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MASSEY
BUSINESS
SCHOOL
TE KURA WHAI MAORI

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perspectives on effective and
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Post-Settlement Governance Entity
group

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Table of Contents

Volume XVII, Issue 2, Feb 2021

Special Edition

Special Edition Foreword

*F. Elizabeth Gray, Trish Bradbury,
Patricia Bossons, Heidi Le Sueur*

Page 3

The view from inside the boardroom, perspectives on effective and ineffective board characteristics and outcomes in entities part of a Māori Post-Settlement Governance Entity (PSGE) group

Dallas Brendan Harper

Page 7

Strategies to promote ethical investments in the NZ market

Rachelle Collier

Page 55

Does second generation gender bias exist in commercial aviation? Pilot experience and perception

Anna Elizabeth Coles (Benge)

Page 98

Whakamanatia: Empowering Māori to access primary health care using mHealth technology

Tia Ashby

Page 114



Special Edition Foreword

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Welcome!

This special issue emerges at a uniquely straitened global moment. Political populism animates various forms of barely masked nativism, attention has been trained to racial inequities in newly sharpened ways, and the promising (and threatening) mobility of goods, ideas, people, and viruses has rendered questions of internationalization and equity more pointed than ever before. Businesspeople face an urgent need to parse the meanings, benefits, and corollaries of an increasingly global and diverse workplace, applying a range of knowledges to the challenge of finding solutions that will both serve corporate objectives and ensure fairness and opportunity for all.

The papers collected in this issue, all produced out of the Applied Research Project undertaken by Executive MBA candidates at Massey University, New Zealand, employ a variety of perspectives to envision a business environment that goes beyond tokenistic recognition of diversity, and even ‘celebration’ of diversity, to meaningfully consider the ways in which business processes and

outcomes may be improved through inviting diverse worldviews, collaborative models, and approaches to knowledge to inform and improve existing practice, and to spark innovation.

Paper one, by Dallas Brendan Harper, discusses research into board effectiveness (and ineffectiveness) in the particular case of Treaty of Waitangi settlements in Aotearoa New Zealand, extending previous scholarship by explicitly considering the role of Tikanga Māori (that is, traditional approaches and understandings of Māori, New Zealand's indigenous people) in the success of board strategy and operations.

Paper two, by Rachelle Collier, grounds itself in the increasing prominence of ethics as a driver of investment decisions. It focusses on the growing importance to investors of information enabling them to choose ethical companies in which to invest, and makes a series of recommendations as to how investment providers can consider marketing, visibility, and disclosure initiatives, as well as a comparison platform, as measures by which to simultaneously serve the interests of consumers seeking information and meet their own corporate objectives.

In paper three, Anna Elizabeth Coles considers gender bias in the aviation industry, taking as a starting point the vanishingly small number of women in pilot and management roles in aviation. The study focusses specifically on female airline pilots, examining the barriers they face to entering the industry, the glass ceiling affecting their promotion opportunities, and the possibility of second-generation bias. The author notes that the cultural change required to undergird

new policies and procedures needs to be grounded in evidence-based research into entrenched organisational behaviour.

In paper four, focusing on the health care sector in Aotearoa New Zealand, Tia Ashby considers how indigenous groups may be empowered through technological design and innovation. Ashby's research explores the ways in which a group of nurses engaged with Māori patients through mobile technology, investigating their perceptions on the effectiveness of this method in terms of improvement of access to primary health care services. As with many indigenous groups worldwide, Māori face many barriers in terms of access to care and improving their health outcomes, barriers that mobile technologies may help diminish. The paper outlines a number of specific implications both for nursing practice and for health organisations using smart technology.

Taken together, these articles foreground the increasingly powerful voices of groups that in different ways have been previously disempowered or disregarded. The authors argue for a commitment on the part of industry not just to acknowledge those voices but to respond by reconsidering and even redesigning strategy, practice, and communication.

Building on the promise of applied research, it is our hope that the papers collected here will contribute to fair(er) opportunities for all by means of enhancing practice that will contribute to (among other things) Māori development and self-determination, evidence-based interrogations of entrenched industry cultures as a necessary starting point for changing sexist policies and

practices, and more deliberative and focussed communication of companies' ethical commitments.

The Special Edition Editors

F. Elizabeth Gray, Trish Bradbury, Patricia Bossons, Heidi Le Sueur



The view from inside the boardroom, perspectives on effective and ineffective board characteristics and outcomes in entities part of a Māori Post-Settlement Governance Entity (PSGE) group

Dallas Brendan Harper
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Whakapapa (Genealogy)

Ko Tainui te waka
(The waka that I affiliate to is Tainui)
Ko Tararua te maunga
(The mountain that I affiliate to are the Tararuas)
Ko Waikawa raua ko Manakau nga awa tere
(The rivers I affiliate to are Waikawa and Manakau)
Ko Kukukohatu te whenua
(Kukukohatu is the land of the marae)
Ko Ngāti Raukawa Te Au ki te Tonga te iwi
(My Wider Iwi is Ngāti Raukawa ki te Tonga)
Ko Ngāti Wehi Wehi te iwi e tau nei
(Ngāti Wehi Wehi are the people of the land)
Ko Wehi Wehi ratou ko Tamatatai, ko Rangitawhia ko Pihaka nga hapū
(Wehi Wehi, Tamatatai, Rangitawhia and Pihaka are the ancestral chiefs of old)
Ko Wehi Wehi raua ko Patiharuru nga tupuna whare
(Wehi Wehi is the chief and Patiharuru is his wife, the names of our ancestral houses)
Ko Maxwell Robert Harper rāua ko Colleen Hokinga Harper ōku mātua
(My parents are Maxwell Robert Harper and Colleen Hokinga Harper)
Ko Dallas Brendan Harper ahau
(My name is Dallas Brendan Harper)

ABSTRACT

Corporate governance of Māori entities has emerged as a topical area over the past three decades. The Treaty of Waitangi (Treaty) settlements process provides redress to New Zealand's indigenous people, Māori for historical grievances inflicted on them by the British Crown. Treaty settlements require Māori claimant groups to establish corporate structures and a collective decision-making framework to manage settlement assets and natural resources. Claimant groups are required to establish a legal creation known as a 'Post Settlement Governance Entity' (PSGE) under the Treaty Deed of Settlement (OTS, 2015).

The researcher applied principles of a New Zealand qualitative (interpretative) study 'Managing performance at the top: a balanced scorecard for boards of directors' (Northcott & Smith, 2011). The researcher gained first-hand perspectives from 15 experienced board members on the characteristics and outcomes of effective and ineffective boards of entities part of a Māori PSGE group. The researcher targeted entities that received a Treaty settlement of no less than NZ\$15 million.

The findings confirm that 'Tikanga Māori' plays a significant role in the characteristics and outcomes of an effective board. 'Director skills' are a significant characteristic of both an effective and ineffective board. Respondents noted the need for 'commercial acumen', 'investment appraisal skills' and 'financial expertise.' The research will add to the literature in a unique Māori context of the characteristics and outcomes of board effectiveness and

ineffectiveness. The research is expected to contribute to Māori Development and self-determination under ‘Te Tino Rangatiratanga.’ The research provides an opportunity to improve the well-being of Māori communities throughout New Zealand to ‘bring back the mana’ through the delivery of life-changing transformational outcomes. The researcher received no funding or specific grant from any agency in either the public, commercial or not-for-profit sectors. The study is fully committed to Māori research principles ensuring the cultural appropriateness of the study (Te Awekotuku, 1991).

CHAPTER ONE - INTRODUCTION

1.0 Background

The Treaty of Waitangi (Treaty) settlements process represents full and final settlement by the Crown of historical grievances inflicted on Māori (Story, 2005). The Treaty was signed by representatives of the British Crown and Māori on 6 February 1840. The redress process is about restorative justice and realisation of Māori aspirations of self-determination. Treaty settlements provide development opportunities to enhance Māori personal well-being and secure cultural identity (Durie, M., 2013). The Treaty signified an attempt to establish a partnership between the British Crown and Māori. The controversies between the Māori and New Zealand texts of the Treaty resulted in fundamental differences of interpretation. The Crown partnership with Māori was initially based on good faith and honest intentions. However, the Crown’s intentions and subsequent actions

soon deteriorated (Hickey, 2006). The Right Honourable Sir Douglas Graham, former Minister in Charge of Treaty of Waitangi Negotiations, stated¹:

The simple fact is that we have to deal with these grievances. Can any country allow sixteen per cent of its population to continue to feel deeply aggrieved about serious injustices? Can we allow the indigenous population to lose all that it holds precious, fail to provide a forum for the grievances to be aired for over 150 years, and then say that Māori are out of time to bring a claim according to the rules of the court? This is hardly in keeping with the honour of the Crown.

There was now a significant shift in the Government thinking that reflected the need to address fragile race relations between the Crown and Māori. The Māori economy is now emerging from the agricultural sector and diversifying into geothermal energy generation, property development, manufacturing, business services, tourism, health and education (Fodder, Davis-Ngatai, & Joseph, 2014). According to Business and Economic Research Limited (BERL), the Māori economy asset base in 2013 accounted for NZ\$42.6 billion (6.1%) of the total New Zealand asset base (Nana, Khan, & Schulze, 2015).

¹ Douglas Graham, *Trick or Treaty?*, Institute of Policy Studies, Victoria University of Wellington, Wellington, 1997, p.89.

