

The Shortage of Accountants: the Case of Indigenous Australians.

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Declaration of Authorship:

I hereby declare that the work herein, now submitted as a thesis for the degree of Doctor of Philosophy of the Charles Darwin University is the result of my own investigations, and all references to ideas and work of other researchers have been specifically acknowledged. I hereby certify that the work embodied in this thesis has not already been accepted in substance for any degree, and is not being currently submitted in candidature for any other degree.

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List of Acronyms and Abbreviations:

AAA	American Accounting Association
AASB	Australian Accounting Standards Board
ABASA	Association for the Advancement of Black Accountants of South Africa.
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ADC	Aboriginal Development Commission
AFOA	Aboriginal Financial Officers Association of Canada
AIATSIS	Australian Institute of Aboriginal Torres Strait Islander Studies
AICC	Australian Indigenous Chamber of Commerce
AICPA	American Institute of Certified Public Accountants
ALFC	Aboriginal Land Fund Commission
ANAO	Australian National Audit Office
ATSIC	Aboriginal and Torres Strait Islander Commission
AUSSE	Australian Survey of Student Engagement
CA	Chartered Accountants
COAG	Council of Australian Governments
CPA	Certified Practising Accountants
DAA	Department of Aboriginal Affairs
DEEWR	Department of Education, Employment and Workplace Relations
HECS	Higher Education Contribution Scheme
IBA	Indigenous Business Australia
ICAA	Institute of Chartered Accountants in Australia
ICANZ	Institute of Chartered Accountants of New Zealand

IELTS	International English Language Testing System
ILC	Indigenous Land Corporation
ILUA	Indigenous Land Use Agreements
IMA	Institute of Management Accountants
IPA	Institute of Practicing Accountants
NAFOA	Native American Finance Officers Association
NNTT	National Native Title Tribunal
SAC	Statement of Accounting Concepts
SAICA	South African Institute of Chartered Accountants
SCCT	Social Cognitive Career Theory
SCRGSP	Steering Committee for the Review of Government Service Provision
SES	Socio-Economic Status
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
VET	Vocational Education, and Training

Abstract

With an estimate of only ten Indigenous members of the Australian accounting professional bodies, this study investigated the possible factors that impede Indigenous students from studying accounting at university level and later joining the profession. It was anticipated that the exploration of these factors would assist in any strategy that aims at increasing the number of Indigenous accountants. Such an increase would reflect a higher participation of Indigenous peoples in financially related national policy and decision making processes. This would in turn reflect positively on Indigenous communities and perhaps ameliorate conflict between Indigenous values and accounting values.

The participants in this research were Indigenous university students. A qualitative exploratory approach reflecting Indigenous methods was used. Analysis of the collected data showed that the Social Cognitive Career Theory Model (SCCT) which informed this analysis needed modification to fit into the Indigenous context.

This study found that distal factors (for example, role models, family members, friends, and previous work and education) are what mainly affect students' learning experience through which self-efficacy and outcome expectations develop to affect study choice. These two major variables together develop an interest in the study choice and, affected by proximal factors (such as discrimination conflict in values and cultural inclusiveness of the teaching/learning experience), the students make their relevant decisions. These findings correlated with the SCCT model; however it also emerged that another major variable which was neglected in the model, has a significant impact on study choice. That variable is financial support expectations.

Indigenous leaders and accounting professional bodies that have now set a target of having 1000 Indigenous accountants by 2021, will find the recommendations from this research study of great significance to their developing strategy.

Chapter One: Introduction to the Study

1.1 Introduction

Over the last decade, there have been serious concerns amongst professional accounting bodies in Australia about the status of accounting education, which has exhibited a dramatic decline in the number and quality of students majoring in accounting (Hardin et al., 2000; Sherman and Tymon, 1997; Albrecht and Sack, 2000; Jackling and Calero, 2006). Many researchers have reacted to these concerns by exploring and determining the reasons behind the general decrease in students majoring in accounting (Felton et al., 1994; Jackling, 2002; Tan and Laswad, 2006). As will be detailed later in the thesis, their studies have found different contributory factors to this setback which they have discussed from different perspectives.

Of greater concern is the poor participation of Indigenous Australians in the accounting profession (Buhr, 2011; Hammond and Streeter, 1994; Hammond, 1997; Holmes et al., 2005; Hooper and Pratt, 1995; Hammond et al., 2007; Jacobs, 2000; Mitchell and Flintall, 1990; and Preston, 2006) with an estimate of only ten Indigenous members of Australian professional accounting bodies¹ (Lombardi and Clayton, 2006, and Rkein and Norris, 2012). Whilst Indigenous peoples are under-represented in many professions, the situation in accounting is particularly acute. Professor Mark Rose of Deakin University stated that: ‘In four decades in higher education, we have really punched above our weight in areas like nursing, teaching

¹ The Australian professional accounting bodies are: the Certified Practising Accountants (CPA); the Institute of Chartered Accountants in Australia (ICAA, sometimes referred to as CA); and the Institute of Practicing Accountants (IPA).

and in some ways law, however, commerce and accounting is not an area we have made headway into yet' (The Australian, 2012).

Furthermore, Warren Mundine² stated that: '1,000 Indigenous accountants are needed to be trained.' This statement indicates the gap in the representation of Indigenous peoples in the accounting profession; indeed, to reach that figure an increase of 9,900 per cent would be required.

Whilst the Australian government has put in place various affirmative action policies to improve the economic well-being of Indigenous Australians, they lag far behind other Australians in general. A poor understanding of accounting hinders the ability of Indigenous community groups to negotiate funding and to account for funds received. As individuals, the same obstacles disadvantage Indigenous business people and artists, amongst others, when planning and negotiating financial matters which are central to the success of their enterprises. It is expected that their participation in accounting education and in the profession will assist Indigenous peoples to improve their money management and financial skills (Bin-Salik et al., 2004).

² Warren Mundine is the Indigenous Labour Network convenor and Chair of the Australian Indigenous Chamber of Commerce. Mr. Mundine is currently the Chief Executive Officer of NTSCORP Ltd., a company in NSW that assists Traditional Owners to achieve social justice and promote economic, environmental and cultural development through Native Title and other avenues. He also provides national leadership for initiatives such as the Australian Employment Covenant to help Indigenous people break the welfare cycle.

1.2 Under-representation

There are many assertions and announcements which reveal the under-representation of Indigenous peoples in various professions, but it is only recently that statements regarding under-representation in the accounting profession have started to be made.

For non-Indigenous peoples there is one accountant for every 110 members of the population.³ However, for Indigenous peoples, there is only one Indigenous accountant for every 45,503 Indigenous persons.⁴ Indigenous peoples are represented more in the medical profession than in the accounting profession, and given the argument that Indigenous doctors are still seen as being under-represented in their profession, and that their numbers desperately need to be increased (Australian Institute of Health and Welfare, 2005), the comparable argument for increasing the representation of Indigenous accountants is considerably stronger.

Australian universities in general recognise Indigenous students as a disadvantaged group, and provide special support services for them. However, more must be done to account for their needs, and to address those issues which may be a barrier to their success (Carson et al., 2007). Australian professional accounting bodies, particularly the Certified Practising Accountants (CPA) of Australia, have also recognised the need for Indigenous accountants, acknowledging the conflict between Indigenous values and accounting values. Until the end of 2011; neither universities nor the accounting bodies had undertaken specific stand-alone strategies to engage Indigenous students in the accounting profession. Deakin University was the only

³ Number of non-Indigenous people divided by the number of non-Indigenous accountants: 19,855,287/179,990.

⁴ Number of Indigenous people divided by the number of Indigenous accountants: 455,026/10.

academic body to approach this issue effectively. The Institute of Koorie Education, and the School of Accounting, Economics and Finance at Deakin University together aimed to increase the participation and employment of Aboriginal and Torres Strait Islander peoples in the accounting profession (Deakin University, 2012).

In October 2011, the Institute of Koorie Education at Deakin University invited Indigenous Accountants, University representatives, professionals from Corporate Australia and representatives from CPA Australia to attend a roundtable gathering. In addition to other evidences, the roundtable attendees relied heavily on evidences provided in the jointly written paper by Luisa Lombardi and Bruce Clayton (2006). As a result of that the attendees obtained sufficient knowledge about the current low numbers of Indigenous Accountants and also developed a strong belief of the significance of this issue.

It was not long after the roundtable and specifically in November 2011; Australia's top accounting professional bodies namely CPA, ICAA, and IPA, jointly appointed Gavin Tye in the role of Relationship Manager of Indigenous strategies. Although late, this was an important step by Australia's accounting bodies.

1.3 Research question

A thorough analysis of relevant Australian literature found little evidence that the under-representation of Indigenous peoples in the accounting profession, and in accounting education, has been investigated as a stand-alone issue. Research about Australian representation in the accounting profession and accounting classes is limited to two studies (Lombardi and Clayton, 2006; Rkein and Norris, 2012). Both

studies were limited to very few Indigenous participants. While the first study discussed the Indigenous Australian accountants' perspectives, the second study focused on Indigenous Australian high school students. This doctoral study, however, concentrates on university Indigenous Australian students. In view of the above, the research question this thesis seeks to address is:

What factors contribute to the under-representation of Aboriginal⁵ and Torres Strait Islander peoples in accounting education and the accounting profession?

While answering this question by itself is a major contribution to the literature, the answer becomes of great significance when applied in support of the national initiative to have '1000 Indigenous accountants by 2021'⁶. To achieve such a goal, a strategy which tackles the problem of participation is required. It is strongly believed that answering the major research question of the thesis is of great significance to a strategy which hopes to increase the participation of Indigenous peoples in accounting education and ultimately in the profession. Therefore, the researcher discusses the findings of this study in terms of this strategy.

1.4 Approach to the study

A review of the literature on the lack of Indigenous participation in Australian accounting education and the accounting profession highlights not only a scarcity of prior research but also a lack of interest. It was only in late 2011 and early 2012 that

⁵ The terms Indigenous Australian and Australian Aboriginal are used interchangeably throughout this thesis. Historically the term Aboriginal was more widely used, whereas today the term Indigenous Australian is more widely used. An Aboriginal person is a descendant of an Indigenous inhabitant of Australia, identifies her- or himself as an Aboriginal, and is recognised as Aboriginal by members of the community in which she or he lives (ABS, 2004).

⁶ Following from the roundtable in 2011, In May 2012, the Australian School of Business at the University of New South Wales held a community forum "1000 Indigenous Accountants in a Decade".

this issue began to receive attention in Australia. In September 2011, as a result of Warren Mundine's call in 2010, a round-table conference was held in Melbourne at Deakin University for the first time to discuss the need for more Indigenous accountants. The conference was made up of researchers, Indigenous accountants, and representatives of Australian professional accounting bodies.

Because of the lack of local Australian literature on the issue under investigation, this research draws significantly on international literature (Hammond and Streeter, 1994; Hammond, 1997; Holmes et al., 2005; Preston, 2006; Hooper and Pratt, 1995; Hammond et al., 2007; McNicholas et al., 2004; Mitchell and Flintall, 1990; and Jacobs, 2000) which has reported on the under-representation of marginalised ethnic groups in the accounting profession. The purpose is to obtain a clearer picture on the types of barriers which these groups encounter when entering the profession. This research also draws on an exploration of the relevant education literature which looks at the impacts of students' study choices on the accountancy profession.

Many studies have pointed out that a student's intention to major in a particular field is affected by factors such as self-efficacy, working conditions, social values, and other stereotypical personal characteristics (Hermanson and Hermanson, 1995; Horowitz and Riley, 1990; Garner and Dombrowsky, 1993; Gul, 1986; Wolk and Cates, 1994). In addition to these factors, this research investigates and explains cultural specifics in developing a particular intention amongst a certain group of people to major or not to major in accounting. More importantly, this study investigates the Indigenous peoples' participation in the economy as a prerequisite for an ethnic group's demand for accountants.

Diverse theories were used in the literature to explain the reasons for a particular behaviour, and more specifically in accounting research to explain factors affecting career choices. These theories are: the theory of reasoned action (TRA) developed by Fishbein and Ajzen (1975); the theory of planned behaviour (TPB) (Ajzen, 1988); and social cognitive career theory (SCCT) (Gainor and Lent, 1998; Lent, Brown and Sheu, 2005).

This study uses social cognitive career theory (SCCT) as a theoretical framework to set forth a number of propositions explaining why Indigenous Australians may avoid choosing accounting as a study choice and/or career. The SCCT model has been tested in a variety of contexts and proven to be a good fit to the career choice process, particularly since it builds conceptual linkages between diverse career theories (James, 2002). Although no studies have been used to examine the applicability of the SCCT model specifically to Indigenous Australians, this theory was successfully applied to other marginalised ethnic groups such as those in the African American context (James, 2002).

1.5 Methodological approach

The participants in this doctoral research study were all Indigenous Australian Higher Education students. Qualitative research methodology was chosen over quantitative research methodology because it has been recognised as a productive way of collecting data from minority groups; it also provides rich data (Grbich, 2007; Smith, 1999). Identifying the research method was completed after careful consideration of an appropriate way to collect data from Aboriginal and Torres Strait Islander participants using a method which falls within the ethical guidelines as

applied to research involving Indigenous participants while also providing rich information.

Due to the complexity of the issue central to the research question of this doctoral study the researcher has taken a multilayered approach to what would constitute the literature review component of the study. The initial chapters of the thesis provide progressively the significant contexts impacting on the research question. These contextual chapters constitute reviews of literature covering a range of areas. The first context visited is the impact of colonisation on Indigenous Australians. In the next the international literature which investigated the under-representation of Indigenous peoples and/or marginalised ethnic groups in the accounting profession was examined. Such literature provided the researcher with a list of themes which impede Indigenous and marginalised ethnic groups in the world from entering the accounting profession. The researcher investigated the themes further to see whether they were applicable to Indigenous Australians by examining further relevant literature and collecting data from the research participants.

Further useful information was found in the accounting education literature. This researched the impediments which prevent students from studying accounting, and the factors which attract students to accountancy. As with the international literature, the accounting education literature provided a number of major themes for this study. This contextual approach continued with a review of the literature considering the alignment of Indigenous cultural values with those of Western accounting. This leads to a consideration of links between a demand for accountants within a community and that community's participation in the economy of a nation.

The final contextual layer considers the possible relationships between students' efficacy in mathematics and English literacy with the field of accountancy as an area of study.

This extended and diverse review of literature has positioned the research question within the full complexity worthy of this doctoral study.

1.6 Significance of the study

According to Warren Mundine: 'It is only with representation from the medical, legal and accountancy professions that Indigenous communities can build strong and self-sustaining economies' (Toohey, 2010). Professor Mark Rose has also stated that: 'In our communities, accountants and auditors are the people that control the money and ask about costs' (Deakin University, 2012).

Although it is arguable that the physical dispossession of Australian Indigenous peoples came to an end a considerable time ago, Indigenous dispossession still continues through accountability under western accounting practices (Gibson, 2000). As this research demonstrates later, Indigenous communities, societies and individuals have been severely disadvantaged by the western accounting system, particularly as a result of not gaining access to the accounting profession due to various impediments. Unsuccessful attempts to reduce the disadvantages resulting from the adoption of the western accounting system have been recorded. Therefore, the researcher assumes that an increase in the number of Indigenous students studying accounting across Australia and an increase in the number of Indigenous

accountants from the present total of ten (Deakin University, 2012; Lombardi and Clayton, 2006; and Rkein and Norris, 2012), would doubtless have a positive impact on Indigenous societies. A good representation of Indigenous Australians in the accountancy profession would contribute to building strong and self-sustainable local and regional economies for Indigenous peoples (Toohey, 2010).

1.7 Overview of the study

This research was an in-depth study into those factors which contribute to the under-representation of Aboriginal and Torres Strait Islander participants in accounting education and the accounting profession.

Chapter one has provided a brief overview of the research project. It describes the importance of the dissertation and its aim. It has also outlined the key research question and justified briefly the choice of the methodological approach to address this question.

Chapter two provides background information about Indigenous Australians which is indirectly linked to the cause of Indigenous under-representation in the accounting profession. It also presents background information about Indigenous Australians' education.

Due to the lack of Australian literature on the research issue, and in order to address the research question from other Indigenous and marginalised contexts, Chapter three interrogates the international literature which has investigated the under-representation of marginalised ethnic groups in the accounting profession. Chapter

three also examines the accounting education literature that provided the researcher with an indication of the types of factors which are normally suggested as responsible for either driving students away from majoring in accounting or attracting them to an accounting major.

Chapter four discusses the need for Indigenous accountants, with reference to the conflict between traditional Indigenous values and western accounting values. Chapter five continues from chapter four and discusses the demand for Indigenous accountants as a result of Indigenous communities' participation in the mainstream economy. It reviews relevant literature on the development of accountancy as a result of developments in economics.

Chapter six investigates the literature's suggestions about the efficacy factors, such as literacy and numeracy, involved in the successful study of accounting. Chapter seven provides an overview of social cognitive career theory (SCCT), which forms the theoretical framework for the study and of the theoretical constructs which underline the research question.

Chapter eight provides information on the overall design of the study. It also includes an in-depth look at the chosen qualitative methodology and ethical guidelines which must be followed when collecting data from Aboriginal and Torres Strait Islander peoples.

Chapter nine presents findings from the interviews. The chapter presents these findings according to themes, and differentiates the findings across the different

study foci represented in the participant sample. Themes are categorised based on their repetition and significance.

Chapter ten discusses the findings and relates them to the literature. The findings are discussed initially to answer the research question. They are then linked with the theoretical model used in this study. Finally, their contribution to a strategy designed to increase the number of Indigenous accountants is considered.

Chapter eleven provides a summation and conclusions resulting from the research, along with the strengths and limitations of the study. Directions for future research are suggested.

1.8 Summary

This chapter has provided an overview of the dissertation. It highlighted the problem statement, which is the under-representation of Indigenous Australians in accountancy. The aims and significance of the study were discussed; additionally, the research question was outlined and the justification of the methodological approach was briefly presented. This chapter also provided a clear outline of the thesis by briefly describing the chapter structure of the thesis. The following chapter begins the contextual grounding of the research study by providing background information about Indigenous Australians and about Indigenous Australians' education under the Anglo-Australian education system.

Chapter Two: Context 1 – An Overview of the Impact of Colonisation on Indigenous Australians

2.1 Introduction

This chapter provides an understanding of the history of Indigenous Australians. This is seen as essential to provide context to the research. The chapter also explains the role played by the conquering nature of colonisation, and the ways in which the different cultures amongst Indigenous peoples limit the educational opportunities of Indigenous Australians.

2.2 Colonisation

‘When John Batman landed on the site of Melbourne in 1835, and presented to the aborigines a piece of white parchment, making them understand that he wanted black marks put on it, they were quite willing to oblige him, because he had given them wonderful presents of blankets, mirrors and knives. They did not know, however, that they were supposed to have conveyed to him 600,000 acres of country between Melbourne and Geelong; they were indeed incapable of knowing it, because no aboriginal has ever thought of men as creatures who owned land from which others could be excluded.’ (Irving, 1935, p. 6).

Indigenous Australians – Australian Aboriginals and Torres Strait Islanders – were the first people to reside on Australian land. The Australian Aboriginal and Torres Strait Islander cultures are amongst the few surviving ancient cultures, being, in fact, amongst the oldest in the world today, and are estimated to go back around 60,000

years (Australian Government, 2008). Prior to 1788, when Captain Arthur Phillip⁷ entered Botany Bay with convicts, officials, marines and dependents to set up a penal colony (Australian Museum, 2004), it was reported that 300,000 Indigenous Australians, divided into over 500 tribes speaking more than 500 languages and dialects, were living in Australia (Broome, 1994). Each of these tribes had their own distinct territory, culture and history (Broome, 1982). For over 2,000 generations, Indigenous Australians managed to survive while continually changing and perfecting their hunter-gatherer lifestyle (Broome, 1982), the details of which varied considerably in response to the wide range and variability of the food productivity of the ecosystems across the vast Australian continent.

However, their lives began to change dramatically as soon as the first European fleet arrived in Australia in 1788. On 26 January 1788, British ships sailed into Port Jackson to confront the Gamaraigal people of the Sydney area (Broome, 1982). The conflict became intense and many Indigenous people died.

The British Government decided that Australia was ‘Terra Nullius,’⁸ and took possession of it without asking the native inhabitants (Broome, 1982). As a result, the British dispossessed the Indigenous Australians of their land and the source of

⁷ He was the captain of the First Fleet, which left England on 13 May 1787 and arrived at Botany Bay on 18 January 1788.

⁸ The prevailing international (European) law concerning the ownership of newly 'discovered' lands held that the inhabitants only had sovereignty over that land if, by their labour and practice of agriculture, they used it and changed it by constructing buildings and towns. If the Europeans 'discovered' lands inhabited by an agricultural people with recognisable systems of government, possession of that land could be taken by the European 'discoverers' only with the consent of the inhabitants. However, if the land was either uninhabited, or inhabited by a people who did not use the land (in the European sense of use), then according to prevailing ideas of international law it could be freely taken. On the basis of the Eurocentric and largely mistaken observations of Captain Cook and others that the Aborigines were few in number, wore no clothes, did not till the soil and had no buildings or observable forms of government, the British decided to take possession of the land without asking the native inhabitants. (Broome, 1982, p. 26).

food, because for Indigenous Australians the land was the source of food. Indigenous Australians were then exposed to a different type of food that their immune systems were not prepared for. Furthermore, poisoned flour was distributed to them, and diseases such as diarrhoea, smallpox, influenza, measles and the common cold introduced by the Europeans killed many thousands of Indigenous Australians (Broome, 1994). According to Campbell (2002), smallpox was particularly devastating, and sometimes killed an entire tribe. Indigenous Australians also lacked fighting and warfare skills because they had never needed to engage in military action. The Europeans therefore won the war for the land because they were able to use guns, horses and organised military forces (Dudgeon et al., 2010).

As a result of the increase in deaths amongst Indigenous peoples, the Indigenous population decreased while the population of European colonial settlements rose in number. Over 200,000 British immigrants migrated to Australia between 1832 and 1850 (Broome, 1982, p. 26). Since land which the settlers claimed for economic purposes became increasingly occupied, Indigenous Australians had no choice other than to gravitate towards the white settlements. Indigenous Australians' attempt to apply their kinship systems to exchange labour for food and other materials failed because the white settlers viewed labour as an individual exchange, and food would be provided only to the person doing the work not to the whole group (Dudgeon et al., 2010). All these sad events led the majority of Indigenous Australians to become 'fringe dwellers to white society', perceived by the dominant society as 'hopeless remnants, clinging to what was left of their cultures and merely surviving' (Dudgeon et al., 2010, p. 29).

Indigenous Australians were not considered Australian citizens and were not included in the population count even after Australia became an independent nation in 1901 (Lombardi and Clayton, 2006). Circumstances, however, began to change gradually. For instance, in Victoria, Tasmania, New South Wales and South Australia, Indigenous men were allowed to vote by the 1950s (Peterson and Sanders, 1998). Local state governments also started to deal with Indigenous affairs. Australian states and territories framed legislation and policies to keep control of Indigenous Australians.

In their attempt to control Indigenous peoples, states issued legislation as follows: in South Australia, the 1911 Aboriginal Protection Act (Brock, 1993); the Cape Barren Island Act 1912 in Tasmania (AIATSIS, 2008); the Queensland Aboriginals Protection and Restriction of the Sale of Opium Act 1897 (AIATSIS, 2008); the Northern Territory's Aboriginal Ordinance of 1911 and the Welfare Ordinance 1953 (AIATSIS, 2008). And as stated by Haebich (1988), the intention underlying this legislation was 'under the pretence of their own good'. Milnes (2001) also stated that: 'The pauperisation of Aboriginal peoples was sealed by legislation; The Aborigines Act 1905 was not a protection for Aboriginal peoples, but allowed for an instrument of ruthless control' (Milnes, 2001, p. 32). As a result, the effect of this legislation was considerable on Indigenous peoples and led to cultural devastation, or at least cultural transformations and adjustments, through the loss of language, family dispersion and the cessation of the cultural practices of Indigenous Australians (Dudgeon et al., 2010).

As was the case with legislation in the other states including the Northern Territory of Australia, the Western Australian Aborigines Act 1905 (AIATSIS, 2008) brought about the forcible removal of Aboriginal children and the captivity of Aboriginal peoples in miserable reserves. Indigenous peoples in these internment camps lived in servitude and despair (Dudgeon et al., 2010). Under this Act, the Western Australian Chief Protector of Aborigines was made the legal guardian of every Aboriginal person and of 'half-caste' children in the state. The Chief Protector was also given, under the same Act, the power to remove so-called 'half-caste' children from their families, away from 'the contaminating influence of the Aboriginal environment', so that they could have 'opportunities for a better life' (Dudgeon et al., 2010). Local Chief Protectors under this act prevented Indigenous peoples from entering towns without permission. In addition, these Protectors also prohibited the cohabitation of Aboriginal women with non-Aboriginal men. The 1905 Act is certainly symbolic of the Indigenous oppression which occurred throughout state government legislation from the mid-nineteenth century onwards. The Australian Federal Government's 1967 National Referendum restored Aboriginal rights, and the Western Australian Aborigines Act was finally repealed after sixty-two years, but much damage had already been done by then.

Until 1967, a significant amount of oppressive legislation involving Indigenous Australians was enacted. In 1934, some Indigenous Australians who were issued 'exemption certificates' or 'dog tags' to make them honorary 'whites' were not allowed to mix with relatives who were not likewise exempt (Lombardi and Clayton, 2006). Those who were exempted had permission to purchase land, obtain

employment, have a bank account and vote. They were also 'given the privilege' of drinking alcohol.

Although Indigenous Australians were considered Australian citizens in 1948 when the Commonwealth passed a Nationality and Citizenship Act, in practice they did not have any rights (Peterson and Sanders, 1998, p. 14). Citizenship during this time has often been referred to as 'citizenship without rights' (Chesterman and Galligan, 1998). However, the 1967 Commonwealth Referendum granted full citizenship rights to Australian Indigenous peoples. Of course, problems continued for Indigenous peoples after 1967. Difficulties with racism and discrimination have persisted. Since 1967, many Aboriginal people have written of the need to recover, regain and reconstruct identities, and to reject the negative stereotypes of Aboriginal held by many non-indigenous Australians (Dudgeon et al., 2010). As a result, legal changes have taken place since that time which have reflected changing government attitudes towards Indigenous peoples.

It is now acknowledged that the achievements in the struggle for Aboriginal rights which occurred in the 1960s and 1970s were built on the efforts of Aboriginal activists in the 1930s and 1940s in NSW and Victoria. These achievements, according to Dudgeon et al. (2010), include: the establishment of the Aboriginal Tent Embassy in Canberra; the creation of the Aboriginal flag by Harold Thomas in 1971; and the beginning of civil rights and land rights law, culminating in the land rights legislation of the late 1980s and the 1990s. It was in 1967 that all Indigenous Australian peoples (men and women) were allowed, for the first time, to vote at Commonwealth level. In 1967, the Commonwealth Constitution was changed to

include Indigenous peoples in the Australian census. The number of Indigenous peoples at the last census count in 2011 was 548,370, a figure which represented more than 2.5 per cent of the total Australian population (Australian Bureau of Statistics (ABS), 2011).

Of the 548,370, 90 per cent were of Aboriginal origin, 6 per cent were of Torres Strait Islander origin, and 4 per cent were identified as being of both Aboriginal and Torres Strait Islander origin (ABS, 2011). In addition, the Aboriginal and Torres Strait Islander population had a younger age distribution than the non-Indigenous population, reflecting higher fertility and lower life expectancy. In 2006, the median age⁹ for Indigenous peoples was 21 years compared with 37 years for non-Indigenous peoples.

2.3 The Stolen Generations

The removal of Indigenous children from their homes and families has been one of the most profound negative consequences which European colonisation has had on Indigenous Australians. The majority of Australian Indigenous families have suffered from the removal of children or the displacement of entire families into missions, reserves or other institutions. Children who were ‘half-caste’ were taken from their families so that they could become instilled with European values and work habits; or, in other words, they were taken away to be ‘civilised’. These children were placed into institutions to be educated and trained to live and work in white society, and had their names changed. They were not paid for their labour

⁹ The age at which half the population is older and half the population is younger.

beyond the provision of food and clothing, and became personal servants (Lombardi and Clayton, 2006).

At that time, very few Indigenous families escaped the effects of forcible removal, and most families suffered over one or more generations (Dudgeon et al., 2010). In certain regions, more than one in ten Indigenous children were forcibly removed from their families. The estimated number of children who were removed from their families and communities is in the tens of thousands (Human Rights and Equal Opportunity Commission, 1997, Part 2). In New South Wales alone, approximately 5,625 children were removed between 1883 and 1969 (Human Rights and Equal Opportunity Commission, 1997, Part 2).

In order to aid assimilation into the white way of living, the removal of Indigenous children continued into the 1950s and 1960s. In fact, after 1940 the removal of Indigenous children was governed by the General Child Welfare Law (Human Rights and Equal Opportunity Commission, 1997, Part 2).. These children are now referred to as ‘the stolen generations’. This action was described as ‘the ultimate racist act’ (McGrath, 1987).

The assimilation policy of Indigenous Australians into white society was part of a broader ‘White Australia Policy’:

‘[This] was designed to control the movement and employment of “coloured” aliens such as Asians and South Sea islanders [and this] presented another complication for Aboriginal people. As non-whites who were Indigenous to Australia they, too, were excluded from

employment on the basis of race under acts intended to control the employment of aliens.’ (Bourke, 1998b, p. 42).

According to Sissons (2005), assimilation was not the only goal behind the removal of Indigenous children from their families and communities in the following countries: Australia, Canada, New Zealand and the United States of America (USA). The other aim for settlers was to achieve the disintegration of Indigenous communities, and to transform the relationship between Indigenous peoples and their environment. In New Zealand, for instance, ‘the government policies to assimilate Maoris and alienate them from their land had been so successful that by the turn of the century [twentieth century] it was thought that Maori culture and language was about to disappear’ (McNicholas et al., 2004, p. 5).

Although the removal of Indigenous children in Australia continued to take place until 1980 (Dudgeon et al., 2010), from 1972 the numbers started to decline. The Whitlam government was elected in 1972. This government adopted a policy of Indigenous self-determination, created the first separate Federal Ministry for Aboriginal Affairs and abolished the White Australia Policy (Lombardi and Clayton, 2006). However, the process of stealing children from their families and their communities was not officially recognised until recently, with former Australian Prime Minister Paul Keating’s historic Redfern Park Speech in 1992, followed by Prime Minister Rudd’s momentous National Apology to the Stolen Generations on 13 February 2008 (Dudgeon et al., 2010).

2.4 Accounting as a tool of dispossession

‘They were hit by the full blight of an alien way of thinking. They were hit by the intolerance and uncomprehending barbarism of a people intent only on progress in material terms, a people who never credited that there could be cathedrals of the spirit as well as stone. Their view of Aborigines as the most miserable people on earth was seared into Aboriginal thinking because they now controlled the provisions that allowed blacks to continue to exist at all. Independence from them was not possible ... It is my thesis that Aboriginal Australia underwent a rape of the soul so profound that the blight continues in the minds of most blacks today. It is this psychological blight, more than anything else, that causes the conditions that we see on the reserves and missions. And it is repeated down the generations.’ (Gilbert, 1977, pp. 2–3).

In Australia, although the physical dispossession of Australian Indigenous peoples, in terms of the doctrine of ‘Terra Nullius’, came to an end only a few years after European settlement in Australia in the late 1700s, the disempowerment of Australian Indigenous peoples has continued using different methods, including the practice of accounting. For instance, a variety of accounting techniques had to be implemented to enable the European colonial invasion to control the Indigenous population (Greer and Neu, 2009).

There are many studies which confirm the use of accounting as a tool of dispossession and domination (Greer and Neu, 2009; Buhr, 2011; Neu, 1999; Neu and Theirren, 2003; Miller and Rose, 1990; Gibson, 2000). This section examines the

use of accounting by the settlers as a way to dominate Indigenous peoples, and the potential of accounting to act as a major incentive for Indigenous peoples to prevent such use. The researcher believes that such prevention starts by gaining accounting knowledge and joining the accounting profession.

There are many countries around the world which have been colonised. Assets, natural resources and land are normally attained by force; however, other less violent ways of acquiring other peoples' assets are recorded. For instance: 'Accounting was used to enable land acquisition and "atomise" Indigenous peoples into individual economic citizens' (Buhr, 2011, p. 142). It was demonstrated in studies by Neu (1999) and Neu and Theirren (2003) that to enable the Canadian authorities to shape, normalise, and instrumentalise the conduct, thought, decisions and aspirations of the Canadian Indigenous peoples, accounting played a remarkable role in assisting them to achieve their goals (Miller and Rose, 1990). Miller and Rose (1990) also proved that accounting is a constituent part of government discourses and policies to enable political domination over Indigenous land and control over Indigenous peoples.

According to Gibson (2000), accounting practices and financial accountability were used by European settlers especially in Australia, for domination purposes. Furthermore, and in order to gain economic power, accounting seeks individual and corporate affluence and wealth at the expense of social infrastructure and social interaction. As a result of the continuous chase for this power, the dispossession of Indigenous peoples continues (Gibson, 2000). For instance, modern accounting notions of wealth, assets and income distribution are not appreciated or even necessarily comprehended by Indigenous peoples, for whom wealth of that kind may not be valued. On the other hand, wisdom, kinship and knowledge of the Dreaming is

their wealth (Gibson, 2000); and the land and their family provide all their needs such as food, shelter, social contact and spiritual enrichment.

There is an additional problem in that accounting is about delivering and communicating information using a specific language: the 'language of business'. Australian Indigenous peoples have their own 'business languages', which contradict conceptually and culturally the Western 'language of business'. Australian Indigenous peoples are therefore disadvantaged in the race for economic dominance (Gibson, 2000). They are further disadvantaged because their languages do not have words which differentiate between play and work (Gibson, 1995). In addition: 'It is demonstrated that when an accounting-based economic system is imposed upon a hunter-gatherer philosophy, the lack of common terminology or mutual understanding results in dispossession of members of the older, social culture by the economically powerful in control of the accounting lexicon which forms the basis for decision making' (Gibson, 2000, p. 291). As a result, Indigenous peoples in Australia continue to have poor health and life expectancy, inferior living standards and low educational attainment, in addition to under-representation in the mainstream economy, and are consequently characterised by lower income levels (Martin, 1995).

In order to avoid a repetition of, for example, the Queensland and New South Wales case of the 'stolen wages',¹⁰ Indigenous peoples are to be encouraged to study accounting and join the accounting profession. As a possible consequence of this, Indigenous peoples would be able to manage their own money, gain financial skills,

¹⁰ The 'stolen wages' is a term that began to be used when, prior to 1969, the New South Wales Government collected monies owed to Aboriginal people from which only a fraction was paid to the Indigenous workers. The remainder, it was called the 'stolen wages'. It also concerns the failure of state authorities throughout Australia to repay entitlement to Aboriginal monies compulsorily acquired by them and held in trust for Aboriginal people.

be financially independent, and be able to make good financial decisions which have an impact on their families, communities and businesses. It appears to be clear that the term 'stolen wages' reflects the fact that Aboriginal and Torres Strait Islander peoples were not allowed to manage their own money. There is enough evidence to show that due to the lack of accounting knowledge amongst Indigenous peoples and, through deliberate omission by governments, there was generally poor administration by Indigenous peoples of the accounts and monies belonging to them (Bin-Salik et al., 2004).

An example of how accounting was used as a tool to control Indigenous peoples is Greer's (2009) statement that the report of the Senate Standing Committee on Legal and Constitutional Affairs provides confirming evidence of how accounting technologies were enlisted in the implementation of policies that denied Aboriginal people access to their own money 'for no reason other than their Aboriginality'. Furthermore, only financial transactions are considered in the accounting systems of Western societies. In Aboriginal societies, social transactions are considered instead, and according to Berndt and Berndt (1988), 'relatives and friends', rather than 'competitors', are 'sharing' rather than 'competing'. Thus, Indigenous peoples are highly disadvantaged due to the implementation of an accounting system which has totally different perspectives about every aspect of their lives. As a result of the extreme social and economic disadvantages faced by the Australian Indigenous peoples due to the implementation of this accounting system, the Federal Government suggested the imposition of strict financial accountability measures for all Indigenous organisations and representative bodies (Greer and Patel, 2000).

2.5 Indigenous education in Australia

2.5.1 Introduction

It is only in the last sixty years that Indigenous Australians started to be present at schools. This was not because they did not want to go there; it was more the case that the Europeans prevented them (Broome, 1994). Although in some cases Indigenous Australians were forcibly taken to schools, this reflected the Europeans' aim of assimilating Indigenous peoples into white culture.

Education impacts not only on study choices at university, but also on the decision whether or not to enter university. While this chapter continues to provide details of the background of Indigenous peoples, its importance emerges from the theory of the 'hidden curriculum' because this theory rejects claims that education teaches only the overtly written-down curriculum. The hidden curriculum concept suggests that while teaching students numeracy and literacy, for example, other unintended lessons are taught which can have an impact on the students' study choice. This discussion can be related to Freire's hidden curriculum, as presented by Thomson and Bebbington (2004 and 2005).

2.5.2 Indigenous students' participation in education and career choice

The Australian Bureau of Statistics (ABS) (2009) recorded that in the last ten years the total number of students (Indigenous and non-Indigenous) in schools had dramatically increased, although there was a decrease in the number of schools. The number of Indigenous students amounted to 155,500 in 2009. This represents the total number of full-time Indigenous students in Australia, and shows an increase of

2.6 per cent since 2008, and an increase of 46 per cent over the last decade (The Australian Bureau of Statistics, 2009).

The number of Australian Indigenous school students amounts to 4.5 per cent of all full-time Australian students. In addition, the number of Indigenous students in Australia who complete year 12 represents only 10 per cent of the student total, and only 3 per cent of them complete a university degree (Korff, 2009). This, however, indicates a 10 per cent increase since 2008, and in 2009 over ten thousand Indigenous students were enrolled in higher education across Australia (Department of Education, Employment and Workplace Relations (DEEWR), 2009). But even though this is a great improvement, it is still less than 1 per cent of all higher education students (DEEWR, 2009). Therefore, while Indigenous Australians constitute approximately 2.5 per cent of the population, they form less than 1 per cent of all higher education students. This indicates low participation in higher education, a situation which can be attributed to many reasons discussed in a later section of this chapter. Although it is not the aim of this thesis to determine why most Indigenous students do not continue after year twelve, it is important to understand the reason why from the available literature. However, it is the main interest of this research to know why the portion of students who decide to continue choose to study a subject other than accounting.

By exploring the types of jobs which Indigenous peoples prefer to do, an indication of whether they might consider doing accounting work and/or studying accounting can be discerned. According to the ABS (2008), Indigenous peoples seem to 'choose' occupations such as labourers, community and personal service workers,

and professionals. It is asserted in the Australian Survey of Student Engagement (Australian Survey of Student Engagement (AUSSE), 2011), that Indigenous students are more likely to be 'studying in the humanities; slightly more likely to be studying education, in a field of health, or in the creative arts; and less likely to be studying science, engineering or business'. For instance, in science-related studies, Indigenous students' under-representation is more obvious than in other fields. According to Snively and Williams (2006), this is because Indigenous students think of science education as inaccessible and irrelevant.

Furthermore, Indigenous women are almost twice as likely to be working as a professional (15 per cent) compared with Indigenous males (8 per cent). Not only that, but when compared with their non-Indigenous counterparts, Indigenous tertiary students are more likely to be female, to be from a lower socio-economic status (SES), and to be older (AUSSE, 2011). In addition, Indigenous students are more likely to be the first in their families to attend university. The following table provides a better illustration of these facts.

Demographic	Indigenous students	Non-Indigenous students
Female	73%	70%
Low SES	27%	18%
Age 25 years or older	43%	22%
Mean age	28 years	24 years
Median age	22 years	20 years
Provincial	29%	22%
Remote	5%	1%
First in family	56%	47%

Figure 2.1: Selected Indigenous and non-Indigenous domestic Australian students' demographic characteristics. Source: (AUSSE, 2011, p. 3.).

2.5.3 Education and accounting, the 'hidden curriculum'

Indigenous education is an extremely important issue, and its direct or indirect impact on Indigenous students' decisions whether or not to do accounting is a major part of this research. This is especially the case when considering the 'hidden curriculum' theory, which postulates that school is not only a place which trains the student to read and write, but also teaches the child other, unintended, skills and attitudes. Although family and friends and other factors might impact on students' study choice, the 'hidden curriculum' theory suggests that the classroom is another source of influence on students' study choice. Therefore, an Indigenous individual's education environment and education history are important for the individual's study choice.

In their study, Thomson and Bebbington (2005, p. 513) outline the notion of Illich's (1971) 'hidden curriculum' which denies the working classes an electoral voice, awareness of their oppression and the possibility of change. Such a framework of repression appears analogous to this study's description of an Indigenous population which may be suppressed into compliance by an accounting system and language they do not understand, oppressed by their consequent disadvantaged position in business and governmental matters, and ill-equipped to bring about changes. Whether this situation has developed wittingly or unwittingly is irrelevant to the authors' belief, like Freire's, that educational issues must be addressed.

An example which was provided in Thomson and Bebbington's study (2004, p.611) states that:

'When young children are reading a book about doctors and nurses several layers of information are introduced. In the first instance, the ability to read and make sense of letters occurs: the child is being educated as to how to read. At the same time, something about (for example) what a doctor or a nurse does, what hospitals are, how hospitals function and the fact people get ill are also being conveyed. Further, if in all the books on this topic all doctors are men and all nurses are women then the child reading the book may also be educated into believing that these roles are always sex segregated.'

This significant element of education is what Illich calls the hidden curriculum. He describes it as 'a ritual that can be considered the official initiation into modern society; institutionally established through the school' (Illich, 1971, p. 402).

In the context of the previous example, it is in the interests of this research to seek in its findings whether there is a link between the hidden curriculum and Indigenous students' study choice; whether Indigenous students' study choice is impacted by their schooling years; and if the unintended knowledge which they gain from the school in regard to career and study options has an influence on their decisions about what to major in at university.

For instance, if, through unintended gained knowledge, students are not exposed to many options in their schooling years, their choices will then be limited to a small number of professions. These professions will normally be ones which Indigenous peoples are exposed to from other sources such as the community, family and/or friends, for instance the health and legal professions. But it is doubtful whether accounting is a profession to which these other sources might expose the students. Clarification about whether accounting is one of the professions which students will be exposed to or not will be obtained in the culture section later in this chapter.

Unintended knowledge can be gained from many sources at school; however, teachers are the main avenue through which this knowledge is delivered to students. While teaching the required material, teachers can also expose students to career options. For example, accounting teachers, while teaching a compulsory introductory accounting class to first-year undergraduate business students at a university, can, in addition to the learning materials for each topic, clarify to students who accountants are and what they do. This unintended knowledge will most likely change the student's perception of accounting. This might result in some students becoming more interested in accounting, while others might lose interest. Some business students might even be surprised at the way their perception of accounting has

changed since they took the class. However, in the case of Indigenous students, an even worse scenario might develop if the claims of Godfrey et al. (2001) prove to be correct. Godfrey et al. (2001) claim that some teachers perceive Indigenous students to have low career aspirations. If this is correct, then the role of teachers becomes destructive rather than instructive.

