead>
<tr>
<th>Māori Term</th>
<th>English Term</th>
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<tbody>
<tr>
<td>iwi</td>
<td>tribe, nation, people</td>
</tr>
<tr>
<td>kaupapa Māori</td>
<td>Māori ideology, Māori principle</td>
</tr>
<tr>
<td>manu tukutuku</td>
<td>Māori kite</td>
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<tr>
<td>rangatiratanga</td>
<td>sovereignty, chieftainship, self-determination, ownership</td>
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<tr>
<td>tauutuutu</td>
<td>reciprocity, alternative</td>
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<tr>
<td>tikanga</td>
<td>speaking protocol on marae</td>
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<tr>
<td>whakawhanaungatanga</td>
<td>correct procedure, custom, practice process of establishing family-like relationships family</td>
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<tr>
<td>whānau</td>
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References


DiGregorio, K. D., Farrington, S., & Page, S. (2000). Listening to our students: Understanding the factors that affect Aboriginal and Torres Strait