CHAPTER TWO - LITERATURE REVIEW

2.0 Tikanga Māori

Tikanga is a framework of principles that form the foundations of a Māori Worldview (Mead, 2016, p. 7). According to Justice Durie, 'Tikanga Māori,' represent customary practices and cultural norms adhered to by Māori (Durie, E., 1994). Māori are 'Tangata Whenua' which means people of the land. Māori place importance on land ('Whenua') and the natural environment on their cultural and spiritual identity. Knowledge and certain types of information were highly prized and tightly held, including environmental, economic and strategic knowledge. Māori used several practical measures and sanctions to control the dissemination of information, including Tapu (forbidden spiritual/sacred restriction) to enforce protection of knowledge. The God of Forests, Tāne had to ascend to the 'Twelfth Heaven' and retrieve knowledge for the benefit of humanity (Kāretu, 2008). The three baskets of knowledge are known as 'kete o te wānanga.'

a) The basket of knowledge to help humanity is known as 'te kete-arōnui.' It translates as meaning 'that before us,' or the natural world that contains secular knowledge which can be used for good or evil, depending on one's motives (Lemon, 1999, p. 5).

b) The basket of knowledge of ritual, memory and prayer is known as 'te kete-tuauri.' It translates as meaning 'beyond in a world of darkness' (Lemon, 1999, p. 5).

c) The basket of knowledge of evil considered harmful to humanity is known as ‘te kete-tuatea.’ It translates as meaning ‘beyond space and time’ contains occult knowledge which could be used for evil (Lemon, 1999, p. 5).

Tāne safeguarded these treasures supports the belief that knowledge is a sacred thing that must be nurtured. There are Tikanga Māori concepts pertinent to the Tangata Whenua in forming their worldview. Mauri is the source of vitality, mana and fruitfulness of people, lands, forests and other natural resources (Te Aho, 2005, p. 302). ‘Te Tino Rangatiratanga’ means absolute chieftainship is about Māori determining their destiny. Te Tino Rangatiratanga is the shared aspiration and collective advancement of Māori as a people and protection of the environment for future generations (Durie, M., 1997, p. 3). Effective corporate governance is critical to Māori in successfully fulfilling ‘Te Tino Rangatiratanga.’ Kaitiakitanga is about stewardship to ensure the preservation, conservation and protection of natural resources and taonga (Spiller, Pio, Erakovic, & Henare, 2011, p. 233). The Māori stakeholder view places importance on sustainability for future ‘unborn generations’ in managing resources (Te Aho, 2005, p. 306).

2.1 Indigenous Governance

The Harvard Project on American Indian Economic Development (Project) located at John F. Kennedy School of Government at Harvard University is an influential study. The Project seeks to advance sustained, self-determined social and economic development of the American Indian nations (Cornell & Kalt, 1990). The Project highlights universal principles that apply in the Māori context of self-

determination. Evidence from the Project is that effective governance structures are required to ensure collective decision-making and sustained collective action (Cornell & Kalt, 2000, p. 467). The Project illustrates that Māori must reflect the cultural values of the community it serves for successful economic development.

2.2 Māori Governance

Prominent New Zealand academics acknowledge Māori governance has distinctive accountabilities and is unique relative to ‘best practice’ literature (Fodder, Davis-Ngatai, & Joseph, 2014; Joseph, 2007; Te Aho, 2005). Māori entities are typically collectively owned based on ancestry and whākapapa (genealogy, lineage, descent). These organisations have a stewardship duty of Wāhi Taonga (treasures). Board decision-making must consider Tūpuna (ancestors), current generations and future unborn generations. Māori governance has three defined aspects (Fodder et al., 2014). Firstly, Traditional Māori Governance consists of concepts of ‘Tikanga Māori’ and ‘Mautauranga Māori.’ ‘Mautauranga Māori’ relates to the interrelatedness between people, what they do and their core values. The challenge is to mesh corporate objectives with the maintenance of ‘Tikanga Māori’ and ‘Mautauranga Māori’ principles (Te Aho, 2005). Secondly, Transactional Māori Governance centres on economic development (Fodder et al., 2014). Business and Economic Research Limited note the Māori economy contributed NZ\$11 billion (5.6%) in 2013 to New Zealand’s Gross Domestic Product (Nana, Khan, & Schulze, 2015). Thirdly, Transformational Māori Governance is about making a positive impact on collective Māori communities and their well-being (Fodder et al., 2014). Transformational Māori governance initiatives strive to address adverse

social metrics, including lower life expectancy and wide-spread poverty (Reid, Taylor-Moore, & Varona, 2014). There are restrictions on Māori land as a result of legislation including the Te Ture Whenua Māori Act 1993 and the Māori Trust Boards Act 1955. The Māori Trustee and Te Tumu Paeroa also play a role in the administration and mobilisation of Māori land including governance functions.

2.3 Learning from ancient Māori wisdom

The relational Five Well-beings concept views people as Kaitiaki (caretakers) of Mauri life force (Spiller, Erakovic, Henare, & Pio, 2011). The relational Five Well-beings approach entails a holistic view that organisations take a stakeholder perspective that considers people and the environment to create multi-dimensional well-being and wealth (Spiller, Erakovic, et al., 2011, p. 166). The approach includes spiritual, cultural, social, environmental, and economic well-being. The Māori stakeholder view of well-being is broader than the shareholder view of material financial wealth. The Spiller et al. (2011) study is an influential one where the emerging environmental crisis has adversely impacted indigenous populations, including Māori (Butler & Hinch, 2007; Johnston, 2013). An effective board must consider the social and spiritual well-being of the Māori people themselves, in addition to environmental and economic consequences.

2.4 Governance Theories

Governance theories explain the interrelationship between the board of directors, chief executive, Iwi and Hapū and other stakeholders. Each of these theories has a defined role of the board and provides a basis for measuring board effectiveness.

2.4.a) Agency Theory

Agency theory underpins many governance studies. The origins emanated from the economics discipline and were concerned with the separation of owners from management (Berle & Means, 1932; Fama & Jensen, 1983b). Agency theory is said to address the propensity of managers to act in self-interest. Board members must act in ‘good faith’ and ‘in the best interests’ of the entity to mitigate self-interest behaviour of management (Fama & Jensen, 1983a). When management act in self-interest, the costs as borne by shareholders are known as ‘agency costs.’ In New Zealand, under section 131(1) of the Companies Act 1993, a director must perform their duties in ‘good faith’ and ‘in the best interests of the company’. Governance research under the agency theory is concerned with the structural aspects, including board member independence and board size (Denis & McConnell, 2003; Larcker & Tayan, 2016; Lipman, 2007). The evidence is inconclusive that independent board members enhance company performance (Bhagat & Black, 1999; D. Dalton & Dalton, 2011; Westphal, 2002). Agency theory is also concerned with Chief Executive Officer (CEO) Duality, where the chief executive may also occupy the board chair role. New Zealand requires separation of the CEO and chair role. Numerous studies argue that CEO Duality results in reduced company performance (Boyd, 1995; Rechner & Dalton, 1991; Rhoades, Rechner, & Sundaramurthy, 2001).

2.4.b) Stakeholder Theory

Stakeholder theory postulates an organisation's purpose is broad and encapsulates customers, suppliers, employees, communities and shareholders (Freeman, R., 1984). The stakeholder view acknowledges that companies compete on multiple dimensions and reflect the strategic importance of suppliers, employees and customers (Freeman, R.E., 1984; Hopper, Northcott, & Scapens, 2007). The stakeholder view considers the broader environment and that managers should consider these in the decision-making process (R. E. Freeman, Harrison, Wicks, Parmar, & De Colle, 2010). Conversely, under a shareholder view, the primary responsibility of a company is to maximise shareholder wealth (Fama & Jensen, 1983a; Larcker & Tayan, 2016). A shareholder view does not consider diverse stakeholders, including future unborn generations.

2.4.c) Stewardship Theory

The rationale of stewardship theory is that members of the board are stewards of an organisation's assets. The strategic role of the board is therefore concerned with being Kaitiaki of land, water and natural resources (Stiles, 2001, p. 628). In stewardship theory, collectivist behaviours are seen to have higher utility than individualistic, self-serving behaviours (Davis, Schoorman, & Donaldson, 1997, p. 25). The steward will always act in the best interests of the collective organisation. Stewardship theory contends that Iwi and Hapū interests are enhanced through the occupation of the chief executive and board chair roles by the same individual (Donaldson & Davis, 1991). There is inconclusive evidence board member

independence enhances corporate performance. A recent New Zealand study supports stewardship theory where a majority of independent directors resulted in reduced corporate value (Koerniadi & Tourani-Rad, 2012). The findings were contrary to well-cited overseas studies (Bhagat & Black, 1999, 2001; Daily, Dalton, & Cannella Jr, 2003; Dalton, D. & Dalton, 2011; Dalton, D., Daily, Johnson, & Ellstrand, 1999; Zahra & Pearce, 1989).

2.4.d) Resource Dependence Theory

Resource dependence theory is grounded in sociology and organisational theory and views the board as a resource (Zahra & Pearce, 1989, p. 297). Directors can contribute valuable resources through network connections for favourable corporate performance. Evidence supporting the resource dependence theory has emerged from board interlocks. Directors are said to not only unlock beneficial relationships with other organisations, but they also ensure favourable transaction outcomes (Schoorman, Bazerman, & Atkin, 1981). The critics of the resource dependence theory cite fundamental differences to agency theory. A highly connected director does not amount to board independence (Muth & Donaldson, 1998). There is inconclusive evidence that resource dependence enhances corporate performance (Kiel & Nicholson, 2003).