2.5.4 Indigenous peoples and the education system

If one is to assume that an increase in the total number of higher education students might mean an increase in the number of students majoring in accounting, then the under-involvement of Indigenous students in schooling will most probably lead to under-representation in accounting studies. It is to be argued that any success in increasing the number of Indigenous students attending schools and universities might trigger an increase in their number in accounting education given the right incentives and background education. Accordingly, encouraging Indigenous children to attend schools, as well as encouraging them to do further studies in order to achieve higher qualifications, would be in the interest of professional accounting bodies.

Because the Australian education system is still seriously failing Indigenous students (Bartlett, 2007), such students continue to be under-represented at all levels of schooling compared to non-Indigenous students (Hauser et al., 2009). Howard (2002) indicated that Indigenous education is an area where debates about blame and failure often take place, where teachers blame parents for not ensuring their children's attendance and parents blame teachers for not giving enough incentives to their children for attending school.

Equally important is the general feeling amongst Indigenous students about their educators' attitude towards them, which they claim does not really show the same level of interest in providing them with the right education and attitude towards their learning compared to their non-Indigenous counterparts. Godfrey et al. (2001) believe that one of the barriers to motivating Indigenous students to do further study is the teachers' perception of the low career aspirations and low educational expectations of Indigenous students.

The literature (Bartlett, 2007; Howard, 2002; Godfrey et al., 2001; Hauser et al., 2009; Ministerial Council on Education, Employment, Training and Youth Affairs, 2000b; Partington, 1997b) indicates that there is a divide between Indigenous students and the school system. This divide can be attributed to the schooling system in general, which does not cater for the needs of such students in terms of culture, language and social belonging. The schooling system, in general, is developed with a lack of proper consideration for Indigenous students' needs (Godfrey et al., 2001), and as a result, the education system is failing Indigenous students. Hayward (2008), who is an Indigenous Professor at Edith Cowan University, states that: 'We have far too many of our children trying to succeed in an educational environment that doesn't tell the truth about our history, the Aboriginal history of Australia.'

One has to admit that the Australian educational system has taken major steps to improve the situation. However, these steps have provided no more than a mediocre improvement over the last thirty years, particularly in regard to attendance, identity and achievement amongst Indigenous students (Partington, 2005). Indigenous Australians are still suffering as a result of an education system which does not cater for them, and as Murdoch (2008) stated: 'Australia's system of public education can

never be called a success until Aboriginal Australians benefit from it as much as any other citizens.’

2.5.5 Recent Progress in Indigenous education

Although it was stated that ‘Educational equality for Indigenous Australians is either not achievable, or if possible, only achievable over a long period of time’ (Ministerial Council on Education, Employment, Training and Youth Affairs, 2000b, p. 10), there has been some progress with Indigenous education. For example, in 2008 the number of Indigenous tertiary education graduates was 20,000 compared to 3,600 in 1991 (Korff, 2009). However, despite some progress over recent years, it has been shown that Indigenous Australian students have lower levels of literacy and numeracy, have far higher rates of absenteeism and truancy, are much less likely to continue their education beyond compulsory years, and are less likely to achieve a meaningful post-school qualification (Commonwealth Department of Education, Training and Youth Affairs, 2000).

Nonetheless, the Australian government and Indigenous leaders have been working on improving the educational situation for Indigenous students. In regard to students’ attendance, Howard (2002) suggests that family support is one of the most important influences in students’ motivation to not leave school. However, what might be more effective is the combination of roles amongst family, friends and teachers in supporting Indigenous students to come to school and study with enjoyment. Friends can also help in attracting more Indigenous students to schools and ensure that they stay and do not leave. Friends can make schools more enjoyable and bearable. Friends can also help with study loads, work and entertaining, and can assist when a

student is experiencing hard times (Howard, 2002). Non-Indigenous friends and teachers can also assist in removing many barriers which are faced by Indigenous students (Partington, 1997b).

As well as families, teachers play an important role in putting students on the right track. However, teachers are expected to work harder with Indigenous students than with non-Indigenous. This is because Indigenous students have different cultures and needs, are mostly poorly prepared academically, and, more importantly, have families who are generally not educated enough to direct their children into future careers. Consequently, relations between Indigenous students and non-Indigenous teachers are often a reason behind some Indigenous students leaving school (Howard, 2002).

2.6 Culture and education

This section explores the impact of Indigenous cultures on Indigenous students' education.

2.6.1 What is culture in non-Indigenous contexts?

Mainstream cross-cultural accounting research has been carried out using Hofstede's definition of culture as '... the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense, is a system of collectively held values' Hofstede (1980, P. 25). In addition to Hofstede, Markus and Kitayama (1991, P. 227) used the following concept of culture, stating that: 'People in different cultures have strikingly different construals of the self, of others, and of the interdependence of the two. These construals can

influence, and in many cases determine, the very nature of individual experience, including cognition, emotion, and motivation.’

Accordingly, development in culture takes place through factors such as beliefs, faith, practices, customs and way of life, art, language, food and the economy. Different societies have different cultures which influence group or community perceptions of life as well as conduct because cultural growth is a driving force for community growth. It should be noted that, with the advent of globalisation, cultural currents are mixing more and more.

According to Kartha (2006), culture is not inherited by someone but obtained through knowledge acquired from his/her family, groups and communities. In practical terms, culture teaches an individual how to survive in different communities (Kartha, 2006). Therefore, in different societies where different needs exist, different cultures exist; and adapting to a new culture raises many difficulties for individuals who are, for many reasons, forced to live and adapt to foreign cultures. Although some might argue that human needs might be relatively similar amongst different societies, they are, however, fulfilled differently.

2.6.2 Impact of culture on education

Students’ cultures can be taken into the classroom. This segregates students from each other, according to a study undertaken by Suliman and McInerney (2003). It was concluded that once teachers know the backgrounds of their students, they form general beliefs about particular ethnic groups related to whether or not members of a group perform well in schooling, or whether or not they have disciplinary problems. In addition, different ethnic groups with different cultures have different objectives

and goal orientations which come into play in the classroom. Culture not only has an impact on students' education and performance; it also impacts on the parents' involvement in their children's education.

2.6.3 Indigenous cultures

Australia is classified as part of the Western world, but it has many different ethnic groups and consequently different cultures. Australian people belong to different clans and communities, which have different needs. Accordingly, Australian 'society' has different considerations and problems associated with this mosaic of culture compared to other parts of the world. Most ethnic groups, although they differ culturally, do not find many difficulties in adapting to Australian culture, and they still manage to maintain most of their original cultures intact. In reality, Australian culture can be characterised as a flexible culture because it takes into consideration some of the immigrants' cultures and introduces new laws which accommodate these. Nonetheless, this is not the case with Indigenous Australians because their cultures are diverse and depend on their location in Australia (Dockery, 2009) and, more importantly, whether they are still residing on their traditional lands. Therefore, Indigenous peoples find it much harder than non-Indigenous Australians to let go of their cultures and/or adapt to a new culture.

The Australian Aboriginal and Torres Strait Islander cultures are amongst the few surviving ancient cultures in the world. Their cultures are, in fact, amongst the oldest in the world, and date back around 60,000 years (Australian Government, 2008). Such Indigenous cultures have managed to survive successfully over this long period

of time, but they did not remain the same (Harris, 2000). According to Harris (2000), Australian Indigenous cultures are changing, not towards western cultures, however, but towards a new version of Indigenous cultures. The changes which resulted in the survival of these cultures are due to the Indigenous peoples' ability to adapt over time to fulfil new needs (Australian Government, 2008). Therefore, it can be concluded that Indigenous Australians are able to excise and change parts of their cultures, but only in order to keep their core cultural traditions within new contemporary contexts, and not to adapt a completely new culture foreign to their core traditions. For the research not to drift from the main point, it is necessary to look into how cultures might impact on students' decisions about the study of accounting. A good start is to examine how culture impacts on students' education in general and on Indigenous students in particular.

2.6.4 Impact of Indigenous cultures on Indigenous students' education

Like Maori peoples in New Zealand, Aboriginal and Torres Strait Islander peoples in Australia are subject to on-going difficulties in a Western education system and curriculum, which has been imposed on them since colonisation (Marie et al., 2008). As a result of cultural differences, Maori students in New Zealand were and are still experiencing lower levels of educational achievements, lower attendance rates, and lower secondary school qualifications (Marie et al., 2008). The same can be said about Indigenous Australians, as detailed earlier. According to Bishop and Glynn (1999) and Smith (1999), cultural difference is an essential reason for the underachievement of Indigenous students, and a culturally appropriate learning environment is necessary for improved educational achievement (Marie et al., 2008).

Australian Indigenous cultures, according to Barnes (2000), place a great emphasis on personal relationships; however, they do not show much concern about individual achievements because the culture is more group-oriented. Indigenous students behave according to this cultural context; but such actions might be misinterpreted by teachers, most of whom come from a different cultural context. For example, the relationship between an Indigenous student and another older person from his/her community drives the way that this student would respond to the older person. This is a pure cultural context that requires Indigenous peoples to respect elders (Barnes, 2000). This action, when applied in school, might have an impact on Indigenous students' education because they might look at their non-Indigenous teachers in the same way as they look at elders from their community. Therefore, according to Ryan (1992), such students will face difficulties in expressing their opinions and knowledge, and might not even ask a question in the presence of an older teacher. The presence of an older teacher in a classroom is, of course, usually the case.

If culture can have an impact on students' educational objectives and achievements, and on parental involvement, and if culture is a significant reason for the underachievement of Australian Indigenous students, then it is most likely that culture would also have an impact on students' decisions to either study accounting or not, and whether to work in the field or not. The following chapter explores a possible link between cultures in general and accounting as a field of study, while a further chapter specifically analyses Indigenous cultures in relation to accountancy.

2.7 Summary

This chapter has provided an important first level context to this research study by providing a succinct overview of the impact of colonisation on Aboriginal and Torres Strait Islander communities, on their cultures and on their access to and progression through the Anglo-Australian education system of this country. The historical context of Indigenous Australians is important because it positions for the study factors impeding Indigenous Australians from engaging in tertiary education in general and in accounting education in particular. Further, this context helps gain an understanding and appreciation of the role played by the conquering nature of colonisation and the ways in which the different cultural and educational system of non-Indigenous Australians limits the educational opportunities of Indigenous Australians. The brief account of the experience of Indigenous students within this educational system highlights the influence teachers' stereotyping of Indigenous students can, of itself, influence students' further study and career choices.

Chapter Three: Context 2 – Accountancy and Ethnicity, Accountancy Education

3.1 Introduction

This chapter provides an overview of past research on factors which impede students from choosing to major in accounting. However, due to the lack of Australian literature on Indigenous Australians and accountancy as a study or career choice, the chapter draws on international literature which investigates the under-participation of Indigenous and/or minority ethnic groups in accounting education and the profession. This chapter also draws on the accounting education literature which has investigated factors which impede students' choice of majoring in accounting. It is hoped that this chapter provides the researcher with insights into some of the impediments which might be faced by Indigenous Australians. It is also hoped that this chapter helps the researcher avoid the risk of overload at the primary data collection stage. This chapter will also assist in giving the thesis a logical framework.

3.2 International literature

Past researchers have discussed the impediments which ethnic minority groups in the United States, Canada, New Zealand and South Africa generally face when entering the accounting profession (Hammond and Streeter, 1994; Hammond, 1997; Holmes et al., 2005; Preston, 2006; Hooper and Pratt, 1995; Hammond et al., 2007; Mitchell and Flintall, 1990; Jacobs, 2000). However, barriers to the accounting profession for Indigenous Australians have only just begun to be researched (Lombardi and Clayton, 2006; Rkein and Norris, 2012).

Indigenous and/or marginalised ethnic peoples, not only in Australia but in the United States, Canada, New Zealand and South Africa are disadvantaged, influenced and controlled as a result of accounting discourses and technologies (Buhr, 2011; Greer and Neu, 2009; Gibson, 2000). In previous centuries, at the initial stages of the colonising process, Indigenous peoples were subjugated and oppressed by violence and the threat of violence. It is only in the last hundred years or so that strategies, such as creating welfare dependency, failing to provide adequate health and education services, and depriving the Indigenous peoples of essential knowledge such as familiarity with accounting systems and practices, have arisen which create a different but equally effective means of controlling these peoples.

The United States, Canada, South Africa and New Zealand have one thing in common with Australia in addition to having English as a first language: all of these aforementioned countries have marginalised ethnic groups and/or Indigenous peoples, and were colonised by white people. One of the common issues amongst these countries' Indigenous peoples and/or marginalised groups is that they are all disadvantaged by the European settlement of their lands. Moreover, accounting in all of these countries is portrayed as a way to dominate Indigenous peoples and take away their territories (Buhr, 2011).

In a similar way to the United States, Canada, South Africa and New Zealand, Indigenous Australians are under-represented in the accounting profession, as the literature details. In most of these countries, under-representation has either been resolved recently, or there are plans and strategies which are or will be implemented.

However, it is without doubt an existing problem in Australia which only until recently started to be researched.

3.2.1 Under-representation

The under-representation of minority ethnic groups and Indigenous peoples in accounting education and in the profession is a fact which exists in all of the aforementioned countries, although the rate of representation differs from one country to another. For instance, according to Mitchell and Flintall (1990), in 1989 the number of black Certified Public Accountants (CPA's) in the United States was no more than 1 per cent of all American CPAs. This figure of 1 per cent represented approximately 2,500 accountants, and yet African Americans represented 12 per cent of the population at that time.

In South Africa, it was 1998 before a black female, Sindiswa Zilwa, first qualified as a chartered accountant (CA). Furthermore, in a situation not very different to the United States, on 31 March 2001 only 1.06 per cent of all South African Chartered Accountants were black. This means that there were only 207 black CAs from a total number of 19,493 South Africa Chartered Accountants (Sadler, 2002). It should also be noted that although the number of black CAs might sound low to the reader, this represents an increase of 170 per cent since 1994, when South African Black CAs numbered 77.

Furthermore, the circumstances in the United States and South Africa are not unique because Canada also has a similar situation with 1,640 members in the country's

Aboriginal Financial Officers Association, which was established in 1999. Nevertheless, it should be noted that this number is growing. For instance, within one year, from 28 February 2010 to 28 February 2011, the number of members rose from 1,492 to 1,640, which represents an increase of 9.9 per cent (Aboriginal Financial Officers Association, 2011). Although it is called the Aboriginal Financial Officers Association of Canada, non-Aboriginal people can become members. Therefore, the exact numbers of Canadian Indigenous members are doubtless lower than the reported membership. New Zealand is also suffering from the under-representation of its Indigenous population, the Maori peoples, in the accounting profession (McNicholas et al., 2004). However, in New Zealand, the situation seems worse than the previously listed countries because the need for accounting and management skills was not recognised by the Maori community until late in the 1990s; as a result, Maori peoples have not yet entered the accounting profession in significant numbers (Ministry of Maori Development, 1999).

On a more positive note, the situation in most of these countries is improving. It has been admitted that for various reasons Indigenous peoples should be represented in the accounting profession. Strategies to increase representation have been set, and in some countries implementation of these strategies has started. In South Africa, for instance, the South African Institute of Chartered Accountants set itself the target of having 3,000 registered black accountants by 2005. In other words, the aim was for 25 per cent of all South Africa's chartered accountants to be black (Sadler, 2002). This would mean an increase of 23.94 per cent.

In Canada, a centre for excellence and innovation in aboriginal finance and management was created in 1999 and named the Aboriginal Financial Officers Association of Canada (AFOA). It should be noted that of all the countries mentioned here, the AFOA represents the only group which has formed a professional accounting designation specifically for Indigenous peoples. In addition, a pilot project targeting Canadian aboriginal youth and urging them to complete high school and then pursue careers in accounting was launched in 2008 (Chartered Accountants of Canada, 2008). In New Zealand, a National Maori Accountants Network has been developed as a special interest group of the New Zealand Institute of Chartered Accountants. In the United States, the Native American Finance Officers Association (NAFOA) was formed in 1982, but without its own accounting designation.

Australia was the last amongst these countries to determine the need for Indigenous accountants, as mentioned earlier. In 2009, Warren Mundine, a member of the Indigenous Australian community and the Indigenous Labour Network convenor and chair of the Australian Indigenous Chamber of Commerce (AICC), was the first to state clearly the need for Indigenous accountants (Toohey, 2010). He said that ‘1000 Indigenous accountants are needed to be trained’. Additionally, and to help Indigenous small businesses succeed, Mundine stated: ‘Let’s keep up the positive momentum and put some resources into encouraging Indigenous people to become qualified accountants ...’. Mundine’s statement was made when it was announced by the Australian Institute of Health and Welfare that the number of Indigenous doctors had doubled from 1996 to 2006 (Australian Indigenous Chambers of Commerce, 2009). Although Mundine was pleased to hear the announcement, he pointed out

that: 'It is only with the representation from the medical, legal and accountancy professions that Indigenous communities can build strong and self-sustaining economies.' An interesting development has been the creation of a website called 'Indigenous Accountants Rock'. This website was created by Australian Adrian Williams with the aim of addressing the critical shortage of Indigenous Australian accountants (Indigenous Accountants Rock, 2011). And in September 2011, a round-table conference was held in Melbourne, Australia to discuss the need for more Indigenous accountants.

The creation of strategies to attract more Indigenous peoples to the accounting profession is good news for all those who are interested. However, in order for the strategies to have a significant outcome, the reasons and impediments which prevent Indigenous peoples either from entering the accounting profession or remaining in it should first be determined. Therefore, the following section will examine all possible barriers which contribute to the under-representation in all of the previously listed countries to help the researcher determine the impediments facing Indigenous Australians.

3.2.2 The South African experience

Since the continuity of the accounting profession depends largely on the ability to adapt to the rapidly changing social and economic needs of the South African community, Sadler (2002) suggested that the accounting profession must always bear in mind the need to increase the number of accountants, particularly black accountants. Diversity in the accounting profession would also bring other benefits

because it would reflect the accounting companies' employee base and that of their clients. Not only that, but black accountants, if they are permitted, can make an exceptional contribution to the accounting profession. Sadler (2002) also stressed that black accountants should not be hired for the purpose of 'window-dressing or tokenism'.

Until 1994, South African Indigenous peoples experienced colonisation alongside legally enforced racial discrimination. Until the first democratic election took place in 1994, non-white South Africans had absolutely no control over work opportunities, and white South Africans fully controlled their employment (Hammond et al., 2007).

In South Africa, it is impossible to exclude or forget apartheid when analysing possible reasons behind the prevention of black South Africans from entering the accounting profession. Apartheid played a significant role in segregating South African society; it has also made the acceptance of social groups which have different cultures and races more challenging (Hammond et al., 2007). As a result, black accounting firms still do not receive work from the private sector (Sadler, 2002). Racism and discrimination, not only at political and leadership levels, but also in organisations and particularly in accounting firms, is a key element behind the low numbers of black South Africans in the accounting profession (Sadler, 2002). According to the Sadler (2002, P.179-180) study, even after 1994 when discrimination was no longer legal, and after the announcement of reaching a target of 3,000 black CAs by 2005, there were still other impediments such as:

‘limited supporting programmes; bright students entering other professions; accounting seen as only a stepping stone to other careers, for example banking; no network of black CAs; blacks not assisting other blacks to develop; lack of career awareness programmes in schools; textbooks which are not black friendly; and leading accounting firms still not accepting blacks and not providing opportunities for their advancement.’

It is admitted that the pass rate amongst black South Africans is relatively poor, which is a result of broken secondary school education (Sadler, 2002). In addition, deficiencies in the publicising of the profession amongst black communities have resulted in overall poor participation in the accounting profession. Furthermore, the self-confidence of black accounting trainees was affected as a result of noting that inside firms, African accountants were assigned less responsibility than their white counterparts.

On the other hand, in spite of all these impediments, the number of black South African accountants is increasing as a result of the efforts of South African institute of Chartered Accountants (SAICA) and the Association for the Advancement of Black Accountants of South Africa (ABASA), academic support programmes and the initiatives of the accounting profession. However, as Sadler (2002) points out, the number is not yet anywhere near the desired target.

3.2.3 The United States experience

Although they are neither the traditional owners of the land, nor the Indigenous peoples of the United States, African Americans share with the aforementioned countries an exclusion from the accounting profession. According to Hammond (2002), African Americans are another group of people who are not adequately represented in the middle class group which is dominantly white. Furthermore, Hammond (1997, P.29) stated that: ‘African Americans were virtually barred from becoming certified public accountants until after the civil rights activism of the 1950s and 1960s led to legislation outlawing employment discrimination.’ Agreement about allowing the participation of black accountants in firms was made after seeing that diversity makes good business sense (Hammond and Paige, 1999). African Americans continue to be under-represented in the accounting profession because of, but not limited to, the following various reasons.

Black African Americans have experienced a similar situation as black South African accountants in that the nature of the tasks assigned to them and their counterparts has been based on ethnicity and colour (Greenhaus et al., 1990; Moyes et al., 2000). In other words, the more mundane responsibilities are consistently assigned to marginalised group members, and more challenging tasks ‘which develop the person’s skills, and engage in a wider network’ are assigned to white accountants. Therefore, cultural differences and discrimination inside the accounting profession has in the past and in the present, and will in the future, lead to the exclusion of the majority of marginalised ethnic groups from this particular field of work. For instance, Moyes et al. (2000, P.36) quote from their study the words of a black African American professional accountant: ‘There is definitely a cultural difference that makes the minority hire feel uncomfortable.’

James (2002) asserts that low self-efficacy amongst African American students to achieve the required skills needed to enter accounting classes and to join the accounting profession has contributed to under-participation. He also proposed that African American students may choose careers other than accounting because of different work values. Brown (2002) added that individuals may head towards a particular profession if a link between their work values and the perceived outcomes of that job exists. Consequently, differences in African Americans' work values raise the possibility of choosing a career other than accounting. Furthermore, James (2002) argued that lack of access to information about accounting may have driven African Americans away from the accounting profession.

3.2.4 The Canadian experience

A similar situation prevails in Canada where the accounting system and techniques are still implicated in the colonisation and oppression of Canada's Indigenous peoples. According to Neu (2000), colonial objectives were achieved as a result of accounting and financial accountability mechanisms.

Following their attempts to join new occupations such as accounting, Canadian Aboriginal peoples encountered difficulties inside organisations when attempting to move into executive positions (Dwyer, 2003). Therefore, it is not surprising to find that in most of today's organisations, senior positions of power and authority are held by white males (International Personnel Management Association, 1990; Weschler, 1994).

Canadian Indigenous employees have always faced significant obstacles when trying to enter non-Indigenous organisations. Volume two of the Report of the Royal Commission of Aboriginal Peoples: Restructuring the Relationship (Royal Commission on Aboriginal Peoples, 1996, p. 937) sheds light on some of these obstacles. The following is a statement made by a Canadian Indigenous person.

‘How was I [an Aboriginal] supposed to deal with a manager and a system that continually sought to treat me as a child? I have both a Bachelor’s and Master’s degree, and their tactics included requests that I submit all of my calculations for verification by a supervisor, ostensibly because they couldn’t be sure my totals were correct. No other person among my forty-three co-workers was required to do this. They told me that my work was being checked because I grew up on a reserve where nobody learned to add properly.’

Discrimination in the workplace, distrust and an unfriendly work environment play a remarkable role in impeding Canadian Indigenous peoples from entering specific professions. As can clearly be seen from the previous statement, a clear reference was made to calculation and addition, which according to many researchers has been linked to accounting (Jackling and Calero 2006; Mladenovic, 2000; Parker, 2001; Wong and Chia, 1996; Hartwell et al., 2005; Mitchell, 1985). As a result, Canadian Indigenous peoples were driven away from a profession which has a strong relationship with numbers and counting.

As in other countries, there is an undeniable gap between Canadian Indigenous peoples' culture and traditions, and the Western derived governmental system implemented in Canada. Because of this system, of which the accounting system is emphatically part, Canadian Indigenous peoples are under-represented in the accounting profession. To illustrate this point, a report prepared for the Public Service Commission of Canada in 1991 entitled 'A Study on the Retention of Aboriginal Peoples in the Federal Public Service' made the following observations.

'... For many, entry (to a profession) involves a culture shock which comes in a variety of guises. The language of the bureaucracy and formalities of government create uneasiness for many Aboriginal peoples. They feel conflicts between their traditional ways and accepted government practices . . . The bureaucratic levels and systems within government are also foreign. The environment is perceived to be fiercely competitive, filled with roadblocks to advancement, and with people looking out only for themselves. The individualistic way in which work is done is perceived to be alien and pressure packed.'

(Public Service Commission of Canada, 1991, p. 16).

Thus, ignorance of Indigenous culture in a country's governmental system neutralises any plan to give full work participation rights to the country's Indigenous peoples. As a result, Canada, as have other countries, has failed in embracing the cultures and traditions of its Indigenous peoples into their accounting systems. Consequently Indigenous Canadians avoid entering the accounting profession.

3.2.5 The New Zealand experience

Hooper and Pratt (1995) stated that: ‘Accounting in nineteenth century New Zealand was part of a new colonial discourse. ... It was a power that legitimised as true that which previously could not be said to be either true or false.’ Doubtless, the under-representation of New Zealand Indigenous peoples in the accounting profession has continued, inadvertently, the effect of accountancy being a tool to subjugate Indigenous society. From the demographics, it would be logical to assume that a significant number of Maori (New Zealand Indigenous peoples) university students should be studying accounting, and as a result many of them should be in the accounting profession (Gallhofer et al., 1999). However, this is not the case. Maori peoples are under-represented in the accounting profession.

It is not only cultural differences, and the contradiction between cultural values and the accounting system, which have been used to ensure the dominance of white authorities over Maori societies. The socio-economic status of Maori peoples has also affected their low participation in the accounting profession (Gallhofer et al., 1999). For instance, McNicholas and Humphries (2005) indicated that female Maori accountants, when involved in the culture of the organisations in which they work, struggle to protect their culture from being lost and to maintain their identity as Maoris. Furthermore, the under-participation of New Zealand Indigenous peoples in the accounting profession is also seen to be a result of educational problems. Maori peoples’ educational underachievement is attributed to the inappropriate education system, and to their economic status, which continues to be considerably lower compared to other New Zealanders (Statistics New Zealand, 2002). As a result of their different cultures, Maori peoples have different work values. Therefore,

incentives and encouragements from certain professional bodies to attract more people from society into the accounting profession, fail to attract Indigenous peoples who require totally different incentives to undertake any type of career.

3.2.6 The Australian experience

Although the situation in Australia does not differ much from its counterpart New Zealand, it differs from the situation in the other countries. As already mentioned, researchers in countries other than Australia have made progress since they began researching ‘treatment impediments’¹¹ a few decades ago. It is only recently, and to a very limited extent, that researchers in Australia have begun to examine ‘access impediments’¹².

Noting that the literature lacks information on Indigenous participation in the accounting profession (Lombardi and Clayton, 2006; Rkein and Norris, 2012), Rkein and Norris (2012, P. 105) stated that one of the possible reasons behind the under-representation of high school students in accounting classes was the lack of knowledge about accounting: ‘Remote Indigenous students have no perception of what “accounting” means and have not had contact with accountants.’ Students in the Rkein and Norris (2012) study were perceived to dislike the notion of spending their working hours in an office, tied to a desk and computer. In addition, those Indigenous students interviewed who had studied accounting as a subject in year 11 claimed that the classes were boring. It was also cited by them that culture has an

¹¹ Treatment impediments refer to barriers and obstacles inside a workplace or profession;

¹² Access impediments refer to the barriers and obstacles which exist prior to entering a profession.

influence on impeding Indigenous students from studying accounting in schools and universities, and from later joining the accounting profession, in two contexts.

‘Firstly, Indigenous children are taught to learn by doing Western-style classes but are less inclined towards that pedagogical approach. Secondly, the historical lack of a currency, the continuing acceptance of barter and swap, and the culture of compulsion to share with the whole community were cited by a teacher as an impediment to the selection of accounting. One can see that these cultural norms would impede the understanding of accounting principles and practices and the recognition of the need for accountants.’ (Rkein and Norris, 2012, P. 105)

The fact that this profession is based on building individual wealth within a capitalist system, whereas the Indigenous societal system is based on totally different perspectives such as kinship and community (Lombardi and Clayton, 2006), was also accepted as one of the main reasons which lie behind the under-representation of Indigenous peoples in the accounting profession. In addition, segregating the Indigenous individual from his or her community is extremely difficult. As a result, Indigenous students tend to choose careers which can be undertaken within their communities, and unfortunately accounting is not seen as such a profession (Rkein and Norris, 2012).

Furthermore, Indigenous education cannot be ignored when examining reasons which might result in the low participation of Indigenous peoples in the accounting profession. Because the Australian education system is still seriously failing

Indigenous students (Bartlett, 2007) at all levels of schooling, Indigenous students continue to be under-represented compared to non-Indigenous (Hauser et al., 2009). Irrespective of whether the reasons are due to culture, the nature of tertiary education, the lack of Indigenous educators and/or any other reasons, Indigenous students are disadvantaged when approaching higher education in urban universities, and their likelihood of failure is constantly increasing.

In comparison to the other countries discussed in this chapter, the Australian accounting profession and its organisations are noted for their multi-cultural/multi-ethnic nature. However, the marginalised ethnic groups of Aboriginal and Torres Strait Islander peoples are, like the Indigenous groups in the other countries, under-represented in accounting education and in the profession (Lombardi and Clayton, 2006; Rkein and Norris, 2012).

3.2.7 Themes

In societies where more than one culture is found, individuals are often uncomfortable with others of a different culture and race (Moyes, et al., 2000). In their paper, Moyes et al. frequently maintained that trainees from marginalised groups fear to ask questions. Ethnic stereotyping might be the result of asking questions, and is assumed to be the result of a lack of information. Such a feeling amongst minority ethnic groups is a result of discrimination. This applies irrespective of whether such discrimination is ‘access discrimination’, where marginalised ethnic and colour groups are prevented from entering a particular profession, or ‘treatment discrimination’, where members of a different ethnicity group look at their

colleagues' race and colour inside the profession instead of their qualifications and achievements (Greenhaus et al., 1990, p. 64). It should be noted that discrimination can sometimes be unintentional, and, as such, it is more difficult to counteract than deliberate malicious discrimination because the perpetrators cannot accept that they are being discriminatory.

Furthermore, career choices amongst different ethnic groups might also play a significant role when directing a certain portion of society into a specific profession, and results in the avoidance of other professions. The most commonly held view is that careers are either a result of individual choice and initiative, or, in the context of social and economic milieu, are based on the availability of options in society (Arthur, 1990; Watson, 1995, p. 132). A further theory suggests that career choices are also influenced by family values, class background and societal values or culture (Derr and Laurent, 1989, p. 465). Watson (1995) in particular has pointed out that in cultures which value family and personal relationships, people will avoid stressful careers which 'might put a strain on these relationships' (Watson, 1995, p. 146).

Relevant literature indicates that in countries such as the United States, Canada and South Africa, discrimination exists either inside the profession and/or before entering the profession. In Australia, however, although discrimination inside the accounting profession has not yet been researched, discrimination in the workplace in general has been researched and reported. Discrimination inside the accounting profession in Australia is another project which the author of this thesis intends to explore later in further studies. In Australia, racist attitudes in the workplace have resulted in a lack of respect for Indigenous peoples from their colleagues (Murray, 1997). Such lack of

respect doubtless leads to lower self-confidence and less self-efficacy amongst Indigenous workers, which according to the literature plays a significant role in the under-participation of Indigenous peoples in the accounting professions in Canada, South Africa and the United States. Evidence was provided earlier to show that Indigenous employees were targeted by their supervisors in order to decrease their self-confidence, for instance through less important task assignments and the unnecessary revision of work.

The factor of cultural differences is common amongst all countries, and as a result Indigenous peoples do not feel comfortable working in an environment where a different culture exists. As the literature indicated, Indigenous peoples struggle while working to preserve their identities, which are defined by their cultures. For this reason, Indigenous peoples set their own work values, which frequently conflict with the work values of non-Indigenous peoples; therefore, Indigenous peoples are seen in some professions more than others. In some professions, cultural differences are less noticeable than in others. More importantly, the work values of Indigenous Australians take into account the Indigenous peoples' ultimate goal of going back to their communities (Rkein and Norris, 2012). Therefore, work values will be determined by a person's consideration of the needs of his or her home community.

Amongst all the countries mentioned here, it has been reported that a lack of information and knowledge about how to access the accounting profession has contributed to under-representation. With the exception of Australia and New Zealand, all the countries have devised strategies to encourage marginalised ethnic groups to join the accounting profession, but there is still a gap between the quality

and quantity of information which a non-Indigenous person and an Indigenous person has access to. Moreover, education levels amongst certain ethnic groups have also contributed to the under-representation in the accounting profession. Regardless of whether low literacy and numeracy levels were a result of cultural issues or poor preparation in primary and secondary schools, they contributed to an increase to under-participation in the accounting profession in all of the countries discussed here.

In brief, although the literature lacks information on Australian Indigenous participation in the accounting profession, insights into some of the problems which lie behind this issue might be taken from existing impediments which were either faced or are still faced by Indigenous and marginalised ethnic groups elsewhere. Although this paper referred to the studies of Lombardi and Clayton (2006) and Rkein and Norris (2012) to indicate some of the impediments which contributed to under-representation in Australia, it should be noted that both studies had a small number of participants. Therefore, it is time now for Australia to follow other mainstream countries and investigate possible impediments. It is hoped that this thesis will stimulate research on the low participation of Aboriginal and Torres Strait Islander peoples in accounting, and contribute to more effective policies in tackling the problem.

3.2.8 Summary

This section has shown that the majority of impediments to entering the accounting profession are common amongst all compared countries. However, Australia and New Zealand are excluded to a certain extent, not because they differ but because no

research has been done to explore the situation. In order for this research to accomplish its objective, the researcher decided to segregate the factors of impediment into themes. The two themes to be used are culture and education. These will be further investigated through analyses of literature relevant to Australian Indigenous peoples and through semi-structured interviews.

In order to investigate whether there are more themes which should be considered apart from culture and education, the researcher intends to review accounting education literature. Such literature is expected to support the need to consider culture and education, and might suggest other themes worth examining.

3.3 Accounting Education

3.3.1 Introduction

In this section of the literature review, the research focused on issues pertaining to accounting education in general. By using the available literature, this section investigates factors which are generally considered by students to either relate to the study of accounting or not. The researcher regards this section as significant because of the lack of information about factors which might influence the choice of Indigenous students about whether they should study accounting and/ or join the accounting profession. By the end of this section, a number of themes will have emerged which require further investigation through analysis of the related literature and through the interviews.

3.3.2 Problems in accounting education

The literature widely admitted that the study of accountancy is declining (Ashworth, 1969; Adams et al., 1994; Karnes et al., 1997; Saemann and Crooker, 1999; Mauldin et al., 2000; Fedoryshyn and Tyson, 2003; Hardin et al., 2000; Sherman and Tymon, 1997; Jackling and Calero, 2006). Therefore, identifying the reasons behind the general decrease in students' decisions to study accounting played an integral role in assisting the researcher in his quest to understand how to attract more Indigenous students into accounting studies.

In their study, Sherman and Tymon (1997), stated that the crisis in the accounting profession is often connected to the liability issues faced by those in the public accounting sector. Jackling and Calero (2006. P. 419) cited Birrell et al. (2005), stating that: 'Evidence from Australia [shows] that the decrease in the number of students enrolling in accounting courses is attributed to a shortage of university-trained professional accountants, [a situation] which in Australia has rivalled the trade skills crisis.' They added that the majority of those people enrolled in accounting are overseas students (Birrell et al., 2005). The same situation exists in the United States and the United Kingdom. Reports in both countries indicated that accounting majors have fallen dramatically, and the numbers studying accounting at university had also fallen (Jackling and Calero, 2006).

These statistics indicated that global accounting education is facing a number of serious problems. These problems, if not seriously addressed and overcome, could lead to the termination of accounting education (Albrecht and Sack, 2000). Albrecht and Sack (2000) formed this opinion after considering the following. Firstly, the

number and quality of students choosing to major in accounting is declining dramatically. It seems that students no longer believe that an accounting degree is as valuable as it used to be or as valuable as other business degrees. Secondly, both practitioner accountants and accounting educators, the majority of whom have accounting degrees, would not major in accounting if pursuing their education over again. Finally, accounting leaders and practitioner accountants believe that accounting education in its present form is old-fashioned and needs to be considerably modified (Albrecht and Sack, 2000).

It is not only researchers who are describing the serious problems in accounting education. The professional accounting bodies are also expressing concern. For instance, the Institute of Management Accountants (IMA) stated that accounting education must be changed in order to satisfy the needs of accountants in industry. Moreover, the American Institute of Certified Public Accountants (AICPA) stated the need for modified accounting education programmes to meet the future needs of CPAs (Albrecht and Sack, 2000). The American Accounting Association's (AAA) Committee on Future Structure, Content and Scope of Accounting Education also called for a different and new role for accounting education than that being taught by most universities today (Albrecht and Sack, 2000). These worries from the top professional accounting bodies and associations of accounting academics such as the AAA indicate the depth of the problem and the need for further research to identify more reasons behind it. Identifying reasons behind the decline in students' decisions to do accounting courses will give an indication of how to solve the problem. Furthermore, many of these reasons will doubtless be relevant to Indigenous students, so that the suggested remedies can be applied in Indigenous communities as well.

3.3.3 Factors affecting students' decisions to study accounting

Prior to listing the factors which are considered by students to affect their decisions about their study choices, it is important to note that many of the country's best and brightest young people are hunting for careers in professions other than accounting. Studies such as Gul et al. (1989), Cohen and Hanno (1993), Allen (2004) and McDowall et al. (2012) have examined factors which have contributed to the decline in the number of students majoring in accounting. Other studies (Paolillo and Estes, 1982; Adams et al., 1994; Auyeung and Sands, 1997; Lowe and Simons, 1997) have found that factors related to the availability of employment and earnings are important in students' choices of majors. Other factors were also found, including perceived job satisfaction, aptitude and interest in subject areas (Paolillo and Estes, 1982; Gul et al., 1989; Auyeung and Sands, 1997). The influence of teachers, friends and families was considered important in some studies but not in others (Paolillo and Estes, 1982; Cangelosi et al., 1985; Gul et al., 1989; Geiger and Ogilby, 2000). An unfavourable perception of the accounting profession in some studies was also recorded (Cohen and Hanno, 1993; Mauldin et al., 2000). Accounting has been perceived as 'too quantitative and boring', and an accountant's work is perceived as excessively time consuming and unpleasant.

Cohen and Hanno (1993) suggested that students who chose not to major in accounting did so because they perceived it to be too number-oriented and boring. In addition, Jackling and Calero (2006) and Parker (2000) pointed out that accountants have typically been referred to as 'number crunchers' given that bookkeeping and auditing work has been associated with an emphasis upon numerical accuracy, routine recording and calculation methods, together with attention to detail.

Determining the motivations behind students' decisions to study accounting is essential in determining the reasons behind decisions not to study accounting. In a study conducted at Lancaster University, the reasons behind a student's choice to study accounting and finance were ranked under four different categories (Lancaster University, 2009). The four categories are as follows.

- **Stimulating:** The world of finance and investment banking attracts many top graduates. Accounting has been placed at the top of the business agenda by financial scandals such as Enron and Global Crossing (Lancaster University, 2009).
- **Rewarding:** Careers in accounting and finance are associated with very high salaries. A recent National Institute study identified accounting as the most well-paid of all degree courses in terms of graduates' lifetime earning capacity (The Times, 28 July 2005).
- **Variety:** International accounting firms offer different kinds of career opportunities to suit all interests including traditional auditing and assurance work, management consulting, corporate finance, IT consulting, tax planning, human resources (HR) and insolvency.
- **Leadership:** Following the acquisition of their professional qualifications, many accountants move into higher management positions in large firms. For example, the Chief Executive Officers (CEOs) in many of the UK's leading companies are qualified accountants.

Therefore, there is a significant need to determine whether those students who study accounting understand the correct perception of accounting. In past research, there have been examples of how students have a mistaken perception of accounting. Inman et al. (1989) suggested that many students believe accounting courses consist of mass production and rote-memorisation. Additionally, Zeff (1989) suggested that students viewed accounting as a rule-based type of educational experience with courses formed of collections of rules to be memorised. Jackling and Calero (2006) also found that more than 50 per cent of first-year students studying a core unit of accounting in Australia had negative perceptions of the accounting profession.

The global negative perception of the accounting profession is one of the main reasons behind the decrease in the number of students graduating and/or enrolling in accounting courses. Tan and Laswad (2006) suggested that negative publicity about the accounting profession resulting from corporate failures in the USA and Australia has had an impact on students' interest in taking up accounting as their major.

Because this study specifically deals with Indigenous students, it will be interesting to discover by means of semi-structured interviews the perception of accountancy amongst these students as a course to study or as a career. The literature certainly lacks information on this particular issue. However, some insights might be gained through an analysis of Indigenous cultures and their impact on students' study choices. Insights into the issue might also be gained through analysis of the Indigenous mathematics literature. In brief, as can be seen there are many variables which could be extracted from the accounting education literature. A mathematics

theme has emerged from this literature, in addition to a cultural theme. Therefore, analysis of the Indigenous mathematics literature will be of significance to this study.

3.4 Summary

Factors which appeared to play a role in impeding students from entering accountancy education and/or the profession were presented in this chapter. They will also be further investigated through the relevant literature in the next two chapters, and through analyses of the data collected from the interview participants. The interview technique to be used with participants will be kept as flexible as possible in the hope that, while listening to the participants' views, other relevant problems and impediments will emerge.

In addition to what may be called supply factors, this research explores demand factors. Supply and demand are two fundamental factors in shaping the character of the marketplace. It is generally accepted that some of the factors which the demand for products and services is predicated on are: customers, the preferences of the target market, consumer income level, the quality of the goods or services being offered, and the availability of competitors' products. The supply of goods and services in the marketplace, however, is predicated on other factors such as production capacity and production cost.

It is also generally accepted that when the demand for a product rises so will the supply, and vice versa. In this thesis, and in order to determine the demand for Indigenous accountants, the researcher investigated Indigenous peoples' participation in the mainstream economy (outcome expectation), and also the conflict between traditional Indigenous accounting values and Western accounting values (outcome

expectation). Based on such analysis, it was clearly seen that a demand for Indigenous accountants is very low. However, although supply is expected to be low as a result of low demand, the supply is in fact low for other reasons as well. Because supply is determined by production capacity and production cost, Indigenous students, as will be seen later in the thesis, have the capacity (self-efficacy) to become accountants; however, the cost which is associated with such a journey into accountancy is high, and is higher compared with other professions.

While it has investigated and analysed available research and/or literature concerning the factors which might impede Indigenous Australians from studying and/or joining the accounting profession, this chapter found evidence that race and colour have proved to be impediments to many people entering the accounting profession (Clayton and Hammond, 2002; Hammond and Streeter, 1994). Although some studies have addressed issues surrounding the impact of culture on students' study choices and on accounting (McGregor, 1997; Ainley and Perry, 1994; Sturman et al., 1992; Meade, 1983; Baydoun and Willett, 1995; Alhashim and Arpan, 1992), others have addressed issues surrounding general education for Indigenous students (Harris, 2000; Hauser et al., 2009; Bartlett, 2007), while many other researchers have suggested that the perception of a relationship between accounting and mathematics might also play a role (Jackling and Calero, 2006; Maldenovic, 2000; Parker, 2001; Wong and Chia, 1996; Hartwell et al., 2005; Mitchell, 1985).