2.5 New Zealand Governance Framework

The New Zealand Exchange 2017 Governance Code (Code) provides ‘best practice’ governance principles that apply to publically listed New Zealand companies (NZX, 2017). The purpose of the Code is to protect the interests of

shareholders and provide long-term value. The New Zealand Exchange (Exchange) adopts a please explain rationale where there are departures, so the market remains informed. All publically listed companies on the Exchange must report against the Code. Director's obligations in New Zealand are provided for in the Companies Act 1993. The Institute of Directors in New Zealand (IOD) was formed in 1989 and is the professional body that supports and establishes standards for directors in New Zealand (Arcus, 2012). Compliance with codes and concepts that underpin best practice are mostly voluntary. Members of IOD must comply with their Code of Practice and the company constitution.

2.6 Global response to corporate collapses

The United States and the United Kingdom approach to corporate governance practices are somewhat philosophically different. The United States approach is 'rules-based' versus a 'general principles' approach in the United Kingdom (Garratt, 2003). The United States approach is to utilise external agencies to ensure compliance and pursue litigation if required. The United Kingdom are considered the leader in corporate governance reform (Garratt, 2003). The United Kingdom 'general principles' approach is based on codes of best practice. Any departure from the general principles require either a revision or a please explain from the board. In the United Kingdom, The Cadbury Committee was established following notable corporate collapses of Bank of Credit and Commerce International and Polly Peck. The Cadbury Report (Report) recommended boards should comprise a majority of independent non-executive directors and establishment of an audit committee (Cadbury, 1992). A key Report recommendation was the separation of

the chief executive and board chair role. The United States governance framework allows CEO Duality. The Report recommended a Code of Best Practice designed to elevate corporate behaviour and reporting (Cadbury, 1992). Following the Enron crisis, the United States Federal Reserve adopted many of the United Kingdom's accounting policies and governance practices (Garratt, 2003).

2.7 Emergence of Qualitative Governance Research

Quantitative research has resulted in prescriptive 'best practice' via the creation of codes that are general principles widely found in corporate governance literature (Sonnenfeld, 2002). The movement in governance research to a qualitative methodology has continued in recent times where researchers have sought the perspectives of board members themselves (Kakabadse, A., Kakabadse, & Barratt, 2006; Leblanc, R. & Gillies, J., 2005; Parker, 2007; Zahra & Pearce, 1989). Qualitative (interpretative) studies reflect how board members interrelate to influence the quality of decision making. Qualitative research may foster the development of more effective governance practices (McNulty, Zattoni, & Douglas, 2013).

2.8 Director's perspectives on board behaviour

A study completed in 2005 highlighted 'board process' and how board members interrelate to arrive at decisions as contributing to board effectiveness (Leblanc, R. & Gillies, J., 2005). As pointed out by Leblanc (2007), many of the structural based quantitative studies centred on the agency theory are generated with an 'outsider view' by researchers who have never sat on a board. The best judge of a

board's effectiveness is said to be directors themselves (Leblanc, R., 2007).

Outsiders rarely gain a close-up view of relationships, informal conversations and quality of debate that take place between directors outside of formal meetings.

2.9 Board effectiveness – board chair and chief executive

An influence on board effectiveness is said to be the relationship between the board chair and the chief executive. In the United Kingdom, the Cadbury Report (Cadbury, 1992) and the Higgs Report (Higgs, 2003) recommended separation between the two roles. A hostile relationship was noted in an ineffective board (Kakabadse, A., Kakabadse, & Knyght, 2010). The 'chemistry factor' between the board chair and chief executive was also noted in the literature (Kakabadse, A., et al., 2010, p. 31). The 'magic relationship' between the board chair and chief executive plays a vital role in board performance (Kakabadse, A., et al., 2006). A healthy relationship between the board chair and the chief executive provides leadership to enhance board effectiveness (Hossack, 2006). Leblanc noted the 'relationship' and 'chemistry' between the board chair and chief executive, the chair's leadership skills, individual directors skills, and working relationships between management and the board as factors contributing to board effectiveness (Leblanc, R., 2007, pp. 18-20). A New Zealand qualitative study by Edlin (2007) based on board member perspectives, highlighted 'chemistry' between the board chair and chief executive. The study also highlighted the role of the decision-making process and the importance of trust (Edlin, 2007).

2.10 Board chair and board effectiveness

Corporate governance research has emanated mostly out of the United Kingdom highlights the influence of the board chair on board effectiveness. The board chair facilitates the decision-making process and creates a climate where directors engage and constructively challenge propositions (Kakabadse, A. & Kakabadse, 2008; Leblanc, R., 2007). The board chair is a ‘conductor of the board’ (Leblanc, R., 2007, p. 19). The Cadbury Report (1992) highlighted the contribution of the board chair in facilitating engagement and participation and external accountability. The Higgs Report (2003) outlines the pivotal role of the board chair on board effectiveness. The board chair contributes to board effectiveness through fostering relationships, disseminating information to the board and providing leadership.

CHAPTER THREE - RESEARCH METHODOLOGY

3.0 Introduction

Governance research in recent years has witnessed a shift from structural-based quantitative studies to a qualitative (interpretative) methodology. The focus of quantitative studies was concerned with structural aspects, including board size, board independence, CEO duality, and company performance. These studies were often performed by those with little understanding of situational context, board dynamics and decision-making practices (Leblanc, R., 2007; Pye & Pettigrew, 2005).

3.1 Qualitative Research Methodology

Qualitative (interpretative) governance studies consider first-hand perspectives of those ‘inside the boardroom.’ The researcher replicated the methodology as used in the Northcott and Smith (2011) study. The research methodology adopted has established reliability and validity. The primary research instrument used was a Survey Monkey Electronic Self-Completion Questionnaire. The questionnaire was distributed to targeted participants through a stratified sampling approach.

Qualitative research is interpretative and is dependent on the researcher’s unique experiences. A further disadvantage of qualitative research is that it often cannot be replicated or extended to broader populations with the same degree of certainty compared to quantitative analyses (Atieno, 2009, p. 17). A multi-step process was used to code and analyse the electronic questionnaire data based on responses received. Triangulation was achieved through the validity of the perspectives received on effective and ineffective board characteristics and outcomes.

3.2 Qualifying entities for the study

The study focused on entities that were part of a PSGE group that received a Treaty settlement of no less than NZ\$15 million. The entity part of a PSGE group had to have been in existence for no less than five years.

3.3 Qualifying board participants for the study

Targeted participants included:

- a) Board Chairs
- b) Directors
- c) Chief Executive Officers.

Board chairs and directors must have been on the board for no less than two years. The requirement for board chairs and directors to be serving on more than one board ensured they had sufficient depth of experience. Chief executives must have been in the role for at least two years. The requirement of serving on the board for no less than two years ensured participants had sufficient operational understanding of a board's function.

3.4 Pilot Study

The purpose of the pilot study:

- a) Ensure survey questions were clear and concise,
- b) Ensure questions were culturally appropriate,
- c) Confirm electronic survey operating functionality.

The qualifying entities were widened to include all entities part of a PSGE group.

3.5 Governance Focus Group

The researcher established a Focus Group that contained a leading Māori governance professional. The purpose of the Focus Group was to provide clarity to the findings and construction of meaning based on analysis by an insider who resides in the boardroom of high-profile Māori organisations. The Focus Group Moderator was the researcher.

CHAPTER FOUR – DATA ANALYSIS – CHARACTERISTICS OF BOARDS

4.0 Introduction

The first part of the research considered the ‘characteristics’ (qualities) of effective and ineffective boards in entities part of a Māori PSGE group. The two questions below addressed the characteristics of effective and ineffective boards.

Question: What are the ‘distinguishing qualities’ (characteristics) of an effective board of an entity part of a PSGE group?

Question: What are the ‘distinguishing qualities’ (characteristics) of an ineffective board of an entity part of a PSGE group?

4.1 Characteristics of effective and ineffective boards

The study replicated the four main themes as used in the Northcott and Smith (2011) study. A new theme Tikanga Māori was included. Table 4.1 below presents the number of participants that mentioned each aspect (theme) and the frequency of

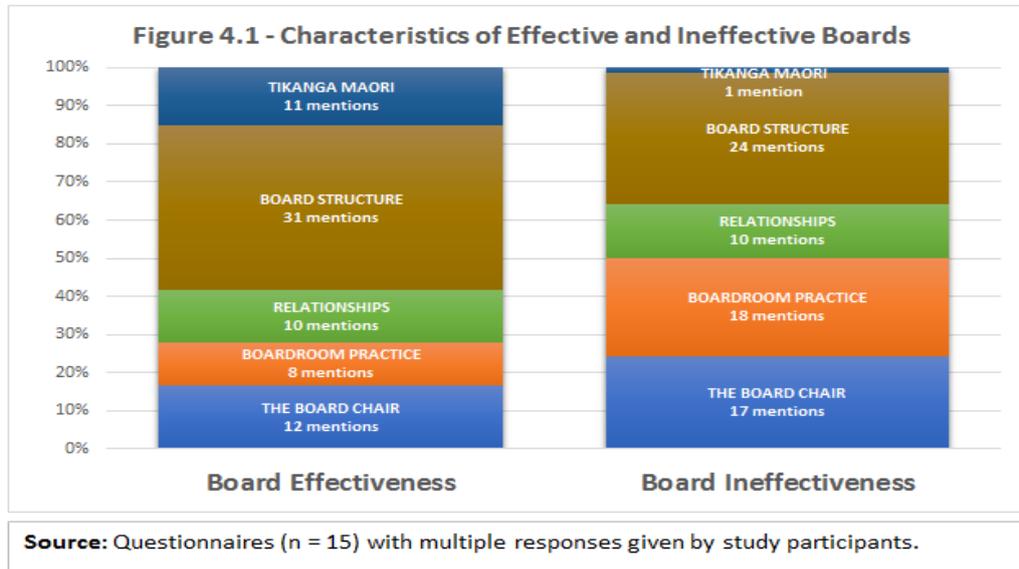
mentions. Some aspects of each theme received multiple mentions that indicated a stronger degree of concern and importance.

Table 4.1 - Characteristics of Effective and Ineffective Boards

| Main Theme | Aspect | Section | BOARD EFFECTIVENESS | | | BOARD INEFFECTIVENESS | | |
|--------------------------------|--|---------|---------------------|----------------|-------------|-----------------------|----------------|------------|
| | | | Participants | Total Mentions | Percentage | Participants | Total Mentions | Percentage |
| THEME ONE - THE CHAIR | 1. The leader of the board | 4.2 | 10 | 12 | 17% | 12 | 17 | 24% |
| THEME TWO - BOARDROOM PRACTICE | 2. The inter-relationship between the atmosphere in the boardroom, the quality of debate, and the effectiveness of decision making | 4.3 | 5 | 8 | 11% | 9 | 18 | 26% |
| THEME THREE - RELATIONSHIPS | 3. Relationships between fellow directors | 4.4.a) | 4 | 5 | 7% | 4 | 4 | 6% |
| | 4. Character and attitude of directors | 4.4.b) | 3 | 4 | 6% | 2 | 2 | 3% |
| | 5. Relationships between the board and management team (including CEO) | 4.4.c) | 1 | 1 | 1% | 4 | 4 | 6% |
| TOTAL RELATIONSHIPS | | | | 10 | 14% | 10 | 14% | |
| THEME FOUR - BOARD STRUCTURE | 6. Board diversity (informational diversity) | 4.5.a) | 4 | 4 | 6% | 5 | 5 | 7% |
| | 7. Individual director skills | 4.5.b) | 15 | 26 | 36% | 10 | 14 | 20% |
| | 8. Selection process to build a better board | 4.5.c) | 1 | 1 | 1% | 4 | 5 | 7% |
| TOTAL BOARD STRUCTURE | | | | 31 | 43% | 24 | 34% | |
| THEME FIVE - TIKANGA MAORI | 9. Aspects of Tikanga Māori | 4.6 | 9 | 11 | 15% | 1 | 1 | 1% |
| TOTAL MENTIONS | | | | 72 | 100% | 70 | 100% | |

Source: Questionnaires (n = 15) with multiple responses given by study participants.

Salient points emerge from Table 4.1 (above) and Figure 4.1 (below) on Characteristics of effective and ineffective boards and are analysed and discussed below.



4.2 Theme One – The Board Chair

The study highlights the effect of the Board Chair as the second most influential characteristic of an effective board (12 mentions or 17%) and an ineffective board (17 mentions or 24%). The board chair is a key influencer and facilitator of board effectiveness and ineffectiveness.

Discussion

The board chair role fulfils the governance leadership function consisting of oversight, compliance and risk management (Hossack, 2006). The board chair creates the ‘opportunity and environment for boardroom participation’ considered vital for board effectiveness (Kakabadse, A., et al., 2006, p. 141). Board effectiveness is positively influenced by the relationship between the chief executive and board chair (Edlin, 2007; Hossack, 2006; Kakabadse, A., et al.,

2010; Leblanc, R. & J. Gillies, 2005). Leblanc (2004) described the ‘leadership skills of the chair of the board’ as one of the most critical factors in delivering overall board effectiveness (Leblanc, R., 2004, p. 438). Leblanc also describes an ineffective chair as ‘distant, non-performing or controlling and disruptive’ (Leblanc, R., 2004, p. 438). The study supports the findings of the Northcott and Smith (2011) study of the chair’s potentially negative influence on board effectiveness.

4.3 Theme Two - Boardroom Practice

Boardroom Practice is a characteristic of an effective board (eight mentions or 11%) and an ineffective board (18 mentions or 25%). Board decision-making, quality of debate, and the atmosphere in the boardroom interrelate to form ‘Boardroom Practice.’

Discussion

The Boardroom Practice definition for measuring board effectiveness is that used in the Northcott and Smith (2011) study encapsulating ‘board process, board dynamics, and board culture and decision-making.’ Leblanc and Gillies highlighted ‘board process’ and how board members interrelate and arrive at effective decisions (Leblanc, R. & Gillies, J., 2005). Decision-making as a vital board function is widely recognised in governance literature (Edlin, 2007; Forbes & Milliken, 1999; Leblanc, R. & Gillies, J., 2005; Leblanc, R., 2004). Leblanc describes ‘chemistry’ as the personal and group relationships between the board and how it contributes to effective decision making (Leblanc, R., 2007). In an

ineffective board, 'poor decision-making' and 'not making decisions' was noted by several respondents.

4.4 Theme Three - Relationships

The study highlighted that Relationships are seen as a characteristic of an effective board (10 mentions or 14%) and ineffective board (10 mentions or 15%). The Relationships theme has three aspects. They each appear to contribute to both board effectiveness and ineffectiveness.

4.4.a) Relationships between board members

Relationships between fellow directors is a less significant characteristic of both an effective board (five mentions or 7%) and ineffective board (four mentions or 6%).

4.4.b) Characteristics and attitude of directors

The personal character and attitude of board members is a less significant characteristic of an effective board (four mentions or 6%) and ineffective board (two mentions or 3%).

4.4.c) Relationships between the board and management

Relationships between the board and management (including the chief executive) is a less significant characteristic of an effective board (one mention or 1%) and ineffective board (four mentions or 6%).

Discussion

The study highlighted that ‘relationships between directors’ is a characteristic of both board effectiveness and ineffectiveness. The shared whākapapa (genealogy, lineage, descent) may explain the established relationships often present between board members. Boardroom culture is said to create an environment of mutual respect and trust where the board can openly debate propositions without hostility (Parker, 2007). The board are a strategic decision-making group that relies on trust, teamwork and an element of chemistry (Forbes & Milliken, 1999). Kakabadse et al. describe an effective board where there exists a ‘magic relationship’ between the chief executive and the board chair (2006, p. 145).

4.5 Theme Four – Board Structure

The study highlighted Board Structure as the most significant characteristic of an effective board (31 mentions or 43%) and ineffective board (24 mentions or 34%). The ‘Board Structure’ aspect refers to skills and capabilities that are said to build the board structure. ‘Individual Director Skills’ received the most mentions (as noted by all fifteen respondents). Board Structure has three aspects.

4.5.a) Board Diversity

Board diversity is likened to informational diversity attributed to the different skills each board member brings to the boardroom table. Board Diversity is seen as a less significant characteristic of an effective board (four mentions or 6%) and ineffective board (five mentions or 7%).

4.5.b) Individual director skills

Individual Director Skills are the most significant characteristic of an effective board (26 mentions or 36%) and an ineffective board (14 mentions or 20%). Respondents noted ‘commercial acumen’, ‘investment appraisal skills’ and ‘financial expertise’ as valued skills in an effective board.

4.5.c) Selection process to build a Board

The board chair must understand the relative skills and areas where the board needs to develop and address areas where skills are deficient. The study highlighted that Selection process to build a board are seen as a characteristic of an effective board (one mention or 1%) and an ineffective board (five mentions or 7%).

Discussion

The study highlighted that ‘individual director skills’ are a significant characteristic of board effectiveness and ineffectiveness. The board chair in developing an effective board must understand the competencies of the board and identify any skill gaps. Board diversity and skills relate to the array of experiences each board member contributes to the board as a decision-making group. Diversity is noted as a differentiator in many sectors which have reached market saturation (Kakabadse, A. & Kakabadse, 2008). The key to achieving board effectiveness is for the chair to recognise and harness the diversity of views that exists amongst

directors. The board chair plays a crucial role in identifying and seeking the agreement of the skills required by the board (Kakabadse, A. & Kakabadse, 2008).

4.6 Theme Five – Tikanga Māori

The study highlighted the aspect Tikanga Māori as an important characteristic of an effective board (11 mentions or 15%).

Discussion

Tikanga Māori is the framework that describes core principles that form the foundations of a Māori Worldview (Mead, 2016). The relational Five Well-beings approach takes a holistic view that businesses embrace a stakeholder perspective that considers people and the environment to create multi-dimensional well-being and wealth (Spiller, Erakovic, et al., 2011, p. 166). Board members must have a fundamental awareness of Tikanga Māori if they are to make decisions that uphold the lore and customary traditions of Māori (Te Aho, 2005). Māori entities have a duty to Tūpuna (ancestors), present generations and future unborn generations.

4.7 Summary of findings

The first theme analysed, ‘The Board Chair’ reflects the leader of the board. The board chair is a characteristic of board effectiveness and ineffectiveness. The influence of the board chair in creating chemistry contributes to an effective board. Conversely, poor chair leadership fosters an ineffective board.

The second theme analysed, 'Boardroom Practice' relates to the boardroom climate, the quality of debate and decision-making process. The study highlighted poor decision-making as a characteristic of an ineffective board. The collective based decisions of the board must result from constructive challenge and debate.

The third theme analysed, 'Relationships' were a relatively less influential characteristic in board effectiveness and ineffectiveness. Shared whākapapa is often common among board members. The study supports the literature whereby the board are a decision-making group that relies on trust and teamwork.

The fourth theme analysed, 'Board Structure' is a significant characteristic in board effectiveness and ineffectiveness. 'Individual Director Skills' are critical in board effectiveness and ineffectiveness. Respondents highlighted the need for 'commercial acumen', 'investment appraisal skills' and 'financial expertise.'