Chapter Four: Context 3 – Indigenous Values and Western Accounting Values

4.1 Introduction:

Given that this study explores possible answers to the research question ‘what are the factors that contribute to the small Indigenous participation rate in the accounting profession’, it is necessary to introduce for later analysis the available evidence of the conflict between Western accounting values and Indigenous values beyond the discussion in chapter three. The premise for introducing this evidence is that it is highly probable that Indigenous students are less likely to participate in an area of study which does not take their cultural backgrounds into consideration. This section of the study examines the gap between Western accounting values and Indigenous values, and raises the importance of the need to consider Indigenous values in the current educational and professional accounting system¹³. Such consideration is seen as vital if there is to be an increase in the representation rate of Indigenous peoples in the accounting profession.

While most of this study concentrates on the Indigenous individual and his or her possible contribution towards a higher participation rate in the accounting profession, this section of the study also raises the question of the contribution of the accounting system, and accounting educators, towards an increase in the participation rate. I raise simple questions such as the following. Why would an Indigenous student study

¹³ Throughout the thesis the term professional accounting system refers to the systems that are used to measure the economic activity of business organisations; systems that use a specific language to transfer data into reports and to communicate economic outcomes to decision makers. A professional accounting system includes the actual steps and rules that are applied in this process, including the accounting standards and principles of the profession. It refers to the capitalistic perspective in looking at the world. On the other hand it is also important to note that when the word accounting is used in this thesis, it does not only represent the theoretical dimension of accountancy, but also the actual practice part of accountancy as interpreted and enacted by accountants.

an area which neglects his/her culture and values? Why does this person always have to sacrifice? Why does the accounting education curriculum and course delivery not change to consider Indigenous values within the broad context of accountancy studies? Why do the Australian professional accounting bodies only make theoretical or rhetorical claims about the need to increase the number of Indigenous accountants, and fail to change any of the normalised accountancy education techniques which have been in place since the colonisation of this country?

I do not presume to speak for Indigenous peoples. Possibly the best way to answer these questions, so as to achieve the best results for all parties, is to seek the opinions of a group of talented Indigenous accountants. From all the publications referred to in chapter three, only one paper, 'Maintaining the Empire: Maori Women's Experience in the Accountancy Profession', written by McNicholas et al., (2004), has dealt with Indigenous peoples and the accounting profession at the cultural level. All thirteen female Maori accountants included in the study in New Zealand stated that it is the role of the Institute of Chartered Accountants of New Zealand (ICANZ) to develop an awareness of Maori culture, work to understand the ethnic make-up of membership, and facilitate Maori networks. Such a statement by professional women places the goal of this PhD research under another challenge. This challenge is represented by the non-existence of an Indigenous professional financial body in Australia, unlike other countries such as Canada, New Zealand, South Africa and the United States.

Accounting, as seen in chapter two and in the following sections of this chapter, not only differs drastically from Indigenous values but is also used as a tool of

dispossession (Buhr, 2011). As a result, it is expected that the outcome expectations of the current educational and professional accounting system are not aligned with the interests of the Indigenous Australians, many of whom may hold different life and work values to non-Indigenous Australians. Research suggested that people from different ethnicities may hold different life values, and they may, as a consequence, prioritise work values differently (Brown, 2002).

No empirical research exists to give an indication of whether Indigenous and non-Indigenous Australians differ in their perceptions of accounting. This chapter therefore provides commentary based on the literature about the possible conflict between Indigenous values and Western accounting values. As a result, it questions the need for Indigenous accountants bearing in mind the possibility of a major conflict between their values and Western accounting values. Since Brown (2002) suggested that individuals may head towards a particular profession if a link between their work values and the perceived outcomes of a job exists, the possibility for Indigenous Australians of choosing a career other than accounting can be raised.

4.1 Technical conflict

A toothbrush and toothpaste are only relevant if a person has teeth; if not, they are redundant. A good example of the principle behind this statement was provided in Gibson's (2000) study. In a hunter-gatherer society, material goods are considered a burden because of the lack of domesticated animals which are available to be used as carriers. For the purpose of our study, what might be seen or deemed as good or profitable accounting practice for westerners might be deemed as a burden for

Indigenous peoples who, according to their traditional cultural value systems, do not accumulate wealth as defined by modern Western societies. While recognising that contemporary Indigenous peoples living across Australia are no longer living as hunter-gatherers, the question becomes to what extent are traditional values associated with the accumulation of material possessions still prevalent and a factor in determining individual as well as community behaviours relevant to financial matters, including financial management? This is a difficult question to answer as a generalisation because Indigenous Australian communities are not homogeneous and now, in the main, live in urban communities. Taking all this into account, this section investigates how Indigenous cultural values, as presented by the literature, differ from Western accounting values; it then raises the issue of what happens as a result of the neglect of these Indigenous cultural values in the accounting system. It is also argued that the demonstrated conflict of values is a significant reason for the inability of Western-defined accounting and financial accountability systems to deliver positive social and economic outcomes to Australian Indigenous peoples.

Buhr (2011) stated that without an understanding of the past it is not possible to deal with negative effects felt in the present. That is why it is advisable to form a general understanding of the differences between Indigenous values and the Western accounting system. Conflict between Indigenous values and the accounting and financial accountability systems has roots dating back 60,000 years. This is the length of time that experts estimate Indigenous cultures have existed in Australia. Cultures which could survive this long will not be easily changed or allowed to be destroyed.

The differences between Indigenous value systems and the Western accounting system are indisputable because Indigenous cultural values, which encompass interdependence, reciprocal relationships, connectedness, cooperation and coexistence, are in contrast to mainstream Western values, which regard the individual as an independent, self-contained autonomous entity (Elkin, 1979; Peterson and Langton, 1983; Bell, H., 1986; Berndt and Berndt, 1988; Cohen and Somerville, 1990; Harris, S., 1990; Harris, P., 1991; Keeffe, 1992; Povinelli, 1993; Markus and Kitayama, 1991). Indigenous value systems are not usually fully recognised although they impact on social, political and economic interaction (Buhr, 2011). Western accounting systems take as a norm the independent, self-contained and supposedly autonomous individual or business. This is the assumed 'given' from which Western accounting techniques are constructed.

When researching the under-representation of Indigenous peoples in the Western Accounting profession, ignorance about the differences between Indigenous value systems and the accounting and financial accountability systems will lead to misleading findings. Many studies have stated that values represented in Australian Indigenous cultures conflict with the values embodied within Western systems of accounting and financial accountability (Cook, 1994; Martin, 1995; Schwab, 1995). Hence, because notions of financial accountability are culturally based (Chew and Greer, 1997), westerners' organisational and financial accountability structures clash with Indigenous Dreaming law (Buhr, 2011), from which the source of Indigenous life comes.

The law of the Dreaming is ‘a cosmology which links the past with the present and future, and integrates all aspects of human activity’ (Nathan and Japanangka, 1983). The law of the Dreaming forms the foundation of all Indigenous values. These values are the exact opposite to the market components of money prices, exchange values, savings and the accumulation of capital (Coombs et al., 1983).

Like Sharia law for Muslims, the Dreaming law is sacred and holistic for Indigenous peoples. An Indigenous Elder explained that: ‘It’s not our idea, it’s a big Law, we have to sit down alongside of that Law like all the dead people who went before us’ (Myers, 1986, p. 47). Not only respecting but also obeying the rules issued by Elders in the family and/or the community is the form of the law that Indigenous peoples are obliged to follow. These Elders, as primary custodians of the law, reinforce familial links, and links to country, through teachings. Maintaining these links forms the basis of the process of cooperative ties and extended associations, which underpin the societal structure originating from the law of the Dreaming (Gibson, 2000). This type of societal structure contrasts with accounting practices which support the competitive nature of economic relationships (Gibson, 2000). Further, accounting plays a significant role in controlling Western society’s artificial markets and organisational structures, which are developed to match social interaction (Chew and Greer, 1997). At a fundamental level, this Western concept or definition of a ‘market’ differs markedly from that of a market based on cultural values of interdependence, reciprocal relationships, connectedness, cooperation and coexistence.

Chew and Greer (1997) stated that Western kinship systems are inclined to trace relations linearly, while anthropologists describe Indigenous kinship systems as classificatory and circular: 'Relationships are grouped as classes and a relationship term is applied to each of these classes, such as father, mother, uncle, aunty, brother and sister' (Elkin, 1979, p. 142). The same relationship terms are returned to after a limited number of generations. Determining these relationships is very significant to Indigenous individuals, because once the type of relationship is ascertained, then and only then can actions and behaviours which the individual will or will not do be known (Chew and Greer, 1997). It is appropriate to note that the kinship system is not narrowed to the extent of linking family groups and communities only; it also extends to the binding of Indigenous peoples with all other elements of the universe.

Cultural identity for Indigenous peoples is closely connected to kin and community (Schwab, 1995). The kinship system shapes and orders behaviour, and classifies a specific relationship between the entire community and each individual member (Crawford, 1989). According to Greer and Patel (2000), kinship rules are viewed as guidance in relation to matters of marriage, food gathering, the sharing of food and other goods, trading amongst communities and educational roles. Kinship rules require all members of the community to 'share', a concept otherwise known as 'gift giving'. 'Individuals were expected to share food in certain ways, show respect to certain people, marry within a section, perform a ritual, avoid speaking to certain people, instruct another person, punish someone or paint particular designs because the pattern laid down in The Dreaming dictated that it should be done' (Chase and Sutton, 1987, p. 75).

While this traditional expression of the Indigenous kinship system has been modified over the two centuries of Australia's colonisation by the British and others, there are still strong expressions of kinship values within extended familial networks amongst Indigenous peoples within Australia.

The kinship system which is very dominant in Indigenous societies differs from the system in non-Indigenous societies. Under the kinship system, the Indigenous individual is bound to other members of his or her society (Blake 1981). Kin relationships come first in Indigenous society and they are above all else. They represent the major difference between the Indigenous and the Western cultural systems. 'In essence the core difference between Aboriginal and White is a contrasting world-view and ontology. The essential element of this is the interactional (kinship, sharing)/transactional dichotomy' (Cook, 1994, p. 101). Due to the domination of the kinship system in most Indigenous communities, the Indigenous values of sharing and relatedness are in conflict with accounting values which are obsessed with calculation and quantification (Chua, 1996).

Amongst Australian Indigenous peoples there are many different tribes with different languages and cultures; however, all Indigenous Australians base their cultures on relatedness and kinship (Bourke, 1998b; Broome, 1994). Division and sharing, when need arises, forms the economic activity; in other words, it is based on the act of giving and receiving (Broome, 1994). Western accounting mainly considers financial transactions; in contrast, Indigenous societies mainly consider social transactions (Berndt and Berndt, 1988). In addition to relatedness and kinship, Indigenous

societies share with each other an interaction with the natural environment, protected by the law of the Dreaming, which was explained earlier (Gibson, 2000).

Greer and Patel (2000) claim that Indigenous values of sharing, relatedness and kinship are incompatible with non-Indigenous values which are imposed by accounting and financial accountability systems such as quantification, objectivity, efficiency, productivity, reason and logic (Greer and Patel, 2000). While Greer and Patel's claim is questionable as to whether it is objective and value-free, it nonetheless prompts the researcher to raise an important point about the objectivity of accounting information. The objectivity of accounting information refers to the idea that managerial accountants communicate openly and clearly with anyone in an organisation without bias. It also refers to accounting information and financial reporting being independent and supported with unbiased evidence, and is based on facts rather than the preparer's opinion.

The requirements which govern accounting measurement intend that information must be free of bias, based on factual and observable data, and exist in the world independent of perception, emotion and desire; that is, the information must be objective. However, in order to ensure this objectivity, all transactions must be 'neutral', as in impartial, disinterested and non-aligned, including transactions inside communities and between family members. But the critical question which arises here is that within Indigenous cultures and under the kinship system and Dreaming law, do these transactions have grounds to be neutral? A question also arises as to whether information provided from a transaction will then be subjective, which is the antithesis of objective. The supply of subjective information contradicts one of the

main requirements which governs accounting measurements. Under accounting principles, only objective information is accepted. Information which is deemed biased and/or subjective is not accepted.

In addition, the Indigenous way of decision-making differs from the Western way. In modern organisations, accounting is used to delegate power for decision-making to lower-level managers; however, in some Indigenous communities, decisions have to be made in the proper lawful way. By way of example, consider the advice provided by Ansara (1989) to Australian governments:

‘No one or two Aboriginal person or persons are allowed or authorised by the Aboriginal Community to make decisions where sacred sites and tribal laws and land are concerned ... Decisions on tribal law and sacred sites are not to be taken as a yes or no by any Government Minister or Department etc., Until

1. Everyone concerned in that community, all the Elders, the families, all sit down together and talk and if necessary men talk and women talk and decide on issues in a meeting together; and

2. All agree and do not make a decision until everybody agrees and keeps meeting together until everybody agrees; and

3. No decisions to be given to the White fella by one or two people unless and until a person is authorised and sent forth by the full body of people’

(Ansara, 1989, pp. 88-89).

This advice illustrates the process which some Indigenous traditional owners of specific land may have to go through prior to making a decision on issues such as selling, leasing and exploration.

This matter of decision-making within Indigenous communities has been explicated more recently in the Social Justice Report 2012 of the Aboriginal and Torres Strait Islander Social Justice Commissioner, Mick Gooda (Gooda, 2012). Here the concept of Indigenous community governance is introduced and explained, along with the potential for tension between this form of governance and corporate or organisational governance.

An example of the incompatibility of Indigenous and mainstream Western conceptions of accounting and financial accountability systems was reported by Young (1987). A government-funded but Aboriginal-managed and -controlled body was established to provide financial support to Aboriginal peoples for land acquisitions, housing development and commercial enterprises. This body is the Aboriginal Development Commission (ADC). In theory, the ADC was supposed to allow for kin relationships and consider other cultural aspects which did not accord well with conventional commercial practices (Greer and Patel, 2000). Instead, Young found that:

‘ . . . The ADC generally prefers to discount such costs and assesses commercial viability in more conventional Eurocentric terms, stressing its dependence on the central bureaucracy. In effect, as a financial

institution, it imposes restrictions and controls which drastically reduce the degree of true self-management in enterprises.’ (Young, 1987, p. 47).

In other words, the ADC considered Indigenous cultural values as immaterial. What mattered to the ADC was compliance with financial reporting requirements and economic indicators of profitability. This example highlights the issue of the role of accountancy as either a positive or negative force in the endeavours of Indigenous enterprises to become self-managing. The question that arises from the ADC example is what would be deemed an appropriate practice of accounting that satisfies both Indigenous cultural values and western accounting values? This question leads to a consideration of Indigenous corporate governance.

The ADC example shows a clear indication of a failure in Indigenous organisational governance. Indigenous organisations, in order to be effective and successful, need to be legitimate within the communities in which they operate, and must act in accordance with the requirements of the broader governance environment (Gooda, 2012). In the previous example, failure has occurred because the Indigenous organisation, the ADC, has worked towards fulfilling the requirements of broader governance legislation and funding, and has disregarded Indigenous cultures, peoples and community governance.

In order to establish effective Indigenous organisational governance, it is important to have legitimate community governance. Such effective community governance must be underpinned by Indigenous ‘cultures, including traditional laws, customs, norms, and values as well as Indigenous contemporary cultural norms and values’

(Gooda, 2012). However, the differences between Indigenous cultures and values, and Westernised organisational governance, make Indigenous governance different, and as a result challenges arise. These challenges occur when it becomes the responsibility of each Indigenous community to determine the best way to establish a link and a match between the types of governing structure and procedure it wants to develop (broader government), and the cultures, values and systems of authority of community members (its people).

Instead of just simply adopting strange and foreign institutions, once Indigenous communities develop their own rules and guidelines their governance will doubtless be strengthened. Gooda (2012) claims that Indigenous peoples will then be able to determine their priorities; define who has the authority and responsibility to achieve these priorities; and involve all community members in developing the processes by which the community's aims and goals can be achieved. In this way, effective organisational governance will ensure that Indigenous organisations achieve community aims and goals.

Dodson and Smith (2003, p. 19) explained how an Indigenous organisation could be successful in merging the requirements of broader government with community governance requirements:

‘Cultural match is not simply a matter of importing romanticised views of traditional Indigenous structures or authority, and expecting them to handle economic development decisions, financial accounts and daily business management. Creating a cultural match is more about

developing strategic and realistic connections between extant cultural values and standards, and those required by the world of business and administration ... Most importantly, while Indigenous governance arrangements need to be informed by local cultural standards if they are to be regarded as legitimate by community members, the governing arrangements also have to work - governing bodies have to be practically capable of responding and taking action in the contemporary environment.’

Such success, while not impossible, comes with difficulties. Creating a link between Indigenous and non-Indigenous models of governance is not easy given the differences between governance cultures. Gooda (2012, p. 92) stated that: ‘Non-Indigenous governance predominantly seeks to manage economic risk. However, this is secondary to Indigenous peoples, who are primarily focused on trying to maintain their cultures and identities at the same time as managing the risk of people dying early as a result of the levels of disadvantage they face.’

To understand such incompatibility further, this research presents two aspects of the conflict: firstly work and employment values, and secondly land values.

What makes the selection of these two conceptions, work/employment and land values, relevant to this study are the following reasons. Firstly, it was suggested in previous studies such as Hofstede (1980), Schwartz (1994) and Smith et al. (1996) that work-related values are significant when differentiating between cultures. Secondly, the Australian Indigenous conception of land was granted a measure of

legal recognition following the introduction of ‘native title’ into property law (Merlan, 1995).

4.2 Work and employment values

The importance of relatedness and sharing is reflected in Indigenous attitudes to work. Indigenous attitudes to work differ from those thought to be typical of non-Indigenous Australians. For instance, it was claimed by Cook (1994) that Indigenous peoples on Bathurst Island make no clear distinction between living and working, and Gibson (1995) stated that there is also no clear distinction between work and play. Instead, work is seen within Indigenous cultural values as attached to participation rather than productivity (Greer and Patel, 2000). Work is regarded as a way of accessing money and cash, and therefore power, but not in the same sense as in Western capitalism (Sansome, 1988). Money again falls under the kinship rules because it is subject to sharing according to kin-related obligations amongst specific members of the community. More importantly it is gained not to increase an individual’s wealth and/or to secure/improve the peoples’ future prospects; instead, it is obtained to accumulate ‘social capital’ by using this money for community services. Sansome (1988) expressed this point as follows.

‘When countrymen enter money into their modality for exchange it is made over into the stuff of help, helping and helping out. To effect the transaction, Aborigines rely on an achievement which the ghost of Talcott Parsons must envy. They assimilate cash to a developed philosophy of social action which has voluntarism at its core, the reconciliation of

human needs for its dynamic and the substantiation of persons as its end.’

(Sansome, 1988, p. 176).

Money in a non-Indigenous context is expressed differently and is obtained for totally different reasons. Within Western accounting values, money is used as a medium of exchange, and as a unit of account. Money is obtained in order to gain ownership of a ‘good’ in the form of goods and services, which are bought with money. When money is borrowed under an Indigenous values regime, the principal only will be returned; no interest is added.

In the kinship system, it is fully accepted that food, hospitality and other services might be demanded from other members of the community (Keen, 1994). Other researchers such as Beckett (1999) and Sansom (1999) found that sharing money is not necessarily supported by community members. Sansom’s (1999, p.165) research referred to a woman who declared that ‘her money was for her children and not available for anyone else to ask for’. Either sharing, or the attempt to avoid sharing money, may result in faster spending of money. The spending of money results in no saving of money. Saving money can be seen in Indigenous contexts as a self-interested act (Demosthenous et al., 2006). These are all examples illustrating the gap between Indigenous values and the Western accounting systems.

In a similar way to money, a number of non-Indigenous researchers claim that attitudes to employment amongst Indigenous peoples also have a different economic imperative to that of non-Indigenous peoples. According to Eades (1988), it is not uncommon for Indigenous individuals to treat continual employment as important.

Work can come to be regarded as an economic necessity, not part of a lifetime plan. As a result, Greer and Patel (2000) concluded that owing to the importance placed on sharing and relatedness in Indigenous enterprises, accounting and financial accountability systems are incompatible with Indigenous cultural values.

4.3 Land values

The conception of land can also be used as another way to illustrate the conflict, and the differences, between Indigenous values and accounting and financial accountability systems. Prior to the British invasion of Australia, there is evidence (Dingle, 1988; Flood, 1995) that Indigenous Australians were well fed because of the importance they placed on cooperation and the sharing of resources (Gibson, 2000). Relatives and friends substituted for competitors; sharing was regarded as essential; and land was seen as a place to provide society's needs.

According to non-Indigenous accounting and financial accountability values, land is viewed as an asset which can be traded for profit, a commodity to be sold and bought, and a means from which to make a living. Indigenous peoples' view of land is profoundly different. Indigenous peoples regard land as their home and their mother; it is steeped in their culture, and is a responsibility given to them to care about it.

Chew and Greer (1997) gave an example of a 'secularisation process' which arose from the imposition of an economics-based accountability model. In their study, Chew and Greer (1997) refer to the experience of the Aboriginal Land Fund

Commission (ALFC). The aim of the ALFC was purchasing land to satisfy Indigenous economic and social needs. The purchasing process was going along the right track until the ALFC had to meet demands from the Treasury. As a Department of Aboriginal Affairs (DAA) officer informed the Commission: ‘This was a problem the Department encountered with the Treasury and it had been forced to recognise the importance of Treasury rationale for accountability and funding purposes. The underlying philosophy could only be considered once Treasury requirements had been satisfied ... [Consequently, the ALFC was being forced to] justify expenditure in Western economic terms (i.e. direct cost benefit) which was irrelevant according to the Commission’s stated philosophy where cost concept was not a material factor determining purchase, but need; and this could not be statistically compared or justified dollar for dollar.’ As one ALFC officer said: ‘I think it was too difficult for the bureaucracy to imagine purchasing land on which to sit down and do nothing’ (Palmer, 1988, pp. 65-66).

Land in Western accounting systems is considered an asset on the balance sheet. According to the Australian Accounting Standards Board (AASB), an asset is a resource controlled (owned) by the entity as a result of past events and from which future economic benefits are expected to flow to the entity, and it must be possible to reliably measure the cost or other value of such benefits.

However, the concept of ‘assets’ is explained in a totally different way in traditional Indigenous societies. To control or to own in Indigenous societies carries an obligation to share (Myers, 1986). Therefore, it can be seen that the Indigenous concept is closer to the current accounting concept of liability rather than assets

(Gibson, 2000) because ownership carries with it the right to be asked, and the request will carry a moral obligation to be granted in Indigenous societies. Gibson (2000) quotes Dingle (1988) as saying: ‘Land was used, cared for and held in trust for future generations. It was also shared with others: to control land is not to enjoy it exclusively but rather to exercise the right, which is at the same time an obligation, to allocate rights in its resource to others’ (Dingle, 1988, p. 10).

This obligation is defined by the boundaries of a clan group’s estate, and by the kinship system within the clan and its related clans within its language nation. This again conflicts with the Western accounting system which looks at land as an asset which is ‘controlled’. To control an asset such as land, according to the Statement of Accounting Concepts (SAC) 4 (1995), is to have the right to exclude others from the benefit arising from it. In the Western accounting system, the asset of land can be sold and/or given away. However, under Indigenous cultural values, land cannot be transferred, sold, taken, lost or abandoned (Greer and Patel, 2000).

In their submissions to the United Nations Working Party Draft Declaration on the Rights of Indigenous peoples, Australian Indigenous populations and participants expressed the conception of land as follows.

‘Indigenous peoples have a unique and spiritual relationship to their land which is very different from the Western European concept of land ownership. Indigenous peoples hold their land collectively, not as individuals, and it is an intimate part of the life, culture, personality,

religion, sovereignty, autonomy and self-determination of Indigenous peoples.’ (UN Doc E/CN 4/Sub 2/1984/20, Annex 111).

Indigenous peoples see themselves as protectors and keepers of the land. Their arguments for land rights and the recognition of their native title are not about property rights (Patel and Greer, 2000). These arguments are, however, ‘actually and symbolically a matter of life and death’ (Ansara, 1989, p. 13). Therefore, in contrast to Western accounting, which only looks into and values the economic side of land, within Indigenous cultures kin relationships and the custodianship of the land take priority.

Although each Indigenous family resides on a specific part of the land, its clan estate, defined physical boundaries amongst the residential areas do not exist.

‘Aboriginal people did not have fences, gates, walls and locks to keep people apart, to define various kinds of living space or to make statements of ownership and trespassing. They did not need physical defences: their boundary indicators were much more subtle. They were aware of their social relationships, and they were especially sensitive about “social space”. At the domestic level, they were able to achieve considerable privacy without constructing physical barriers.’ (Berndt and Berndt, 1985, pp. 24-25).

Therefore, on one side, there are the Indigenous cultures which do not see the relevance of land in terms of asset ownership, and that is why they have subtle if not

overlapping boundaries; while on the other side, there is the Western accounting system which is concerned about the documentation of assets, including land ownership, defined by the strict application of metrics.

4.4 Neglect leads to failure

Consideration of Indigenous culture should be given high priority when adopting an accounting system in Australia, particularly if we are to see an increase in the participation of Indigenous Australians in the accounting profession. If the accounting system is left as it is without such consideration, transferring Western forms of accounting practice to non-Western contexts, such as Indigenous cultural contexts, is a limited exercise (Chew and Greer, 1997, p. 277).

The following is an example of an ineffective attempt to impose a system of financial accountability which was foreign to the Indigenous culture of the community involved. In the Yirra Statement, the Kimberley Land Council pushed to obtain a similar authority to that of the Torres Strait Island Authority because they believed that the Aboriginal and Torres Strait Islander Commission (ATSIC), in its form at that time, was no longer relevant to their needs. Kimberley people in the Yirra¹⁴ Statement announced that:

‘... the community organisations are owned by the communities and are accountable to the authority and power of the Aboriginal Law and culture.

This belongs to our old people ... ATSIC was meant to give power to the

¹⁴ The Yirra Statement to the Hon. Robert Tickner, Minister for Aboriginal and Torres Strait Islander Affairs, MT, Anderson Station, 5 October 1994). It is called the Yirra statement because it was presented at “a major ‘Aboriginal’ Law and Cultural Festival, ‘Yirra 94’, held on the Fitzroy River in Western Australia”.

Regional Councils and through them fund the development of their communities. Instead it penalises initiatives, stops development and cuts across our Aboriginal way of doing things in the name of accountability to a foreign system of government.’ (Kimberley Land Council, 1994),

This statement summarises the disadvantages of not giving consideration to the Indigenous cultural context in the Australian accounting system. Moreover, from the previous example, it can be concluded that the conflict between accounting and Indigenous cultures may be expressed in terms of a conflict between accountability to the principal and the higher principles, of kinship and familial obligations (Chew and Greer, 1997; Laughlin, 1996).

Doubtless, ignorance of Indigenous cultures in the country’s accounting system will lead to an ineffective accounting system in Indigenous societies. Systems of financial accountability should take into account the particular context in which they operate in order to avoid the colonising potential of accounting systems.

‘Accountability is culturally determined. In accounting, we ignore this important principle ... Accountability clearly denies any kind of homogeneous arrangement. Individuals, including professional people who attempt to understand accountability in this way, are committing a kind of ethnocide which assumes all people are the same, or assimilation which encourages some people to behave in unfamiliar ways. [An] Accountability framework [sic] should be negotiated arrangements considering fully the economic and cultural conditions of the parties concerned.’ (Mataira, 1994, p. 13).

Therefore, adopting a European accounting system which does not take into consideration Indigenous cultures will not be effective and may be detrimental. Cultural aspects of Indigenous peoples must be addressed in the implementation of accountancy practices and in accountancy education otherwise Indigenous involvement in tertiary and secondary education accounting classes will remain very limited. If the system does not comply with students' cultures, then the students might either be offended or prefer to not know about the system and let someone else engage with it.

Cultural consideration is an important factor and should be given close attention when adopting and/or teaching a new accounting system. Many issues must be taken into account to avoid ineffectiveness and failure. For example, an individual Indigenous worker is more likely to be loyal to, and to take care of, his or her family members and friends, rather than to a company. In contrast, a non-Indigenous individual is more likely to be loyal to his or her company while balancing nuclear family obligations. Furthermore, giving consideration to the differences in cultures is not only important when adopting a new accounting system or mentioning numbers, it is also important in the schooling system. If fewer Indigenous students attend schools, the possibility that Indigenous students will specialise in any discipline including accounting becomes more remote. Indigenous education and its relationship with the under-representation of Indigenous people in the accounting profession will be explored in a later chapter.

4.5 Summary:

As a result of the direct conflict between strong Indigenous cultural values, and accounting and financial accountability values, Indigenous Australians are less likely to engage in the accounting profession. However, this conflict only acts as an impediment for Indigenous peoples who are aware of the problem.

Because accounting is socially constructed, the current Western accounting system has no or limited grounds for engagement amongst Indigenous societies. Recent calls by Australian professional accounting bodies to increase Indigenous participation in the accounting profession are based on an argument which says accounting is socially constructing, and encourages assimilation into mainstream Western culture and society. These professional bodies might be anticipating that increasing the number of Indigenous accountants will assist in reconstructing Indigenous societies to more Westernised ways. By adopting this view of accountancy as a device for cultural reconstruction, accountants may be inadvertently contributing to the ongoing assimilation of Indigenous peoples.

Chapter Five: Accountancy and Participation in the Economy

5.1 Introduction

Because accounting has emerged from society, and is socially constructing and socially constructed (Hines, 1988), it impacts on society, and is impacted on by society. Some might argue that accounting developed purely in response to changes in the environment and societal demands (Alexander, 2002). As a result, accountants play a significant role in the development of economic prosperity; and the accounting profession and systems have been developing to respond to changes in economic conditions.

Since accounting develops as a result of economic needs, and while examining what impedes Indigenous Australians from engaging in accounting, it seems necessary to explore the extent to which Indigenous peoples participate in the economy and the sectors they participate in, in order to determine the economy's impact on the need for accountants. This section therefore discusses the impact of the development of economics on the development of accounting, and then explores the demand for accountants as an outcome of Indigenous participation in the economy. In order to determine the extent to which Indigenous Australians participate in the economy, I will be using the Overcoming Indigenous Disadvantages Report measures (SCRGSP, 2011).

5.2 What is accounting?

At different levels, human beings need information to assist in making decisions. Regardless of the type of information needed, this information is always needed to

help understand the world. Equally important to accessing this information is the ability to interpret it and understand its limitations (Juchua et al., 2009). Lack of information and/or misinterpreting information will most likely lead to poor decisions. Accounting provides information to help in making decisions about economic activities. Accounting can help with these decisions by providing information about the results which owners of economic assets, and other decision makers, expect to see (Juchua et al., 2009). Such information is provided particularly for managers, owners, members and other stakeholders who make decisions about organisations and businesses. In other words, this information is acquired by people who make economic decisions; people who do not make economic decisions will not find such information of any benefit.

On the other hand, accounting is not just about making economic decisions and directed specifically to those who require such information, but is also important more broadly in contributing to social and environmental decision-making. Accounting information plays a major role in facilitating the communication between the different arenas of a society, for instance, communication between political, economic, social and institutional arenas.

Accounting information can also be used in the decisions in relation to effective allocation of scarce resources, which again affects everybody in a society. In addition the argument that was raised earlier in Chapter four, that accounting is both socially constructed and socially constructing shows the importance of accountancy in relation to society more broadly. The modifications to the Australian Accounting Standards due to the carbon tax is an example that accounting is not purely about

economic decisions but is also useful to make decisions about social and environmental activities. However, for the purpose of this Chapter concentration will only be applied to the economic side of accounting.

To simplify what accounting is, it is possible, for instance, to say that at an individual level everyone plans how much money should be spent this week or today, and how much should be saved. At the business level, it is essential for a company to have information about the inflow and outflow of its economic resources. This information is collated by accountants and interpreted by them. Accounting is also known as the language of business (Ahmed, 2008), and as a result, accounting forms the essential help an organisation needs to determine where it stands financially. Accounting is an essential tool for planning and budgeting because it deals with the measurement of economic activities.

According to the American Accounting Association, accounting has been defined as ‘The process of identifying, measuring, and communicating information to permit judgments and decisions by the users of the information.’ A definition from the American Institute of Certified Public Accountants (AICPA) says that ‘Accounting is the art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are, in part at least, of financial character and interpreting the results thereof.’

5.3 Participation in the economy

Participation in the economy is measured based on people’s involvement in economic activities. Economic activities are human activities which are performed in

exchange for money. Non-economic activities, on the other hand, are those activities which are not performed in exchange for money. As reviewed in the previous section, accounting develops in response to an increase in economic activities, resulting in an increase in the number of accountants.

The extent of people's involvement in economic activities can be measured through employment, income, land, home, business control and ownership. Through employment, people participate in the economy by providing services for which they receive payments. Through business control and ownership, people participate in the economy by providing and distributing goods and services in order to make profits. Businesses also provide a potential source of employment and income for individuals and communities. Through land control and ownership, people participate in the economy by generating cash flow as a result of usage, and investment in land. Land control and ownership can also deliver commercial benefits such as increased income, employment and profit.

5.4 Indigenous participation in the mainstream economy

Although it is now time for Indigenous Australians to have the same types of opportunity as other Australians, Indigenous Australians still lack opportunities 'to get education, find a job or start their own business, own their own home and provide for their families' (Australian Government, 2011, p.2). The 2011-2018 Indigenous Economic Development strategy states that its aim is to increase Indigenous Australians' participation in the economy. It is anticipated that effective participation in the economy will form the necessary foundations for good health, functional families and successful communities.

Accordingly, it must be ensured that Indigenous Australians are contributing to, or at least have the opportunity to contribute to, a prosperous economy in order to achieve greater economic independence and security for themselves, their families and their communities (Australian Government, 2011). The following table depicts the differences in economic indicators between Indigenous and non-Indigenous Australians.

	Indigenous Outcomes	Non-Indigenous Outcomes	Percentage Differences
Education Source ABS 2006	Year 12 attainment= 47.4% (among the 20-24 year old population)	Year 12 attainment= 83.8% (among the 20-24 year old population)	Year 12 attainment= 36.4% (among the 20-24 year old population)
Training and Employment Source NATSIS 2008	Persons 15 and over Employed= 58.8% Unemployed= 16.6% Not in the labour force= 35.5%	Persons 15 and over Employed= 75.0% Unemployed= 4.2% Not in the labour force= 21.7%	Persons 15 and over Employed= 16.2% Unemployed= 12.4% Not in the labour force= 13.8%
Business and Entrepreneurship Source ABS 2006	Self-Employed=5.56 % Self-employed. No staff= 26%	Self-Employed=16.3 % Self-employed. No staff= 6.7%	Self-Employed= 10.74% Self-employed. No staff= 19.3%
Financial Security and Independence Source ABS 2006	Median Weekly Income= \$278 Home Ownership= 36%	Median Weekly Income= \$473 Home Ownership= 71%	Median Weekly Income= \$195 Home Ownership= 35%

Figure 5.1: Snapshot of Indigenous and non-Indigenous economic indicators (Australian Government, 2010).

From the above figure, it can be seen that Indigenous Australians' participation in the economy is lower than that of non-Indigenous people. Employment outcomes can directly impact people's living standards and many aspects of their well-being. Employment for all people, and not only for Indigenous Australians, improves income for families and communities. However, it is more likely that Indigenous

Australians will be unemployed and remain unemployed for longer than non-Indigenous Australians. Part-time employment also accounts for a greater share of total employment amongst Indigenous Australians (37 per cent) compared to non-Indigenous Australians (29 per cent) (Australian Government, 2010).

Non-Indigenous Australians earn approximately double what Indigenous Australians earn (\$473 per week compared to \$278 per week) (Australian Bureau of Statistics, 2006), and while around 40 per cent of Indigenous Australians (amongst the 18-64 age group) rely primarily on income support, only 14 per cent of non-Indigenous Australians in the same age bracket rely primarily on income support. Indigenous Australians are three times less likely to be self-employed than non-Indigenous Australians (Australian Bureau of Statistics, 2006). While only 36 per cent of Indigenous Australians own their own home, 71 per cent of non-Indigenous Australians own their homes (Australian Bureau of Statistics, 2006). Furthermore, 39.5 per cent of the Indigenous population lives in state or community housing, compared to 3.2 per cent of non-Indigenous Australians.

Prior to colonisation, a non-cash economy existed in Australia. Indigenous Australians were involved in trading with other countries; however it was more similar to bartering. On the other hand Indigenous peoples have been participating in the mainstream economy since the 1800s and/or since the white settlement in Australia (Abbott, 1969; Jebb, 2002); however, their participation has always been controlled and managed by Westerners. A large portion of Indigenous Australians who worked between 1897 to the late 1970s have had their wages administered for them by the Australian government or police authorities, and many of them have had

their wages stolen. For instance, the Western Australian government had full control of Indigenous wages until 1968. Since then, it is claimed that the Australian government has given Indigenous Australians full rights to manage their money. However, this is not the case because the Australian government still exerts control and makes decisions on behalf of Indigenous peoples. Indigenous peoples after 1968 could manage their money on their own; however, this situation did not last long because after the introduction of the BasicsCard¹⁵, Indigenous Australians' monies were again subject to control by the Australian government but in a different form. Again, and as explained in chapter two, lack of accounting knowledge allows accounting to be used as a tool of dispossession and control. In addition, in her article titled 'In the interests of the children: accounting in the control of Aboriginal family endowment payments', Greer (2009) addressed the role of accounting in enabling the Protection Board of Aborigines to deny Indigenous women access to cash payments in 1928. Cash was however substituted in the form of goods.

5.4.1 Employment

¹⁵ Robson (2010) wrote that: 'Tomarchio was a gold prospector who became an unregistered moneylender based in the remote Western Australian mining town of Laverton until 2008. He charged around 30% interest and, to secure repayments, took the bank cards and PIN numbers from his hundreds of Aboriginal clients.' Tomarchio lent his clients more than \$5,000 per day. Due to the lack of financial literacy, borrowers made no complaints about being overcharged. However, as the situation expanded, voices started to be heard. Because the borrowed money was not used to add value but rather was used wastefully (most of it was spent on alcohol), it has compounded disadvantage and poverty for children and families in the community. Such a story has led to the introduction of 'Welfare Quarantining' which converts 50% of welfare payments into a BasicsCard that can only be spent on food, clothing and medical supplies, and only at certain stores. The official Australian Centrelink Website defines BasicsCard thus: 'If you are on Income Management, you are eligible for a BasicsCard. The BasicsCard is a reusable, PIN-protected card that allows you to spend your income-managed money at approved stores and businesses through the EFTPOS system.' The majority of BasicsCard users are Indigenous, 40.4% of Indigenous peoples rely primarily on income support (or are on income management) in comparison to only 13.8% non-Indigenous. Although widely condemned as a racist, and a controlling measure, this policy was introduced to protect people from moneylenders like Tomarchio.

Employment outcomes are of great significance to people’s living standards and many aspects of their well-being. Since employment leads to better income for families and communities, it can have a positive influence on people’s health and education. Because employment also enhances self-esteem, increases opportunities for self-development, influences interaction at family and community levels, and reduces social alienation, it is the aim of the Council of Australian Governments (COAG) to ‘halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade’ (COAG, 2009a).

The following figure 5.2 shows the differences in employment rates between Indigenous and non-Indigenous Australians.

Figure 4.6.1 Proportion of population aged 15–64 years old employed, 2004–05 and 2008

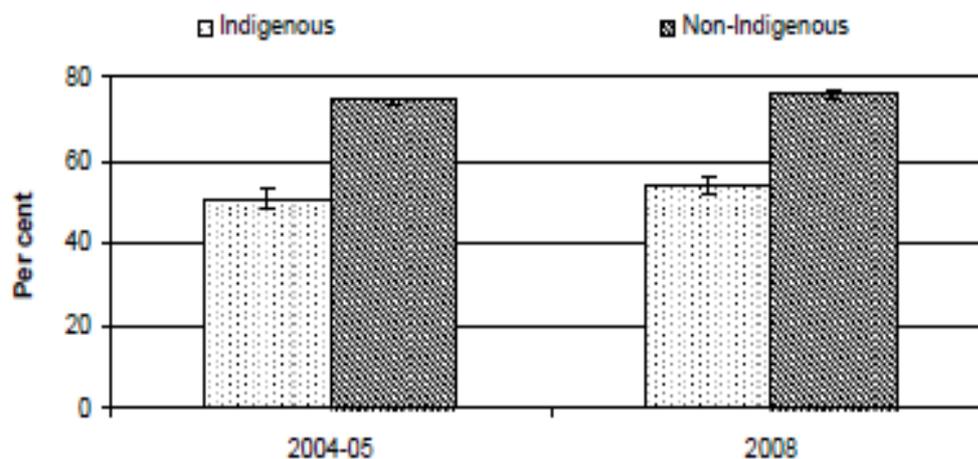


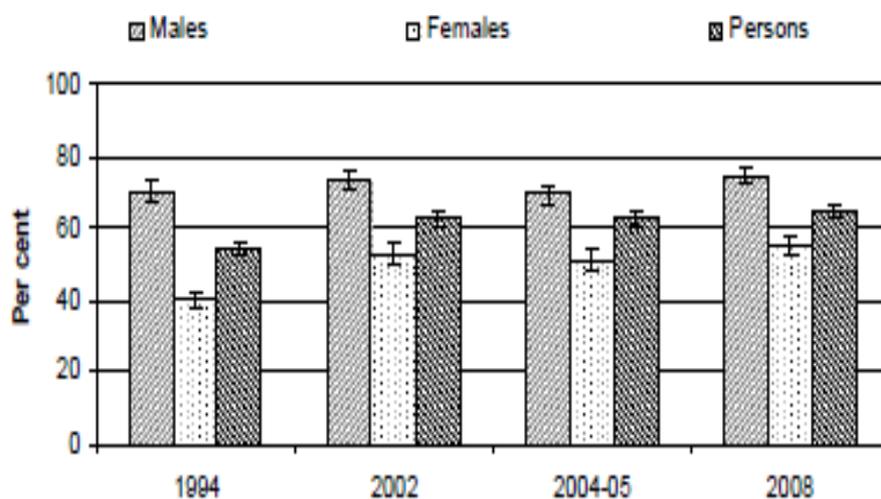
Figure 5.2: Proportion of population aged 15-64 years old employed, 2004-05 and 2008. (Steering Committee for the Review of Government Service Provision (SCRGSP, 2011, p. 4.63). Source: ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 4A.6.1.

There was no significant change in the gap between Indigenous and non-Indigenous employed people over the period between 2004–05 and 2008 for those aged 15–64. The increase in the employment to population ratio for Indigenous peoples (from 50.7 to 53.8 per cent) is not statistically significant, especially because the rate for non-Indigenous peoples also increased by a similar amount (from 74.2 to 76 per cent).

The following figure, 5.3, shows a significant increase in the labour force participation rate from 54.5 to 64.5 per cent between 1994 and 2008. However, labour force is defined by the ABS as ‘[The] Labour force comprises two mutually exclusive groups within the population: 1 - The employed (people who have worked for at least one hour in the reference week, including those who have received wages for participating in the Community development Employment Project CDEP¹⁶). 2 - The unemployed (people who are without work, but are actively looking for work and available to start work within four weeks)’ (SCRGSP, 2011, p. 4.60).