The final theme, 'Tikanga Māori' reflects Māori customs and beliefs held by the Tangata Whenua. The study adds to the literature that Tikanga Māori is a critical characteristic of board effectiveness. Board members must have an awareness of Tikanga Māori and aspirations of the Tangata Whenua. The study highlights the unique accountabilities, including a duty to future unborn generations.

CHAPTER FIVE – DATA ANALYSIS - OUTCOMES OF BOARDS

5.0 Introduction

The second part of the research considered the ‘outcomes’ of effective and ineffective boards in entities part of a Māori PSGE group. The two questions below addressed the ‘outcomes/outputs’ of effective and ineffective boards.

Question: What are the ‘outputs/outcomes’ of an effective board of an entity part of a PSGE group?

Question: What are the ‘outputs/outcomes’ of an ineffective board of an entity part of a PSGE group?

5.1 Outcomes of effective and ineffective boards

The research replicated the main themes and aspects reflected in the New Zealand study by Northcott and Smith (2011). A new theme Tikanga Māori was included. Table 5.1 below presents the number of participants mentioning each aspect and the frequency of mentions.

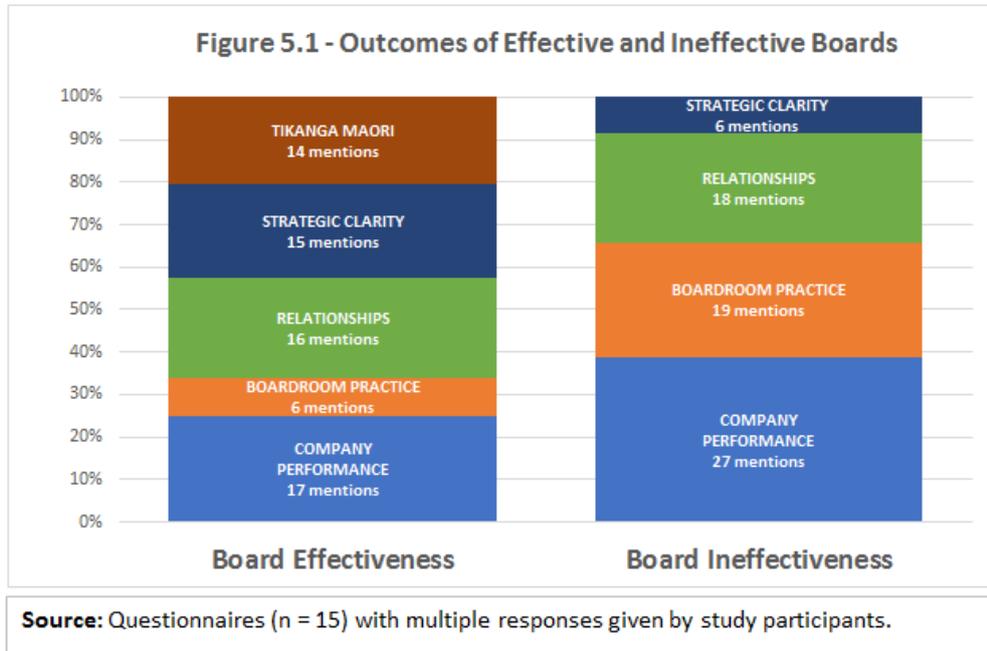


Table 5.1 - Outcomes of Effective and Ineffective Boards

| Main Theme | Aspect | Section | BOARD EFFECTIVENESS | | | BOARD INEFFECTIVENESS | | |
|--|--|---------|---------------------|----------------|-------------|-----------------------|----------------|-------------|
| | | | Participants | Total Mentions | Percentage | Participants | Total Mentions | Percentage |
| THEME ONE - COMPANY PERFORMANCE | 1. The performance of the company | 5.2 | 10 | 17 | 25% | 14 | 27 | 39% |
| THEME TWO - BOARDROOM PRACTICE | 2. The inter-relationship between the atmosphere in the boardroom, the quality of debate, and the effectiveness of decision making | 5.3 | 5 | 6 | 9% | 13 | 19 | 27% |
| THEME THREE - RELATIONSHIPS | 3. Relationships between the board and management team | 5.4.a) | 5 | 5 | 7% | 8 | 8 | 11% |
| | 4. Relationship between directors | 5.4.b) | - | - | - | 2 | 2 | 3% |
| | 5. Iwi, Hapū and wider stakeholders | 5.4.c) | 8 | 11 | 16% | 8 | 8 | 11% |
| TOTAL RELATIONSHIPS | | | | 16 | 24% | | 18 | 25% |
| THEME FOUR - STRATEGIC CLARITY | 6. Clarity of objectives for the organisation | 5.5 | 11 | 15 | 22% | 6 | 6 | 9% |
| THEME FIVE - TIKANGA MAORI | 7. Aspects of Tikanga Māori | 5.6 | 9 | 14 | 21% | - | - | - |
| TOTAL MENTIONS | | | | 68 | 100% | | 70 | 100% |

Source: Questionnaires (n = 15) with multiple responses given by study participants.

Salient points emerge from Table 5.1 (above) and Figure 5.1 (below) on Outcomes of effective and ineffective boards that are analysed and discussed below.



5.2 Theme One – Company Performance

‘Company Performance’ was a critical outcome of both an effective and ineffective board. Ten participants (67%) noted favourable company performance as generating a net return and asset growth (17 mentions or 25%). Conversely, in an ineffective board, 14 participants (93%) noted adverse company performance with not delivering a net return and (or) no asset growth (27 mentions or 39%).

Discussion

Research evidence suggests that company performance as a measure of board effectiveness is inconclusive (Dalton, D. & Dalton, 2011; Hermalin & Weisbach, 1991; Leblanc, R., 2007; Zahra & Pearce, 1989). The study highlighted the need for the board to engage with Iwi and Hapū on their strategy on delivering an

economic result. The study supports the stakeholder theory of meeting the expectations of a wide range of parties, most notably Iwi and Hapū (Freeman, R., 1984).

5.3 Theme Two - Boardroom Practice

Five participants (33%) indicated 'Boardroom Practice' is an outcome of an effective board (six mentions or 9%). Conversely, 13 participants (87%) identified boardroom practice as an outcome of an ineffective board (19 mentions or 27%). Respondents noted 'hostile environment in the boardroom', 'lack of unity', 'poor boardroom culture' and 'lack of teamwork' in an ineffective board.

Discussion

The 'Boardroom Practice' definition was that used in the Northcott and Smith (2011) study that is said to encapsulate 'board process, board culture and behaviour.' The importance of decision-making as a vital board function is recognised in the governance literature (Edlin, 2007; Forbes & Milliken, 1999; Leblanc, R., & Gillies, J., 2005; Leblanc, R., 2004). Effective board chairs are said to create outstanding 'chemistry' (R. W. Leblanc, 2004). The effectiveness of a board is the result of group participation (teamwork) and interaction, cognition of information, and critical discussion (Forbes & Milliken, 1999).

5.4 Theme Three - Relationships

'Relationships' play an important role in the outcomes of both an effective board (16 mentions or 23%) and ineffective board (18 mentions or 25%). The

‘Relationships’ theme has three aspects that contribute to the outcomes of board effectiveness and ineffectiveness.

5.4.a) Relationships between the board and management

The aspect was seen as an outcome of both an effective board (five mentions or 7%) and an ineffective board (eight mentions or 11%). Respondents noted the board to remain focused on governance and not to interfere in management activities. An effective relationship is characterised by respect established through openness, respect and candour. An ineffective relationship is characterised by management being undermined and thus being unable to be held accountable.

5.4.b) Relationships between board members

The aspect was seen as an outcome in an ineffective board (two mentions or 3%). The study highlighted a low number of mentions reflective of healthy respect among board members where there is often connectedness through shared whākapapa (genealogy, lineage, descent).

5.4.c) Iwi, Hapū and wider stakeholders

The study highlighted the significance of relationships with Iwi, Hapū and wider stakeholders as an outcome of an effective board (11 mentions or 16%) and ineffective board (eight mentions or 11%).

Discussion

Maintaining sound ‘Relationships with Iwi, Hapū, and other stakeholders’ is an important outcome in board effectiveness and ineffectiveness. The accountabilities include spiritual, cultural, social, and environmental aspects of a relational Five Well-beings approach (Spiller, Erakovic, et al., 2011). The findings of this study are that stakeholders have a vested interest in these organisations (Freeman, R., 1984). Iwi and Hapū have high expectations and will often vocalise them and demand results.

5.5 Theme Four – Strategic Clarity

11 participants (73%) indicated ‘Strategic Clarity’ is an outcome of an effective board (15 mentions or 22%). Conversely, six participants (40%) identified strategic clarity as an outcome of an ineffective board (six mentions or 9%). Strategic clarity has two specific aspects. The first aspect is clarity of the organisation’s direction as specified by the board in their strategy-setting capacity. The second aspect is ensuring effective control of management’s actions in delivering the board’s strategy.

Discussion

An effective board must have strategic clarity to perform the management oversight function. Management must be held accountable in delivering the board’s strategy. The responses by role were consistent with 75% of board chair and directors noting ‘Strategic Clarity’ as an outcome of an effective board. In contrast, 67% of chief executives noted ‘Strategic Clarity’ as being an outcome of an effective board.

5.6 Theme Five – Tikanga Māori

The theme reflects Māori customs and beliefs held by the Tangata Whenua. The study highlighted that aspects of Tikanga Māori were viewed as a critical outcome in an effective board (14 mentions or 21%).

Discussion

Māori place importance on the land (‘Whenua’) and the natural environment on their cultural and spiritual identity. The study adds to the literature that outcomes of Tikanga Māori require objective and tangible measures to assess board effectiveness.

5.7 Summary of findings

The first theme analysed, ‘Company Performance’, was a significant outcome of board effectiveness and ineffectiveness.

The second theme analysed, ‘Boardroom Practice’ relates to the boardroom climate, the quality of debate and decision-making process. The study is consistent with the literature on ‘board chemistry’ that applies to effective and ineffective boards. Respondents noted in an ineffective board the prevalence of ‘poor chemistry’, ‘lack of unity’, ‘poor teamwork’, and resulting futile decision-making.

The third theme analysed, ‘Relationships’ are an outcome of both an effective and ineffective board. The specific aspect that was an influential one was ‘Iwi, Hapū

and wider stakeholders’, and their demands. The study highlighted the broader accountabilities and the need for the board to engage with Iwi and Hapū.

The fourth theme analysed, ‘Strategic Clarity’, is concerned with strategic direction. The study highlighted board ineffectiveness where management tactics were not aligned with the board’s strategy.

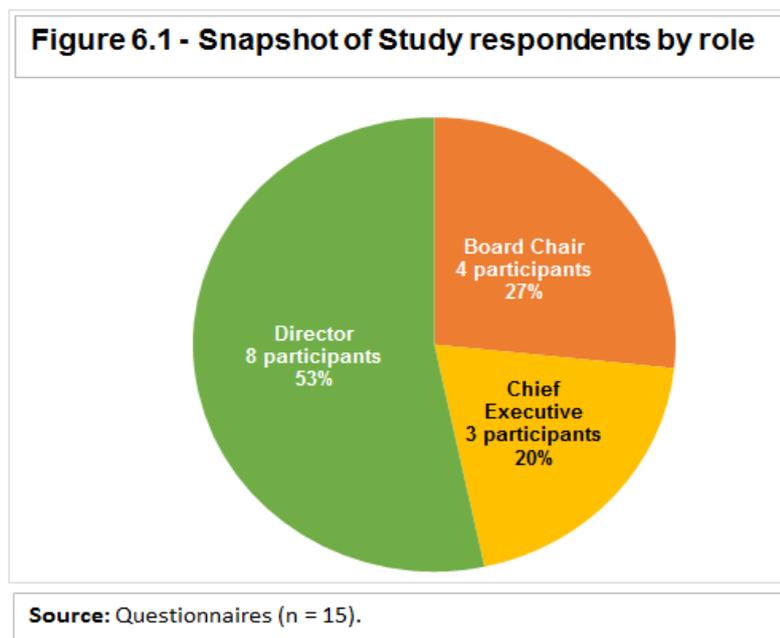
The fifth theme analysed ‘Tikanga Māori’ is a significant outcome of an effective board. The importance of balancing cultural, environmental and economic themes is a significant finding and acknowledges the Māori stakeholder view of well-being. Respondents noted the need to ‘restore the mana of the people’, ‘improve the well-being of Iwi and Hapū’ and ‘protection of Wāhi Taonga for future generations.’

CHAPTER SIX – CONCLUSIONS AND RECOMMENDATIONS

6.0 Summary

The qualitative study elicited first-hand perspectives from 15 experienced board members on what they perceive constitutes the characteristics (causes) and outcomes (effects) of effective and ineffective boards. The participating entities are each part of a Māori PSGE group that were recipients of a Treaty settlement of no less than NZ\$15 million. The Treaty settlements of the participating entities collectively totalled NZ\$583 million. The entities now collectively manage total assets of more than NZ\$4 billion. The perspectives from the participating board

members will serve as indicators of board effectiveness and ineffectiveness in a unique Māori post-settlement entity environment. Figure 6.1 below provides a snapshot of participant roles of the 15 experienced board members included in the study.



6.1 Board perspectives on Characteristics and Outcomes

Five themes of ‘Characteristics’ were analysed in the study, including a new theme, ‘Tikanga Māori.’ See Table 6.1 below.



Table 6.1 - Summary of Characteristics of Effective and Ineffective Boards

| Main Theme | Aspect | Section | BOARD EFFECTIVENESS | EQUALLY ASSOCIATED (BOARD EFFECTIVENESS AND BOARD INEFFECTIVENESS) | BOARD INEFFECTIVENESS |
|--------------------------------|--|---------|---------------------|--|-----------------------|
| THEME ONE - THE CHAIR | 1. The leader of the board | 4.2 | ✓ | | ✓ |
| THEME TWO - BOARDROOM PRACTICE | 2. The inter-relationship between the atmosphere in the boardroom, the quality of debate, and the effectiveness of decision making | 4.3 | ✓ | | ✓ |
| THEME THREE - RELATIONSHIPS | 3. Relationships between fellow directors | 4.4.a) | | ✓ | |
| | 4. Character and attitude of directors | 4.4.b) | | ✓ | |
| | 5. Relationships between the board and management team (<i>including CEO</i>) | 4.4.c) | | ✓ | |
| THEME FOUR - BOARD STRUCTURE | 6. Board diversity (<i>informational diversity</i>) | 4.5.a) | | | ✓ |
| | 7. Individual director skills | 4.5.b) | ✓ | | ✓ |
| | 8. Selection process to build a better board | 4.5.c) | | | ✓ |
| THEME FIVE - TIKANGA MAORI | 9. Aspects of Tikanga Māori | 4.6 | ✓ | | |

Five themes of ‘Outcomes’ were used in the study, including a new theme, ‘Tikanga Māori.’ See Table 6.2 below.

Table 6.2 - Summary of Outcomes of Effective and Ineffective Boards

| Main Theme | Aspect | Section | BOARD EFFECTIVENESS | EQUALLY ASSOCIATED (BOARD EFFECTIVENESS AND BOARD INEFFECTIVENESS) | BOARD INEFFECTIVENESS |
|---------------------------------|--|---------|---------------------|--|-----------------------|
| THEME ONE - COMPANY PERFORMANCE | 1. The leader of the board | 5.2 | ✓ | | ✓ |
| THEME TWO - BOARDROOM PRACTICE | 2. The inter-relationship between the atmosphere in the boardroom, the quality of debate, and the effectiveness of decision making | 5.3 | ✓ | | ✓ |
| THEME THREE - RELATIONSHIPS | 3. Relationships between the board and management team | 5.4.a) | | ✓ | |
| | 4. Relationship between directors | 5.4.b) | | ✓ | |
| | 5. Iwi, Hapū and wider stakeholders | 5.4.c) | ✓ | | ✓ |
| THEME FOUR - STRATEGIC CLARITY | 6. Clarity of objectives for the organisation | 5.5 | ✓ | | ✓ |
| THEME FIVE - TIKANGA MAORI | 7. Aspects of Tikanga Māori | 5.6 | ✓ | | |

6.2 Conclusions

The findings from the study confirm that ‘Tikanga Māori’ plays a significant role in the characteristics (cause) and outcomes (effect) of an effective board. A respondent aptly described Tikanga Māori as ‘restoring the people’s mana.’ Tikanga Māori represents the context in which these entities operate and the expectations of the Tangata Whenua. Board members must have cultural awareness of the duty to ancestors (Tūpuna), present and future unborn generations. Tikanga Māori has universal application where environmental stewardship is critical to a sustainable strategic pathway into the future. Tourism New Zealand’s ‘100% Pure New Zealand’ mantra that underpins the lucrative tourism sector is dependant on effective management of natural resources.

‘Company Performance’ plays a significant role in the outcomes (effect) of an effective and ineffective board. The theme captures the need to deliver asset growth and economic return necessary to fund life-changing transformational initiatives.

The ‘Board Chair’ plays a pivotal role in the characteristics (cause) of an effective and ineffective board. The influence of the board chair in creating outstanding chemistry contributes to board effectiveness. Conversely, poor chair leadership fosters board ineffectiveness.

The study highlighted ‘Director Skills’ as a characteristic (cause) of an effective and ineffective board. Respondents noted the need for ‘commercial acumen’, ‘investment appraisal skills’ and ‘financial expertise.’ The study highlighted the ‘Selection process to build a board’ as a characteristic (cause) of an ineffective board. The right people with diverse skills and experiences must occupy board roles (Subramanian, 2015). A lack of ‘Board Diversity’ is a characteristic (cause) of an ineffective board. A board needs to develop and maintain a level of skill diversity that embraces seeing things in a different light.

‘Relationships’ are a characteristic (cause) and outcome (effect) of an effective and ineffective board. The study supports the literature that boards are a decision-making social group that relies on trust, teamwork and chemistry (Forbes & Milliken, 1999). ‘Iwi, Hapū and wider stakeholders’ are an outcome (effect) of an effective and ineffective board. The study highlighted the need to manage stakeholder relationships.

‘Strategic Clarity’ is an outcome (effect) of an effective and ineffective board. Respondents noted ‘not seeing the big picture’ and ‘short-term thinking’ in an ineffective board. The board must fulfil the oversight function whereby the chief executive is ultimately held accountable.

‘Boardroom Practice’ is a characteristic (cause) and outcome (effect) of an effective and ineffective board. Respondents noted ‘poor decisions,’ ‘no teamwork,’ and board members being ‘disengaged’ in an ineffective board.



A summary of the findings is contained in Table 6.3 below.