¹⁶ The Community Development Employment Projects (CDEP) scheme was established in 1977 primarily as an income support and community development program for remote Aboriginal communities. Since the launch of the Aboriginal Employment Development Policy (AEDP) in 1987, it has expanded its objectives and is now also regarded as an employment program. Under the scheme, members of participating communities forego individual access to social security entitlements. Amounts broadly equivalent to these entitlements are paid as block grants to communities which are then utilised as a wages pool to provide part-time employment. (Altman, J. C. and Daly A. E. 1992. P. 1)

Figure 4.6.5 Indigenous labour force participation, people aged 15–64 years, 1994 to 2008^{a, b}



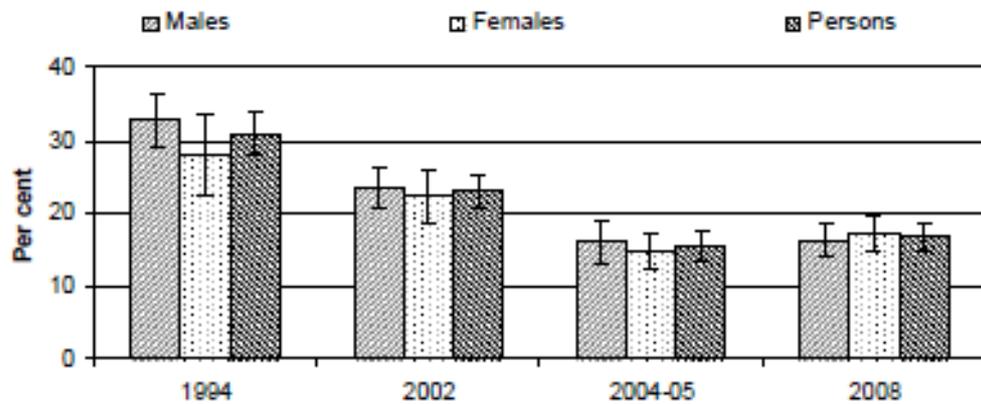
^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Labour force participation is the number of employed plus those who were unemployed and available for work expressed as a percentage of people aged 15–64 years.

Figure 5.3: Indigenous labour force participation, people aged 15-64 years, 1994 to 2008a, b (SCRGSP, 2011, p. 4.67). Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS NATSISS 2008; ABS NHS 2007-08; table 4A.6.6.

In addition, the following figure, 5.4, shows a significant decrease in the unemployment rate¹⁷ from 31 to 16.6 per cent.

¹⁷ The unemployment rate is the number of unemployed people expressed as a percentage of the labour force (employed plus unemployed people), and is a widely used measure of potentially underutilised labour resources in the economy.

Figure 4.6.6 Indigenous unemployment, by gender, people aged 15–64 years, 1994 to 2008, Australia^a



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Figure 5.4: Indigenous unemployment, by gender, people aged 15-64 years, 1994 to 2008, Australia (a). (SCRGSP, 2011, p. 4.69). Source: ABS NATSIS 1994; ABS NATSISS 2002; ABS NATSISS 2008; table 4A.6.6.

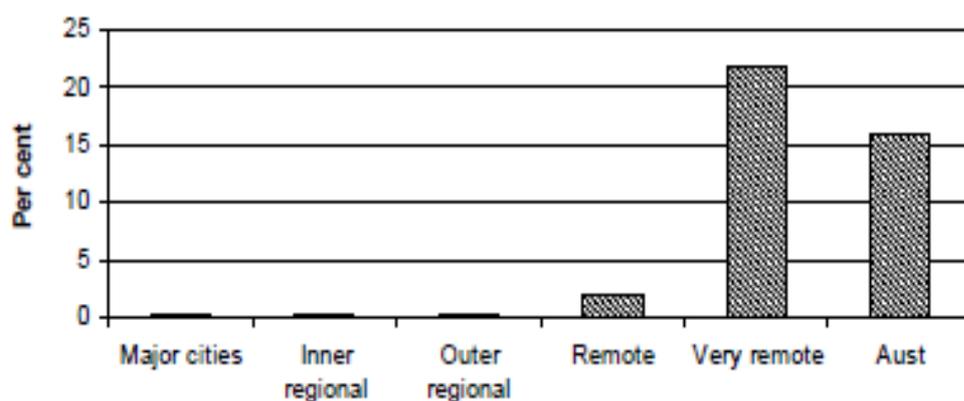
Although the changes which have taken place in regards to Indigenous employment are not enough to close the gap, these changes have always been an increase in the participation of Indigenous people in the mainstream economy. Indigenous peoples were more likely than non-Indigenous peoples to be employed in the public sector (25.8 per cent compared to 14.7 per cent in 2006). The data also showed that Indigenous peoples were more likely than non-Indigenous peoples to be employed as labourers, and less likely to be employed as managers, administrators and professionals.

5.4.2 Land and business control and ownership

The social and cultural importance of land to Indigenous peoples has been discussed in detail in the previous section of this chapter. Therefore the focus of this section is on Indigenous-owned or controlled land and businesses as measures of economic

participation. Although of great cultural significance, the majority of Indigenous-owned land in Australia is of low commercial value (SCRGSP, 2011). From an economic perspective, land alone is an imperfect indicator of the benefits Indigenous peoples derive from owning land. The literature lacks data on the extent to which Indigenous peoples use their land for economic purposes. The following figure, 5.5, shows the regional areas of Indigenous-owned and controlled land.

Figure 8.2.1 Indigenous owned or controlled land as a proportion of all land by remoteness, September 2010^a



^a The ILC makes no warranties as to the currency or accuracy of this information. Non-ILC land information included in totals is from 2000.

Figure 5.5: Indigenous owned or controlled land as a proportion of all land by remoteness, September 2010 (a) (SCRGSP, 2011, p. 8.11). Source: ILC (unpublished); table 8A.2.2.

Figure 5.5 shows that Indigenous peoples owned or controlled 16.1 per cent of land in Australia. However, since we are only concerned in this section about the economic benefits which these lands might provide, it is important to note that most of this land (98.1 per cent) is located in very remote areas of the continent with consequent economic concerns.

Although individual Indigenous people may buy land, or otherwise gain freehold title to land, this form of land ownership by Indigenous status is not identifiable (SCRGSP, 2011). Local Aboriginal Land Councils in NSW are the only land councils in Australia which are independent statutory bodies. These councils are constituted under the NSW Aboriginal Land Rights Act 1983, and hold their land under freehold title (SCRGSP, 2011). In other states, it is the Indigenous Land Corporation (ILC) which purchases land that cannot be acquired by other means on behalf of Indigenous peoples. For instance, the ILC can purchase land that is held under freehold title which is not available for claim under native title.

The National Native Title Tribunal (NNTT) (2009, p. 1) provides a plain language description of native title.

‘Native title is the recognition in Australian law that some Indigenous people continue to hold rights to their land and waters, which come from their traditional laws and customs. Native title has its source in the body of law and custom acknowledged and observed by the claimant’s ancestors when Australia was colonised by Europeans. Those laws and customs must have been acknowledged and observed in a substantially uninterrupted way from the time of settlement until now.’

Australian common law recognised native title in 1992 following the decision made by the high court of Australia in the Mabo case. This in turn led to the Commonwealth Native Title Act 1993, which set up the process for native title claims to be determined through the court system.

Native title provides Indigenous peoples with communal rights and interests, and with varying levels of control and management of lands (SCRGSP, 2011). However, according to the NNTT (2009, p. 1), the following conditions must be met: '1 - The rights and interests are possessed under the traditional laws currently acknowledged and the traditional customs currently observed by the relevant Indigenous people. 2 - Those Indigenous people have a 'connection' with the area in question by those traditional laws and customs. 3 - The rights and interests are recognised by the common law of Australia.' The majority of native title applications are yet to be finalised by the Federal Court of Australia. The SCRGSP (2011) maintained that only 132 native title determinations have been made since 1994, while, as at 30 June 2010, 456 active applications were in the system. Of the 132 claims, only 95 found that native title existed and 37 found that native title did not exist.

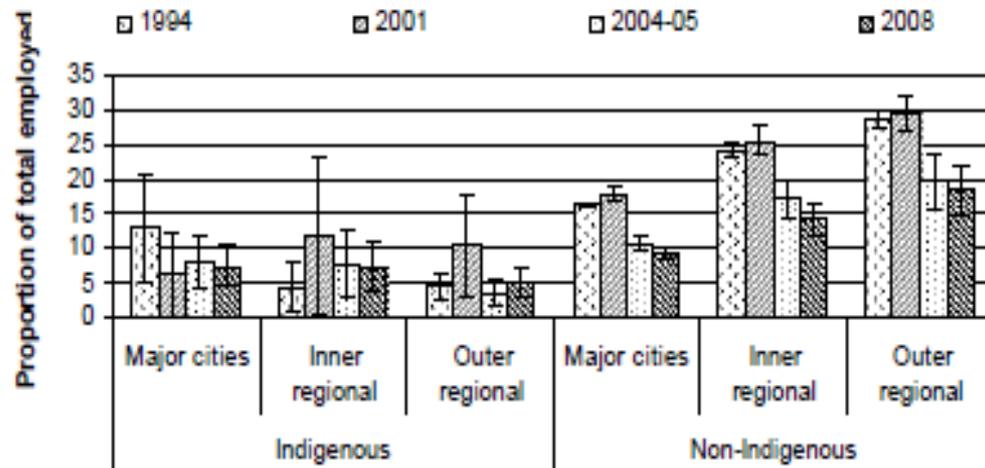
An alternative mechanism was created for resolving native title issues. This mechanism is called Indigenous Land Use Agreements (ILUAs), which are agreements made between one or more native title groups and other parties about the use and management of land and waters. (SCRGSP, 2011). Under ILUAs, Indigenous peoples may negotiate agreements which lead to economic benefits, such as employment and compensation. Although it is doubtful that these agreements are working in the Indigenous peoples' best interest, a judgment cannot be made. This is because there is no information available about the value and benefits of ILUAs to Indigenous peoples because ILUAs are confidential, with the benefits known only to the parties to the agreement. Some of the benefits have now become known to the

public, such as those that come in the form of monetary payments (royalties); support for community services, facilities and infrastructure; employment and training programmes; and protection for cultural sites (SCRGSP, 2011).

5.4.3 Self-employment

Although self-employment and participation in the ownership of enterprises can allow people to reduce their reliance on government welfare and improve self-sufficiency, self-employment and ownership of business rates amongst Australian Indigenous peoples are low compared to non-Indigenous peoples or the Maori peoples of New Zealand. Between 1994 and 2008, self-employment rates did not change greatly amongst Indigenous peoples, with rates remaining at 7 to 8 per cent of those employed. However, amongst non-Indigenous peoples, rates were around 20 per cent in 1994 and 2001, but decreased significantly to around 11 to 12 per cent in 2004-05 and 2008. Figure 5.6 illustrates these differences.

Figure 8.2.5 Self employment as a proportion of total employed, people aged 18 to 64 years, non-remote areas, 1994, 2001, 2004-05 and 2008^{a, b, c, d}



^a People who are self employed include employers and own account workers. ^b Non-remote includes major cities and inner and outer regional areas. See glossary for definitions of remoteness areas. ^c Proportions of self employment amongst Indigenous people in 1994 for major cities and inner regional areas; in 2001 for inner regional and outer regional areas; and in 2004-05 for inner regional areas have RSEs between 25 per cent to 50 per cent and should be interpreted with caution. The proportion of self employed Indigenous people in major cities in 2001 has an RSE greater than 50 per cent and is considered too unreliable for general use. ^d Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Figure 5.6: Self employment as a proportion of total employed, people aged 18 to 64 years, non-remote areas, 1994, 2001, 2004-05 and 2008 (a, b, c, d) (SCRGSP, 2011, p. 8.25). Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NHS 1995; ABS (unpublished) NHS 2001, including the Indigenous supplement (NHS (I)); ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008 and ABS (unpublished) NHS 2007-08; table 8A.2.13.

The Indigenous Australians' self-employment rate is low even when compared to Indigenous peoples from other countries. For example, New Zealand's Maori peoples score higher than Australia's Indigenous peoples in terms of self-employment. In 2006, while only 5.4 per cent of employed Indigenous Australians were self-employed, 9.8 per cent of employed New Zealand Maori peoples were self-employed (SCRGSP, 2011).

5.4.4 Home ownership

14.9 per cent of Australia is land covered by registered ILUAs. As a result, Indigenous Australians are now left with 1.2¹⁸ per cent of the total area of Australia under their control. Some of the Indigenous land which is left is communally owned, and cannot be sold or mortgaged. Although this ensures ongoing Indigenous ownership, it prevents individuals using land for economic benefits such as housing or business. Any developments on the land, including home ownership and private sector financing, must be pursued through sub-leasing arrangements. Unlike the United States and Canada, where similar situations arise on Indigenous communally owned land, Australia's legislative provisions allow for sub-leasing and private sector financing, and are different in every state and territory (SCRGSP, 2011).

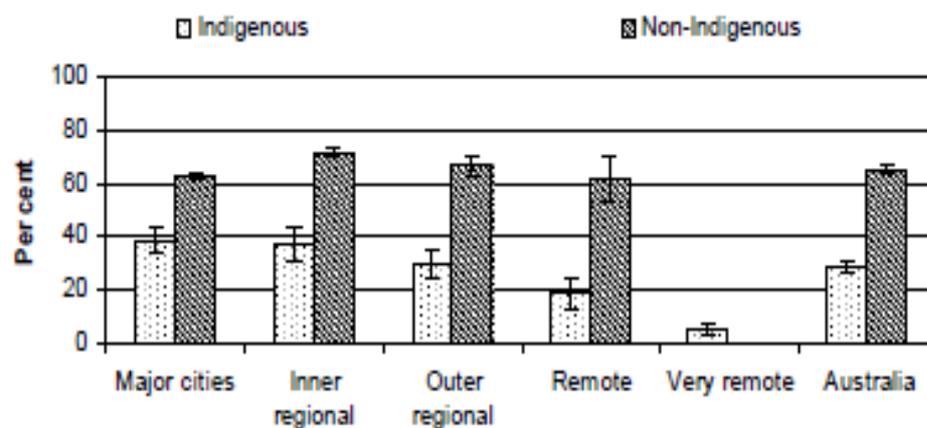
Private housing can provide economic benefits from living, renting, selling, or borrowing against the property (SCRGSP, 2011). Other benefits also emerge from the ownership of a house. For example, a home can be passed on as an inheritance, or households can modify a dwelling to suit their particular needs. While research has suggested that Indigenous peoples aspire to home ownership, as do non-Indigenous peoples, Indigenous peoples are more likely to face greater barriers reaching this goal (Memmott et al., 2009; Szava and Moran, 2008).

Szava and Moran (2008) found that 55 per cent of respondents in a survey said that the most positive aspects of home ownership were independence and control. 40 per cent regarded ownership as making financial sense, and 35 per cent said that positive aspects included pride and a sense of ownership. The most commonly mentioned

¹⁸ 1.2 = 16.1 (which they initially controlled) minus 14.9 (which was leased out).

negative aspects of home ownership were maintenance and repairs (33 per cent), and paying rates and utilities (22 per cent).

Figure 8.3.1 Proportion of people aged 18 years and over living in home owner/purchaser households, by remoteness, 2008^{a, b, c}



^a Non-Indigenous data for very remote areas of Australia are not available from the 2007-08 National Health Survey. ^b Comprises participants in rent/buy schemes and those living in a household in which payments were being made on mortgages or secured loans towards the purchase of the dwelling. ^c Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

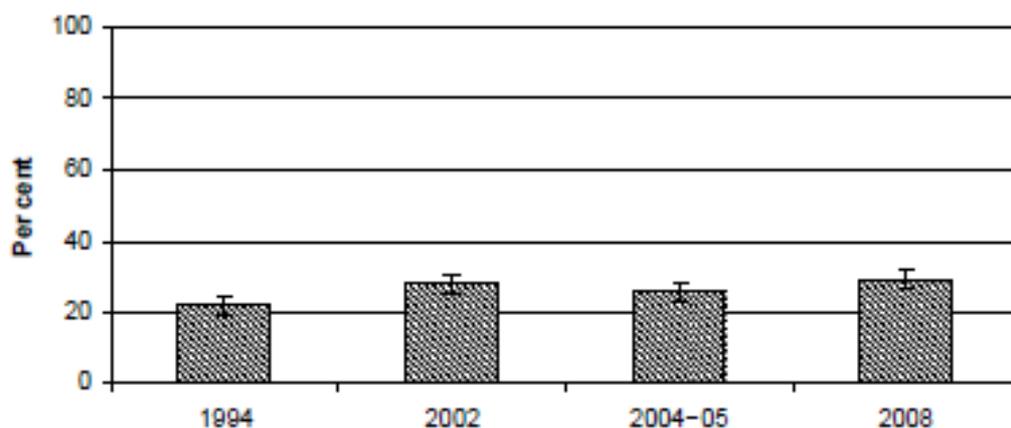
Figure 5.7: Proportion of people aged 18 years and over living in home owner/purchaser households, by remoteness, 2008 (a, b, c). (SCRGSP, 2011, p. 8.32). Source: ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007–08; tables 8A.3.1 and 8A.3.2.

The proportion of Indigenous Australians living in a home owned, with or without a mortgage, by a member of their household is significantly lower (29 per cent) than for non-Indigenous peoples (65.2 per cent) as per figure, 5.7. The Australian National Audit Office (ANAO) (2010) attributed the lower rate of Indigenous home ownership to the following reasons: higher unemployment rates; intergenerational welfare dependency; lower incomes and likely lack of savings; limited access to loans; and lack of information about financial planning. These factors were

particularly prevalent amongst those living in remote and very remote areas (ANAO, 2010).

Figure 5.8 details the progress of home ownership and control within Indigenous peoples since 1994.

Figure 8.3.2 Proportion of Indigenous people aged 18 years and over living in home owner/purchaser households, 1994, 2002, 2004-05 and 2008^{a, b}



^a Error bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information). ^b Difference between 2002 and 2004-05 data is not statistically significant.

Figure 5.8: Proportion of Indigenous people aged 18 years and over living in home owner/purchaser households, 1994, 2002, 2004-05 and 2008 (a, b) (SCRGSP, 2011, p. 8.33). Source: ABS (unpublished) NATSIS 1994; ABS (unpublished) NATSISS 2002; ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NATSISS 2008; table 8A.3.3.

There was an increase from 10.6 to 20.3 per cent between 1994 and 2008 in the proportion of Indigenous adults living in a home owned by a member of their household with a mortgage, whereas there was no significant change in the proportion of Indigenous peoples living in a home owned by a member of their household without a mortgage (SCRGSP, 2011). The increase in respect of

mortgaged homes can possibly be attributed to government programmes to increase Indigenous homeownership. Examples of government programmes successfully encouraging Indigenous home ownership are given in the following (SCRGSP, 2011, p. 8.31).

‘The home ownership programme now marketed as IBA Homes was established in 1975 under the Aboriginal Loans Commission, and was transferred to Indigenous Business Australia (IBA) in 2005. IBA offers a concessional lending product and tailored after-care support targeting those in most need. Since its inception, the programme has helped more than 14,100 individuals and families. In 2009-10, IBA approved 363 new loans, valued at \$82.2 million, assisting 1,217 Indigenous people.

‘Loans are generally for the purchase or construction of a home. Loans may also be provided for purchasing land, essential home improvements or home maintenance and repairs. IBA’s typical borrower is a first homebuyer, purchasing a modest home valued at less than \$300,000. Loan repayments are based on a concessional commencing interest rate, currently set at 4.5 per cent. The concessional rate increases gradually until it reaches the IBA Home Loan Rate. IBA adjusts its Home Loan Rate to be 1 per cent below the RBA cash and Commonwealth Bank’s standard variable rate.’

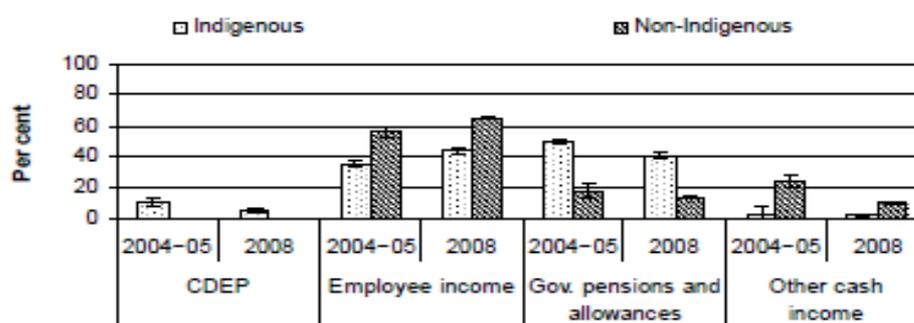
5.4.5 Income support

Income support is seen as a major key indicator of social and economic welfare.

Indigenous peoples have been over-represented in the Australian income support system (SCRGSP, 2011). Poor standards of health, high levels of unemployment and low levels of educational attainment are all conditions which have contributed to the high dependence on income support (DEEWR, 2009). All eligible Australians are allowed income support to ensure they have adequate levels of income to support themselves and their dependents. Centrelink is the body which distributes income support payments to eligible residents such as the aged, people with a disability, carers, youths and students, families with children, the unemployed and widows (Centrelink, 2010).

In 2008, as per figure 5.9, 40.4 per cent of the Indigenous population reported government cash pensions and allowances as their main source of personal income, compared to 13.8 per cent of non-Indigenous peoples.

Figure 8.4.1 Main source of personal cash income, people aged 18–64 years, 2004–05 and 2008^{a, b, c, d}



^aFor the Indigenous population, includes unincorporated business, property, other pension, and other regular sources. ^bFor the non-Indigenous population, includes profit or loss from own unincorporated business, profit or loss from rental property, dividends or interest, child support or maintenance, superannuation or annuity, worker's compensation and other regular source. ^cIncludes persons whose main source of cash income was not stated or not known, and those who had no source of income. ^dError bars represent 95 per cent confidence intervals around each estimate (see chapter 3 for more information).

Figure 5.9: Main source of personal cash income, people aged 18-64 years, 2004-05 and 2008 (a, b, c, d) (SCRGSP, 2011, p. 8.38). Source: ABS (unpublished) NATSIHS 2004-05; ABS (unpublished) NHS 2004-05; ABS (unpublished) NATSISS 2008; ABS (unpublished) NHS 2007-08; table 8A.4.2.

In 2008, 44 per cent of Indigenous peoples and 65 per cent of non-Indigenous peoples had their main source of personal income listed as employee income. However, a much higher proportion of Indigenous peoples (40.4 per cent) compared to non-Indigenous peoples (13.8 per cent) received government pensions and allowances as their main source of personal income. Although 40.4 per cent is high, this represents a decrease of 9.3 per cent since 2004. The proportion of Indigenous peoples receiving employee income as their main source of income increased from 35.3 per cent to 44.0 per cent during the same period.

5.5 Summary

Statistics about Indigenous Australians' participation in the mainstream economy have revealed low participation rates. Furthermore, their participation in the mainstream economy is mainly in the form of government employment and at the lower income levels. While these statistics in themselves should be further investigated to know why they are so, they are relevant to this research. Since accounting has developed as a result of developments in the economy, and the number of accountants increases in line with increases in economic activities, Indigenous Australians are likely to have low representation in the accounting profession because their participation in the economy is low.

The social cognitive career theory (SCCT)¹⁹ model suggests that people are more likely to choose a particular career if they anticipate a perceived outcome from it. Low rates of Indigenous employment, business ownership and land ownership, and

¹⁹ SCCT was outlined in the introductory chapter, and is further explained in the chapter seven.

significant reliance on income support are elements which will most likely lead to lower participation by Indigenous individuals in the accounting profession. Through business and land ownership, for instance, people are more likely to see the relevance of accounting and thereby appreciate the perceived outcome from pursuing an accountancy career.

The assumption being developed throughout this section is that, as a consequence of low levels of participation in the mainstream economy of Australia as defined by employment, business ownership, land/home ownership and income support, Indigenous Australians, in general, are less likely to perceive a positive outcome from an accountancy career compared to non-Indigenous Australians. This may be a significant background factor influencing the number of Indigenous higher education students pursuing accountancy studies.

Chapter Six: Context 5 – Numeracy and Literacy Efficacy

6.1 Introduction:

The discussion presented in chapter three suggested a number of themes or factors which play a major role in influencing students' decisions about whether or not to major in accounting. In the absence of research about Indigenous students' efficacy in accounting, this chapter provides an analysis of these students' efficacy in mathematics and English. It is suggested that students' efficacy in mathematics and English is an important element in decisions to major in accounting. As a result, it may be possible to set forth propositions about whether or not Indigenous Australians would have high self-efficacy in accounting. The following section contains a review of the relevant literature on the perceived relationship between mathematics and accounting, and a review of the literature on Indigenous mathematics. The subsequent section covers Indigenous English language literature, and the final section examines the conflict between Indigenous values and accounting values. This final section of the chapter is of great importance. Firstly, it confirms what researchers in other countries have concluded, and secondly it raises a major question about the validity of the demand for Indigenous accountants in the current accounting system and teaching modes.

6.2 Impact of mathematics on students' self-efficacy expectations in accounting

A number of authors claim that students' mathematics skills and their enjoyment of mathematics influence their decisions about whether or not to study accounting (Cohen and Hanno, 1993; Jackling and Calero, 2006; Hartwell et al., 2005; Parker, 2000). If the perception of a relationship between accounting and mathematics reflects reality, then students' participation and performance in accounting might be

anticipated because of their participation and performance in mathematics. Therefore, this study considers the mathematical skills of Indigenous students as presented in the literature, and in line with the previous literature it draws a tentative conclusion about whether mathematics can be one of the factors which impede Indigenous Australians from studying accounting. The need to address the relationship between accounting and mathematics is due to the lack of research on Indigenous students' participation in accounting in Australian literature. On the other hand, Australian literature is rich regarding Indigenous students' performance in mathematics (Cooper et al., 2005; Matthews, 2003; Matthews et al., 2005; Warren and Young, 2008; Watson et al., 2006). But here one must proceed with caution because this literature is authored by non-Indigenous researchers and educators, and may therefore be subject to the ever-present bias common to research on the Indigenous 'other'.

6.2.1 Accounting and mathematics

It is noticeable that most definitions of accounting do not specifically mention the term 'mathematics'. However, the perception of a strong relationship between accounting and mathematics at the level of arithmetic computations cannot be denied (Jackling and Calero, 2006; Hartwell et al., 2005; Mitchell, 1985; Parker, 2000; Wong and Chia, 1996). Nonetheless, most accounting definitions state that accounting requires numerical and analytical skills, both of which are also integral elements in mathematics. Sharlee (2008) stated that accounting is a very old subject, and argued that the word 'account' comes from the Latin words 'ad' and

‘computere’, which mean ‘to reckon together’. Furthermore, the word ‘reckon’ means ‘to count up, compute or calculate’.

Cohen and Hanno (1993) suggested that students who chose not to major in accounting did so based on recommendations and advice from people important to them; but more significantly, they perceived accounting to be too number-oriented and boring. Jackling and Calero (2006) found that accountants have typically been referred to as ‘number crunchers’, given that bookkeeping and auditing work has been associated with an emphasis upon numerical accuracy, routine recording and calculation methods, together with attention to detail (Parker, 2000). Yunker et al. (2009) maintained that accounting as a discipline is concerned with the accurate numerical measurement of accurately defined operational concepts.

Parker (2000) has also argued that negative views about accounting as a profession are linked to poor numerical skills. For Parker (2000), these numerical skills are seen as essential for someone to be successful as an accountant. Other studies, such as that by Mitchell (1985), demonstrated that the possession of greater numerical ability drives a better performance in accounting. Furthermore, Wong and Chia (1996) indicated that a higher degree of proficiency in mathematics is associated with a higher performance in financial accounting.

Such a strong perception of a relationship between accounting and mathematics is not only supported by researchers. Students also think that a person has to be good with numbers in order to do accounting. For instance, it was concluded in a study conducted by Eskew and Faley (1988) that the success of university students in

accounting was a result of spending more study hours on mathematics and statistics. Other studies have suggested that students' interest in mathematics plays an important role in driving them into accountancy. Hartwell et al. (2005) indicated that 75 per cent of accounting majors expressed a high level of interest in mathematics compared to only 43 per cent of other business majors.

It is important to note that the structure of contemporary accounting courses in Westernised countries has also assisted in creating this perception. Universities in the UK, the USA and Australia, for example, require their students to prove their mathematical skills before they can enrol in accounting courses. Pepperdine University in the United States requires accounting students to do two core mathematics courses, namely Math 214: Calculus for Business and Math 215: Probability and Linear Algebra. Charles Darwin University in Australia also requires all accounting students to do a statistics class which complies with the Australian professional accounting bodies' requirements.

All of the previous elements (researchers, teachers and universities) have in fact worked together inadvertently to create the current perceived relationship between mathematics and accounting. It is probable that such a perception works as a sufficient reason to prevent students uncertain of their mathematical competence from choosing to study accounting, even if the students are aware of the many other benefits which come with this study choice. Therefore, since this perception seems to reflect a reality as presented earlier, students who choose accounting, and practitioners of accounting, should ideally be comfortable with, and competent in, mathematics in general and numbers in particular (Yunker et al., 2009).

Warsono, Darmawan and Ridha (2009) argued that the use of mathematics rationality simplifies the explanation of why the elements of expenses and assets should receive the same treatment in relation to credits and debits. They also demonstrated that the rules of debits and credits are based entirely on mathematical logic and that the process of learning accounting should be based on a mathematical platform. Furthermore, their study proposed that a mathematical perspective could be employed to solve crucial issues of accounting principles. Pincus (1997) suggested that grounding accounting in mathematics can make the process of understanding accounting much easier, including the adjustment of debit and credit entries, a subject which has often become a source of complaint on the part of students.

6.2.2 Indigenous peoples and mathematics

As with education in general, Australian Indigenous students, taken as a broad cohort, continue to be the most disadvantaged group in mathematics (Cooper et al., 2005). Indigenous students' performance in mathematics is below state and national averages at every level of schooling (Watson et al., 2006; Frigo and Simpson, 2008). Although this research focuses on students who possess sufficient academic skills to enter university, a brief review of some of the literature on the attainments of Indigenous students in mathematics is included as a potential reference point, highlighting the relevance of cultural differences, an issue which may be pertinent to this research study. Such literature shows the width of the gap in the claims between researchers. Historically, researchers such as Blake (1981) and Brandenstein (1970) were culturally myopic when it came to the Indigenous Australian counting and

numbering systems. These researchers inappropriately maintained that the Indigenous counting system did not exceed three, and that Indigenous Australians did not feel the need to count. Blake and Brandenstein were criticised by Harris (1987, p. 1) who argued that: ‘Statements such as these, which do not even admit five, are not simply misleading they are false.’ Others argued that both Aboriginal and Torres Strait Islander peoples were able to count when there was a need to do so. For example: ‘Haddon, [when amongst] the Western Torres Strait Islanders, was given considerable information on numbers including one hundred - Maura - and one thousand - Kai Gasa (Haddon 1890, p. 305)²⁰.’ Another example which shows that Indigenous Australians were able to count and had words for numbers is as follows: ‘Tindale bargained with Groote Eylandters, demanding 150 spears, which he indicated as 10 x 15 (10 fingers x 15 sticks). The Groote Eylandters brought him the correct number, 140 of them being tied in bundles of twenty because that was obviously how they preferred to group them.’ (Tindale, 1925, p. 129).

Lovesy and Fraser (1999) denied the validity of prior research which suggested that the inability to count was a result of the lack of words for numbers. Mate Mate (1989) reported on two different counting systems used by the Kulin nation tribes in Victoria before European colonisation. The first system relied on number words associated with parts of the body beginning with the word for number one, bubupi munungya - the little finger - and ending with the word for sixteen, bundial - the place on the top of the skull where mourners cut themselves. The second system of counting was a base-5 system. In this system:

Number one is Kanbo

²⁰ As cited in Harris, 1987

Number two is Benjeroo

Number three is Kanbo-ba-benjeroo

Number four is Benjeroo-ba-benjeroo

Number five is Benjeroo-ba-benjeroo-ba-kanbo

Number six is Krauel

Number seven is Krauel-ba-kanbo

Counting continues in the same manner (Mate Mate, 1989, p. 14).

A similar counting system to the base-5 system of the Kulin was also reported for the Yolngu of North-East Arnhemland (Cooke, 1990). Here the number words refer, in the main, to the numbers one, two, three and four, and then ‘one hand’ for five as follows in the Djambarrpuyngu dialect:

One	wangany
Two	marrma’
Three	lurrkun’
Four	dambumiriw
Five	gong-wangany (one hand)
Six	gon-wangany ga wangany baythinyawuy (one hand and one left over)
Seven	gon-wangany ga marra’ baythinyawuy (one hand and two left over)
Eight	gon-wangany ga lurrkin’ baythinyawuy (one hand and three left over)
Nine	gon-wangany ga dambumiriw baythinyawuy (one hand and four left over)

Ten gong-marrma' (two hands)

Eleven gong-lurrkun (three hands) (Cooke, 1990, p. 10).

Cooke (1990) referred to a turtle-hunting trip where gathered turtle eggs were shared equally amongst three men and himself. The eggs were counted into piles of five referred to as rulu.

‘As this was done one of the men proceeded to “deal out” eggs to each of us rulu by rulu until they were all gone.’ (Cooke, 1990, p. 11).

Others might argue that the inexistence of words leads to misunderstandings about the concepts. For example, it has been reported that, not surprisingly, in Indigenous languages words specific to contemporary accounting such as ‘expenditure’, ‘variance’ and ‘budget’ do not exist. This by itself might be an interesting area of study for those who argue that the lack of Indigenous accountants is a result of the Indigenous peoples’ lack of understanding of these concepts. However, this is not a strong argument, and can be rejected by asking self-answered questions: How many overseas students know of these words? And how many English speakers know the meanings of these words? The words are technical terms which are learned in introductory accounting courses. Therefore, the non-existence of these words in Indigenous languages does not necessarily of itself lead to a lack of understanding of the concepts amongst Indigenous students studying accountancy.

Since there is a perceived relationship between accounting and mathematics, and current researchers suggest that Indigenous Australians are below average in their competency with mathematics, it is important to uncover some of the reasons behind this observation.

In schools where there was a clear social division and racism amongst students (Indigenous/non-Indigenous), Indigenous students have demonstrated poor performances in mathematics. However, Indigenous students were successful in mathematics and performed better than their non-Indigenous counterparts in other schools. Such success, for instance, was due to a range of significant factors: culturally inclusive student education, living in homes where there was strong and/or academic support for school learning, and having individual teachers who are inclusive and strongly supportive (Watson et al., 2006). This view was supported by Matthews (2003), who suggested that a main reason behind the observed limited success in mathematics by Indigenous students is that Indigenous peoples and their cultures are totally ignored in Australian mathematics education. Mathematics is presented as a purely Westernised discipline without reference to its historical and diverse cultural roots and developmental contexts, a point relevant to the development of accountancy as a discipline of study and professional practice.

Furthermore, in such a Western education system, the mythology about the unimportance and lack of numeracy in Indigenous cultures (Watson et al., 2006) has played a role in the failure of Indigenous peoples to achieve success in mathematics. Teachers are also a major factor behind this failure. It is often the case in most Australian schools that the Indigenous students, and the teachers, come from different cultural backgrounds with different life experiences. Watson et al. (2006) suggested that teachers might not place emphasis on counting terms because they think such terms can be understood by all students regardless of their backgrounds. However, some Indigenous students may not understand these terms at the outset and, if not attended to sensitively by their teacher, they may withdraw from the

mathematical learning being provided. Student withdrawal can be understood as a protection of the self within the public accountability system operating in classrooms. To avoid 'shame' through a public admission of ignorance when clearly others understand, an Indigenous student may simply opt out with the self-judgment that 'I'm no good at maths.' Most likely, teachers who are unaware of such important issues for Indigenous students in their classes and who continue to use mathematical terms in class which are not understood fully by their Indigenous pupils will unconsciously disadvantage the Indigenous population in the classroom; and, according to Watson et al. (2006), Indigenous students would not appreciate such ignorance.

Both Indigenous students and educators contribute to the failure in mathematics education according to Matthews et al. (2005). These researchers believe that there are two significant factors: Indigenous students do not see much relevance (if any) in mathematics, and mathematics educators do not have much faith in the mathematics learning ability of Indigenous students. The Indigenous students' view of the irrelevance of mathematics is possibly a result of the limited need for mathematics in their communities (Nakata, 2002). In addition, Cooper et al. (2005) stated that even after two years teaching Indigenous students, teachers still do not know how to teach these children effectively.

6.3 Impact of English on students' self-efficacy expectations in accounting

Like mathematics, language is perceived to have a relationship with, and impact on, the study of accounting. Proficiency in mathematics alone is not regarded as

sufficient to bring success in accounting. Proficiency in English is also required in national contexts where English is the *lingua franca* of the financial sphere and, consequently, of the accounting profession (Wong and Chia, 1996). According to Wong and Chia (1996) English language proficiency is important for students to comprehend financial accounting and to communicate their understanding in the relevant financial accounting examinations. If proficiency in English is poor, the level of performance may be affected.

According to many researchers such as Grace and Gilsdorf (2004), Wong and Chia (1996) and Reinstein and Houston (2004), accounting requires a high level of communication and writing skills; while according to Grace and Gilsdorf (2004), accounting abilities can be strengthened once a student's oral communication skills are improved. This emphasis on the relationship between language and accounting is not only asserted by educators and employers (Grace and Gilsdorf, 2004), but also by the professional accounting bodies which recognise the significance of this relationship. In Australia, both the Certified Practising Accountants (CPA) and the Institute of Chartered Accountants (ICAA) issued statements in 1996 asking all tertiary accounting programmers to explicitly teach a range of communication skills (Sin, Jones and Petocz, 2007). Additionally, and following the professional accounting bodies' request, the Department of Immigration and Citizenship in Australia (2010) introduced changes for the General Skilled Migration Visa, giving priority to applicants who have accounting as their occupation. However, this was conditional on the applicants achieving a score of seven or over on the International English Language Testing System (IELTS). The score of seven in IELTS is an

indication of English proficiency which is deemed essential for career opportunities in Australia.

Researchers, in their attempts to support the existence of a positive relationship between English language and English literacy competencies and students' decisions to major in accounting, have used several examples. Examples drawn from the research literature follow. Reinstein and Houston (2004), for instance, emphasised the importance of writing skills at the start of the accounting course. Although the need to write reports does not arise until later course subjects, first-year accounting students are still required to write memorandums and small reports. Analytical skills are also strongly needed in introductory accounting courses. Introductory accounting subjects such as financial and cost accounting require numerical skills, but they also require proficiency in English in order to understand the main accounting concepts and principles. As students move forward in the curriculum, language and verbal skills become more significant. In the higher level accounting subjects, there is little emphasis on numerical analysis such as in accounting theory; however, there is a significant need for English language skills.

The importance of proficiency in the English language in the accounting profession in English-speaking nations is also apparent in the readability of accounting and auditing messages. Whether students develop a comprehension of accounting and auditing messages, or whether they are not going to bother reading such messages, reflects a prediction made by researchers about the readability of the messages (Barnett and Leoffler, 1997). Financial reports should be clearly and professionally written by accountants to allow investors to comprehend and understand the

significance of the intended information. This process is essential to enable investors to make informed investment decisions. The benefit of this information can be enhanced by making the information more comprehensible and useful to a large number of users (Schroeder and Gibson, 1990). In other words, financial reports should be written by practitioners with very good, professional language skills which use the prevailing language of commerce.

Emphasis on such a relationship extends beyond the successful study of the accounting course at university to the actual profession and workplace. Maupin (1993) questioned the ability of accounting graduates with poor communication skills to obtain employment, and Cheng and Saemann (1997) claimed that employers are not satisfied with the verbal and written communication skills of most accounting graduates. Other researchers found that in order for accounting graduates to succeed in their profession, they must be skilled at making oral presentations (Hiemstra et al., 1990) since accounting work relies heavily on this skill. In his research, Gray (2010) found that a number of New Zealand media outlets blamed universities for not producing adequately literate graduates; he also confirmed previous findings by international researchers which suggest that new accountancy graduates often start their careers with inadequate oral communication skills.

In practice, improving language skills amongst accounting students can have a major impact on their employment, because improving or strengthening accounting students' writing skills leads to the production of well written reports, and strengthening students' oral communication skills leads to greater effectiveness in

explaining to clients their financial circumstances, the options for financial endeavours and the management of these options.

Even though there is sufficient material in the literature to suggest a relationship between language and accounting, the majority of accounting students pay more attention to the numerical and technical side of accounting and close their eyes to the language aspect. This is the reason why most accounting majors are normally excellent technically, but are weak in language skills (Cheng and Saemann, 1997).

Ahmed (2008) stated that in order to understand accounting language and interpret accounting information, it is compulsory to know the meaning of various terms in accounting statements such as 'Entry, Business Transaction, Goods, Services, Revenue, Expenses, Expenditure, Cost, Expired Cost, Unexpired Cost, Sales, Turnover, Stock, Inventories, Debtors, Creditors, Assets, Current Assets, Liabilities, Drawings, Capital Account, Debit Side and Credit Side'. Therefore, since English is not the first language of most Indigenous Australians, it is possible that based on such a proposed relationship, Indigenous students are not likely to perform as well as native English speakers. However, since this research is looking at Indigenous university students who are doing other courses which also require a high level of English language skills and an understanding of technical terms expressed in English, facility in the English language is most likely not going to be a major factor affecting students' decisions to major in accounting in particular.

Even though they are bilingual, Indigenous students are disadvantaged compared to non-Indigenous students because English is not the language spoken at home

(Warren and Young, 2008). Their 'home English' lacks some of the vocabulary commonly used to describe mathematical situations (Warren and Young, 2008). However, since it is apparent in the literature that this proposed relationship, although very significant, is not given a great deal of consideration when choosing to study accounting, a supporting claim could be made that English literacy may not be one of the impediments which prevent Indigenous students entering the accounting field.

Confirmation on whether English plays a role in keeping students away from accountancy can only be supported empirically after the data which is collected from participants in this research study have been analysed.

6.4 Summary

Because accounting was related to students' performances in mathematics and English, this chapter presented sufficient literature to investigate this issue further from an Indigenous perspective. As a result of colonisation, Indigenous students were, and still are, amongst the most disadvantaged groups in Australia. This has carried forward to their education, and affected their attainments in English and mathematics. It is, however, unethical to make judgments about the Indigenous population in the context of their traditional numbering system. In this research we are targeting university students, the majority of whom will have good English, and whose performance in mathematics is not significantly affected by their traditional numbering system. These students have attended Western-style universities.

Chapter Seven: Study's Theoretical Framework for Data Analysis

7.1 Introduction

Many studies have pointed out that a student's intention to major in a particular field is affected by factors such as self-efficacy, working conditions, social values and stereotypical personal characteristics (Hermanson and Hermanson, 1995; Horowitz and Riley, 1990; Garner and Dombrowsky, 1997; Gul, 1986; Wolk and Cates, 1994). To explain the factors affecting the choice of study, these studies have generally used diverse career theories such as the theory of reasoned action developed by Fishbein and Ajzen (1975), the theory of planned behaviour (Ajzen, 1988) and the social cognitive career theory (Gainor and Lent, 1998).