Table 6.3 - Summary of Board Characteristics (*Causes*) and Outcomes (*Effects*)

| BOARD EFFECTIVENESS | EQUALLY ASSOCIATED WITH BOARD EFFECTIVENESS AND BOARD INEFFECTIVENESS | BOARD INEFFECTIVENESS |
|---|--|--|
| <p>Characteristics (<i>Causes</i>)</p> <ul style="list-style-type: none"> + Strong Chair leadership + Effective Boardroom Practice + Tikanga Māori + Individual director skills <p>Outcomes (<i>Effects</i>)</p> <ul style="list-style-type: none"> + Company Performance + Strong Boardroom Practice + Strategic clarity + Effective Iwi, Hapū and wider stakeholder engagement + Tikanga Māori | <p>Characteristics (<i>Causes</i>)</p> <ul style="list-style-type: none"> * Relationships between directors * Character and attitude of directors * Relationship between the board and management <p>Outcomes (<i>Effects</i>)</p> <ul style="list-style-type: none"> * Relationship between the board and management team * Relationship between board members | <p>Characteristics (<i>Causes</i>)</p> <ul style="list-style-type: none"> - Poor Chair leadership - Poor Boardroom Practice - Lack of Board diversity (<i>informational diversity</i>) - Individual director skills lacking - Poor selection process to build a board <p>Outcomes (<i>Effects</i>)</p> <ul style="list-style-type: none"> - Poor Company Performance - Poor Boardroom Practice - Lack of strategic clarity - Ineffective Iwi, Hapū and wider stakeholder engagement |

6.3 Recommendations

The overarching recommendations are as follows:

6.3.a) Reflect Tikanga Māori in the Company Constitution

A constitution is not required under the Companies Act 1993. If there is a constitution, concepts of Tikanga Māori must be included to ensure delivery of a sustainable future pathway and provide well-being for unborn generations.

6.3.b) Kaumātua must have a voice on the board

The study highlights Tikanga's role in board effectiveness (cause and effect). Kaumātua provide diversity and essential perspectives of ancient Māori wisdom, stories of old, and understanding of critical concepts of Tikanga relevant in the long-term stewardship of asset holdings and natural resources.

6.3.c) Tikanga Māori must underpin the board's strategy

The strategic plan must reflect concepts of Tikanga Māori centred around enhancing well-being and stewardship of asset holdings and natural resources. Executive compensation must reward behaviour linked to Tikanga based strategy against measurable targets.

6.3.d) Promote Director Skills and pipeline of talent

Individual director skills are a critical characteristic (cause) of board effectiveness and ineffectiveness. Whare Wānanga (universities and technical professional bodies)

need to integrate concepts of Tikanga Māori into their course offerings, reflecting the growing significance of the Māori economy and environmental stewardship themes.

6.3.e) Develop a Twenty-Year Workforce Strategy

Māori post-settlement related entities need to develop a Workforce Strategy for the next 20 years to meet the expected demand of a changing labour workforce. The Māori economy is diversifying from traditional primary sector activities into value-added sectors including manufacturing, property development, renewable energy, technology, and tourism (Fodder, Davis-Ngatai, & Joseph, 2014). Supply-side workforce planning must commence supporting the imminent demand.

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Strategies to promote ethical investments in the NZ market

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EXECUTIVE SUMMARY

CareSaver is an ethical KiwiSaver fund manager in New Zealand. It possesses ethical values and applies these to its investment portfolios by including companies who practice ethical activities and excluding companies who do not practice ethically. This research was conducted to identify opportunities for recommendations to CareSaver to promote their ethical KiwiSaver funds, increasing public investment into their funds. The primary data was collected using a survey distributed on social media sites, with the secondary data being the literature review. Both sets of data from the survey and the literature review informed the recommendations. The survey indicated that there are many New Zealanders who care about ethical investing and expect their investments not to be invested in unethical practices. It also showed that these individuals place trust in their providers to invest in firms consistent with their values or, lack the knowledge and understanding of finance to look further into their investments. It found that the majority of consumers search the internet for information on investment funds and seek a comparison platform for investment funds and the

activities in which each firm invests. Adding to this data, the literature review helped to provide examples of what other companies have done to promote their ethical investment funds. The recommendations for CareSaver are to pursue a brand alliance with value-aligned companies; align with climate change or ethical influencers to create brand awareness through word-of-mouth, then leverage these two databases to promote CareSaver through a targeted marketing campaign. A recommendation is included to communicate with the Financial Markets Authority (FMA) and discuss changes around disclosure and visibility for fund managers, to give consumers the knowledge of where their money is invested. In turn, this will give them the power to choose investments that align with their values.

1.0 INTRODUCTION

This research will address people's perceptions of ethical investments and provide recommendations to promote ethical investments. There appears to be an assumption that public opinion of ethical investments is negative (Parker, 2019); that it produces lower returns while generating higher fees. This research aims to establish if such a belief exists and to understand if it is true. To do so, the research will identify a baseline definition for ethical investments and review literature on perception. The literature will also review promotion and communication of ethical funds, with examples of what similar companies have done. With results from surveys of KiwiSaver participants and investors from

the general population, I will identify ways to communicate the benefits of ethical investments and promote CareSaver's ethical funds.

This research is to assist CareSaver, and ethical KiwiSaver fund manager, to increase public investment into their ethical funds. With insights from both the primary data (surveys) and secondary data (literature review), I aim to deliver a set of recommendations that enables them to effectively communicate the benefits of ethical investing to a target segment, promoting their ethical KiwiSaver funds.

2.0 FIRM REVIEW – CareSaver

CareSaver is an ethical and responsible KiwiSaver fund manager which avoids investing in companies that harm society while actively seeking out those that are making a positive difference. One of their challenges is to change the perception of ethical investments and promote investment into their ethical funds. The values they hold mean they seek out companies to invest in that benefit the environment and contribute to social issues, while avoiding companies who do harm, either to the environment or socially. CareSaver believes that people should invest in line with their ethical values and have created a KiwiSaver fund that includes ethical and excludes unethical enterprises. Another challenge is the negative perception of ethical investments (that they produce lower returns) generating increased investment into their funds. I aim to develop recommendations for CareSaver, through research and

analysis of surveys from an investing population, that can be adopted to generate increased investment into their ethical funds.

CareSaver has three funds: Conservative, Balanced and Growth (CareSaver, 2019). Its fund types are similar to other providers KiwiSaver funds, including NZ's main banks (ANZ, BNZ, Westpac, ASB and Kiwibank) (Interest.co.nz, 2020). According to the quarterly KiwiSaver market survey published by Morning Star (Murphy, 2020), ANZ leads the market share of KiwiSaver funds with more than \$15.2 billion. ASB and Westpac hold the second and third spots respectively. The six largest KiwiSaver providers in NZ, account for approximately 80% of the total KiwiSaver assets. As CareSaver is a new KiwiSaver fund, recently established in 2019 (CareSaver, 2019), they are a smaller player in the market within the remaining 20% of KiwiSaver assets. CareSaver aims to increase its market share over time. It is an actively managed fund, which is where the funds are invested into specific stocks or bonds, determined by the portfolio manager. Alternatively, investors can choose a passively managed fund, which uses index's instead of individual stock picks. The KiwiSaver market is highly competitive as seen above. CareSaver's competitive advantages are its environmental, social and governance (ESG) criteria, setting them apart from other KiwiSaver schemes and appealing to those investors who wish to align their investments with their ethical values. However, these ethical values CareSaver possess, could hinder investment into their funds from certain segments, due to the negative perception of ethical investments

(Parker, 2019). CareSaver's recent fund performance has proven previous research to be correct, that ethical funds benefit from reduced market risk in times of economic turmoil (Beer, Estes, & Deshayes, 2014). CareSaver's funds have been performing significantly better throughout the COVID-19 pandemic of 2020; subsequently impacting our national and global economy. The pandemic has seen NZ's main banks and other KiwiSaver funds drop significantly, while early indicators show CareSaver's fund has remained relatively stable in comparison (CareSaver, 2020).

3.0 RESEARCH QUESTIONS

- RQ1. What is the general public perception of ethical investments?
- RQ2. Do the ethical values of people match the reality of their investments?
- RQ3. What factors will influence perception of ethical investing?
- RQ4. How can we communicate the benefits of ethical investments and match people's values with their investments by the promotion of ethical funds?

4.0 LITERATURE REVIEW

4.1 What is Ethical Investment?

The term or idea of ethical investment originated from nineteenth-century religious groups within the United States, wanting to align their investments with their morals (Hofmann, Penz, & Kirchler, 2009). Their vision of ethical investment was to avoid ‘sin-stocks,’ which are shares of organizations involved in gambling, alcohol, tobacco and other practices that were deemed morally deficient. Since then, the idea of ethical investment has been adopted by the United Kingdom, launching the first ethical fund in 1984 (Hofmann et al., 2009). Richardson (2009) believes our world is facing grave, ecological problems; therefore our financial institutions have a responsibility to shift economic activities towards sustainable organizations. The definition of sustainable development is to meet the needs without sacrificing tomorrow's generations; through activities that are not detrimental to our environment or social issues (Gillani & Kutaula, 2018). Sustainability issues are inherently connected to ethical investing, as ethical investing is also concerned with avoiding activities that are detrimental to our future generations, along with including investments that have a positive impact on our environment and social issues. Richardson's statement above brings us to today, where ethical investment is recognised as one of the fastest-growing areas of finance, with awareness and demand from investors seeking to invest in such investments (Ballesterro, Pérez-Gladish, & Garcia-Bernabeu, 2015; Ortas, Moneva, Burritt, & Tingey-Holyoak, 2014). There are multiple terms associated with ethical investment, such as socially

responsible investment (SRI) and social and environmentally responsible (SER) (Ballesterro et al., 2015; Ortas et al., 2014; Rahman, Lee, & Xiao, 2017; Richardson, 2009; Sparkes, 2001). Although ‘ethical investment’ is known as the older phrase, being replaced by ‘socially responsible investment’ (Sparkes, 2001), for consistency I will use the phrase ‘ethical investment’ (EI) as it differs from socially responsible through its avoidance of broader activities.