The theory of reasoned action conceives intention to be determined by an individual's attitudes towards a particular behaviour, which is subject to the influence of some referents (parents, instructors, friends, for example). An individual's attitudes are determined by beliefs about the outcomes and consequences of a particular behaviour, and the influence by referents represents the social environmental pressure to perform or not to perform the behaviour (Fishbein and Ajzen, 1975). Because some factors may interfere with an individual's intention to behave in a particular way (Cohen and Hanno, 1993, p. 222), the theory of planned behaviour was more explicit in incorporating an additional pro/anti control factor, which represents either an additional incentive to perform the behaviour in line with individual's attitudes (pro), or a prohibitory factor to not perform the behaviour despite the individual's attitudes (anti) (Ajzen and Madden, 1986; Ajzen, 1988).

Social cognitive career theory (SCCT), however, adds an additional personal variable, 'self-efficacy', to the 'individual's attitude' variable to explain that an intention to behave in a particular way is also determined by a person's perception of his or her aptitude to perform career-related activities. Particularly in the last two decades, there has been a growing emphasis on the importance to the development process of cognitive variables, personal agency and contextual influences. This resulted in the social cognitive approach, which explains factors affecting students' study choices (Lent, Brown, and Hackett, 1994, 2002; Lent and Brown, 1996).

Indigenous Australians, in choosing to major in a particular field of study at university as part of their education journey, are taking the first step towards their career choice. After an in-depth examination of all other theories, the researcher decided to use social cognitive career theory (SCCT) to interrogate and explain the reasons why Indigenous Australians do not choose accounting as a study choice and/or career. Since 1996 the SCCT model has had a major impact on the field of career development research. Many researchers have proposed the significance of this theory (Brown, 2002; Brown and Brooks, 1996). Patton (2002) maintained that the SCCT model is developed on a rich theoretical and empirical base, and Blustein and Flum (1999) considered SCCT to be 'one of the most influential new theoretical perspectives in career development' (p. 349).

According to the aforementioned researchers, SCCT has been tested and endorsed as a generative theory for the career decision-making process in a variety of contexts. Existing research measures social cognition in relation to academic and career interests (Lent and Brown, 2006). And since Lent, Brown and Hackett (1994)

conceptualised the theory as relevant to both academic and career behaviour, SCCT is particularly well-suited to constituting a framework for this thesis. No record of the use of social cognitive career theory has been noted in the Indigenous Australian literature; however, SCCT is now used to understand career choices by other marginalised groups in the world such as African American students. For instance, Lent, Brown and Sheu (2005) applied the SCCT model in an engineering context at historically 'black' and predominantly 'white' universities and found it to be predictive for both African American and non-African American student groups.

Lent, Brown and Hackett (1994), the initial developers of the SCCT model, sought to offer relevance to diversity and individual differences, and to the rapidly changing types of career resulting from recent economic, social and technological changes (Lent, Brown and Hackett, 2002). As a result, and since the SCCT model emphasises diversity, personal agency and contextual factors, the model is an ideal theory to underpin an investigation of the career choice of accounting amongst Indigenous peoples. The SCCT model seeks to explain the process which guides the development of a person's educational and occupational choices, interests and achievements.

SCCT is in fact an extension of Bandura's (1986) general social cognitive theory. SCCT adopts Bandura's triadic-reciprocal model of causality in which personal attributes, external environmental factors and overt behaviour are assumed to interact and mutually influence one another (Lent et al., 1994) This framework features three variables through which people help to guide their career development. These variables are: self-efficacy, outcome expectation and goal mechanisms (Lent, Brown

and Hackett, 1994). Self-efficacy and outcome expectation are two key personal variables which play a major role in determining career choice. These two personal variables grow and develop through collective learning experiences from an early age until the point where a decision about one's career is made. However, SCCT posits that these two variables influence a person's interests and career goals: that is, a person's intentions, plans or aspirations to engage in a particular career direction, all of which are aspects of the third variable, goal mechanisms.

7.2 Self-efficacy

Self-efficacy is a dynamic attribute dependent upon competency and confidence (Albert and Luzzo, 1999). Bandura asserts that self-efficacy beliefs are 'concerned not with the skills one has but with the judgments of what one can do with whatever skills one possesses' (Bandura, 1986, p. 391). The measurement of self-efficacy provides an indication of how an individual will respond when confronted with obstacles. Self-efficacy is not considered to be a static or passive trait, but rather a dynamic set of self-beliefs which are related to specific performance domains such as study or career choices (Lent et al., 1994). Self-efficacy beliefs originate from personal performance accomplishments, overt learning, social influence and psychological factors (Brown and Lent, 2005) with performance accomplishment considered the most powerful source of self-efficacy beliefs (Bandura, 1997). These beliefs help individuals identify their choice of activities, the effort they are willing to put into these activities and their persistence in the face of obstacles when pursuing their chosen activities.

In addition, it is essential under social cognitive career theory that a person is required to assess his or her capabilities and the requirements to engage in a performance. While people are making their decisions about careers, they are strongly influenced by their self-efficacy beliefs and, as stated by Bandura et al. (2001), 'exclusions or large classes of options are made rapidly on self-efficacy grounds with little thought of costs and benefits' (p. 201). Thus, amongst the sample in this study, it is anticipated that self-efficacy will play a crucial role in the participating students' confidence in their ability to pursue an accounting degree, despite the various barriers and obstacles they may experience in their education journey.

Many researchers, while doing research on career-related self-efficacy and outcome expectation, have found a strong positive relationship between the two (Gainor and Lent, 1998; Lopez, Lent, Brown and Gore, 1997; Smith and Fouad, 1999). Chronister and McWhirter (2003) stated that when self-efficacy expectations are low, outcome expectations are much more likely to be low. Bandura (1986) regarded self-efficacy as generally the most influential determinant of behaviour. He backed his claim by noting the many instances in which people hold positive outcome expectations about a given course of action, but avoid such action if they do not have the capability to perform it. Lent and Brown (1996) provided an example supporting such a claim. They said that even though there is a common belief in the United States that pursuing a medical career will yield a high income, many students do not choose to enter this field because they doubt that they possess the requisite capability to pass the course.

7.3 Outcome expectation

Social cognitive career theory maintains that, as well as acting on their judgments of what they can do, people, including students, act on their beliefs about the likely outcomes of various academic and career choices (Bandura et al., 2001). Beliefs about the consequences of performing particular actions constitute the second central variable to the social cognitive career theory, outcome expectation.

Outcome expectation refers to beliefs about the outcomes of performing particular behaviours. In other words, it refers to beliefs regarding the consequences of success in specific educational or career decision-making behaviours (Betz and Vuyten, 1997; Ochs and Roessler, 2004). For instance, ‘if I do this, what will happen?’ (Lent et al., 2000, p. 41). Two components are considered in this context: an individual’s work values and his/her perceptions of the outcomes which are likely to emerge from a career choice. It is most likely that an interest towards a particular career will be developed if there is a positive connection between the person’s work values and the perceived outcome of choosing a particular career.

Beliefs about work which a person holds as principles and which guide how he or she should function are called work values (James, 2002). These may include values such as the level of financial prosperity, altruism, and the independence which may accompany work. Although work values are cognitive structures, they have behavioural and affective dimensions, and serve the purpose of meeting the felt needs of the person who holds them (James, 2002). Hence, work values play a major role in setting professional goals (Brown, 2002). On the other hand, individuals’

behaviours can be influenced by their outcome expectation beliefs ahead of their self-efficacy beliefs if the desired outcomes do not eventuate despite high competency in a particular behaviour (Lent et al., 1994). Swanson and Woitke (1997) argue that although people might have high self-efficacy and an interest in a particular career, they may avoid it if they anticipate negative outcomes.

In addition, outcome expectations include beliefs about extrinsic rewards as well as beliefs in more intrinsic rewards such as self-directed consequences, pride in achievements, and social consequences such as approval (Bandura et al., 2001, Lent et al., 1994). Like self-efficacy beliefs, outcome expectation beliefs are acquired through learning experiences. When quality of performance is likely to guarantee a particular outcome, outcome expectation is strongly influenced by self-efficacy.

7.4 Personal goals

As per the following figure (7.1), self-efficacy and outcome expectation combine to influence the development of interests. SCCT posits that people develop a lasting interest in a career when they see that the career leads to valued outcomes, and they regard themselves as capable enough to succeed. It is then that ‘interest’ influences the identification of, and planning for, career choice goals (Lent, Brown and Hackett, 1994). Figure 7.1 illustrates this process with a model of how career interests develop. Goal mechanisms, also referred to as personal goals, play a fundamental role in career choice and decision-making theories. These goals are the actual intention to engage in activity (Bandura, 1986).

Bandura (1986) defines personal goals as the determination to engage in a certain activity or to produce particular outcomes. These goals then lead to the selection and practice of a career (Lent, Brown and Hackett, 1996). By setting goals, people remain focused on attaining expected outcomes. Along with self-efficacy and outcome expectation, personal goals increase the likelihood of goal attainment (Bandura, 1986). Although self-efficacy, outcome expectation and personal goals work together towards goal attainment, self-efficacy and outcome expectation, when experienced or perceived in a negative light, can diminish a person's interest in setting personal goals (Lent et al., 1994). For instance, an individual is less likely to develop personal goals for an occupation for which he or she displays low self-efficacy and/or has a low outcome expectation. An individual is more likely to set personal goals for a career for which he or she displays self-efficacy, even if the individual perceives a number of obstacles to entry into the career.

In the career development field, goals are referred to as expressed choices, plans or decisions when they involve specific intentions and commitments to act and are temporally close to the behaviour of career entry. If these goals do not involve commitments and considerations of reality factors such as job market conditions, they are considered to be aspirations or daydreams (Lent et al., 1994). Aspirations and daydreams are temporally far from the action.

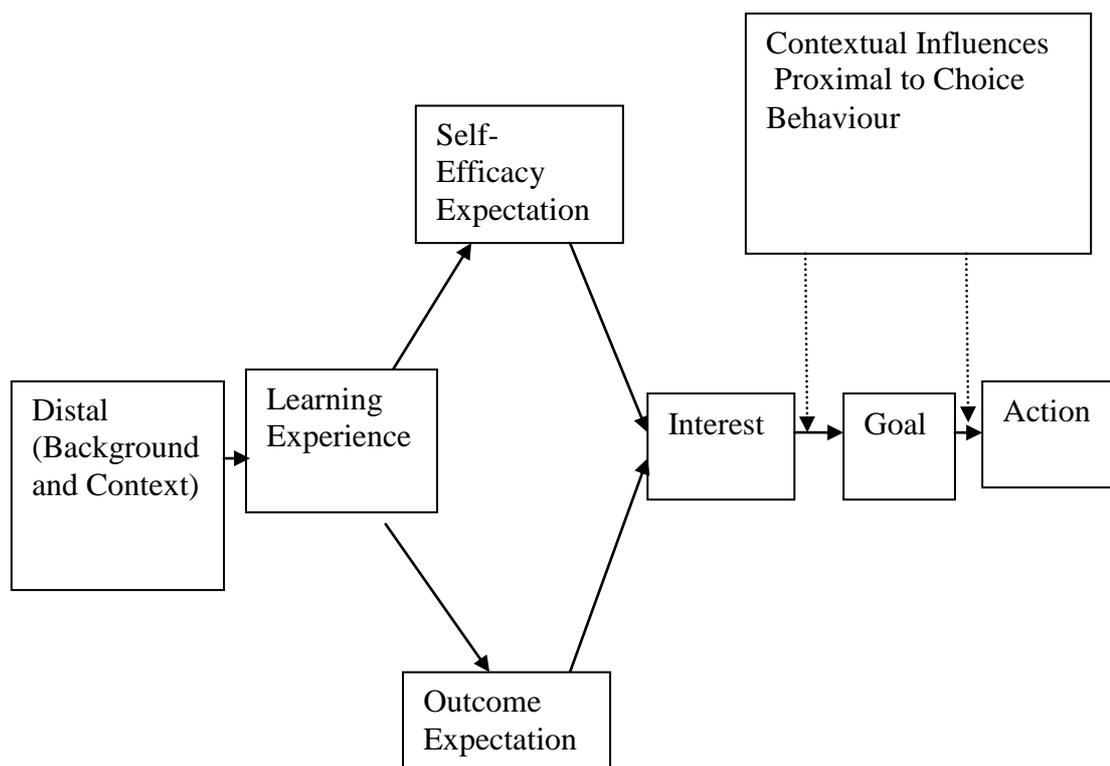


Figure 7.1: Social cognitive career theory (Lent, Brown and Hackett, 1994).

7.5 Contextual influences

It is not only these two key variables of self-efficacy and outcome expectation which impact on students' career or study choices. SCCT proposes that contextual influences also play a major role because they may influence key variables and relationships within the model. Contextual influences can either be distal influences and/or proximal influences.

7.5.1 Distal influences and learning experiences

Distal influences are those that are far from the decision point, but which still shape learning experiences, social cognitions and, ultimately, interests. These influences affect the learning experiences through which career-relevant self-efficacy and

outcome expectation develop. These influences may impact on a person's choice through the types of career role models to which an individual is exposed, and the sort of support or discouragement received for engaging in particular academic or extracurricular activities (Lent et al., 2000). These influences may also include factors such as early skill development, cultural socialisation, access to information and exposure. The SCCT theorises that self-efficacy and outcome expectations are shaped by information sources or what is referred to as learning experiences. Therefore, positive prior learning experiences within specific fields increase the likelihood of developing strong self-efficacy beliefs and optimistic outcome expectation in those fields.

According to Lent et al., (1994), there are four main sources that enable learning experiences to influence self-efficacy and outcome expectations. These four main sources are:

1. Past performance accomplishment, such as if a student had in the past earned a high score in a specific course.
2. Vicarious learning, such as if there is someone who is similar to the student and had succeeded in the course.
3. Social persuasion, such as if the student has been told by a role model or a teacher that he or she should consider this specific course.
4. Physiological states is the ability to turn anxiety into an exciting challenge to complete the course.

Lent et al., (1994) however asserts that past performance accomplishment plays the most crucial role in influencing self-efficacy and outcome expectations.

7.5.2 Proximal influences

Proximal influences are very close to the decision point and may moderate the relationship between career interests, goals and choice. Contextual factors may also assert a direct influence on choice-making or implementation. For example, in collectivist cultures and subcultures, the wishes of influential others may hold sway over an individual's own personal career preferences (Lent et al., 2000). These influences may include factors such as job availability or financial support for a particular career option. The following is a quotation from Lent et al.'s study which explains precisely how contextual factors influence an individual's career choice (Lent et al., 2000, p. 38).

'Proximal (and anticipated) contextual factors may moderate the relations of (a) interests to choice goals, and (b) goals to actions. ... One's primary interests are likely to prompt corresponding goals (e.g., social interests lead to intentions to pursue a social-type career); goals, in turn, promote choice-relevant actions (e.g., applying for a training program related to one's goal). However, contextual influences help determine how these processes unfold. It is posited that people are less likely to translate their career interests into goals, and their goals into actions, when they perceive their efforts to be impeded by adverse environmental factors (e.g., insurmountable barriers or inadequate support systems). Conversely, the perception of beneficial environmental factors (e.g.,

ample support, few barriers) is predicted to facilitate the process of translating one's interests into goals and goals into actions.'

While the importance of proximal factors is clear, these factors can only affect a decision after an interest in a subject has been created. Their role is active towards the end of the decision-making process.

7.6 The SCCT model and Indigenous Australians

Self-efficacy beliefs and outcome expectations are seen to exert a direct and strong influence on the formation of careers and academic interests. SCCT proposes that people form an enduring interest in an activity when they consider themselves competent at it and when they anticipate positive outcomes from performing it. In turn, the interest which emerges from self-efficacy and outcome expectation leads to intentions or goals for further involvement in this activity. Self-efficacy and outcome expectation directly affect the choice of goals and the amount of effort expended in pursuing them.

The researcher was unable to note in Australia any research which has examined the self-efficacy of Indigenous Australians in the accounting field, or any other field. In the absence of any information on Indigenous students' self-efficacy in the accounting field, the broader construct of personal efficacy may have implications for self-efficacy in accounting. Themes which have emerged from the literature were also examined in Chapters four, five and six in order to establish propositions about why Indigenous students avoid studying accounting. The literature maintained that

students' enjoyment of, and performance in, mathematics, and their proficiency in English, are closely related to their decision to study or avoid studying accounting (Jackling and Calero, 2006; Hartwell et al., 2005; Parker, 2000). This has been discussed in detail in Chapter six. Chapter four and Chapter five, dealt with issues which influence students' outcome expectations. Therefore, the following section examines the general construct of Indigenous personal efficacy.

7.7 Personal efficacy

Personal efficacy is a general feeling of competence, personal control and confidence in managing one's life (James, 2002). This construct is similar to self-efficacy but is related to life in general rather than a specific performance domain. As such, personal efficacy may impact on self-efficacy in a number of different occupational domains.

Indications about Indigenous Australian individuals' efficacy were provided in a book titled *Contextual factors that influence the achievement of Australia's Indigenous students: Results from PISA 2000-2006* (Bortoli and Sue, 2010).

- Results from international programmes which assess the skills and knowledge of young people have indicated that Australia's Indigenous students perform at a significantly lower level than non-Indigenous students.
- On average, Indigenous students reported significantly lower levels of confidence in their abilities to handle tasks effectively compared to their non-Indigenous peers. These differences were found when self-efficacy was

assessed generally, and when self-efficacy was assessed in relation to mathematics and science.

- On average, Indigenous students reported significantly higher levels of mathematics anxiety than their non-Indigenous peers.
- Despite the lower levels of self-confidence and self-concept amongst Indigenous students, particularly in relation to mathematics and science, there were no differences found in the levels of effort and persistence in studying reported by Indigenous and non-Indigenous students.
- Fewer parents of Indigenous students, compared to those of non-Indigenous students, had attended post-secondary education, and many parents of Indigenous students had not completed secondary school. This in itself creates a barrier to further education because without an understanding of the educational system it is difficult for Indigenous parents to provide adequate levels of support for students to continue their education.
- Indigenous students were also found to be more likely to live in single parent families than non-Indigenous students, and were less likely to possess items of family wealth than non-Indigenous students. The effects of inadequate resourcing means that in such circumstances Indigenous students are less likely to have access to the required books and materials, or to have a quiet place to study.

Low personal efficacy may cause Indigenous Australian students to have low self-efficacy in a number of study fields. These fields are most likely to be those which are perceived to be academically challenging, or those with low Indigenous

representation. However, Indigenous students' self-efficacy in accounting cannot be confirmed by their personal efficacy alone, particularly because Indigenous Australians are found in other fields which also require high levels of personal efficacy such as the legal and health professions.

Therefore, it is in the interests of this research to see whether: low self-efficacy for the perceived skills necessary for accounting may cause Indigenous Australian students to choose careers other than accounting; differences in the extent to which work values match perceived outcomes may lead Indigenous Australian students to avoid studying accounting; cultural differences in social values may lead Indigenous students to avoid accounting as a career; and lack of access to information about accounting may lead such students to choose careers other than accounting.

7.8 Summary

In this chapter, social cognitive career theory (SCCT), which forms a framework for the present study, has been discussed. The SCCT model is well suited to investigating the under-representation of Indigenous Australians in accountancy because it describes the study and career choice decision-making process. The main variables are outcome expectation and self-efficacy, which are influenced by distal factors which create a person's interest in a particular career or field of study. This interest is then influenced by contextual proximal factors which turn interest into action and behaviour.

Chapter Eight: Study's Research Methodology and Method

8.1 Introduction

This chapter outlines the processes and methodology undertaken in the research. The chapter discusses the ethical guidelines for conducting research with Aboriginal and Torres Strait Islander peoples, and provides details about the data collection process. In line with the methodology chosen for this study, it is appropriate to explain the context in which the study took place. Information about participants will provide these details.

A qualitative research methodology was chosen over a quantitative research methodology because the former has been recognised as a productive way of collecting data from minority groups, and provides in-depth and rich data (Wilson, 2007b). The research method was identified after careful consideration of the most appropriate way to collect data from Aboriginal and Torres Strait Islander participants using a method which falls within ethical guidelines for Indigenous research while also providing rigorous results.

Semi-structured interviews are seen as a culturally respectful way to obtain information from Indigenous participants, mainly because of the participants' complex cultures, which are heavily influenced by oral traditions. A manageable number of available participants have also played a role in the decision about the

method used. Semi-structured interviews, according to Wilson (2007a), allow participants the freedom to talk in a relatively informal way.

8.2 Why qualitative research?

Because knowledge is power, individuals are not always prepared to share it amongst themselves or, more significantly, with outsiders. Some Indigenous peoples fear that their knowledge will be misused and, lacking the power to prevent such abuse, they choose to keep quiet (Doubleday, 1993). Therefore, the researcher needed to find a research method which conformed to the ethics guidelines and which produced acceptable outcomes in terms of research rigour and veracity. Similar studies by accounting researchers using non-Indigenous participants were considered inappropriate for this research given the cultural differences involved and the sensitivities rightly impacting on research of this nature. What the researcher wanted was a methodology which values and authenticates the participants' voices.

The differences between Indigenous and non-Indigenous peoples become even more marked when it comes to research. In the last century, Indigenous peoples in Australia, and in the rest of the world, were excessively researched. Researchers, most of whom were not Indigenous, often intended to use the collected data to impose programmes and policies on Indigenous peoples. However, other researchers highlighted the Indigenous perspective of the participants. Smith (1999) stated that amongst all words, it is most likely that the word 'research' is the 'dirtiest' for Indigenous peoples. In addition, Smith (1999), Rigney (1999) and Brady (1992) maintained that while non-Indigenous peoples look at research as an academic

process, the perception of research amongst Indigenous peoples is different because of its historical links with the processes of colonisation (Henry et al, 2002).

Because of this difference in the perception of research, a research methodology and method must be selected carefully to preclude any concerns, in order to: firstly, take into consideration the reluctance of Indigenous peoples to be researched; secondly, value and be respectful of the Indigenous participants' knowledge, their cultures and their communities; and thirdly, fulfil the purpose of the research, which includes contributing to the knowledge-base of Indigenous communities. The following sections explain why a qualitative exploratory methodology was chosen for this research. The method of conducting semi-structured interviews will also be explained.

Qualitative research techniques have long been used in research. Qualitative techniques such as observations and interviews are as old as recorded history (Taylor and Bogdan, 1984). Qualitative research methods have also been used in a range of academic disciplines such as psychology, sociology, anthropology, education and health (Taylor and Bogdan, 1984). In the main, qualitative research methods place more emphasis on people and situations rather than numerical information (Miles and Huberman, 1994). Qualitative research methodology was chosen as an exploratory approach which would enable the researcher to access data from participants which would provide details about their perceptions of accounting, and the impediments and enhancers the participants perceive they encounter or will encounter if they undertake a study of accounting and then a career as an accountant.

According to Philips and Pugh (1987), Webb (1992) and Ghauri et al. (1995), when the literature lacks information about the researched issue, and the uncertainty about the variables is high, the exploratory approach is the most useful way to proceed. It is also a characteristic of this type of research that it has a high degree of flexibility. Webb (1992) stated that the main purpose of the exploratory approach is to clarify the picture of the problem or the situation which is researched. It also uncovers the significant variables which are relevant to the research project. Because of the lack of information about Indigenous participation in the accounting profession, the need to obtain and understand the participants' perceptions about accounting as a field of study, and in order to listen to the factors which Indigenous students say influence their decisions to study or not to study accounting, a qualitative exploratory methodology was deemed the most suitable approach.

A qualitative exploratory methodology enables a reader to 'see what the researcher saw' when the data is articulated and analysed (Grbich, 2007, p. 92). The ability to present the data to the reader as articulated by the participants, and then as synthesised by the researcher, is of major significance, particularly when researching Indigenous issues. It removes the issue of 'talking on behalf of others', and instead it strengthens the trustworthiness of the collected data. This explains why open-ended interviews are seen as the best way to conduct such research. The next section, however, explains why a semi-structured interview type was chosen over other types of interview.

8.3 Method: semi-structured interviews

To explore the reasons behind the under-representation of Indigenous students in accounting classes as well as in the profession, conducting semi-structured interviews²¹ was felt to be the most appropriate method to take into consideration the three issues of concern raised earlier. Choosing the most suitable method when conducting a research with Indigenous peoples has many considerations, particularly if the researcher is a non-Indigenous researcher. It was from this understanding that the researcher was influenced by an Indigenous researcher when adopting and adapting his qualitative research method of semi-structured interviews.

Difficulties also face Indigenous researchers such as Shayne Williams as can be seen in his Doctoral thesis. In his thesis Dr Williams, aspired to create a pure Indigenous methodology that will ‘challenge the invasiveness of Western forms of research’ (Williams, 2007, P.109).

Although Williams strongly believes of the significance and benefit of conducting Indigenous participatory action research, he was unable to adopt such a methodology, mainly due to the relatively tight academic time frame within which to complete his doctoral study. He stated that ‘the consultation process alone is very protracted. If it is done as it should be, in tandem with the Indigenous peoples who would conjointly own and control the research process, it would require a significant longitudinal commitment that would scope beyond the time parameters of doctoral study’ (Williams, 2007, P.107). Given the time constraints Williams decided to adopt

²¹ All interviews were recorded after gaining permission from participants.

his own methodological approach, and to use ‘Yarning²²’ as the way to collect information from participants.

In his data collection phase, Williams would start the conversation by ‘yarning up’ about himself, and secondly he would ‘yarn up’ about the research. He would then disseminate the formal letter of the introduction to the research, the Plain Language Statement, and the Consent form. This conversational style of data collection was influential in the data collection phase of this research into the low numbers of Indigenous Australians opting to study accountancy.

Although in this research, as detailed in the following paragraphs, the researcher used a semi-structured interview approach, he still did a ‘yarn up’ about himself but of course not to the extent that Williams would have most likely been able to. This is because the researcher of this study is not Indigenous.

By conducting semi-structured interviews, the researcher allowed the interviewees to raise issues the researcher had not considered, and enabled a deeper exploration of responses (Burns, 2000). The research method was carefully selected in order to best suit the aim of the study, which is to hear the voice of the Indigenous student and to unveil new information. There is only limited Australian literature on this topic. As such, the researcher was particularly interested in gathering the perspectives of Indigenous students. This approach would assist the aim of PhD research to contribute to current literature.

²² Yarning is the informal talk that preceded any conversation. For instance, asking questions about the person’s family prior to get into the formal conversation.

There are three types of interviews: structured, unstructured and semi-structured. Structured interviews are used mainly in surveys which are followed by quantitative analysis (Burns, 2000). This technique could be used when a researcher has a large group of Indigenous students to interview or where there is a structured list of questions which can be directed to each student (Burns, 2000). However, such a method of interview does not suit the objectives of this research study, and is not compatible with the methodology adopted because the research tries to avoid predetermined response categories, which if used would prevent the researcher from exploring the feelings or perceptions of the students and the unknowns (from the researcher's perspective) which are significant to the research field and research questions.

Unstructured interviews cannot be distinguished from general conversations. Unlike structured interviews, the interviewer does not have a structured set of questions. The advantage is that the researcher can discuss any areas of interest during the interview. Also, this type of interview allows the respondents to include any point they see as relevant (Brownell, 1995). However, this method was not used because although the researcher wanted to facilitate the free expression of information from participants, the researcher also had a specific research interest. Under these circumstances, to portray the interviews as unstructured would have been disingenuous.

Therefore, this study uses a semi-structured type of interview which stands between structured and unstructured interviews. Unlike the preceding two types of interview methods, this method comprises predetermined questions, but the sequence of the questions and further discussion on interesting points raised by interviewees are issues decided on by the researcher. The predetermined questions emerged from the

review of the literature and from the researcher's interpretation of this literature in the context of the specific research study. The semi-structured interview is very suitable for this research study given its exploratory nature and the uncertainty of knowing in advance if the student participants will be in a position to give information relevant to the study's objectives. Semi-structured interviews are therefore very useful for exploratory research. The predetermined questions were used only to guide the interviews from the outset, and further interview questions evolved depending on each participant's responses.

By adopting this method, the researcher allowed the study participants to raise issues themselves. When they did, the researcher asked questions about the issues they had identified. For this reason, the interviews commenced by asking general questions, beginning with the participants' education before moving on to questions about their study choice. These opening discussions made it easier for participants to raise their own issues. With such an approach, participants can be asked the same questions but with plenty of flexibility to make comments and add extra information. Furthermore, the questions are open-ended, allowing the interviewees to make unique contributions to the data collected. The ability to research further into issues raised by interviewees is a valuable characteristic of semi-structured interviews.

It is important for the researcher, while conducting such interviews, to be mindful of the need to be flexible, thereby ensuring that each participant is comfortable and able to talk openly to the researcher. The researcher should ensure that he does not lead and influence the discussions in ways which could curtail a more free-flowing but focused dialogue. This can be achieved by allowing study participants to raise and

put forward their own comments, and by showing that the participants' input is valued.

This research study, through the adoption of semi-structured interviews as its research method, investigated and provided answers to the factors associated with the under-representation of Indigenous Australian university students in accounting studies and, as a result, in the accounting profession.

8.4 Guidelines

Hunter (1997) suggested that Aboriginal and Torres Strait Islander peoples of Australia are one of the most researched groups in the world. Many researchers have used unethical practices when obtaining information (Hunter, 1997). Furthermore, according to the World Health Organisation (2006), intellectual property recognition for Indigenous peoples did not exist until less than a decade ago.

The research undertaken for this thesis conforms to the guidelines for ethical research drawn up by the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), which notes that 'Consultation is a two-way process; ongoing consultation is necessary to ensure free and informed consent for the proposed research and for maintaining that consent' (AIATSIS 2002, p. 3). In this study, the information provided by the participants, and all data collected, is utilised in consultation with the participant. At no point is the provided information used unless the relevant participant has permitted it.

Furthermore, the guidelines of AIATSIS (2002) remind researchers of their ethical obligation to give something back to the community. The purpose of this research is

to contribute to a strategy which helps increase the number of Aboriginal and Torres Strait Islander peoples in the accounting profession. If the results demonstrate an ability to assist in the establishment of such a strategy, then communities and individuals could benefit from such an outcome, as explained earlier in the discussion about the importance of the study.

Ethical approval was granted by the Charles Darwin University's Human Research Ethics Committee to undertake this research (Appendix 1 and 2). Due to the time taken to identify participants for the study in the first year of ethics clearance, this approval was extended by a further year. In the second year, the highest possible number of potential participants was included in the study. Confidentiality has been ensured by keeping participants' data electronically secure and using pseudonyms to shield their identities. This also entails separate physical storage of the ethics consent forms.

8.5 Recruitment process

The interview recruitment process included no direct initial contact with any of the potential participants. Contact was made to organise dates and times to visit and to conduct interviews with the participants through two types of strategy:

- 1- Visits were made to the campuses of Higher Education institutions, and a meeting was held with Aboriginal and Torres Strait Islander Support Centres²³.

²³ Although the main role of Indigenous Support Centres or Units (ISU's) is to assist Indigenous university students adapting to the university environment and meeting the academic requirements through pastoral care and tutoring support, the Indigenous Liaison Officers associated with these ISU's are the first people to approach if a researcher wishes to interview a university's Indigenous

2- Emails were sent to Aboriginal and Torres Strait Islander Support Centres.

The recruitment of participants has followed the above two strategies. The Support Centres contacted the potential participants, and the researcher was informed once someone agreed to be interviewed. The necessary information for the Support Centres and the potential participants included a consent form (Appendix 3), proof of ethics clearance (Appendix 1 and 2) and a plain language statement (Appendix 4). These documents were either handed to the staff of the Support Centres or sent via emails so the staff could contact potential students prior to my visits. Both strategies emphasised the fact that students were not required to participate if they did not want to, and that they would not be disadvantaged in any way if they chose not to participate or to withdraw.

Although such information sufficiently explained what the research was about, the researcher presented the research project to Support Centre staff and participating students in almost all instances. The researcher found this approach to be a very useful way to mingle with students and gain their trust.

Although it was anticipated that interviews would be conducted face-to-face, three interviews were conducted over the phone. The interviews took place in a number of settings, and the approach was varied to suit the participants. The researcher always ensured that individuals' needs were met, and that the participants felt comfortable

students. As a researcher I am not allowed ethically to directly approach Indigenous students. Therefore the ISU plays the role as a link between the researcher and the student. I attached to my request to each ISU my research project's plain language statement, consent form and the study areas of students relevant to my research. The ISU staff then approached the students and obtained their consent on my behalf and arranged suitable times for the interviews. This procedure reduced the potential for students to feel that they being coerced by me to participate in the research.

and safe in the process. While some suggested sitting in an open outdoor space, others suggested being indoors.

8.6 Participants

To remain consistent with the aim of this thesis, only Indigenous Australians participated in the study. The majority of participants came from the Northern Territory of Australia, but there were also participants from all over the country. Furthermore, the participants came from rural, remote and urban areas.

In the end, a total of twenty-four participants took part in the study. While the majority were Aboriginal (twenty-two), two participants were from the Torres Straight Islands. In addition, the majority of participants in this study were female (seventeen). There were seven males. Most of the participants were mature age students.

Three types of participant took part:

1. Accounting students (four)
2. Business students (five)
3. Non-business students (fifteen)

To ensure confidentiality, all names used in the reporting of the results are fictitious. Accounting students are represented as A1 ... A4. Business students are represented as B1 ... B5. Non-business students are represented as NB1 ... NB15.

The number of participants limits the study. The number could have been expanded by including more non-business participants; however, this was seen as unnecessary because the themes became repetitive. While every effort was made to include more accounting participants in the study, four was the maximum number the researcher was able to obtain. To comply with the ethical procedures and guidelines, the researcher was not allowed to do more than contact the relevant Indigenous Liaison offices at universities and wait to hear back. Due to the lack of respondents, ethics clearance was then renewed for another year (see appendix 2), and the period for data collection was expanded for a further year. While this extra time did enable the sample number to increase, it unfortunately did so very slowly.

The initial plan of the thesis was to include Indigenous accountants in the sample; however, they were excluded from the study because no responses were received. As a result, the thesis had to be restructured to accommodate this.

Six universities from different states in Australia were contacted. These universities were chosen because they have high numbers of Indigenous students. Two universities of the six did not seem to take much interest in the research. One university did not reply to the researcher. The three universities which showed interest provided a limited number of participants. In total, three universities were included in this study. It should be noted that the twenty-four participants have provided valuable insights into study/career choices; as a result, rich data was collected, and saturation of themes was met in most instances.

Another limitation of this study was that it had only two Torres Strait Islander participants; therefore the information is not comprehensive enough to include a significant Torres Strait Islander perspective. Nonetheless, information provided by these two participants was included and treated in the same way as the other data. It is also important to note that, throughout this research, particularly in the literature review chapters; much of the literature was Aboriginal Australian in content and in many instances did not offer a Torres Strait Islander perspective. According to Taylor and Guerin (2010), Torres Strait Islander peoples make up only six per cent of the total Indigenous population (517,200), with two per cent being both Aboriginal and Torres Strait Islander. This may explain why the literature, and access to Torres Strait Islander students, was limited.

Indigenous non-business students were included in this study for a number of reasons relevant to the Indigenous context of the research. Irrespective of the course which non-business participants were studying, they are treated as an homogenous group for the purposes of this research. Non-business students are normally included in accounting education research to present their 'perception of accounting' and their 'image of the accountant' (Saemann and Crooker, 1999). Non-business participants were also important to the study because they helped the researcher explore the other factors which are taken into consideration when Indigenous students make decisions about their studies and/or career choices. In this way, the non-business participants helped the researcher assess the validity of the SCCT model in the Indigenous context. This is discussed further in Chapter 10. The researcher acknowledges the higher participation rate of the non-business students in this study compared to accounting and business students; but their inclusion, while providing a broader

perspective on Indigenous university students' perspectives on 'accounting' and on motivations to embark on particular study pathways, was also an indication of the under-representation of Indigenous students in business studies.

Business students participated in this study because, as indicated in the literature review, all business students must attend at least one core accounting class to be able to complete their degrees. Unlike the non-business participants, business participants have had experience of accounting as an area of study, and have possibly gained an insight into accounting as a career; as a result, they are in a better position to express their views on themes such as 'perception of accounting', 'image of the accountant', 'outcome expectation' and 'self-efficacy'. Their ability to compare 'prior to the course' and 'after the course' perceptions was also of interest to this study. Both the business and non-business student participants in this study were directly relevant to the goal of this research, which was to answer the main research question: what are the factors which impede Indigenous Australians from doing accounting?

Accounting participants have helped the researcher explore these same negating factors by working backwards from their positive decision to undertake a full study of accounting. By knowing the factors which influenced their positive decisions to major in accounting, it became possible to gain insights into the factors which contribute to the negation of this decision.

While the low number of Indigenous business and accounting student participants in this study is primarily attributed to the lack of these students in general, other factors also limited the researcher's ability to expand this participant sample. Since

Indigenous peoples are amongst the most researched groups on the planet, this fact is by itself strong enough to discourage many Indigenous students from participating in any kind of research. Furthermore, a major problem with the research was that the researcher had to approach students through their Support Centres in keeping with the ethics guidelines. Because of this, many potential Indigenous participants were less likely to participate. The most that the researcher could expect from the Indigenous Support Centres was that they would send, in addition to the first email to potential participants, a first and second reminder. Under such circumstances, the limited response rate is totally understandable. After all, many people simply delete emails which ask for participation in a survey.

Nonetheless, all participants in this research study, to whom the researcher is very grateful, participated of their own accord. Each one had the option to leave the 15-minute interview²⁴ at any point; but most suggested extending the interview to discuss further issues. Furthermore, most participants have informed the researcher that they are looking forward to seeing the outcome of the research, which is based on the outcome of their input.

8.7 Summary

This chapter explained the methodology adopted for the research. It discussed the guidelines for researching Indigenous-related issues, and ethical approaches. It also provided a detailed explanation of the recruitment process for the participants, together with the limitations which accompanied it. The last part of the chapter

²⁴ Interviews were planned to last for 15 minutes, but most interviews lasted around 25 minutes; only two interviews took less than 15 minutes. Participants were happy to extend the length of the interview.

included a discussion about, and explanation for, the method by which data was collected.

Chapter Nine: Research Study's Findings

9.1 Introduction

This chapter introduces the results of the discussions with the students who were interviewed. Initially, the interview questions (Appendix 5) concentrated on finding information about self-efficacy expectations, helping the community, previous employment, previous education, social influence, educators' influence, peers' influence, perception of accounting, role models, past experience with accounting, and the interviewees' understanding of the relationship between mathematics and accounting. Questions were devised in order to collect information which might help in finding answers to the main research question: 'What are the factors which contribute to Indigenous Australians' under-representation in the accounting profession?'

The quotations introduced in this chapter provide the backbone of the data analysis chapter and are based on the perceptions of the interviewees. By providing quotations taken directly from the interviews, it is possible to examine and understand the experiences and opinions of the participants (Patton, 2002). The selected quotations in this chapter provide a clear idea of the participants' concerns such as their aspirations, fears and difficulties.

In compliance with CDU ethics guidelines, all names used in the reporting of the results are fictitious. The quotations are extracted from all the students interviewed, whether they are business or non-business students. The findings reported in this Chapter are based on the answers provided by participants to the interview questions.

After interview audiotapes were transcribed, a thematic analysis based on repetition and significance was employed. From this analysis the research has found that there are three important factors which play a major role in the decision-making process. These three variables are: financial support expectations, perceived outcome expectations and self-efficacy expectations. The research has identified other factors, listed in this chapter, which have minor but significant effects on the interviewees' study choices.

The findings relating to each of the three major variables are introduced first beginning with those relevant to the financial expectations variable. Further findings are then included grouped under 'access to information' and 'perceptions of accounting'. Within these groupings of findings, the details are clustered according to the study areas of the participants in the research; that is, non-business students (NB), business not majoring in accountancy students (B) and accountancy students (A).

9.2 Financial support expectations

Neither the literature nor the SCCT model emphasised the impact of financial support expectation on study choice. The literature has, however, identified the impact of financial support expectation on students' education in general, and particularly on their decisions about whether or not to pursue their studies. People are more likely to quit their studies and look for work if they are faced with financial hardship. Previous research (Lent, Brown and Hackett, 1994, 2002; Lent and Brown, 1996) did not identify financial support as a main determinant of students' study choices. In contrast, this research's findings have shown that it has a significant

impact on the participants' study choices and that it plays a key role. This was clear during the interviews, so questions were developed to investigate the extent of the impact of financial support on the students' study choices. Although participants' decisions to major in particular fields were not made solely on one factor, financial support expectation was given priority by most of the participants, as is clear from the interviews. Together with outcome expectation, and self-efficacy expectation, financial support expectation was found to have a major impact on the participant's interest in particular fields.

In summary, neither the literature nor the SCCT model included financial support as a key attribute; instead, they examined and used outcome expectation and self-efficacy expectation. The literature has, however, stressed that financial support has an impact on students' study choice in general, and in particular acts as a determinant to continue studies.

As a result of the interviews, it became apparent that mature age students with children to support have decided to stop their studies because of financial pressure. However they were able to pursue their studies when their financial situation changed and in most cases they were able to obtain scholarships to study a specific course. Consequently, students had a choice either to study what the scholarship offered, or to stay at home. It was also apparent from the interviews that many Indigenous students have agreed to study subjects which they may not have any interest in only because they were offered scholarships for specific courses.

While speaking to participants about their education in general, it was noted that most of them (72%) had left university after an initial enrolment period for a considerable time before they came back. Although some decided to have a break after year 12 because they were not sure what they wanted to do at university, many of the participants left the university because of financial pressure. The following quotations are examples of participants' views on the importance of their financial situations.

NB1 stated that:

‘In 2010 I stopped studying, because I could not live on what I was earning ... My Centrelink payments were not enough, so I had to get a full-time job. But now things have changed, I have decided to come back to uni and study because work is going to pay for it, but it has to be within my role at work ... in the Department of Health.’

NB6 has two children of her own to care for, and the scholarship which was offered to her was the only way for her to continue her degree on a full-time basis.

‘There is no way I can do uni without additional financial help ... I am fortunate now that my work pays me to study full time, because I have two children otherwise it would have been so hard to accommodate for the two together (study and work). So now I do not have to go to work while I am studying.’

NB9 is not pleased about the fact that she did not start her university degree directly after she finished high school. Instead, she was forced to work for four years before she started at university. Her plan was to save money for university; and during this time, she could decide on her choice of major. But her plan did not succeed because she was unable to save any money.

‘I do not have kids of my own ... my other family (mother, father, aunts, uncles and cousins) were in need of money so I gave it to them ... Luckily I got a scholarship.’

With the scholarship offered, NB9 was able to come back to university and continue studying. B1 had a different experience from NB9. Although she has a large family of her own, her extended family members played a major role in her ability to return to university and continue studying.

‘Since I have four kids, I was only able to come back to uni because I have a huge family, all of my sisters would help out, and baby sit ... It is a bit hard financially, but that is why I decided to come back to uni and study to improve my financial situation.’

It was not the initial plan of the thesis to include predetermined questions related to the participants’ financial situations. However, after the first discussion with the participants, it was apparent that the researcher should take into consideration this important factor. The quotations given above are examples from different participants which showed the importance of the financial support factor on

participants' education. The following section shows the importance of such a factor on participants' study choices.

Non-Business Students: NB

NB1, who was studying for a Bachelor of Education (Teaching) degree before she was forced to stop due to financial pressure, has now changed to the health profession. During the interview, NB1 explained why she decided to study health instead of teaching. After quitting her teaching degree, NB1 began to look for a job. At the time she was not selective about the type of work ('work is work'), and as soon as a work opportunity arose she took it. This opportunity was conditional on the completion of a job-related course.

'The reason why I am working there is that they have an Indigenous education programme through the Department of Business and Education, and they put aside twenty entry-level positions to get into the Department of Health once they have completed the twenty weeks Certificate 2 in community services, and they paid for it.'

NB1 was driven from education to the health profession primarily because of financial pressure. NB1 stated that if she was given a scholarship to do education 'I would not have dropped out of uni in the first place ... definitely I would have stuck with teaching ... Work said that you can study and we will pay for your course as long as it is in your role ... and yes you will still be working with us and getting paid the same rates.' Although NB1 had many reasons why she initially wanted to become a teacher (such as her self-efficacy, and her willingness and ability to help

children if she became a teacher) she was nonetheless obliged to turn from education to the health profession primarily because of financial pressure.

NB2, who is not a mature age student and has no dependents to look after, had to work for four years until an opportunity for a scholarship arose. She was offered a scholarship which, in addition to her partner's income, has played a major role in her return to university to study law. Her choice to study law was strongly influenced by the scholarship which was offered in addition to other factors.

'I'm on an Indigenous scholarship ... so they pay me fortnightly payments to study full time. And then every year, usually at the end of the year, I do a three months' placement somewhere with a solicitor in the Northern Territory ... so it could be legal policy, and I do some work with them during that time ... There is no way that without this scholarship I would have come back to uni ... yes it was the main thing that brought me back here, but also I always wanted to do law too ... that is also another factor.'

A reluctance to decide whether to proceed with a study choice without financial support, or to go with another option with financial support, was clear in the case of NB3. NB3, who is now working as a full-time teacher, completed a Bachelor of Education without a scholarship, but had many important factors which affected her decision to choose education. However, she relied primarily on Centrelink payments and also on financial support from her family. NB3 was on Higher Education Contribution Scheme (HECS), so she did not have to pay any tuition fees while she was studying. However, it is now her first year at

work and she is required to start making payments for her tuition fees through her tax. When the researcher asked NB3 whether, if she had had a scholarship to study something other than education, would she still have done education, she said: ‘Maybe if you asked me this question back then I would have said “No” since it was ok, and I was not paying any money ... But now I will think about it more ... No I think I would have still done education ... I do not know, it is hard to say; maybe it will depend on the course that I would have done instead.’

NB5, who changed his study major from law to resource management after he had done two years of the law degree, had a number of factors which influenced his decision. These factors are presented later in this chapter. However, unlike most of the participants, NB5 placed financial support as a contextual factor and not a main determinant.

NB6 is another example of how a scholarship which was offered to her through work has prompted her to study for a Bachelor of Behavioural Science degree. NB6, who works for the government at Centrelink, stated that: ‘They offer Indigenous scholarships through my work for specific roles ... my role is included. But you need to show them that you are committed and you do the first year on your own. So I have done the first year, I applied for the scholarship and I got accepted.’

NB7 is one of those students where a scholarship has played a crucial role in changing career choices. NB7 completed her study to become a library technician ‘many years ago’, and has been working as a library technician for a long while.

However, she is now in her second semester of the first year of a bachelor degree in teaching and learning. Although other factors have helped with the decision-making process, NB7 says that: ‘ ... No way I would have come back to Uni, with no scholarship.’ NB7 also stated that:

‘A scholarship came up, and I applied for it, and since I am a little bit of a hippy, I believe if something happens it happens for a reason, I was successful with the scholarship so I said goodbye to work, and here I am now. I stopped working, because it is a full scholarship and it keeps me afloat ... My main concern was that I am going to study and I do not have to worry about money’

NB7’s early decision to work as a library technician was also driven by the availability of a scholarship.

‘At that time, the only options that were out there was a traineeship through an Indigenous traineeship, and that got me into libraries, and my boss then helped in allowing me to go and study the diploma, so I really went with the flow. There were other options out there, but library is the one that I got accepted in, I really did not care then on what I am going to do ... money talks’

NB7 has made it clear that regardless of the course, as long as she has a scholarship she is going to be pleased. However, with the availability of more than one scholarship, other variables play a role in determining study choice.

NB8, who had very strong reasons for wanting to become a social worker, stated that: ‘ ... I will still do my social work course even if I did not get a scholarship, not that I know what business is all about, but more because I just wanna become a social worker and nothing else ... Well, but if you offer me a scholarship to something else, then it is worth looking into it ... I think most probably I will take it on especially if I see some good outcomes out of it.’

NB11 affirmed the impact of a scholarship on a person’s study choice, but also declared the importance of knowing about alternatives. She stated that: ‘If I get scholarship (to do accounting), I might change my mind, but I need someone to come and tell me exactly how accounting would help kids and communities then I might do it.’

NB13, who is under a lot of financial pressure but knows exactly why she wants to become a human rights lawyer, was reluctant to confirm whether she would still do law in the absence of a scholarship, and with the possibility of studying something other than law with a scholarship. Like NB13, NB14 was unable to confirm whether he would still proceed with his plan to become a marine biologist if he was not given a scholarship, but instead was offered a scholarship to do biomolecular science. NB14 is more interested in biomolecular science than marine biology, but he can see himself benefiting his community more if he becomes a marine biologist. NB14 stated: ‘It will be hard decision if I do not get a scholarship for marine biologist but I get one for biomolecular science.’

Although NB15 does not have an interest in accounting, he is quite confident that he can do it if he decides to. NB15 is interested in teaching, and he is hoping to obtain a scholarship. However, he stated that: ‘If I did not get a scholarship to do teaching and got one to do accounting, I would definitely look into it way more. I have never looked into it to see what it is all about.’ Like others in this study, NB15 said that knowing what accounting is about might create an incentive for him to decide to do accounting, especially if he is offered a scholarship.

While most of the non-business participants declared the importance of the financial support factor in their study choices, the following participants did not see it as a major factor. They instead saw it as a supportive factor for their predetermined choices.

Although NB4 has a scholarship to complete her social work degree, the financial support factor in her case was marginal, although ‘it helps a lot’. Her main reason surpasses any other factors. The main reason for her is to help children, especially those who have been stolen from their parents.

NB9, who has just finished the first semester of her teaching degree, explained that it is more likely she will stay with teaching even without a scholarship by using her sister as an example.

‘My sister works full time and does her study part time ... and she does not have a scholarship ... I am gonna look for a scholarship. But if I do not get a scholarship to teaching but get one to do another degree, it will

depend on what this degree is ... I mean I am surviving now on what I get from Centrelink, and I do five hours a week at the Centre of Remote Health here, I probably would still go with teaching. Now I just see myself in a classroom.’

Although there is some reluctance, there is also a high level of assurance that NB9 will continue even without a scholarship²⁵. It is important to note that NB9 receives help from her parents to look after her children, and that she also lives with them.

NB10 is an exception compared to other students in this research study because the financial support factor did not have any impact on his choice to do an advocacy degree. NB10 stated that: ‘I won’t be on a scholarship when I start doing the advocacy degree ... Most of my income is derived from my own business ...’

Business students: B

In a similar fashion to the majority of the non-business participants, most of the business students suggested that the financial support factor is a major variable in the decision-making process of study choice.

B1, who has a scholarship to do a business degree, also has other factors which drove her towards business. However, because B1 has a family of four children for whom she is responsible, a scholarship was a must for her to proceed with her business degree.

²⁵ When the researcher spoke to NB9 for the first time, NB9 was not yet enrolled; but she is now enrolled in her teaching degree without a scholarship and has just finished her first semester.

B2 is now in the final stage of studying for a business degree which she initially started in the Vocational Education, and Training (VET) sector doing a diploma in business. She said that in addition to other considerations, financial support was one of the main reasons which drove her towards the business major.

‘I transitioned from a diploma in business which I completed in 2006, and then enrolled in a Bachelor of Business ... I was accepted in the Indigenous women’s programme, which is coordinated by the Commissioner of Public Employment, they were looking at trying to up-skill Indigenous women, so they can move to middle and senior management positions in the NTPS, but only two of us from CDU were successful in taking places, it was very competitive ... they were only offering the Diploma of Business.’

B4 also said that a scholarship has played a major role in his decision to enrol. He stated that: ‘... the scholarship made more certain that this (business) is what I want to do’.

Accounting students: A

A1, the first accounting student interviewed, has a scholarship from work to do her accounting degree. Although she always wanted to become an accountant for reasons which are discussed later, she said that if she did not have a scholarship to do accounting, and had been offered one to do something else, she would have accepted the offer. But the other subject would have had to be something that ‘I like, and I know what it is about ... and I need to see that I can be of benefit, like with my role at

work I can see how with accounting I can help a lot of Aboriginal people ... so I need to see first if this is also there ... When you do not have many options you are basically stuck ... Well I am lucky that I got a scholarship to do something I like, and I always wanted to do, but honestly ... a scholarship can change the mind for a lot of people’.

A2, who is now in the first year of her accounting degree, had been working at a bank for a number of years. Although she had made up her mind to do accounting prior to knowing about any possible scholarship, she now has a scholarship from work to do accounting studies. A2 stated that: ‘The bank has been quite supportive, and as soon as I asked them about financial assistance, they were like ... no problem ... there is a scholarship for you’. Although A2 is eager to continue her accounting degree, and believes in the many positive outcomes which will emerge from it, she, like most participants in this study, had raised the possibility of shifting from accounting to something else due to financial pressures. She stated that: ‘If I did not have the scholarship, I would have searched for another scholarship ... because I now know how hard it is to finish your study without a scholarship ... A lot of my friends drop out because they cannot live on what they are earning ... If the finance side of it is sorted then they can study anything ... they are all smart too.’

Although other factors influenced A3’s decision to major in accounting, the scholarship which she was offered has played a major role in the completion of her accounting degree. In addition to other factors, the cadetship which was offered to A4 by the Treasury Department has played a major role in his decision to pursue the accounting path. A4 stated that: ‘I have a cadetship with the New South Wales

Treasury to study accounting. Which gives you a study allowance to study full time, and during the semester breaks I work for them. And they train me up understanding the financial information system, and at the end of this year when I finish they will offer me a full-time position as in the graduate programme.’

It was apparent that many students, who were suffering financial pressure, have been hoping for opportunities to improve their financial circumstances. Although they believe that education provides them with financial stability, many were unable to continue due to financial pressure.

9.3 Self-efficacy expectation

Non-business students

Neither the literature nor the SCCT model disregarded the significance of the self-efficacy phase in the study and/or career decision-making process. Although participants in this study did not mention any self-assessment of their ability to succeed in their studies, they referred to factors which can be categorised under self-efficacy expectation as being important factors which they took into consideration before making final decisions about their study choices. For instance, NB1, who had her own solid reasons why she wanted to become a teacher, received a strong push towards her education degree from one of her colleagues who was a teacher. Her colleague said that teaching was not a hard course to study. NB1 stated that: ‘The teacher that I worked with made the job look so easy, but at the end it was pretty hard.’ NB1 has now moved to the health profession because ‘... nursing seems a lot easier.’

While NB1 made it obvious that it was the lack of self-efficacy for teaching which mainly prevented her from continuing her education degree, other important factors stimulated her interest in joining the health profession. Although these factors are discussed later, it is important to know that NB1 has tested her ability to successfully complete a health degree through her employment at the Health Department. NB1 stated: ‘... But I am not going to become a teacher now because it is hard, and also the financial stuff ... I did enjoy it, it is not that I did not, but nursing seems a lot easier, I live with it and I see it every day.’ NB1 then explained the major factor which impacted on her ability to successfully complete her education degree. If NB1 had been able to spend more time studying, she would have easily passed; but due to the financial pressure which she had, she was forced to look for something easier. She stated that: ‘Anyone can do accounting, anyone can become a teacher, you just need to have the time to study for it ... and it is a bonus if you have a supportive environment.’

There was a noticeable perception amongst the research participants of a strong relationship between accounting and mathematics. Many of the participants in this study declared that accounting is not an area of interest for them, and that their opinion is not critical of accounting²⁶. The reason for the lack of interest is that they are ‘not good with maths and/or numbers’. For instance, NB2 is very certain that she will not do accounting. She said this is ‘not because I do not like accounting, but more because I’m not good at maths; I’m not good at numbers’.

²⁶ As will be seen later, this is because most participants have not been exposed to accounting.

While in many instances low self-efficacy regarding mathematics has played a crucial role in keeping students away from accounting, NB3's high self-efficacy in English has played a significant role in her decision to become an English teacher. She stated that: 'Well, I really liked English, and I always scored high or maybe the highest sometimes.' Like most participants in this study, NB3 also linked efficacy in accounting with efficacy in mathematics. She said, 'I just thought you just had to be, like, really computer literate and ... know your maths ... and I wasn't good at maths.' NB7 and NB15 also said that the perception of accounting as a number crunching exercise is what affected their confidence about studying the subject.

NB5 changed his study major from law to resource management after he had done two years of the law degree. One of the reasons which pushed him away from law was the difficulty he experienced in completing the degree. He stated that: 'I went and did law for a couple of years and it was just too hard ... so I went back to resource management ... and, yes, it's just easier' It is the interest in the area which mainly influences a person's ability to successfully complete a course.

NB7 and NB15 also declared that the perception of accounting as a number crunching exercise is what affected their confidence about studying the subject. NB7 said that: 'When I think of accounting, I think of numbers, they (numbers) scare me. I do like maths, but was not good at it.' NB15 stated that: 'You need to be so smart at maths, I am not. That is another reason why I have never thought about it.'

Although NB14 was one of the smartest students in his mathematics class, he never thought of doing accounting. Because of his belief in his capability to pass any

subject, his study choice was mainly based on his ability to provide help to his community.

NB12 said her brother failed in the introductory accounting class because it was 'hard'. She stated that: 'My brother also did IT, but he also had to do this accounting unit, and he failed it so he had to do it again ... a lot of people think it is hard. So why bother?' NB11, while in year 12, chose classes based on her ability to pass them. NB11 stated that: 'I did hospitality and dance, and then I changed and I did music ... because they were easy to pass.'

Business students: B

B1 suggested that Indigenous students' belief in their ability to successfully complete a task can be traced to the success of other community and family members.

'Most Indigenous people will be like ... Well, they have done it before, so I can ... Indigenous peoples that are accountants are very intelligent people ... Some people say accounting is like a posh degree, like if you are Indigenous they say, Oh you are too good for other people, you are too smart, there is a tick mark attached, like when I was doing the one course in accounting, and my other peers will be like, what are you studying, and then after I tell them they will be like OHAH well. Smart, like you are smarter than anybody else.'

Participants' perception of accounting is discussed later in the chapter. B3 has chosen business mainly because 'that is where my skills lie, I thought I will just follow that path'.

B4 said that one of the factors which affected his decision to study business was the ability to pass the course. He stated that: 'It comes down to leading by example ... A friend of mine is doing the same course, and he has not failed yet.'

B5, who initially decided to study accounting, changed his mind after attempting the first accounting class. B5 admitted that his perception of accounting was based on information which he gathered from society and school. His mathematics teacher in high school insisted that he should do accounting since he was the best amongst his classmates in mathematics. He stated that: 'Everyone made it look like accounting is maths or maths is accounting ... even my teachers, everyone will be like you should do accounting.' B5 was briefly exposed to accounting in year 12. He said, 'I think we studied three accounting chapters ... the course was called Business Study'. But his reaction to accounting after he went to university completely changed.

'I was shocked ... It was very different to what we did in the high school, I am still good with maths, and I still like maths, but I do not think accounting has anything to do with maths ... Well, accounting involves a lot of numbers but that is not maths ... I in fact struggled with the concepts ... I am not sure whether it is the book, or the teacher ... but definitely I was misguided ... Many of my friends maybe wanted to do accounting but because they are not good with maths they are not doing

it, so if people change that view for them then they might try it and most likely they will be good at it.’

B5 explained that his reason for quitting his accounting degree, and deciding to have a break for a year before he decide what he wants to do, was the difficulty he experienced in understanding concepts. He stated that: ‘The concepts were very hard; I could not understand how they are all linked. Maybe because I lived in communities most of my life, I can’t give examples to myself so I can understand them. I can’t relate these concepts to my way of life.’ The researcher then informed B5 briefly about the conflict between Indigenous values and Western accounting values. As a result, B5 said: ‘You see, I did not know all that ... but I think maybe that is why I didn’t understand the concepts because they are coming from a different point of view ... that is why I could not make that link.’ B5 was forced to leave accounting and choose something else later on because of his inability to finish his studies in a suitable time frame. ‘I do not wanna be stuck here for ten years just for the sake of becoming an accountant ... I can help my people in other ways’.

Accounting students: A

Students expected that efficacy in accounting was based on their performance in mathematics. Those who were good at mathematics were strongly encouraged to do accounting, since it was expected that they would do well. A1 stated that: ‘My maths teacher at school used to always encourage me to do accounting ... yes I was very good at maths.’

A2, who is now in the first year of an accounting degree, believed that students will need to have average literacy and numeracy skills in order to do accounting. She stated that: 'I think anybody can become an accountant as long as they have the literacy and numeracy skills. Their literacy has to be to some extent good and I think most Indigenous students are good. Because in accounting there is also like the business side to things, so they will need to understand all of that.'

A3 also believed that you do not have to be exceptionally clever to do accounting. She stated that: 'I know that I am not silly, I am an average student, so I thought if I study hard enough I will pass. And my Mum and Dad both told me no matter how many times I try, in the end I will get there, and that is all what matters.' A3 has managed to complete her accounting degree without failing any classes.

9.4 Outcome expectation

Helping the community was a factor identified by most participants as an incentive for their study choice. Indigenous cultures value the relationships between members of the community and the sense of helping each other, and this was noticeable amongst the participants.

One of the most significant findings of this study is that all participants, while explaining their academic or career choice decision process, prioritised their capacity to help their own communities as an outcome of course completion. Although many of them are aiming to help the most disadvantaged group on the Australian continent - the Indigenous peoples - others expressed their willingness to help other people as

well. The perceived outcome of the career for only one participant in this study was for the benefit of himself (and his family), rather than for the benefit of the whole community.

While many may think that outcome expectation most likely refers to a high status job or a high salary,, in this study the outcome expectation of most participants refers to their ability to assist and make a difference to those who are in need. Most participants did not regard the monetary reward of a job as a major influence on them. For instance, NB1 said, ‘Money is not something that drove me to get the job’, and B2 stated that ‘I did not choose what I want to do because of money’.

Non-business students: NB

Participants’ life experience has an impact on study choice. The struggle and fight to get ‘things’ in the past has created a major incentive for them to assist ‘other generations’ in gaining access to these ‘things’ in an easier fashion. NB1, who like most participants faced difficulties acquiring education, was willing to become a teacher in order to help others. She stated that: ‘I wanted to become a teacher mainly to help students and little kids learn ... I would have done that to all students, not only Indigenous students, they are all kids and need the education.’

NB2, who is studying law, is no different to the other participants. She is doing it to benefit her community.

‘I suppose I see it as a tool that I can use to help Indigenous people ... maybe bridge that gap in the law where ... a lot of people who are

Indigenous, especially out in the communities, see it as, that's the White law. And I want to ... bridge that gap and help them understand this is the law, everyone follows it and just, sort of, help them to understand that's what it is. Because there are a lot of Indigenous people, especially out in the communities; they don't understand it and then when they do something wrong it's not explained to them. They don't understand that there are a set of rules ... I just think that going into, or studying law, I can get as much knowledge as I can possibly then help translate it back to them, to get an understanding so that they can actually be a part of society productively ... so just, sort of, help them out instead of getting the arse-end of the law when they get told, you've done something wrong, you're going to get locked up for it, or here's a fine. And then they're still sitting there like, I don't understand what I've done. So I guess that's, kind of, maybe my wanting.'

The following quotations illustrate that a major influence behind participants' decisions to study a particular course is the ability to help their communities.

NB3 stated that:

'I just suppose they need a lot of Aboriginal teachers, for the Aboriginal kids. And, like, I can relate to them, and, yes. I can, like, be a role model for them and help them go through school, yes, the way I went through school. Because I never really had, like, Aboriginal teachers or role

models, and I want to be that for the other, for the younger mob. I can see myself making a difference with this degree’

NB4 and NB8’s interest in taking degrees in social work have mainly been driven by a desire to help people who have been stolen from their families. Both NB4 and NB8 were taken away from their families. NB4 stated that:

‘I want to be a social worker, so I can help people (Aboriginal people and non-Aboriginal people) that have been taken away from their families, because I have been taken away from my family. I know my family now, but when I was a kid, I did not. Because I have experienced it, I would like to help other kids that are going through it, so I can tell them that I have been through it ever since I was little kid baby. I’d just like to do that.’

NB4 also stated that her only incentive to do a Bachelor of Social Work degree was because:

‘My family was stolen, by the government, and so was I, for 18 years, so it means I belonged to the government ... I was an orphan for 18 years ... if I become a social worker I can help this stop happening in future generations ... It’s the only way I can make a difference, to become a social worker ... Because I speak my language, and they (the social workers that I had) don’t.’

NB5 stated that:

‘It actually leads somewhere that ... where my life would actually serve a purpose ... I can see myself making a difference with this degree ... because I think I could contribute somehow to the environment, it’s kind of looking at Indigenous people and looking about how they kind of live their lives sustainably with the environment and then looking at Western society, which isn’t sustainable. So with Western society, they tend to like go into an area, take out all the resources, monopolise everything and then when the land’s completely worthless, they just move on to another place ... They’re looking at ways of doing things sustainably. And that is what I want to make sure is happening.’

NB7 stated that:

‘I am just doing it to benefit kids, full stop ... regardless of whether they are Indigenous or not. I had a really bad education, and with life experiences you would understand that everybody is an individual and we all have different learning capabilities, and there are a lot of teachers out there who teach two-one type of learning, and I want to be somebody who could possibly incorporate the different ... to let the different learners have a chance. To get past that stumbling point that I actually reached, which is one of the reasons why I left school. So it is more to do with the kids than anything I think.’

Again, and in a similar way to most participants in this study, NB9, when asked, ‘Why did you choose to study teaching?’ said, ‘To be honest because I want to be able to help people’.

NB10, who was doing a teaching degree and changed his plans in order to do an advocacy degree, stated that he did this so as to ‘enhance and be part of the needs for more equality support for men, whether within the Indigenous community or even in the broader community’.

NB11 stated that:

‘I kind of wanna work in stuff that is helping kids and communities ... It is kind of social work. But just working with programmes that get kids out doing stuff. But I would not mind work on the health side of it ... like promoting healthy things and food, and stuff like that ... I know I wanna do stuff, so that I am working with kids, and working with communities.’

NB12 began studying for a business degree before she changed to nursing. In addition to her high self-efficacy expectation as a result of her previous education and teachers’ encouragement, the main reason behind her initial decision to study business was her plan to start her own enterprise. NB12’s decision to change to nursing was made in order to assist Indigenous peoples, particularly in rural areas. NB12 stated: ‘I think it is because of family and stuff, you know a lot of people get sick, and especially in the Indigenous community. Because my parents are from

Torres Strait Island ... and it is very rural up there, and that's what I want to get into, like the rural areas.'

NB13 has decided to pursue a law degree to help close the gap between Indigenous and non-Indigenous peoples. NB13 stated that: 'I want to become a human rights lawyer, because of all the stuff that is happening in Australia at the moment and what the government is doing with Indigenous people, they are taking us a step back more than closing that gap between us.'

NB14, who is more interested in biomolecular science than marine biology, decided to study marine biology instead because he sees greater benefits to his community with such a course.

'I wanna help my community ... I am from the islands so like help out my own where I am from. And there is a lot of research that I can help with. Like if I am the marine biologist with the group, I can talk to the people, where I can be a bridge between the Islanders and whites. We are very connected to the ocean. In the past people used to catch a type of shell and traded it with Fiji and other countries for wheat and stuff like that, but now the whites are taking full control, they hire the islanders to do most of the work, and they just pay them wages. I just wanna be like a bridge, like if there is something that I understand I can explain it to them in our language, and they can understand me, and like they might be more comfortable talking to me instead of a white person'.

NB15 stated that:

‘I can help other Indigenous students so that they can do the same thing; I was the only Indigenous student in my whole school, so I have never had the Indigenous role model to look up to, except my parents. But my main aim is to join the UN and something like that, and teach in refugee countries. That is my main goal in teaching. Yeah it is not my intention to help just Indigenous students, but any other students with needs.’

Because of their life experiences, and particularly the difficulties they faced to obtain education, basic human rights and facilities, participants in this study stressed that their intention to help deliver benefits to the next generation was a main variable in determining their study and career choices.

Business students: B

The business students were no different to their non-business counterparts in their willingness to approach a study course which is expected to be of benefit to their communities, and all those who are in need.

B1 stated that:

‘Because of the Northern Territory intervention and a lot of Indigenous people have a lower life span than non-Indigenous people ... so ... with my marketing experience that I am going to learn once I finish my degree,

I can develop promotional materials to advertise in my own languages to get like health messages across to my own people, like eating the right food is good for you, or something like that ... Because you see a lot of posters up everywhere, and they are only in English, I know that not all of my family speak English very good. So that is what I am going to achieve in marketing.’

B2 stated that: ‘I did not choose what I want to do because of money; I want to have my own business ... I think all what we need to get up there is more businesses that are owned and managed and run by Indigenous people.’

B3 stated that:

‘One of the motivations to get into the business discipline was to assist my community. In order to build an influence on my community, I needed to build my capacity and understanding about how to operate a business, or use these qualifications to then go and build other organisations to be better and successful businesses, whether they be a not-for-profit or for-profit companies ... I think people out there (meaning non-Indigenous people) are really threatened by an Indigenous individual that has a bachelor of business. Well they’re telling you to go and get your education ... that is a wonderful thing; being an Indigenous woman in an Indigenous field you can normally see fear over peoples’ faces. So it has been a challenge to secure work at high levels, but I don’t think of it as a hindrance, I think of it as an opportunity to go and look elsewhere,

and that is why I ended up opening my own business and being a partner in the firm. Absolutely there is discrimination against Indigenous business people, you better believe it. I think because there is massive shift and movement taking place that people are actually threatened by Indigenous businesses and business people rising up and especially in areas such as accounting, marketing and economics, and those key areas.

That people are just going ... oh my goodness what is going on here.'

B5 changed his study course from accounting to another business field, but his initial reason for doing accounting was to assist people from his culture. B5 stated that: 'I always thought of doing something ... so I make a difference to my own people ... we all know what's happening in our communities ... I thought accounting will help me to address the money issue in our communities ... our people gets ripped off by others'

Accounting students: A

In a similar way to their non-business and business counterparts, the accounting participants highlighted the significance of the perceived outcome from a study or career choice. This perceived outcome is of great importance in the decision-making process only if it leads to benefits for people and communities.

A1 stated that: 'I believe that accounting is not just important for Indigenous peoples it is important for everybody ... accounting is very important for the success of any

business, and I think that is what we need in our Indigenous societies ... yes we have the business but who does the books? ... of course it is not an Indigenous accountant.’

A2 strongly believes that through her accounting qualification, she will be able to assist her community.

‘To be honest, I really do not know yet how accounting will help my people, but I know it will help them ... Maybe after I finish my degree, I can know better ... I do not think Indigenous people would like to understand about the sales and they have to make profit and everything. I think I can help, I think you just need to teach them more about it, like speak to them about it and explain it more. They feel like they can trust me more, because I am coming from their views, and I can speak their language as well ... Money management is their weakness so maybe that is where I can fit in and help’

A3’s ability to provide assistance to Indigenous businesses was her perceived outcome from becoming a qualified accountant. She stated that: ‘I do wanna help people of my own culture ... My brother and dad, they both have businesses ... they struggle from time to time ... I think they need good guidance, for financial advice, and help with how to do the book work correctly, and things like that.’

A4 was quite unique in this study. While most participants expressed their interest in studying a course which primarily provides help to their communities, A4’s self-

interest is what mainly motivated him towards accounting. Nonetheless, A4 assured me that by being an Indigenous accountant he can assist Indigenous Australians.

‘I think everyone does something for their own benefit. First of all, you gotta be happy with what you doing, you gotta do it for yourself first of all, and that is why I am doing it, for future career for myself and earning a living. But in doing that I am also helping Indigenous people. I think Indigenous people need representations in government bodies. In doing that getting a full-time position here at Treasury I am representing Aboriginal people. Occupying positions in government would have key roles in helping Aboriginal people ... The fact that I am a mature age student I am not getting any younger, and doing labouring jobs is not appealing anymore, so I’m looking at the future. So for me in order to be working in the future, I think I need to educate myself, and accounting would provide a good career for me I believe, and not only that, but at a personal level being an accountant can help you budget your life a lot better with managing money. And I think that is primarily how accountants can help Indigenous peoples, because money management is something that is lacking in the communities. Indigenous organisations primarily hire or sub-contract non-Indigenous accountants to do the work for them from what I understand, so if they can have Aboriginal peoples in those roles, I think it would be a bit better in change of control, so probably Aboriginal people can have a bit more control over the financial side of their organisation.’

The last quotation differs from the previous ones and shows that although NB4 is studying to achieve personal goals, he can also assist Indigenous peoples. It is important to note that during the recorded phone interview, A4 mentioned that he grew up in the city, and does not speak any Indigenous languages, something which is also unique in this study.

9.5 Access to information

Irrespective of whether it was self-efficacy, financial support expectation and/or outcome expectation which influenced a student's decision to pursue a particular degree, what appears to be of great importance to the decision-making process is access to information about the area of study. Knowledge about, and familiarity with, an area of study is one of the most important factors. Such awareness and familiarity has enabled participants to make decisions. Familiarity was gained through different forms and sources. This section presents findings from the research about the way participants gather information which ultimately affects their decisions about their choice of subject to study. To support this claim, the research presents a selection of quotations from the participants.

Non-business students: NB

This research has found that accounting is one of those areas which students do not get exposed to as much as other fields. It is the last subject which students discuss amongst themselves. NB1, for instance, stated that the researcher was the first person to mention accounting to her: 'After you talked to me I said is this a sign that I am

meant to do accounting?’ She then recalled that her father ‘used to say to me when I was really young, that his mom used to tell him “save your money, save your money”’ ... but I was that high [meaning very young]’. NB1 believes that she is now more exposed to accounting because of her boyfriend: ‘My boyfriend told me the other day that “you need to save up, or you are not coming with me for Christmas holidays.” No one said that to me before ever.’ In comparing accounting to other professions, NB1 stated that: ‘Health is more related to Indigenous, because you need to look after your health every day.’ She was then silent for a few seconds and said, ‘But you also need to deal with money on a daily basis.’

NB3 stated that: ‘No one really talked about accounting, and it was, just, never really mentioned ... it was mainly the main things that was like doctor, lawyer, or teacher, or ... sports person. But other things don’t really ... Accounting never really, I don’t really use it in my vocabulary, not really’ The main sources of exposure to different fields and areas are, according to NB3, teachers, family and friends. ‘It is them who do not open our eyes to some professions like accounting’; instead they ‘expose us to other professions’.

It was not NB7’s intention to become a teacher; however it was word of mouth which changed her life. Once she was informed about a scholarship which she was able to acquire, she changed her mind about education. Although it was the scholarship which most probably drove her towards education, her knowledge about the scholarship was equally important.

‘I rang up and talked to the girl about a position that came up in the Department of Education, and it was to do like with the admin role of the scholarship, the admin role which oversees it all, and she said, “Why don’t you go not only for the job but also for the scholarship and see how you go” ... It is word of mouth more than anything, how I get to know about this scholarship. And once I found out about this scholarship, I was working with two other girls, who were eligible, and were working as teacher assistants and I give them the information and a little bit of motivation, and they applied and they were successful as well, so now there are three of us in the same place.’

Interaction with workers was also one of the important factors which exposed participants to particular careers. NB8, who decided to become a social worker, had interacted in the past with the social worker she had when she was young. More information was then obtained from the Internet and other media sources. She said, ‘the social worker that I had since I was a kid ... was not an Indigenous lady ... I think it is better if I had an Indigenous woman, Because she (the non-Indigenous social worker) would not be able to connect with Aboriginal kids, where I am Aboriginal, I understand and I know the culture and all that, so I will be able to interact with Indigenous kids.’ NB8 then researched the availability of the social work degree, and the universities which offered it.

NB10 was exposed to the advocacy degree by searching the Internet.

‘I was looking through Batchelor’s website²⁷ and I become aware of what they call a Bachelor of Aboriginal and Torres Strait Islander Advocacy. I read what I could online, in theory it sounds fantastic, I have spoken to some of the people who are doing the course to see how impacted and affected the course might be, but I am quite specific to where I believe the advocacy degree would support me and where it will be appropriate ... It is all about that I believe in equality, I do not believe in superiority of anybody.’

NB11’s interaction with the school which her son attends exposed her to a teaching career. She stated that: ‘I got to know that this is a way to help people from other people, like the school that I take my son to, and when they have stuff running like community stuff, I will take him to it, and then you find that there is more stuff there. And that is where I think I just got interested.’

It was a movie which initially exposed NB13 to the need for her to step forward to assist her community; and secondly it was information passed on from her godfather, who is a lawyer, which encouraged her to pursue a law degree.

‘When I was touring with my grandmother around Australia for our generation ... I did not know the full impact of what was happening in the Territory at the time, when I saw a film called “Our Generations”, that basically showed what happened in an island at the Top End of Darwin,

²⁷ The website for Batchelor College.

“Galiwinku”, basically talking about what the intervention is, and all that, and what happened to us. I was like “I can’t just sit here and do nothing”, so I went into law ... I have talked to my godfather, he is just a lawyer, and I have got a friend, who does law as well. I think the biggest influence that I had was the drama.’

A similar case is that of NB14, who as a result of watching scientific documentaries was exposed to the career choice of marine biologist.

‘I do not know of any marine biologist. I got exposed to this because I watch a lot of science documentaries and stuff, and watch a lot of stuff on YouTube. And I just thought there was like a marine biologist and I was like “Oh what is that?”. I knew there were people that go out and do research, but I did not know what they were called, and I was like I could become that ... I do not think anybody from the people who I hang around with knows what accounting is ... like properly ... I have not spoken to any marine biologist.’

Business students: B

B1 provided a good example of how exposure and access to information might impact on 'study and/or career choices. She stated that: ‘To do accounting you need to have some idea about accounting and finance, for example like health degrees are widely publicised, so people have a lot of idea of what is a health degree.’ She then asserted that, based on her experience and her current role at the university, accounting is not as widely publicised as other professions.

‘If I am going to be a doctor I am going to be treating people to become better and make them better, and they are not gonna be sick anymore, so they kind of make a connection, but in accounting they do not make the connection, they do not say I wanna start my own business uh this is accounting so I am participating in the economy. They say I want my own business and they stop it there, they do not realise that they are participating in the economy, and this is how the economy works, they do not get the big picture.’

Accounting students: A

Although A1 was always interested in mathematics, it was information ‘about banking’ which she accessed through the career advisor at her school which attracted her ultimately towards accounting. She stated that ‘at high school we had a career expert, and they had all this stuff about banking, so I thought I’d just try it out, after I had a chat to the guy there’. A3 also emphasised the importance of allowing people access to information. A3 questioned whether she would have done accounting if her father did not have a business which exposed her to the bookkeeping side of accounting. She stated: ‘As I was growing up, my dad used to have his own business (an electrical business) where he had to look after his books and stuff like that, so he sort of just had an influence on me to study accounting ... if he did not have this business I most likely would have done nursing like my other two cousins.’ Her expression was indescribable when she found out that there are only ten Indigenous members of Australian professional accounting bodies.

‘OH my GOD ... Are you serious? ... I was not even aware of that! I think it is a big thing. I think Indigenous students in high school should be made aware of what opportunities they have out there. Like I said earlier if I was not made aware of the fact to get a cadetship and doing accounting and stuff like that, because it was financially hard for me, I probably would have gone half way through my degree, and thought “Ahhh, I will just drop out” and I go do something else but because I had something there to back me up and kept me there at uni.’

9.5.1 Previous work

Most participants in this study took a break after finishing high school and did different types of work. Some of the sample students interviewed either had work experience after completing their schooling or had internship during their schooling. This study found that such employment influenced participants’ career choices when they decided to continue their studies at university.

Non-business: NB

NB1 started her teaching degree because of her previous job as a teacher’s aide; she then changed to the health profession as a result of her new job in the Health Department. Similarly, NB2’s previous work at a lawyer’s office helped her confirm her choice of a law degree.

‘I worked from 2007 to the start of 2010 after school ... And that was just because I didn’t know what I wanted to do. It was actually a job that one of my brother’s friends, who was a lawyer, said, “Hey, we’ve got a

position - why don't you come and try out for it?" So I was like, "Sure, okay, no worries". Before then I was just, kind of, looking for work anywhere. So I just wanted to do anything ... and now here I am doing law at uni.'

NB6's employment is what initially encouraged her to start and complete her behavioural science degree; but it is the same job which is now pushing her away from this career. She stated that: 'The team that I work with at Centrelink is a group of health professionals, we have a psychologist, so I am exposed in that way, plus my former high school teacher ended up being my boss at Centrelink, and she encouraged me to do this because she saw that I was really interested in it.' However, she has decided to leave and pursue a teaching career. NB6 said that this decision is due to discrimination at work.

'They do not use the expertise of our local (Indigenous) staff, like just in simple logistic things, like with the whole intervention things that started, they only used five local staff, and they got all these other people from down south to come up and go out to remote communities, and they never listen to us on what's needed to be done. And you know we have got a lot of Indigenous staff that are just stuck at one level, they do not seem to get up into these management roles, they're just stuck at one level, and never progress further in the organisation ... I do not know why.'

The environment which prevailed at work for NB7 was the main factor which developed her interest in teaching. NB7 stated that: 'I worked at a library at a school

for eight-and-a-half years, so that sort of got me thinking in terms of being in that education environment, and seeing what the teachers do, because the library has like three classrooms, so you get to see a lot of what happens and a lot of interactions.’

NB9 is also no different to the other participants. NB9 changed from the business major of Human Resources (HR) to teaching because of experiences at work.

‘I used to have a passion for human resources, because when I went up to Darwin, I started at Centrelink, and then got a job back in HR, and the main part that I love about HR, is being an advocate to staff, so if they got problems they come to me, and then I tell them which way to go, and how to go about it and stuff, and so something happened, and one of managers had a bit too much to say on how HR should be running and they took that HR off me, that is where I got really annoyed, and I decided where could I go to be able to help people. So I thought of teaching.’

Although he has experience, and has been teaching for many years, NB10 decided to take a teaching degree to obtain a formal qualification. He stated that: ‘I worked with the community with youth and, being part of the community, the teaching degree was great because I teach with kids, so doing the teaching degree would give me formal qualifications of what I have been doing for the last ten-fifteen years.’

For NB12, her previous employment at an Indigenous medical centre has played a major role in her enrolment for a nursing degree.

Business Students: B

Unlike most participants who worked prior to commencement of their degree courses, B1's previous employment did not have an impact on her study choice. B1 is now doing a Bachelor of Business, majoring in marketing, whereas her previous employment was in teaching.

'The first two jobs that I had were just two jobs that I got, because I had a young child at that time, that was in primary school and the staff at the school saw that I got along really well with the other children in his class, and that is when they offered me a position ... then worked as teachers' assistant at various primary schools. I have done that for about ten years before I decided I wanna come and study.'

Accounting students: A

Working at a bank is the job which A2 chose to do while she was studying. As a result of this work, A2's interest in 'financial stuff' increased, and she decided to pursue an accounting degree.

'I was in a class called "work ready", where you just do English, maths, and then in year 12 they had Work Place Practices, and Integrated Learning, so you would only go to school two days a week, and the rest of the week you would work. I was working at a bank. I have always thought that it will either be accounting or business, but I think just working in the bank make me think about more to choose accounting ... I wanted to be in an office doing the accounting work, but then I was

talking to one of the managers ... She said if I do get my accounting thing, I can do accounting within the bank, so still in that bank.'

The preceding quotations from participants have highlighted the importance of the familiarity which a participant might have with a particular field, and how such familiarity and awareness reflects study choice. Previous work and employment is as important to previous education in the decision-making process.

9.5.2 Previous education

Students' previous education was also found to be one of the factors which drives students' career and study choices.

Non-business students: NB

NB2 had taken a legal studies course in year 12, which led to her doing law at university. NB2 said, 'I did legal studies in year 12. And, I did politics in year 11, but I think I did like law more'.

Business students: B

B1's high school subjects also influenced her decision to choose to study business at university.

'In my senior year at year 12, I did like bookkeeping, simple bookkeeping, I just took as an elective. One of my teachers suggested that I should do bookkeeping [and] asked me if I would like to do it, since I

am good at maths, and he suggested accounting as a career later on, but I was young at that time, and I did not really think about it seriously. And he showed me the book and the subject ... but when I did it I liked the business part of it more.’

B2 was influenced by her previous course, a diploma in business, to complete her business degree. For B3, one of the main factors which helped her decide to continue and complete her degree was the diploma class itself. She stated that: ‘There was a group of things which made me think of a business degree. There were peer groups within the study, so there were a lot of study buddies that helped each other. There were also the lecturers who were really good, because they come from industry itself, they were able to give a real approach. They were not textbook teachers, they came from the sector.’

Accounting students: A

A1, A2 and A3 were influenced by the accounting courses they did in their high school years. These courses played major roles in giving them theoretical exposure to accounting.

9.5.3 Societal influences

9.5.3.1 Family influences

The impact of family members on the participants’ study or career choices was explored. Previous research had shown that Indigenous students are more likely to follow family members when it comes to study and/or career choices. It was also

noted in the literature that Indigenous peoples receive encouragement from their families regarding a specific type of job or career, and that they are more comfortable if they choose to do what someone else in the family has already done successfully.

Non-business students: NB

The impact of other family members on participants' study or career choices was one of the findings which this study explored. Indigenous students are likely to follow the paths of other family members. Participants appeared to feel comfortable when they chose to study in an area in which someone else in their family had already been successful.

Although there was no pressure from her family, it was natural family influence which directed NB1's study choice. She stated that: 'The other main reason is that most of my mother's family are teachers ... So I was like: I will be a teacher because everyone else is a teacher.'

NB2, who is studying for a law degree, has a brother who is a lawyer and a father who 'has done a little bit of law'.

'We always talked about it at home ... they never said you should become a lawyer, maybe not ... my brother, kind of, put me off it and I was like, "No, I don't want to do it". ... but talking about it all the time, and growing up listening to my family talking about law cases, got me

interested in it ... my brother is also doing well for himself, he provides a lot of our people with advice and things.'

NB3 also stated that family plays a major role in study and career choice: 'Like, if your mum was a doctor, you'd probably want to be a doctor.' In addition, it was the experience and encouragement of NB8's aunt and cousin which helped her to make her study choice. She stated: 'My family are very supportive in my choice to become a social worker; my auntie introduced me to this place. My auntie and my cousin have done this programme.'

NB9's decision to study education was strongly influenced by her sister who is doing an education degree, and by her father who completed his education degree at a mature age. NB9 decided to follow their paths: 'Teaching kind of just popped in to my head. My dad got his teaching degree at 42, so kind of following his footsteps I guess. My sister is now doing it through CDU as well ... she is doing the same course ... well you know we should do it together. So that was kind of supportive.' NB9's family support has enabled her to study full-time while caring for two children.

NB14 feels proud because her family supports her decision to study at university. She stated that: 'My family are all really supportive and excited for me, because they see it, it will benefit the community ... this gives me a lot of incentives to continue and finish.'

NB6 was the first in her family to pursue a degree. She does not receive any support from her family. She stated that: 'My family do not like it me going to uni and

getting a degree, they just think it is a bit too poppy, they actually think I am a white girl, because I study.’ While such a situation was a unique case for this study, it is in fact an issue which is highly visible in society.

With NB15 it was his cousin who exposed him to the teaching degree: ‘I have a cousin who is a teacher. And I spoke to her about it. She explained all the good stuff about it. There are a lot of things that now attract me to it. Work and get six weeks off during the year, you are allowed to work in those six weeks. It is a job that you can travel on ... Being able to teach in other countries.’

The previous examples of quotations from participants of this study raised the significance of family influence on ’study and career choice.

Business students: B

Business student participants were no different to the non-business students regarding the influence of families. Families have influenced participants’ education in general, and in some cases influenced study choices at university. On the whole, participants seem to follow the study and career paths of family members. As B3 stated: ‘It comes down to leading by example.’

B2 stated that:

‘I have been involved in education for a very long time, because my mum is an academic. My mum has graduated with PhD a number of years ago.

So I was very lucky growing up in that environment, I have been involved in education for a very long time. And not just my mom, my other aunts are graduates of universities. Family influences are very important, especially for the individual's immediate family structure, so I learned those principles so I will pass it on. So when you think of some of the remote Aboriginal kids who do not have any connections to like universities and TAFE studies, it is really hard to encourage them engage them to get here and take on further study.'

Accounting students: A

Accounting students have also been subject to family influences. A1, for instance, has a father who is a bookkeeper. A1 said, 'my father worked in bookkeeping before'. A2 and A3 were also influenced by close family members. A2's aunt is a very successful businesswoman who has her own business. A3's family business was the main source of encouragement for her to study accounting.

9.5.3.2 Teachers' influences

This research has also found that in addition to other factors, teachers in some cases play a role in encouraging students towards particular study and career choices.

Non-business Students: NB

In addition to her parents' impact, NB2 was influenced by her high school law teacher. NB3 described the role which two of her teachers played in her decision to

study education. NB8 suggested that teachers, in addition to helping students achieve their goals, can also ‘give you a boost’.

NB11 was approached by a teacher who suggested a specific field of study for her; but NB11 believes that she should first be comfortable with the subject which she wants to specialise in. She stated that: ‘When I first came here, I spoke to one of the teachers ... she is like what you interested in, and then she is like you will be good at this and this, and then I was like, I will just wait and see, because I do not wanna agree to anything until I am comfortable with it and I can make my own mind up.’

While interviewing NB12, it was relevant to note that she differentiated between high school teachers and university teachers. In her opinion, high school teachers can have an influence on students’ study choices, but university teachers do not because there is no social interaction with them.

‘ ... Maybe it was the teacher, the high school one was much better, she was very close to us, but the uni one was just like in and out ... he comes and talks and then leaves. Not much interaction. I am quite sure if he sees me in the shopping centre he would not recognise me, but the high school teacher would know us straight away ... At uni, you really have to make an effort to go and see the teacher ... That is why if I had an Indigenous lecturer at uni it would have made a difference, because of the connections, and you can share stuff with them, and they will understand where you’re coming from.’

NB14 clarified the impact of teachers when he or she stated that: 'I think teachers sometime play a role in pushing us students towards a specific career, for instance, they push girls towards teaching and nursing.'

NB15 was unique in this study because he was the only participant who was significantly affected by his teacher.

'I really did not know what I want to do ... I decided to do teaching, because of my high school teacher, because there was no Indigenous teachers, like not enough male Indigenous teachers. He just said about being such a good person. I really do not know what pushed me into teaching ... it is just that one talk.'

Accounting students: A

A2 affirmed the influence of the teacher on her study choice. She stated that: 'The career advisor that I had was also my maths teacher. She always tells me that I should go into the financial industry, because I was pretty good with maths. She helps me a lot.'

9.5.3.3 Peers' influence

It was also noted that some participants have been encouraged towards a particular career as a result of influence from their peers.

NB3, who is studying teaching, was influenced by her friends. She stated that: ‘Some of my friends I went to school with, a couple of them are teachers ... I reckon it’s just, like, friends, like if your friends are wanting to do uni, and they all want to do nursing, then you’ll probably follow them too.’

B1 stated that: ‘What drove me to marketing is a friend of mine was working for a company doing like marketing promotions and marketing things, and they showed me what they do, and I said that is interesting, and I just decided to pursue it.’

9.6 Perception of accounting

9.6.1 What accounting is about

The participants’ perceptions of accounting have played a major role in their decisions to avoid it or study it. As seen in the previous sections, students were more likely to choose to study subjects which they are familiar with. Areas such as accounting, which they were not exposed to, did not attract the students’ attention. All participants in this study were asked to describe their understanding of what accounting is about. It was important to note the differences in participants’ perceptions of accounting; and more importantly, the changes in perception which occurred once students had taken their first accounting course.

Most participants expressed a lack of knowledge about accounting, and as a result they held an incorrect perception of it; however, they demonstrated significant knowledge about other areas of study. This situation was mainly due to their lack of

interaction with accountants, whereas they have had a lot of interaction with teachers, nurses, doctors and lawyers.

This study's main finding confirmed the dearth of information about accounting amongst participants. The following are a selection of quotations from participants about their perceptions of accounting.

Non-business students: NB

NB1 stated that:

‘Accounting to me is what you do when you are organising your bills, your money gets in, your money pays out and how much you got at the end of it! I really do not know much about accounting ... I have just realised that I have to pay my debts off. I never did it before! Like my power bill, I did not keep it up ... That is because no one put it in my head before, that you have to pay your bills, if you do not you will get back credit ... That is why I did not pay my bills so I can have that money ... I was really bad’

NB2 had no idea of what accounting was until her friends had to do accounting classes in their high school years. She stated that: ‘I don't really think I was aware that there was accounting until my friends were, like, “Oh yes, I'm enrolled to do accounting”. And I was like, okay. But if they don't really have the option, they don't know it's there.’ NB2 then stated that: ‘I thought it was, kind of, odd, at first. I was like, wow, why do you want to do accounting? But I think that was just the

immaturity of being a year 12 student going, who would want to do accounting? I hated maths, so' She also assured the researcher that Indigenous students have the ability to become accountants but only if they are exposed to it.

'They are really good at it. And a lot of them are. It's just they don't really know that it's out there. And I don't really think, if they do know, they don't know what the job would entail. They're like, well, what would an accountant do? Like, would I just sit there at a desk and count numbers? And they don't actually understand what it is the job would be asking them to do. So, I don't know. It's just ... they have never seen an accountant before.'

Because NB2 spoke on behalf of others in the last quotation, the research will not discuss the issues which were raised; however, this quote was included because it shows NB2's perception of accounting as a course to study and as a career, and also covers the issue of familiarity with the field.

NB11 was another participant who has never interacted with an accountant. She nevertheless managed to do her tax return online. She stated that: 'I have never met an accountant before, I do my tax online. I just went through it (the tax return form) myself with my other friend, and I thought if I bugger it up, I bugger it up, but it came out alright. I just do it on the E Tax ... I kind of get a bit frustrated with it, like I am alright with numbers, it is just kind of does my head in, so I just like to get through it as quick as I could.' NB11's perception of accounting as a result 'is not

about how rich people work with their money and stuff? Finding out where their money is gone and is that accounting is that what it is? I do not really get it’.

NB14 is another example of those participants who have never previously met an accountant, and her perception of accounting was limited to being about tax. She stated that: ‘Is it not where people do your taxes for you? That is all ... Accounting, the first thing that comes to my mind is taxes.’

In more than one case, accounting was referred to as being about money. NB15 stated that: ‘Accounting is about sorting other people’s money, and that kind of stuff, and bookkeeping the books.’

NB7 was similar to other participants such as NB14 and NB15 in her view of accounting.

‘When I think of an accountant I think of the guy that does your tax returns ... I think now accounting is used daily, but it was not something that I grew up with. My parents had eight kids, and so we had no money, we never had money to learn about money. So the age [sic] of us, I can honestly say are all pretty useless with money in terms with budgeting, like now my brother is thirty something and he’s just getting to the point where he is feeling he can now look after his money and save. But although having said that, I own my own house, but a lot of that has got to do with my husband’s influence rather my own, I see money and I just spend it. But I honestly put that down to my own ...

how can you learn something? ... Surely you have to have money to learn something about money? ... do you know what I mean? ... I am talking a couple of dollars.'

As part of the research, the participants were asked about the possible benefits which accounting might provide for their communities and for individuals. Even though they had very limited information about what accounting is, after time for thought the participants were able to suggest different ways in which accounting might be beneficial. Irrespective of whether participants in this study had a correct perception of accounting, they agreed that accounting could benefit their communities and peoples, although most did not know how. For instance, NB4 stated: 'How would the community empower itself? ... that involves money, and numbers, right? So how can communities empower themselves if they don't have a knowledge of numbers, to help run their own fruit and vegetable farms.' NB11 stated that: 'I think accounting helps people, business and staff ... Accountants can help managers' NB2 stated that: 'I can just see that there is a huge benefit in having that background, or going into that field.'

In addition, NB10 stated that: 'Most definitely very beneficial, for businesses. Having being involved in some of the Indigenous communities, I can see the practicality of accountancy not just doing business, but the stability that comes with it.' NB15 stated that: 'Accounting sure can help, I know back home there are a lot of Indigenous organisations, they can't run their money and they're always looking at outsourcing to companies to do it for them, so it will be good to have Indigenous people to control their money, and have the skills to be able to manage it

themselves.’ NB13 stated: “I think accounting would help only if we were taught and we had the jobs as Aboriginal people instead of the white person coming in to control you. The lack of knowledge, then what happened is we have been so downgraded that we just feel like we are little children and we can’t be hopped up, we’re kept pushed down.’

Although NB5 expressed a view that accounting overall is boring, he found that doing a financial spreadsheet and business plan was interesting. NB5 stated that: ‘I’ve just thought it was pretty boring and it just involves mathematics ... I like ... in the past, I’ve written up a business plan and I’ve created my own like spreadsheets and then ... I found that interesting but, you know, I wouldn’t want to do that every day, you know? That’d just be so boring.’ NB9 shared a similar view and stated that: ‘Honestly when I think of accounting I think oh my God that is just so boring.’

Lack of interaction with accountants was a reason behind the students’ different perceptions of accounting. NB8, for instance, stated that: ‘I do not have a clue, I have heard of it before, but I do not know what accounting is. Maybe about bank accounts.’ NB6 stated:

‘I do not know much, because I only see my accountant once a year, to do my tax return. And I have never thought about saving the \$300 that I pay for my accountant to do my tax return; I just do not have an interest in finding out how you do it. I think accounting maybe is about managing money, finding loopholes for tax; I think to become an accountant you need to be good with money, like responsible, I do not

know budgeting and stuff ... whereas I think, can I say, a lot of Indigenous people, just money is there to be spent. We do not worry too much about saving money for the future.’

NB13 stated that: ‘For some reason I found accounting is a bit mysterious, and like you’re walking to world that you do not know of, sitting there listening to them talking about it, and it is like Okay that is actually interesting, I am sitting in a mysterious world listening to stuff about accountants.’

NB10 was able to express a much better understanding of accounting than the others because he has a family member who is an accountant and also because he has done accounting studies in the past. He stated that: ‘Accounting is about financial management, money management, financial planning, and payroll ... My brother is an accountant and he runs his own business as a financial manager, and does well for himself. There is a stability that comes with what he does that actually help his family and his extended family.’ Having a brother who is an accountant was not a sufficient reason for NB10 to do accounting. NB10 has other factors which affected his choice.

Business students: B

B1 said that accounting is seen by society as a hard subject. She stated²⁸ that: ‘Some people say accounting is like a posh degree, like if you are Indigenous they say, OH you are too good for other people, you are too smart ... Like when I was doing the one course in accounting, and my other peers would like “What are you studying?”’,

²⁸ This quote has been used twice in findings as it fits into two different themes.

and then after I tell them they will be like OHAH well ... smart, like you are smarter than anybody else.’ She also said that accounting can be of great benefit to Indigenous peoples and communities. She stated that: ‘Accounting can also help; it would help by managing finances better within the community. But not much is understood about accounting within Indigenous communities, like if you go and ask any of my families that live in the community and ask them about accounting, they will say, “What is accounting? I do not know about that”. But it would help, because people do not know that accounting and finances are linked.’ This again emphasises the issue of familiarity with the field.

B2’s perception of accounting did not change either before or after she took the course. She stated that: ‘To me personally, accounting seems to be quite structured and even a little bit boring,’

B5’s perception changed dramatically after he attempted his first accounting class. His perception was that accounting is about mathematics, which is why he developed an interest in it; however, he came to realise that mathematics is only a minor aspect of it.

B3 said that her view of accounting changed gradually the more she was exposed to it. B3 was first exposed to accounting through an introductory accounting course, and then through her work.

‘ ... my perception of accounting was completely different until I had to start doing this. This is part of business development and part of my

business ... I think accounting is about telling the money story, and putting it in basic simple terms, what is coming in, and what is coming out, do we have that cash flow, and do we have this money, and can we do the things that we need to do, so it is about the money story of the business.'

Accounting students: A

A1's perception has also changed since she started her accounting degree; however, the change has occurred in a way which has increased her interest in the subject. She stated that: 'I thought accountants are those who do your taxes, people who are bookkeepers, who kept a record of company's transactions and receipts. My perception has now changed; accounting is much more than that. It is not only looking at the internal but also the external environment.'

A2 said that her view of accounting has changed gradually the more she was exposed to it. A2 was exposed to accounting mainly through her accounting degree.

'My view of accounting changed a lot after doing the introductory accounting course; I now think it is more about businesses and financials. To set plans for business to see how businesses are going. I think it is also about pre-planning and budgeting. In the past I thought it is just full of maths and numbers. Well it is related to maths, but the maths that I did in the high school is way more challenging ... I always thought it is just about maths, but there is a whole other side to it as well'.

A3's perception of accounting after she graduated did not differ dramatically from before she started her accounting degree.

'I used to enjoy helping dad with his books since I was a kid ... I used to love finding amounts and learn how to use MYOB. I was already open to the fact of what was involved. Obviously I did not know too much about it growing up, because I was a kid, but I was always around a business environment so I knew what was involved, and as I grow older I understand more of what it is all about, it has not really changed heaps.'

9.6.2 Image of the accountant

Although participants in this study expressed their perceptions of accounting, it is also important to note their understanding of the image of an 'accountant'. Most participants regarded accountants as male, white and of a mature age. They were imagined as wearing suits, and sitting in an office behind a desk in front of a computer. The following are a selection of quotations from participants about their views of an accountant.

NB3 stated that: 'I always thought it was mainly talking to people and being in an office. That's what I thought accountants were.' NB9 stated that: 'I just see stiff people in suits that are like 50-years-old and hate where they are.' NB10 stated that: 'Accounting is a male dominant profession, because most of those people who go

into accountancy are male.’ NB10 cannot see himself as an accountant. He said that: ‘I could not imagine myself being an accountant because of my age ... for me accountancy seems to be more a technologically driven industry; hence social interaction with people is out too. You would deal with a number of people but if you are working within the same organisation your social contact is with members of your organisation [and] not always interacting with [the] broader community.’

NB13 stated that: ‘Accounting to me is a picture of someone sitting at a desk with a stack of papers all around the room, probably, in his early forties or late thirties, at that mature age.’ NB14, while comparing the image of an accountant with a marine biologist, stated that: ‘I have never seen an accountant, but I can think of an accountant ... a white man, with a white shirt, a tie, and long black pants. He will have a calculator on his desk, and a computer, a notepad, pen, very clean desk. And I really hate being in an office’ However, when he thinks of a marine biologist he sees ‘a blond person, because of being tanned ... because in the sun all the time ... because they’re mostly white and they go in the sun’.

NB15’s image of the accountant is no different. He stated that: ‘I think of a calculator, and a suit; that is about it, and in an office. And that is not something that I like. I am more of a person that’s social and interacts with people, and likes to be outside.’ B2 stated that: ‘When I think of accounting I think of a middle-age man sitting in an office.’ A3 shared the same view as other participants regarding the image of an accountant; however, she thought that women are also part of the profession, even though they are possibly a minority. Since she has never met an accountant before, she always thought that an accountant was ‘a white man or

woman in his business outfit'. Her view has now changed since she started working in the accounting industry. She stated that: 'I can see how multicultural it all is.'

9.6.3 Accounting and maths

This study has also found that participants' have a strong perception of a relationship between accounting and mathematics. While this perception has prevented some from choosing accounting, it has encouraged those who enjoy and perform well in mathematics to choose accounting. Although this study has suggested that students were not exposed to accounting, and as a result did not know much about it, they could nonetheless see a strong link between accounting and mathematics. The following are a selection of quotations from participants in this study.

Non-business students: NB

NB1 stated that: 'My auntie said to my cousin once, that you are good with maths so you need to do accounting' In her statement, NB1 confirmed the general public perception of accounting and its connection with mathematics. NB5, while expressing her thoughts of what accounting is about, stated that: 'I just assume you just have to have really good maths.' NB6 said that: 'I think there is a big correlation between maths and accounting, what I think anyway is that you need maths to do accounting. I do not know if that is the case.'

NB7, NB9, NB10, NB11 and NB12 shared the same view on the relationship between accounting and mathematics. NB7 stated that: 'When I think of accounting, I think of numbers, they like scare me. I do like maths, but was not good at it, but

maybe that could have been just my own experience, I did not have very good teachers.’ NB9 stated that: ‘I think accounting is about numbers, maths, and money ... and maths, but overall I hate maths.’ NB10 said that: ‘Students who do accounting need to have a competency in maths.’ NB11 believed that: ‘You probably do not have to be the smartest student, but it will help I guess if you are really good with maths and stuff and in English and knowing like the terms.’ NB12, who attempted an introductory accounting course, struggled as a result of poor mathematics skills. NB12 stated that: ‘... I passed it, okay. But maths is probably my weakest. Numbers and things like that.’

NB13 said that: ‘Accounting to me is about numbers, and adding it up and doing taxes. But I am not sure of the full aspect of it and what it is all about.’ NB13 stated that: ‘I think you need to be good at maths to do accounting, probably good with the English, like for example, like instead of teaching us four hours of English about accounting, it would be ... say four hours of our language time talking about what accounting is and how to become an accountant.’

While most participants mentioned the relationship between accounting and mathematics, the following quotation is unique. NB14, who performs well in mathematics, was not aware that because of this he should consider accounting. He stated that: ‘If you are good at maths you can do accounting. I am good at maths, but no one ever told me that you’re good at maths you should do accounting.’

Business students: B

The business participants appear to have a different view from the non-business participants regarding the relationship between accounting and mathematics. While they agree to some extent that accounting is connected to mathematics, they insisted on limiting that connection to very basic levels.

B1's struggle in the introductory accounting course was not due to difficulties in mathematics; instead, the problem was the accounting concepts. She stated that: ' ... At first some of the concepts were difficult for me, because I had not come across them ... Yes it is numbers but not maths' B2 was the only business student participant who had a similar view to the non-business participants. She stated that: 'I struggled. I think because of maths, I have never been good at maths even at school.'

B5's perception changed after he started his accounting course. B5 had an interesting experience since he initially decided to study accounting because he thought it had a lot to do with mathematics; but it turned out not to be related to mathematics, and as a result he left accounting. B3 seems to agree with B5 since she stated that:

'I think maths is only a component of it, I think it is more understanding the different components of what you're describing as far as the story of money goes. Maths is only one small part of it. It is actually how you are able to analyse, how you are able to observe the flow of the story, and I did not quite understand that when I got in because I thought it was all about maths which actually gave me fear ... but the more and more I have exposed myself to it (accounting) the more I am getting slightly

respectful towards it. But now I look at it as it is, just the money story, how I tell where the money is and how it is going.’

Accounting students: A

While accounting student participants were expected to have a correct perception, they initially shared their views with business and non-business participants. They were able to form a more accurate perception only after they were exposed to accounting classes.

A1 stated that: ‘ ... of course the first thing that comes to your mind is maths, but do we really use maths in accounting, that is another question’ A2 added to the previous statement when saying that: ‘I always thought it is just about maths, but there is a whole other side to it as well.’

While A3 did not deny the relevance of mathematics in accounting, she did not give it too much importance because ‘computer does it all these days’. Instead, she emphasised the importance of language skills and stated that: ‘You also need to know how to communicate with other people. You need to have that kind of skills. They need to have enough to be able to explain to the clients’

A4 was like the rest of the accounting students participating in this study. He said that there was a need for only basic mathematics in accounting. A4 stated that: ‘That perception does need to be changed. People should know that mathematics is only a percentage of it, maybe 20 per cent since you are looking at numbers, but most of the

time you're only using basic mathematics.' He then added that students with average mathematics skills can perform well in accounting.

9.6.4 Role models

Participants in this study suggested that the lack of role models in accounting is an important factor in discouraging Indigenous students from choosing to study the subject. The availability of role models for other professions has helped Indigenous students to choose other fields.

NB10 stated that it was older people (role models) who have pushed him towards teaching. He then discussed the influence of role models on students' choices.

'It was the unconscious kindness of people around me that actually encouraged me. I was not even aware because I worked with youth. It was when I was a youth, older ones taking interest in me as a person and directed me to working with kids. But it was not a conscious choice. But I believe that any academic discipline, universities need to begin marketing their approach to primary school students not high school, especially from an Indigenous point of view which will translate to the wider community very much. The idea of being able to put into a child mind not just about you wanna good job then you have stable money, but you wanna do this because it is gonna help you and it is gonna help your community. For instance if you put to a child mind that higher education is the accepted norm, then it is not gonna be seen as something special, it is gonna be seen as something you do, and not

something for a certain intellect group. You have gotta bring those role models into the schools, and they have gotta be genuine examples which means, someone walks in and starts gammon, kids are gonna know, they will know. A role model is to be brought into the schools, to prepare a child for the university; you look at it in ten or more years, which is why primary school is a great area of focus ... Bringing role models to talk to the kids, has a lot of power.’

The issue of role models was also raised by B2, who stated that: ‘I do not see why accounting should not be up there, maybe we have not promoted accounting enough, maybe we do not have the number of scholarships available for that accounting profession, or maybe we have not promoted those Indigenous accountants who are role models.’

The influence of role models on students’ study choices was explained by B3, who herself was subject to such influence. She stated that: ‘I had a really good mentor, who made contact with this individual, and he suggested that I consider studying to gain a better understanding of what it would be like to develop a business. Because I wanna to start a business at the time, and he suggested that I enrol in a VET qualification, because he did not think I was ready to take on a degree. So I did an advanced diploma in marketing, which took two years.’

9.6.5 Experience with accounting

A number of participants in this study have had a taste of accounting. With the exception of B5, all other participants in this study who initially decided to study accounting have either completed or are still studying for accounting degrees. B5's experience with accounting, which has pushed him away from the subject, was presented earlier. The experience of four other participants, one of whom one works in accounting while the other three have completed the first accounting unit, is presented below.

Although these four participants do not intend to study accounting, information which was gathered from them regarding their experience in accounting is important for the strategy which tackles the problems of participation. All four participants agreed that they did not enjoy the accounting course.

NB4 has enjoyed her job as a bookkeeper in the past; however, she was not prepared to go into accounting for two reasons. Firstly, she wants to contribute to her community, and cannot see that accounting would help. The second reason is mathematics.

'I thought it was interesting, more bookkeeping. I did keeping up with their stats numbers ... like what the stall was earning, things like that, numbers for them ... people paying, prices of the stalls, the vegetables, things like that. But what turned me off, honestly, is algebra. Somehow I don't like it, algebra, and a lot of people don't like it ... I do wanna just do something that gets me a job; I want to be working and helping others at the same time ... that is why I decided to become a social

worker ... maybe if someone explained to me how accounting would help Indigenous people I would most probably have done it because I liked it and I worked in it.'

B1 struggled in her introductory accounting class although she sees a lot of benefit from doing it. B1 does not regret the long nights which she spent studying for it.

'I had to do a core unit (Introduction to Accounting), but if I did not have to do it I would have still done it, because it does not matter what field you go to you still need accounting, even if one day I want to own my own marketing business, I still need the information in that course (I now have a fair idea on how to go about it, we had to do a business plan). People do not realise when they go into a business, you need them things (accounting) in place ... But I think that was just enough for me ... I do not wanna study it anymore.'

B2, who has the opposite view to that of B1, stated that: 'If I did not have to do it I would not have done it.' She attributed this attitude to her struggles during the course.

'I did not complete the class the first time because I was struggling. Accounting is not my strength, and I know that myself ... but because accounting is a core unit you have to complete it. I know that number, and stats, accounting principles are not my things. I struggled. I think because of maths, I have never been good at maths even at school. You

can think of me as an urban kid growing up in Adelaide who just did not really succeed in primary school. I have real memories of me struggling with maths in primary school, and then moving to high school. I struggled, I just built a passion to stay away from that area. And I know that the blockage for me was the numbers and I really could not focus on the concepts.’

While B2 was telling the researcher about her second experience with the introductory accounting course, she made some interesting statements on the factors which led to her enjoyment and passing of the class. It was the teacher, and the way the subject was taught, which made the difference.

‘The second time I did accounting, was much more enjoyable than the first time, the way the teacher explained the concepts made a lot more sense, and he also had come from overseas, and has a different culture to the accounting culture so he sort of shared some of his experience with us, and also it was not as much about numbers and figures, because we had to do a business plan which I enjoyed, specially because we did it in groups. I could see clearly from the course the significance of the accounting knowledge if I want to have my own business.’

B3 shared a similar experience to that of B2. She stated that numbers, concepts and textbooks made the class unenjoyable.

‘I think it is a fact that because I am not an actual numbers person, I am more creative and more of a writer. When it actually came to dealing with numbers I found that I needed extra tutorial support. And it was not because I did not understand it or I did not have any issue with numbers, it was just that it was a new type of teaching and learning, of understanding concepts of what financial management and financial processes were. This was where I had the extra tutorial support to get me through. Which was great and it did get me through. And I think it was the actual textbook that we had to do our teaching from, made it a damn hard unit.’

9.6.6 Interest in the area

One of the themes which also emerged from the interviews was interest in the area. Participants are more likely to choose a field which they are interested in, as a result of their perception of it.

NB6 is interested in peoples’ behaviour; she therefore decided to study behavioural science. She stated that: ‘I am interested in behaviour, and just looking at dysfunction, like my family was highly dysfunctional, trying to understand the reasons why. Why they act the way they do. Why people do things the way they do. But my sister is doing business, and if you look at her you will see that that is her type of personality, she is always been into that.’

NB9’s decision to study teaching as a result of her interest in it was clear from her statement that ‘It was just something that I thought of, and you know when you get a

feeling that something is right, that is what you have to do, that is what it was like, it was like no question about it’.

B2 has always been interested in administration, and as a result she decided to pursue a degree in business. She stated that: ‘Administration has just been my thing for quite a while; I started working when I was 16, that was in admin positions, that is where my skill lies, I thought I will just follow that path. But I have not yet selected a stream in business, it is more like management, is where I like to fit.’ It is important to note that distal factors create an interest in an area. Such factors are similar to those presented earlier; for example, the influence of teachers, peers, family members, role models, previous education and previous employment.

9.7 Summary

This chapter introduced the results of the discursive semi-structured interviews with participants in this research study. In order to comply with the research methodology adopted for this project, this chapter has included mainly quotations from the participants. This approach allowed the voices of the Indigenous students to enter into the thesis untrammelled. These quotations allowed the researcher to determine a number of themes based on their frequency and co-occurrence. These themes were then interpreted and translated into expectation variables (financial, self-efficacy and outcomes expectations) and other factors that were of influence to the participants’ selection of areas of study. These other factors were grouped under ‘access to information’ and ‘perceptions of accountancy’.

Included within the ‘access to information’ grouping were the following factors:

- Previous work;
- Previous education; and
- Societal influences.

The factors included within the ‘perception of accounting’ grouping were:

- What accounting is about;
- Image of the accountant;
- Accounting and maths;
- Role models;
- Experience with accounting; and
- Interest in the area.

A detailed analysis and discussion of these variables and factors follows in the next chapter. Here the findings presented in this current chapter, are based on information portrayed through the voices of the Indigenous participants in the research study, and are closely examined and tested against the SCCT model, a model used in accounting research to explain factors affecting career choices.

Chapter Ten: Analysis of Findings and Discussion

10.1 Introduction

The purpose of this chapter is to bring together the findings from the interviews and to consider them in the light of the relevant literature. The methodology of this research has aimed to ensure that the necessary integral elements were present for an effective study of the reasons why accounting is not perceived well by Indigenous Australians as an area of tertiary study and as a potential career. The research outcomes, as presented in Chapter nine, have shown that a number of factors affected the participants' decisions regarding their study choices. These findings are discussed in this chapter in order to answer the research question: 'What factors contribute to the under-representation of Aboriginal and Torres Strait Islander peoples in accounting education and the profession?'

The analysis of the findings in this study was based on the SCCT model. This research is unique in Australia in that it has thoroughly examined the problems associated with pursuing a career in accounting from an Australian Indigenous perspective. This thesis has demonstrated, in Chapters three, four, five, six and seven, that existing research in this field lacks a methodology which could provide answers as to why accounting is not well perceived amongst Indigenous Australians in particular. The lack of published research on accounting as a study choice, as well as the low number of Indigenous Australians studying accounting or working as accountants, has contributed to the challenges faced during the research undertaken for this doctoral study. Consequently, the methodology adopted in this research has only taken into consideration Indigenous participants, in order to ensure that only

Indigenous voices would be heard. In addition, in order to better investigate why Indigenous students do not study accounting, the researcher found it important to include non-business participants as well as business students in the sample; this was partly because of the limited number of Indigenous accounting participants, and partly in order to better understand the differences between non-business participants' perception of accounting and that of their business counterparts.

The findings from this study advance our understanding of the factors which might impede Indigenous Australians from choosing accounting as a course of study and/or career and make an important contribution to the development of a specific strategy for increasing the number of Indigenous accountants to 1,000 by 2021. The need for this strategy was presented in the first chapter, based on Warren Mundine's statement that '1,000 Indigenous accountants are needed to be trained'; professional accounting bodies, along with Indigenous leaders in Australia, are aiming to achieve this by 2021. However, without a clear picture about why Indigenous peoples may not choose accounting as a study choice, the strategy will lack proficiency and validity. This doctoral thesis provides the information required to avoid this trap.

Therefore, in this chapter, the researcher examines the findings in relation to the literature, interprets the findings in relation to the SCCT model, and makes significant recommendations about how the findings could be used by organisations, policymakers and researchers. Findings of this research will be doubtless of great significance to attendees of the roundtable that was held to discuss the issue of the under-representation of Indigenous accountants, and also to the National Relationship Manager - Indigenous Accountants Australia, Mr. Gavin Tye.

10.2 Summary of the analysis of the findings

This research has reinforced some of the factors which the literature has suggested may contribute to the avoidance of accounting as a career and/or study choice. In the third chapter of this thesis, a number of factors which impeded students from studying accounting were explored. In their research papers, the authors discussed in Chapter three participants who were either marginalised or non-marginalised ethnic groups.

The theoretical framework drawing on the SCCT model has also presented the career decision-making process and the factors which play a role in the process. While this study has reinforced some of these factors, it has also found other significant factors. A summary of the analysis of the factors which emerged from this study is presented in the following paragraphs.

While listing the themes which emerged from the interviews based on their frequency and co-occurrence, it was apparent that study choices depended to a large extent on whether the participants believed they had the ability to successfully complete specific courses. In the SCCT model, this is called 'self-efficacy expectation'. While participants' self-assessments of their ability to complete specific university undergraduate courses, including accounting courses, differed from one student to another, it was a common feeling amongst all participants that a field of study with negative self-efficacy expectations would most likely be avoided.

Not all participants assessed their ability to complete courses before their choices were made. Twenty-one per cent of participants did not think about their individual

capacity to pass a course until after they had started it. This was particularly true of students studying courses which friends or members of their family/community had taken before them. While participants all agreed that they would not enrol in a course which they thought they might fail, self-efficacy expectation was mainly based on their perception of that course. In the previous chapter, there were many examples of mistaken perceptions about accounting from the non-business students.

It was clear that all participants agreed that the main factor which drove study choice was the perceived outcome from the course. While answering the first question in this study, 'Why did you decide to study ...?', all participants asserted that the most influential factor for them was the perceived outcome of their future careers. In the SCCT model this is called 'outcome expectation'. While the perceived outcome for 92 per cent of participants was the ability to help Indigenous communities, children, businesses and non-Indigenous peoples, only eight per cent of participants had, in addition, other perceived outcomes which played a role in their decisions. These expectations included the rewards of a job, the stability that comes with a job and the ability to travel.

In addition to these two major themes, a third major theme emerged from the interviews. The ability to access funds and/or financial support for further education was highlighted by participants. This issue is called 'financial support expectation', and was a theme which proved to be important due its high frequency and co-occurrence. Seventy-nine per cent of participants asserted the importance of financial support expectation on their study choices. The findings of this research suggested

that most participants in this study were pulled towards a specific field once they were offered a scholarship to study it.

These three themes as variables in the study choice process, self-efficacy expectation, outcome expectation and financial support expectation, are strongly connected with each other. While a first impression might suggest that the three themes must combine together to develop an interest in an area, there were some exceptions to this expectation in this study. For instance, a perfect match between these three variables would exist when participant X finds that his or her aims and goals can be achieved through the perceived outcomes from a particular field of study; there is a belief in self-efficacy; and there is access to financial support. Generally speaking, participant X would be unlikely to continue with this field of study if he or she discovers that the perceived outcomes do not match his or her aims and goals. Participant X would also be less likely to continue if he or she is not efficacious and lacks the necessary capabilities to pass the class. Finally, participant X would be less likely to continue if he or she is suffering from financial problems and financial support is insufficient or stops.

The previous chapter gave many examples of students who were forced to change their major area of study because of efficacy problems and/or difficulty gaining access to financial support. However, there was no response which suggested that a participant had decided to change courses due to outcome expectation. One of the main goals for many participants was to use their study to help their communities. As accounting skills are of obvious benefit to Aboriginal communities, this raises the

question why Indigenous participants are not deciding to study accounting in greater numbers.

This question leads to another theme which emerged from the interviews. It became clear that students' exposure to particular fields of social and economic life had an important impact on their study/career choice. Such a theme is called 'access to information', and it relates to how much information about a field of study is available to students before they enrol at a university. Exposure to particular fields could lead to higher student enrolment; and low exposure will mostly lead to poor enrolment rates. This study has found that participants were more likely to study in an area which they had previously been exposed to. Areas such as education, social work, health and legal work are those which most Indigenous peoples are exposed to. Participants were least exposed to areas such as accounting, and financial and business management, because of their lack of interaction with accountants, and lack of engagement with work involving accounting practices.

This study found that access to information and exposure to particular fields were two major factors in the career decision-making process. For instance, if a student's intention was to help his or her community, he or she needed to acquire knowledge and information on how to provide the community with benefits. Such knowledge, according to the study, was passed to student participants from different sources, including study and career advisers, teachers, peers, family members and role models, and also included previous education and employment. Each of these sources, however, steered the students in a specific direction. As a result, participants in this study were more likely to pursue a career which they had been exposed to and

encouraged towards; areas which were neglected by the aforementioned information sources were also neglected by the participants.

This study found that previous work environments and types of work had an important influence on students' study choices. Previous work experience exposed participants to a particular area and field, and as a result they developed an interest in it. It was found that participants who had spent time in the workforce before attending university and continuing their studies were more likely to choose courses related to their work.

Previous education was also an important influence on participants' study choices. It was found that participants who had studied in the past, whether in high school or in VET, were more likely to choose courses which were a continuation of these classes. During high school years, participants gained information about particular areas and fields, and as a result they developed an interest in them. Information was obtained from teachers, who proved to have a major influence on students' study and/or career choices. Teachers tended to suggest possible careers to students, and it appeared that students were more likely to take their suggestions into consideration.

Family members were found to be major sources of information, and played a major role in exposing participants to particular fields. Although there were exceptions, this study has found that participants were more likely to choose to study a course which they were familiar with, and particularly so if someone in their family had already studied it. Participants said that role models were an important factor in encouraging Indigenous students towards a particular field; by the same token, the lack of

accounting role models is an important factor in discouraging Indigenous students from the accounting profession or in not considering accountancy in the first instance.

None of the research participants knew an Indigenous Australian Accountant, and 83 per cent of the participants had not met an accountant. Only 20 per cent of the non-business students knew a person who was studying accounting. Because of the complete lack of interaction with Indigenous accountants, Indigenous students were more likely to choose other professions to which they were exposed by role models.

As well as the lack of role models, it appears from the findings that teachers are less likely to expose Indigenous students to accounting. In this study, only one person was advised by a teacher that accounting was a possible career. Teachers, like the majority of people in society, have their own perception of accounting, which often focuses on accounting's relationship with mathematics; therefore, accounting was suggested only to those who had notable mathematical skills.

Because of the lack of Indigenous accountants, Indigenous participants were less likely to have a family member who was an accountant. Instead, family members were more likely to be in the education, legal and health professions, thereby exposing participants to these areas. As a result, it was common to find Indigenous students studying in the areas of education, law and health. The participants' peers exerted similar influences.

As a result of a lack of access to information about accounting from teachers, peers, family members and role models, students had formed their own perceptions of the

subject. These perceptions, which were mostly erroneous, provided other reasons for avoiding accounting as a study choice and later as a career. Most participants expressed a lack of knowledge of what accounting is about. Lack of exposure also resulted in a strong perception of a relationship between accounting and mathematics. This perception had a significant negative effect on those non-business students who did not enjoy mathematics or performed badly in it. This perception, however, was not supported by 80 per cent of the business participants and 100 per cent of the accounting students. These participants, because of their familiarity with accounting, had more accurate perceptions about it, and said that only basic mathematics was required in accounting.

As stated earlier, most participants had never met an accountant before, and they had also formed their own image of an accountant. The image described by most participants was that of a 'white man'. Firstly, such an image would not encourage non-white participants to enter accounting; and secondly, it could be expected to keep non-white females from entering this imagined, white-male-dominated profession. While these perceptions are not supported by the reality of the contemporary Australian accountancy profession, they existed because of lack of exposure to, and unfamiliarity with, accounting and accountants.

On the other hand, participants who had been exposed to accounting, such as the five business student participants and two non-business participants, still did not change their minds about studying the subject. These participants were exposed to accounting either through work or through the compulsory introductory accounting classes for university business students, but they were also exposed to other fields,

and thus chose other disciplines over accountancy. Their choices were impacted upon and driven by the three main variables.

Although the researcher did not find any participant who, as a result of exposure to accountancy, had changed his or her mind and decided to do accounting, the study nonetheless found that the participants raised important issues about the way accounting is taught. One participant explained that her good experience with accounting was due to a 'non-white' teacher, others raised an issue about understanding the concepts, and another expressed concern about the textbook which had been prescribed.

10.3 Discussion of the findings

While reviewing the literature, it was noted that in general the economic factor was found to be important to students' education: people with a low socio-economic status, such as Indigenous Australians, are less likely to continue their formal education beyond high school. Social cognitive career theory, while not neglecting the financial support factor in the career decision-making process, uses it only as one of the contextual factors included in the theory. This study asserts that financial support expectation is one of the major variables which directly impacts on students' study and/or career choices and therefore, this study suggests that the SCCT model should have an extra phase added, prior to the behaviour phase. This phase is to be called 'financial support expectation'. Due to the notable impact that financial support expectation (presented in this study as the expectation of a scholarship) had on participants' study choice, this study identified that such expectation should be a

major factor, in addition to self-efficacy and outcome expectations. Thus, building on the original SCCT model, the modified SCCT model advanced in this thesis claims that students' interests in a particular area of study is a function of three major factors instead of just two.

Most participants in this study confirmed the direct relationship between study choice and the offer of a scholarship. In the absence of a scholarship to study a subject they had been exposed to, and given the offer of a scholarship to enter a different field, most participants said they would take up the scholarship offer and enter the other field. However, before making their choice, the participants said they first needed to be exposed to information about that field. Exposure to a particular field could be achieved through a number of different ways such as through practical experience and/or advice from friends, teachers and family.

The SCCT model states that neither self-efficacy nor outcome expectations on their own can lead to action; however, together they form interest and can then lead to action. Similarly, this study found that financial support expectation on its own did not drive the students' interest. It had to be concurrent with self-efficacy and outcome expectations, an observation which is different from the original model. It was also noted that even those participants who had a solid understanding and expectation of their perceived careers expressed reluctance to stay with their original decisions in the event of a different scholarship offer. Participants in this study were happy to change their study choices if a scholarship offer arose, as long as the new area of study served their goals. For most participants these goals included a

considerable interest in helping their communities on completion of their university studies.

Since outcome expectation is affected by distal factors over a period of time, most of the Indigenous students participating in this study were likely to change to careers which led to similar outcomes as long as financial support continued. Only two of the participants were, to some extent, clearer than the others in expressing their decisions to stick to their choices irrespective of a scholarship.

Unlike the SCCT model, which gives significant attention to the self-efficacy variable, this study has found that, although significant, participants' self-efficacy expectations were not as important as the other two main variables in developing students' interest in a particular field. This study has confirmed the SCCT proposition that self-efficacy on its own does not lead to behaviour. Participants who knew they were efficacious with numbers did not choose to study accounting, simply because they could not perceive a beneficial outcome from becoming accountants.

Based on participants' experience, this study questions whether a student can assess his or her ability to pass a class before attempting it. Some participants changed their choice of major because of difficulties they faced after they had enrolled in a course. However, the majority did not develop an interest in an area of study as a result of their perceived capability to pass a course, even though actual capability was of great importance. Participants tended to assess their capability based on their exposure to a particular area: 'Others have done it, so I can do it.' While the self-efficacy expectation is important in the development of a person's interest in a specific field,

it might not prove to be a correct assessment in practice. Students may think positively about their ability to pass a specific course; nonetheless they may fail.

Chapters 4 and 5 explored the phenomenon of a lack of demand for Indigenous accountants as a result of conflict between Indigenous and Western accounting values and low participation by Indigenous communities in the economy. Most participants in this study, while answering the first main question, ‘What made you decide to study ... ?’, often made statements expressing a commitment to helping their own and other Indigenous communities. Although participants, even those who were studying accounting, did not see a conflict between Indigenous and Western accounting values, most were either not exposed to accounting or were not aware of how accounting could be of help to their communities.

Accounting student participants had a better view about the ways in which accounting could benefit Indigenous peoples and businesses. These participants were exposed to the positive use of accounting through different sources; they had mainly decided to pursue accounting degrees and careers as a result of this positive exposure. However, contrary to what the literature suggests, that most accounting students choose to study accounting because it is a financially rewarding career, only one participant out of the whole group of participants said that this was one of the reasons for his choice. Most participants in this study did not attach much importance to a potential high income in the future as one of the perceived outcomes of their study choice.

Because the research has found that participants' ability to help their communities was what motivated most towards a particular study area, this thesis suggests that, while the outcome expectation phase in the SCCT model remains in its current place, it should be made clear that it is the most significant variable amongst what is now proposed as the three main variables.

Since it is the perceived outcome of a particular study or career choice which is the main developer of an interest to pursue it, then how people develop such expectations is important to this analysis. If participants who are not 'silly' but 'smart' are aware that 'accounting is out there' and that 'it can help' their 'communities, peoples and businesses', they will most likely choose accounting as well as other professions (these terms are quotations from study participants themselves). But participants, in the main, were not aware of accounting, and they lacked exposure to correct their perceptions about it.

The historical aftermath of colonisation and white dominance is still evident in Australia. The feeling of inferiority still lingers for Indigenous peoples. Accounting was perceived by participants in this study to be an exclusive profession and not for Indigenous peoples; it was regarded as a job for the 'white man'. Furthermore, this situation would not attract the majority of Indigenous Higher Education students, who are female. Irrespective of whether or not the participants' perception was correct, if this preconception persists, Indigenous Australians will doubtless continue to avoid accounting as a study and career choice. The perception and image of accounting was based on the lack of interaction with accountants. Indigenous students are more likely to be in contact with health workers (in hospitals and clinics), with teachers (in schools), with social workers (because of family

situations), and with legal workers (in disputes over a land rights claim or due to the conflict between Indigenous law and Western law), and are less likely to be in contact with an accountant because of a lack of participation in the mainstream economy. Most participants in this study had had no interaction whatsoever with accountants prior to making their study choice.

Due to this lack of interaction with, and lack of exposure to, accounting, participants had developed their own perception of the subject. Most participants in this study shared similar views to those discussed in the literature. Participants viewed accounting as boring, odd and highly structured. The aspect of accountancy being seen as 'a white-dominated profession' corresponds to findings from studies in New Zealand, Canada, South Africa and the United States. Gender, however, was also raised in this study, since most participants not only regarded an accountant as a white person, they also specifically viewed an accountant as male.

Most participants in this study confirmed past findings in other research, that there is a strong perception of a significant relationship between accounting and mathematics. However, participants who were accounting students expressed a different opinion. Although they did not deny that mathematics was part of accounting, they did not pay it much attention. They agreed that only basic mathematics was required.

The business or non-business participants did not mention a need for proficiency in English to study accounting, but most of the accounting participants confirmed the information provided in the literature about the need for such proficiency. As a

result, this study cannot suggest a particular level of English proficiency as an obstacle to entering an accounting course; however, a lack of proficiency in English could be deemed an obstacle to continuing accounting studies. This was an obstacle which the accounting participants had overcome.

As in the literature, this study has found that social factors such as peer, family and teacher influences may play a significant role in the academic decision-making process. This study has also confirmed the SCCT proposition that such influences are deemed as contextual factors in the career decision-making process. In some cases in this study these influences were crucial in driving participants' decisions towards a particular field of study. As a result, this study suggests that these influences should remain categorised as distal factors. .

Loo and Rolison (1986) found that African American students were more likely to pursue a PhD in accounting if they had a mentor from the same racial or ethnic group within the faculty. No participants in this current study had ever seen an Indigenous accountant, and the majority had not interacted with or even seen a non-Indigenous accountant. Even those participants who were either accounting students or graduates had not yet met an Indigenous accountant. The lack of mentors or role models was one of the recurrent themes which participants in this study suggested was an important factor in discouraging Indigenous students from choosing accounting. The mentor factor was seen to be of great importance in an environment where very few Indigenous Australians go to university. As already happens in health and education, for example, a role model in the accounting profession could help to attract students towards accounting. Indigenous accountants or business people, as role models,

could explain the outcome expectations of an accounting career and/or how to achieve professional accounting qualifications and the skills needed to successfully complete the course.

In this current study, only one participant, as a result of the first introductory accounting course, decided not to study accounting any more. The impact of the first accounting course on students' decisions to major in accounting is an area which has been heavily researched (Geiger and Ogilby, 2000). The importance of this first course lies in its ability to present useful accounting information to first-year business students. This can lead to better decision-making for all business majors, and can also encourage or discourage individuals from choosing accounting as a major. Although the participant numbers were small, this current study has confirmed that most students' perception of accounting changed after the experience of the subject gained during the first introductory accounting course. While this present study did not record any participant who decided to pursue an accounting degree as a result of their introductory accounting course, the course did create an interest in accounting for those who attempted it. In addition, it helped them to understand the accounting world better, and changed their perception of accounting in a positive way. However, participants in this study did not translate their acquired interest in accounting into goals, and these goals into actions, mainly because of proximal factors such as lack of exposure, lack of role models and an unclear career path. While most participants reacted positively to the course, some raised concerns about the prescribed textbook and the role of the lecturer. While Indigenous instructors are the most suitable for attracting Indigenous students, accounting lecturers from overseas were also liked by at least one participant. The participant

who raised the positive impact that the overseas accounting lecturer had on her said that it was due to the similarity in cultures between her (the student), and him (the lecturer), and the ‘traditional’ examples that he used to explain certain concepts and principles.

10.4 Contribution to the SCCT model

As a result of the research findings, this study suggests that the SCCT model, when applied in an Indigenous context, should be adjusted to the following.

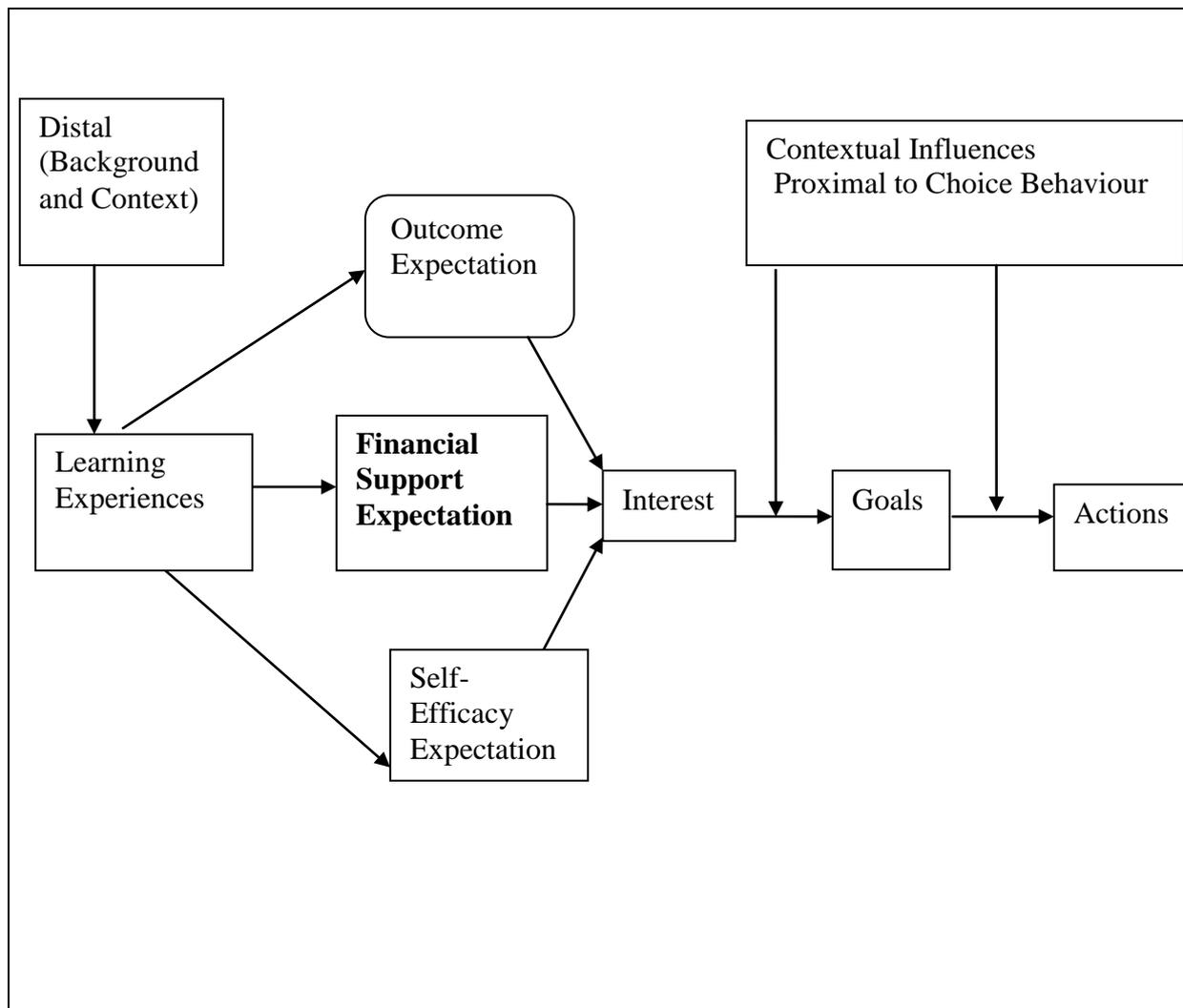


Figure 10.1: The modified SCCT model for Indigenous Australians adjusted to reflect the findings of this research.

This modified SCCT model shows that the financial support expectation is a third pillar in developing interest amongst Indigenous students towards study and career choice.

Distal influences are those which are far from the decision point but which shape learning experiences, social cognitions and, ultimately, interests. This study found that these influences affected the learning experiences through which the main variables (outcome expectation, financial support expectation and self-efficacy expectation) developed. By accessing information about a specific career, students developed their perceptions of outcome. The development of students' outcome expectation in this study has proved to be the result of information passed on from role models, teachers, peers and family. This study has found that students are more likely to choose careers to which they have been exposed.

As a result of these distal factors, participants in this study had developed perceptions and images of various careers. These distal factors, wittingly or unwittingly, had played a major role in developing a perception of accounting and an image of an accountant amongst participants. Since the perception and image did not comply with their perceived desirable outcome of a career – that is, 'helping the community' – Indigenous students were more likely to avoid accounting; and they did. Lack of access to information about accounting had resulted in the development of a discouraging image of an accountant. These distal factors had been significant in pushing students away from a perceived mysterious, white male dominated career.

Because almost all study participants stated that their main perceived outcome expectation of a career was to be able to assist their peoples, accounting, as a result of a lack of access to information (distal influences), was not on the list of careers which could fulfil this expectation. Distal factors play an important role in exposing students to professions such as the law, education and health, but neglect other professions which can sometimes be of equal if not more significance in providing help. Accounting is one of these professions which has been neglected.

The modified SCCT model, adjusted according to the findings of this research, suggests that Indigenous Australians, based on their perceived outcome expectations, financial support expectations and self-efficacy expectations, develop interests in fields of study and work accordingly. Such interests are then translated into goals, and the goals into actions.

Once an interest in a field is developed, the career decision process moves to another stage. At this stage, the process is impacted by proximal influences which may moderate the relationship between career interests, goals and choices. Participants in this study regarded employment and job availability as two important factors, which can be categorised as being proximal factors, but not to the extent of forcing them to change their career choices. While this study did not find that proximal factors had major impacts on career choices, it found that financial support expectation, which under the original SCCT model is attributed to being part of the proximal factors, played a major role in the career and study choices of the Indigenous students participating in this study; which is why this study supports the argument that financial support expectation should have its own phase in the SCCT model.

10.5 Contribution to strategies to increase the participation of Indigenous Australians in the accountancy profession

The main goal of this thesis is to answer the research question: what factors contribute to the under-representation of Aboriginal and Torres Strait Islander peoples in accounting education and the profession? The factors which impede Indigenous Australians from greater participation in the accounting profession have been discussed earlier in detail. The importance of the exploration of these factors becomes clear when they are incorporated into a strategy to tackle the issue of participation.

Since the perceived outcome of a job or study course is suggested as one of the main variables which impacts on participants' decisions to major in a particular field and/or to avoid accounting, an in-depth view is required to explain this. The next question, therefore, is: why did participants not approach accounting based on the expected outcome of the subject? This is particularly significant since accounting is important to the improvement of money management and financial skills amongst individuals and communities. Accounting can also be significant in the involvement of Indigenous peoples in financial decisions which impact on their peoples, families, communities and businesses, thereby helping to enrich lives and activities. This study's Indigenous participants, all of whom were concerned about their communities, unfortunately were never made aware of the benefits of accounting. They also had an incorrect perception of accounting which was far from the reality. Based on the finding of this study that the outcome expectation variable is a major factor in the study choice process, the likelihood of future Indigenous students taking

an accounting degree is expected to be greater only if they are exposed to the benefits of accounting and can form a different perception of it. However, the question which remains to be answered is how this perception can be changed. This study found that distal factors had a significant influence on students' perceptions. Therefore, in order to see changes in students' perceptions of accounting, a strategic focus on these distal factors can offer a productive way forward.

10.5.1 Distal factors

With their current view of accounting, this study's Indigenous participants were not likely to approach such a profession. They had never been made aware of an accurate perceived outcome of studying accounting, but nonetheless had been exposed, wittingly or unwittingly, to a negative view of it. Their perception of accounting as a 'white male-dominated' profession would need to change. If such a perception remains, Indigenous participation in accounting is highly unlikely to increase. Because it is not expected that this perception will change overnight, plans and strategies should be put in place as soon as possible. Even though Indigenous accountant role models are the best way to change the current perception, the limited number of such individuals means that caution in terms of expectation is required. Nonetheless, Indigenous accountants can still play a major role. Just by touring the country's schools and presenting themselves to Indigenous students, they would undermine the students' false perception that accounting is a job for white people only.

The other challenge is to change the perception of accounting as a male-dominated profession. Lombardi and Clayton (2006) interviewed three Indigenous accountants who were male. Although there is no research about the gender of the existing handful of qualified Indigenous accountants, reliance can at least be made on the accounting participants of this study, of whom two were Indigenous females. One was an accounting graduate and the other was planning to graduate with an accounting degree. These women, through visits to schools, could dispel the myth that accounting is just for white males.

The largest role could be played by the Indigenous Support Units (ISUs), which work at universities and schools. Prior to approaching the students, the staff of the ISUs must first be made aware of the significance of accounting, and convinced of the subject's importance. Once the correct perception is given to the staff of ISUs, they can play a major role in delivering this perception to Indigenous students in secondary schools and elsewhere. Since the teachers referred to by participants in this study appeared neither to improve students' understanding of accounting nor to explore an accounting option with them, it is doubtful whether perceptions will change without a strategy that guides and encourages teachers to explore accounting with Indigenous students. Through their connections and relationships with universities and/or schools, the ISUs could work with the universities' Schools of Business Studies, and with business and accounting secondary teachers, to introduce accounting to Indigenous students.

Because previous education and employment experience influence students' study choices, placements in finance and accounting -related workplace positions in

Indigenous companies and businesses have the potential to increase Indigenous participation in accounting. These types of placement should be made available to Indigenous students; and most importantly, students should be exposed to, and made aware of, the existence of such placements. By exposing Indigenous students to the type of work which accountants do, a number of objectives can be achieved. Firstly, students can obtain a more accurate perception of accounting; this will enable them to base their study choice on an accurate rather than an erroneous perception. Secondly, by working in Indigenous companies, Indigenous students will be in a better position to perceive the positive outcomes of accounting. According to the analysis based on the SCCT model and the findings of this research study, Indigenous students are more likely to choose accounting as a study choice, and join the profession, if they see how accounting can assist their families, communities and businesses.

The impact of previous education is similarly important. Once ISUs have the correct perception of accounting, and have passed this on to teachers and career advisors, accounting can be proposed to students as an elective class in high school. Teachers and career advisors should also be made aware that not only those students who are good with mathematics should be advised to consider accounting; other students should be so advised as well. After their exposure to basic accounting, students will have a clearer picture of what accounting is mostly about. Based on their experience in these accounting classes in high school, students will be in a better position to assess their self-efficacy in accounting. In addition, because accounting is part of the Business Studies discipline with students exposed to accounting in their first year of tertiary study, it could be reasonable to assume that these accounting classes would

also attract Indigenous students to the accountancy field. With such an approach, it might be deemed easier to attract students initially to the general field of Business Studies rather than to a specific major within it.

Because financial support expectation was found to be a major variable in the decision-making process of study choice, in addition to self-efficacy and outcome expectation, the professional accounting bodies and Indigenous leaders should ensure that students are aware of any offers of financial support which target Business Studies for Indigenous students, particularly scholarships with a preference for accounting majors. They should also ensure that there are a sufficient number of scholarships to achieve the strategic target of 1,000 Indigenous accountants by 2021.

Once students are properly exposed to accounting, they are most likely to have a different perception of the subject. Their new perception may have a positive effect on their view of the perceived outcome from studying accounting, and on their self-efficacy expectations. These factors, in addition to the offer of financial support, will together create an interest in accounting. However, for that interest to be converted into action, other factors, known as proximal factors, must play a major role.

10.5.2 Proximal factors

Once students develop an interest in a particular field, they need to be satisfied with their choice before moving to the behaviour stage. Satisfaction is created and influenced by proximal factors, which decide whether or not students persist in their choice. In Chapter four of the thesis, the researcher presented materials on the current

conflict between Indigenous values and accounting values. Students, who develop an interest in accounting after they perceive a positive outcome from it, will not be pleased once informed of this conflict, or when they directly experience such a conflict. The way that accounting is taught in Australian universities does not take Indigenous values into consideration as was discussed earlier in Chapter four of the thesis. This can be a major impediment to students' satisfaction, and while Indigenous students can be influenced to study accounting through attention to the distal factors affecting study choices, attention must be paid to the way Business Studies, including accounting, are taught by academics to their Indigenous students. This is a challenge for universities and their Schools of Business Studies.

Many Australian universities, for example, Charles Darwin University, have policies which respect Indigenous knowledge and values. These universities must consider ways in which they can support the professional learning of their Business Studies Schools, showing academics how to provide a more culturally inclusive learning experience for their Indigenous students, particularly those undertaking an accounting major. In this way, the proximal factor of the teaching/learning experience of accounting will provide greater satisfaction for Indigenous students and improve their chances of retention through to completion. Once such students have graduated in greater numbers and there are, say, 1,000 in the profession, these Indigenous accountants can make recommendations about, and indeed changes to, accounting teaching methods in universities and, more importantly, merge Indigenous values into the current accounting system of Australia.

Because of the lack of Indigenous accountants and accounting students, it is less likely for an Indigenous student to have a family member and/or Indigenous friend who is an accountant. As a result, the influence of family and friends cannot be part of the strategy at the moment. Instead, the focus should be on changing the current perception of accounting through role models and secondary school, and on developing a more inclusive accounting pedagogy at universities. However, the role models should make clear to students that accounting is not a profession which involves discrimination as appeared to a perception of some participants in this doctoral research study. Brown (2002) suggested that otherwise this might lead minority groups to avoid professions in which they perceive a likelihood that they will be discriminated against, making this a proximal contextual influence.

The importance of the successful implementation of the strategy lies in the significant impact it will have after the behaviour stage. As a result, careful attention should be paid to the first implementation of the strategy. The following diagram illustrates this.

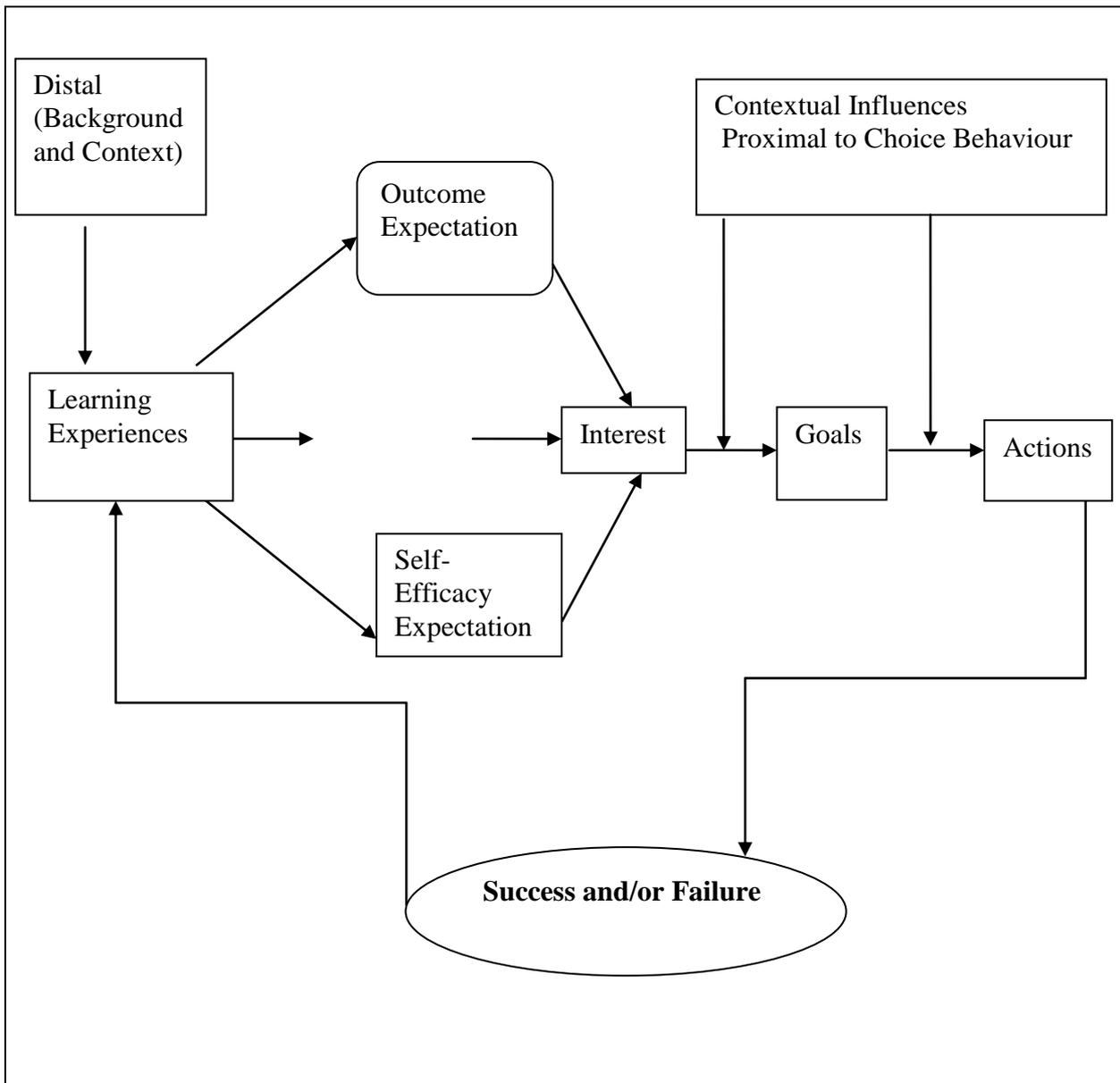


Figure 10.2: The modified SCCT model for Indigenous Australians adjusted to reflect the findings of this research, in relation to the strategy.

Those who implement the strategy should ensure that the outcome of their actions is positive. The results of actions will play a major role in creating the perception of accounting for the next generation of Indigenous students. If the outcome is failure, this would most likely be a destructive element in the strategy to increase Indigenous participation in accountancy. It would then be harder to rectify the resultant negative picture of accounting and the accountant. A positive outcome, on the other hand,

would enable societal influences such as family members and peers to publicise accounting; a form of positive feedback within the strategy. The following diagram illustrates the factors which the strategy should take into consideration.

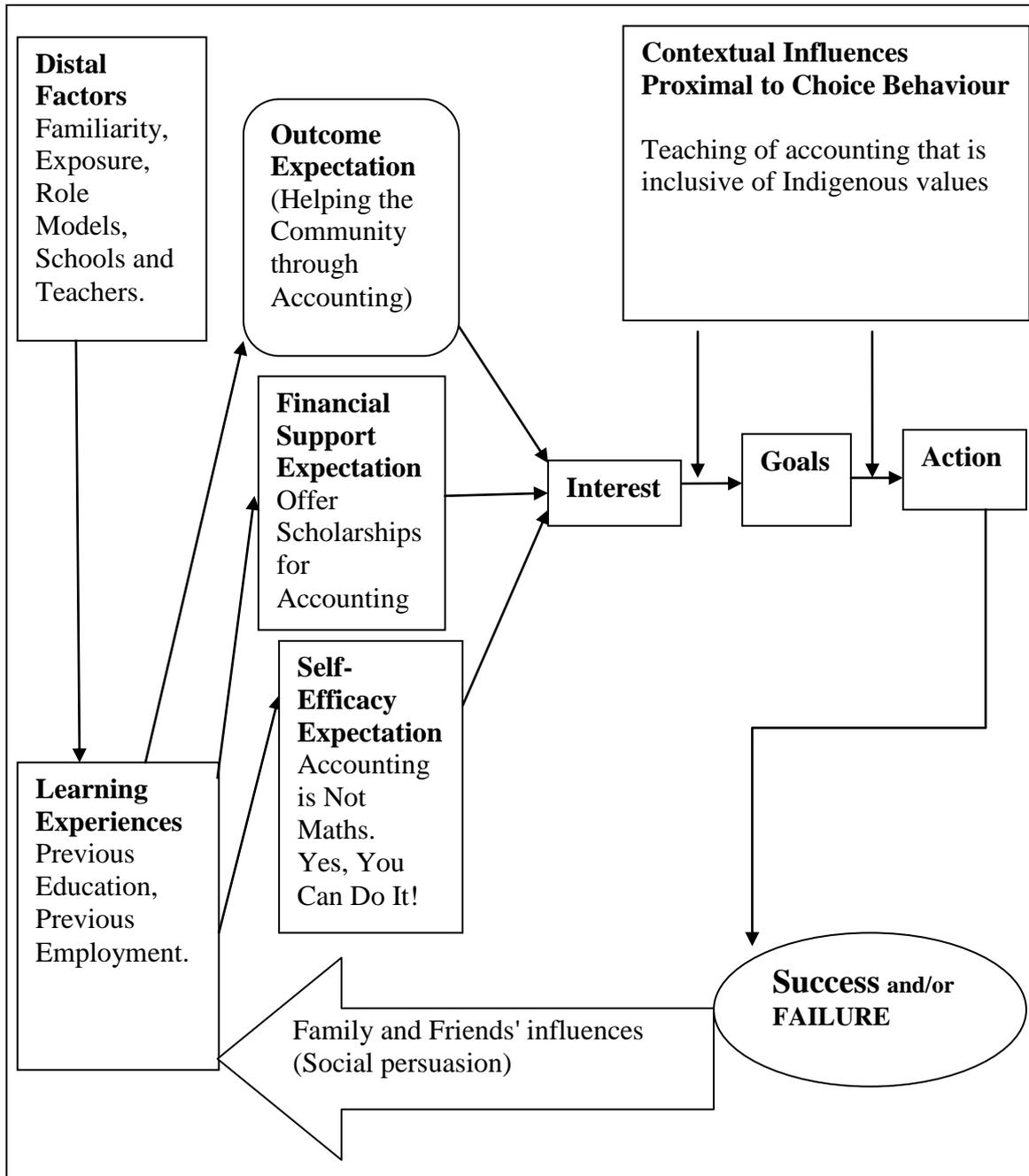


Figure 10.3: The modified SCCT model for Indigenous Australians adjusted to reflect the findings of this research, with recommendations.

10.6 summary

The analysis undertaken in this chapter supports the modification of the SCCT model in the context of Indigenous Australian tertiary education to include a third major variable, the financial support expectation. The now tripartite of expectations, central to the construction of a career interest and of a study pathway towards achieving that career, can be positioned between distal and proximal influences arising from this research study to present a dynamic strategy aimed at increasing the numbers of Indigenous accountants in Australia over the next decade.

This further development of the SCCT model and the proposed strategy focusing on increasing the numbers of Indigenous accountants are the key outcomes of this doctoral study.

Chapter Eleven: Conclusion to the Study

11.1 Concluding summation

This study set out to investigate the factors that contribute to the under-representation of Aboriginal and Torres Strait Islander peoples studying accounting at university and the possibility later of joining the accounting profession. The research study started by undertaking a series of contextual reviews beginning with an overview of Indigenous history, particularly the impact of colonisation and the stolen generation era, as a result of which Indigenous peoples are still suffering from an education system that does not give full consideration to their cultures. The use of accounting as a tool of dispossession directed against Indigenous peoples was also seen as an additional disincentive for Indigenous peoples to have representation in the accounting profession.

A further review showed that there was a limited amount of information available on the participation of Aboriginal and Torres Strait Islander Australians in the accounting profession and/or accounting education. However, literature investigating non-Australian Indigenous and marginalised ethnic groups in other countries (Canada, New Zealand, South Africa and the United States) was accessed for this study and cited. While the literature on accounting education in general is extensive, there were only two articles which reported on research into the issue of Indigenous Australian participation in accounting, there was no in-depth research study into the factors which impede Indigenous students from studying accounting at tertiary levels in Australia. While these studies were referred to in this doctoral thesis, they were essentially an introduction to this aspect of accounting education.

Because the literature emphasised the impact of the perception of a strong relationship between mathematics and accounting on students' decisions to study accounting, this research study reviewed historical and current Indigenous mathematics education. Based on the literature, it was clear that Indigenous Australians could have an efficacy in mathematics similar to that of other students studying accountancy. In addition, and based on an analysis of the available literature, it was established that Indigenous Australians are less likely to engage in a profession whose values conflict with their traditional values. Conversely, such a conflict can be viewed as an incentive for Indigenous Australians to enter such a profession in greater numbers in order to make changes to both the way accountancy is taught at universities and then practiced in general but specifically with Indigenous communities and their enterprises.

The literature review was extended to include information about Indigenous peoples' participation in the mainstream economy. This was seen of great significance, because the literature showed that an interest in accounting develops as a result of an individual's development in the economy. It was noted, however, that Indigenous peoples' participation in the economy is generally low, and as a result Indigenous peoples are less likely to see the need and a subsequent demand for accountants from within their own communities. Because it was found that the current number of Indigenous accountants in Australia does not match even their present participation in the economy, highlighting the significance of this research study in seeking to identify those factors which impede Indigenous Australian students from studying accounting.

The Social Cognitive Career Theory (SCCT) model formed the theoretical framework underpinning the analysis of the research findings of this doctoral study, findings that emerged from an exploratory qualitative approach using semi-structured mostly ‘conversational’ interviews. Even though the number of people interviewed was not large enough to generalise beyond this sample, there is sufficient evidence to recommend modifications to the SCCT model. It was clear from the findings that, for the Indigenous participants included in this research sample, there were three major variables which influenced the students’ interests in particular areas of study. These variables were self-efficacy expectation, outcome expectation and financial support expectation.

Through interviews with participants, a number of factors which potentially affect students’ decisions to study accounting emerged. These are summarised as follows:

1. The lack of available accounting scholarships.
2. The perception of a strong relationship between accounting and mathematics, and the perception that only people who perform well in and enjoy mathematics should approach the accounting profession.
3. Lack of interaction with accountants, meaning that participants do not have sufficient and authentic knowledge about accounting.
4. The inability to see positive outcomes from accounting for Indigenous communities.
5. The perception of accounting as a profession for white males only.
6. The lack of Indigenous role models to expose accounting to Indigenous peoples.

7. The lack of support and exposure from secondary teachers and career advisors.
8. The lack of family members or friends who are accountants.

The findings of this research have shown that when applying the SCCT model in the Indigenous context, the self-efficacy expectation variable, while still remaining a major variable, was not regarded by participants to be of as much importance as the financial support expectation variable. In this study, it was found that the self-efficacy expectation variable was not emphasised by most participants because they tended to test their self-efficacy in the context of a specific choice after they had developed an interest in it. The research found that the most crucial variable amongst the three major variables which develop an interest in a specific career and/or area of study was the perceived outcome. According to the research, the desirable perceived outcome of a career was to contribute to the well-being of Indigenous communities. Thus, financial support and outcome expectations combined to secure study/career interests for Indigenous students in the first instance.

While these findings contribute to the literature by exploring the factors which impede Indigenous peoples from greater participation in accounting, they also contribute significantly by proposing modifications to the SCCT model when it is used in Indigenous contexts. In this respect, a major contribution of the research study is towards the formulation of a strategy which hopes to increase the number of Indigenous accountants to 1,000 by 2021.

The research-based recommendations to be included in such a strategy can be summarised as follows.

1. Increase the number of scholarships for Indigenous students tied to business studies with an emphasis on accountancy.
2. Work on changing students' perception of accounting amongst high school and university students.
3. Ensure that students are aware of the benefits of accounting (even in its current form) to their peoples and communities.
4. Ensure that students know that if they need to make changes which affect financial decisions (a situation which is not normally in the hands of Indigenous peoples), they need to be present in the accounting profession in larger numbers. Once they are more highly represented, they can suggest major changes to the accounting system. Familiarity with accounting practices, and the potential for changes to these practices from within, can help students on graduation to overcome the issue of the conflict between Indigenous and accounting values.
5. Identify role models, who could play a major part in changing high school and university students' perception that accounting is a white male-dominated profession.
6. Ensure that the perception of a strong relationship between accounting and mathematics is changed, and change the perception that only those who enjoy and are good at mathematics can do accounting.
7. Establish a close relationship with the Indigenous Support Units at universities and ensure that they work on a strategy with secondary teachers and schools to expose accounting to Indigenous students, firstly through

accounting courses at school and secondly through work placements in finance-related businesses.

8. Undertake a professional learning program in targeted university Business Studies Schools involving accountancy lecturers and Indigenous Support Unit staff to develop accountancy course curriculum and pedagogies that are non-discriminatory of Indigenous students and are more attuned to Indigenous cultural values.

These are the main points which this thesis recommends should be taken into consideration when working on a strategy which hopes to increase the number of Indigenous accountants.

11.2 Limitations and future research

Although this study has successfully answered its major research question, it nonetheless has a number of limitations. For example, the research was carried out by a non-Indigenous researcher. The researcher has been living and working with Indigenous peoples and societies in the Northern Territory for a decade, but he still lacks a truly in-depth understanding of Indigenous lives, cultures and traditions. This limitation was compounded in the literature review chapter, where most of the reported research was conducted by non-Indigenous researchers and therefore many of their studies were open to the same criticism. However, because the researcher was under Indigenous academic supervision, it has been possible to resolve many of these issues.

The other main limitation to this study is the number of participants. Although this was discussed in detail in Chapter eight, it is raised again here in the conclusion of this thesis. The limited number of participants has prevented the researcher from generalising from this study. Although the findings of the research would have been strengthened if they had been based on a larger sample, the sample could not be larger. The number could have been increased by including more non-business students, but this addition was seen to be unnecessary because there was a sufficient number of non-business students already in the sample, and because the themes articulated by these participants became repetitive. However, the topic of the research in itself limited the number of business and accounting participants available for the study as only Indigenous students could be included. Since the research is investigating the issue of the under-representation of Indigenous Australians in the accounting profession, and since the literature states that there are only ten Indigenous members of the Australian professional accounting bodies, the number of Indigenous business students was expected to be low, although not as low as transpired. Despite the researcher allowing sufficient time for data collection and attempting to contact most campuses which might have a relevant sample, it was not possible to have more than nine business student participants. Greater collaboration from more universities across Australia would have increased participation but the logistics of this doctoral study did not allow this.

The limited number of participants should encourage future researchers to engage in studies which include a higher number of participants. Furthermore, future studies could include in their data collection a number of the factors which this study has revealed. Although these factors are based on a limited number of participants and

obtained through semi-structured interviews that allowed a free-flowing exchange of information (a time-consuming method), they nonetheless play a significant role in the issue central to this doctoral study, the current low level of Indigenous university students' participation in accounting.

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Appendix

Appendix 1



CHARLES DARWIN UNIVERSITY
Ellengowan Drive, Darwin, Northern Territory 0909
ABN 64093 513 649 | CRICOS Provider No. 00300K | RTO Provider No. 0373
cdu.edu.au

14 September 2011

Mr Hassan Rkein
Charles Darwin University
North Flinders International House
DARWIN NT 0909

Dear Mr Rkein

**RE: H11028 - Indigenous Australians in Accounting
Human Research Ethics Committee Project Application Approval**

The Charles Darwin University Human Research Ethics Committee considered your application for ethics clearance for the abovementioned project at meeting 7/11, held on 29/11/2011.

The Committee approved this application.

The Committee noted the applicant has addressed concerns regarding participant recruitment.

Please find attached a notice of clearance.

The expiry date of ethics approval for your project is **29 November 2012**. It is the responsibility of the researcher to ensure that ethics approval is renewed prior to the expiry date. If renewal is necessary, you will need to submit a progress report including a statement of compliance with ethical requirements, and detailing any proposed or actual changes to the project, which may affect its ethical acceptability. Renewal/Final Report forms are available from the Web at: http://www.cdu.edu.au/research/office/renew_final_04.rtf or from the Office of Research & Innovation.

If any significant alterations to your project are contemplated, or if any matters arise which may conceivably affect the continued ethical acceptability of the project, you are required to immediately notify the Human Research Ethics Committee by letter.

Our best wishes for the success of your project.

Yours sincerely

A handwritten signature in black ink, appearing to read "Sharon Bell".

Professor Sharon Bell
Chair, Human Research Ethics Committee

OFFICE OF RESEARCH & INNOVATION
T. +61 8 8946 6923 | F. +61 8 8946 7066 | E. cdu-ethics@cdu.edu.au

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Appendix 2



CHARLES DARWIN UNIVERSITY
Ellengowan Drive, Darwin, Northern Territory 0909
ABN 54093 513 649 | CRICOS Provider No. 00300K | RTO Provider No. 0373
cdu.edu.au

25 February 2013

Mr Hassan Rkein
Charles Darwin University
Darwin NT 0909

Dear Mr Rkein

**RE: H12171 - *Indigenous Australians in Accounting*
APPLICATION FOR RENEWAL OF ETHICS CLEARANCE**

The Charles Darwin University Human Research Ethics Committee considered and approved your application for renewal of ethics clearance at meeting 1/13, held on 07/02/2013. Please find attached a notice of clearance.

The expiry date of ethics approval for your project is **7 February 2014**. It is the responsibility of the researcher to ensure that ethics approval is renewed prior to the expiry date. If further renewal is necessary, you will need to submit a progress report including a statement of compliance with ethical requirements, and detailing any proposed or actual changes to the project, which may affect its ethical acceptability. A Final Report will be due upon completion of the project. Renewal/Final Report forms may be downloaded from the Web at: http://www.cdu.edu.au/research/office/renew_final_04.rtf or obtained from the Office of Research & Innovation.

If any significant alterations to your project are contemplated, or if any matters arise which may conceivably affect the continued ethical acceptability of the project, you are required to immediately notify the Human Research Ethics Committee.

Yours sincerely

A handwritten signature in black ink, appearing to read "Sharon Bell".

Professor Sharon Bell
Chair, CDU Human Research Ethics Committee

DEPARTMENT NAME
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Appendix 3

CDU Human Research Ethics Committee, Adult Consent Form

Adult Consent Form for

PROJECT TITLE: Indigenous Australians In Accounting

I.....of.....
.....

Hereby consent to participate in a study to be undertaken by **HASSAN RKEIN** of **CHRLES DARWIN UNIVERSITY**,

And I understand that the purpose of the research is:

For better understanding of the factors affecting the participation of Indigenous students in studies of accounting.

I acknowledge that:

- The aims, methods, and anticipated benefits, and possible risks of the study, have been explained to me by HASSAN RKEIN.
- I voluntarily and freely give my consent to my participation in such study.
- I understand that aggregated results will be used for research purposes and may be reported in scientific journals and academic journals.
- Individual results **will not** be released to any person except at my request and on my authorisation.
- I am free to withdraw my consent at any time during the study, in which event my participation in the research study will immediately cease, and any information obtained will be returned to me or destroyed at my request.

Note: interviews are going to be recorded.

Signature:

Date:

Appendix 4

PLAIN LANGUAGE STATEMENT

Project: Indigenous Australians in Accounting

Chief Investigator: Hassan Rkein.

Purpose of the Study:

The main purpose of this project is to increase the number of Aboriginal and Torres Strait Islander people in the accounting profession, Hassan Rkein, a doctor of Philosophy student at Charles Darwin University, is talking to some Indigenous university students. An aim of this part of the research is to see how many Indigenous students have chosen to study accounting. Following this, Hassan will talk to a few students about their reasons for studying or not studying accounting, their knowledge of the work of accountants, and what specific problems they face in the course.

Benefits of the Study:

This study will help in understanding what affects the participation of Aboriginal and Torres Strait Islander university students in studies of accounting. Once this is identified, we hope to solve some of the problems the students tell us about. It is hoped that eventually we will be able to increase the number of Indigenous professional accountants and the number of Indigenous business people with an understanding of the financial aspects of their business. These people will be able to help in negotiating for grants, manage funds, assist community members with financial problems, and give an Indigenous voice to a number of government policies.

What would be expected of you?

Students who take part in this research will be asked to talk about why they do or do not study accounting, and what they know about accounting and accountants. From the discussions we should have an idea about what affects the participation and performance of Indigenous students in accounting subjects and accordingly what prevents them from joining the accountancy profession.

Discomfort/ Risks:

There are no risks associated with this study. Participants can leave the discussion at any time.

Confidentiality:

Information collected will be used confidentially. Names will not be mentioned and research materials will be stored securely.

Your Participation:

I would be very grateful if you agree to participate in this interview but you are free to refuse to participate. Even if you decide to participate, you can withdraw from the interview at any time.

Results of the study:

If you would like to see the results of this research at a later date, you can do so.

Persons to contact:

If you have any questions about the project, please contact the researcher, Hassan Rkein on ph: 04 22 85 00 45 or 08 8946 6659. If there is an emergency or if you have any concerns before commencing, during, or after the completion of the project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee on 08 8946 6498 (free telephone number 1800 466 215) or by email: cduethics@cdu.edu.au. The Executive Officer can pass on any concerns to appropriate officers within the University.

Note: the interviews are going to be recorded.

This information sheet is yours to keep.

Appendix 5

Questions, which were asked during the interviews. While some of these questions were not asked, other questions were asked depending on the conversation.

- What are you studying?
- Why did you choose to study this specific..?
- Would you continue your studies if you have NO Scholarship?
- What is the most critical factor for your decision to study?
- Would you change to accounting if your scholarship changed to accounting?
- Did your financial situation affect your choice of study?
- Would you be forced to let go of accounting due to financial pressures?
- Does financial family support have any effect on your study?
- Is the scholarship enough? Are you forced to work part time as well?
- Why didn't you start university right after high school?
- Would you leave work to study accounting if you are offered a scholarship?
- Who motivated you to study?
- Do you think that being good in math means you are good in accounting?
- How sure you were about your abilities regarding the course you are studying?
- Why is it hard to study accounting?
- Would you be discouraged from continuing your studies in case you failed a subject or subjects?
- Do you think you will be successful in accounting if you are good in math?
- Do you think you will be successful in accounting if you are good in English?
- Do you think that your ability to study accounting has anything to do with your family members' ability in general?

- Do you think that you can study accounting?
- Do you think by studying accounting you will help your community?
- Do you prefer to study a course which will allow you to help your community?
- Would you change your major to another more beneficial to your community?
- Do you think that aboriginal teachers would better understand aboriginal students?
- Would you study any major only if it helps your community?
- How is your community affected by your study choice?
- Where you affected by any of your family members in your study choice?
- Where you encouraged by your family to pursue a particular subject?
- Did you seek advice from your parents or relatives regarding your study choice?
- Did you seek advice from your teachers or friends?
- Why did not you study what others in the family did?
- Was you study choice affected by your ability in the subject you have chosen?
- Did you seek advice from your teachers regarding your study choice?
- Were you affected by your teachers regarding your study choice?
- Were any of your teachers a role model for you?
- Were you given advice in general by your teachers regarding your study choice?
- Were your teachers' advices helpful for your study choice?
- Were your choice affected by what your peers told you?

- Why didn't you study as your peers?
- Did you discuss your study choice with your peers?
- Would you have studied different subject had you not discussed it with your teachers and peers?
- Are you satisfied with your teachers' guidance?
- How your previous education or work did affect your study choice?
- Did you choose subjects at high school because had hope to later work in a particular field?