Hofmann et al. (2009) found that the definition of EI does not have a consensus among researchers, irrespective of its interest to investors, whereas earlier, Sparkes (2001, p. 195) described EI to be “based upon the avoidance of certain activities,” although which activities, are up for debate. Hofmann et al. (2009) then sought to define ethical investment while further distinguishing it, using the following criteria: exclusion of unethical companies and the inclusion of ethical companies. According to various researchers, EI funds are identified using a ‘screening’ process (Beer et al., 2014; Michelson, Wailes, Laan, & Frost, 2004; Rahman et al., 2017); the process of including or excluding companies from funds, based on environmental and social criteria. Michelson et al. (2004) describe the two main ways of identifying EI are to apply negative or positive screens. Negative screening involves avoiding companies whose activities are related to or concerned with alcohol, tobacco, gambling or unethical practice; not dissimilar to the original ‘sin-stocks’ described by Hofmann et al. (2009). Positive screening is to look at companies who promote public good (Hellsten & Mallin, 2006), or engage in socially responsible activities (Hellsten & Mallin, 2006; Michelson et al., 2004). Although this research supplies us with a good

grounding into what measurements define ethical investments, what defines ethical is personal and determined by the individual. People possess different values, therefore may not view the same activities as another, as unethical (Sampford & Berry, 2004). Therefore, EI's are defined by the individual and their values which may include both positive and/or negative criteria to select funds that display positive and/or avoid negative activities, of the individual's choosing.

4.2 Attitudes and Perception

Mindful Money and Responsible Investment Association Australasia (RIAA) co-commissioned Colmar Brunton to design and deliver a 2019 report on New Zealander's (NZ) attitudes towards responsible investment (Colmar Brunton, 2019). The survey was completed by 1000 New Zealanders over 18 years of age. Their key findings were a noticeable rise to 83% of New Zealanders who expected their investments to be invested responsibly, up from 72% in 2018 (Colmar Brunton, 2019). Another finding was 2 in 3 New Zealanders would consider moving their investments, if they discovered their current fund engaged in activities misaligning with their values. Colmar Brunton also gathered perceptions on investing responsibly with the top barriers being, 'not enough time to compare options', 'not enough independent information', 'lack of credible options' and 'don't believe the claims for responsible or ethical investment'. These barriers give insight to RQ1: What is the general public perception of ethical investments? This survey also shed insight into what ethical values New Zealanders view as the most important. They were human rights

violations, labour rights abuses and environmental degradation. As explained above, ethical investments are those that are deemed ethical by the individual according to their values, so the need for an independent platform for people to choose investments based on their values seems appropriate. Mindful Money (2020) is currently this platform in NZ. There are other platforms such as Smart Investor by Sorted (2020). However, this platform only compares risk, returns and fees of KiwiSaver or managed funds. G. Boyes from the FMA (personal communication, February 26, 2020), commented on how they sought to get ethical metrics into this comparison tool, but it was difficult as there is no wide consensus on the term ethical investment; as per Hofmann et al. (2009) findings above. Mindful Money, however, is an independent not-for-profit who seek to align peoples values with their investments, using a comparison tool on their website to include or exclude certain activities. CareSaver (2020), is also on Mindful Money's website and given they are the only KiwiSaver plan in NZ that does not invest in fossil fuels, which is a form of environmental degradation, their likely hood of being suggested as a fund to invest in is high. Recently the NZ government announced that fossil fuels will be removed from all default funds by 2021 (Orsman, 2020). Currently CareSaver remains the only KiwiSaver fund that does not invest in fossil fuels. The Mindful Money website helps promote CareSaver's funds' by aligning people's values with the investments of funds; good promotion for CareSaver, both in brand awareness and increased investment.

Mackenzie and Lewis (1999) carried out research, interviewing 20 ethical investors. The results showed that while these investors have ethical concerns, they were not willing to sacrifice financial requirements to adhere to them indicating their perception of EI was that of lower financial returns; allowing further insight into RQ1 on perception. These investors dealt with this perceived problem by dividing their portfolios amongst ethical and non-ethical investments. This enabled them to alleviate their consciences by investing, in part, in EI's. Mackenzie and Lewis (1999) findings above have inspired part of question 1 of the survey for this research project; what percentage of EI the respondents have. Hofmann et al. (2009) showed that ethical investors place importance on both financial performance and ethical screens when reviewing investments. In fact, she found that their importance placed on financial performance was no different from that of traditional investors; who are motivated by financial rewards alone. Using focus groups and interviews, Hofmann et al. (2009) found that although women are more likely to invest ethically there is no specific demographic of ethical investors, therefore they cannot be segmented this way. Environmentally friendliness and philanthropy were shown to be common indicators of ethical investors. Her research found that investors want an authority, or similar, to inform and guide them on the authenticity of EI's. These authorities can assure investors of the reliability of the funds, along with the ethics of each fund's values; confirming the need for a platform such as Mindful Money. Hofmann's findings are also consistent with those of Colmar Brunton (2019) above, on the perceived barriers to ethical investment in their survey. Hofmann et al. (2009) concluded by stating more

research is required in this area of what investors want, with a suggestion for the use of surveys for further research, to aid in getting a broader representation of ethical investors' decisions. As recommended in Hofmann's findings above, my research method will include a survey populated to individuals over 18 years old to understand if people's values align with their investments and what factors might change the perception and promote EI's.

Ethical consumerism has grown in recent years, due to consumers becoming aware of their power as individuals, to affect change in large organizations by changing what they buy, according to their values (Gillani & Kutaula, 2018). It is no surprise then, that these ethical consumers will want to look at their investments (whether that be their KiwiSaver schemes/managed funds or shares) to check if they align with their values. Aligning our investments with our values is another way for us to address the sustainability issue (Kim, 2003), which has been supported by financial institutions that provide EI's, giving us a vehicle to practice what we preach not just in consumerism, but also in investment decisions.

4.3 Risk and Performance

As discussed above, the research carried out by Mackenzie and Lewis showed that while some investors that have ethical concerns, they are not willing to sacrifice financial performance from their investments to address them; showing that their perception of ethical investments is that they produce lower returns. Ballestero et al. (2015) stated that studies on the relationship between EI and

financial performance do not reach unanimous conclusions. There is much research to argue whether EI generates increased financial performance. For example, Rahman et al. (2017) found through his qualitative research that ethical funds perform no worse than traditional non-ethical investments; that is investments concerned with activities such as oil, gas, tobacco, alcohol, or those organizations engaging in unethical practice such as Volkswagen and their supposedly 'clean' diesel vehicles (Bovens, 2016). Rahman et al. (2017)'s results indicate that while EI's do not surpass traditional investment's performance, they do match the performance, implying that investors are not paying a price for their ethical values financially. Interestingly, Ortas et al. (2014)'s results, based on the selection of traditional and ethical portfolios to compare, produce similar results to Rahman et al. (2017); similar returns for both ethical and traditional investments. From this research, he also discerned that systematic risk is lower for EI funds. He found evidence suggesting that ethical funds will recover quicker than non-ethical investments in times of economic crisis, such as the Global Financial Crisis (GFC); meaning ethical investors can benefit from reduced risk across their investments whilst adhering to their moral and ethical values. This is good news for investors who seek only high returns as it has been evidenced that EI's do perform well. While EI and traditional investments might have common performance patterns, Beer et al. (2014) also found that the screening process of EI can protect investors, in some cases (like the GFC), from market risks.

To further support Ortas et al. (2014) findings, Kreander, Gray, Power, and Sinclair (2005) evaluated 60 European funds, both ethical and non-ethical, concluding that there is no difference in the performance of each fund financially. The above findings evidence that EI's do not underperform financially against their traditional counterparts. Michelson et al. (2004) stated that EI performance versus traditional investment performance being "one of the most contentious and debated issues in the field," consistent with Ballesterro et al. (2015) statement above. Michelson et al. (2004) however, identifies reasons why EI might outperform traditional investments. He believes higher financial returns may occur due to the screening process described above, allowing investors to identify EI's that have a robust focus on their management quality and sustainability; indicative of well-performing organizations (Cullis & Lewis, 1992). Michelson et al. (2004) continue to explain that EI has been proven to operate with longer time horizons than traditional investments. Cummings (2000) noted this earlier, with empirical research supporting the notion that the longer an EI fund has been operating, the more likely it is to outperform recently established funds. This is interesting for CareSaver's future returns, as its most recent returns were 8.85% (CareSaver, 2020), significantly above NZ's main banks' returns. Spiller (2000) also concluded that international evidence shows there is no additional cost to investing ethically, with New Zealand (NZ) being no exception. He continued to state that it is possible for investors to "do well while doing good," (Spiller, 2000, p. 151) through investing in environmental and social activities, while achieving wealth creation through equal or higher returns. This helped derive RQ4: How can we communicate the benefits of

ethical investments and match people's values with their investments by the promotion of ethical funds? Not only this, but the world is facing a new age where environmental assets (such as water and air) have the potential to be the new driver of wealth creation in the future as the world population is estimated to be 10 billion by 2050 (Sandor, Clark, Kanakasabai, Marques, & Lovins, 2015). This growth in population is putting pressure on our ecosystems, meaning investors who seek high returns should look to organizations who are investing in environmental assets, if they wish to maintain their wealth creation through investments in the future.

4.4 Communication and Promotion

It is common for corporate partnerships or alliances to emerge when both parties possess similar values, which can either inadvertently or intentionally promote the activities of both organizations (Burton et al., 2017). An example of this is Australian Ethical, an ethical fund manager not dissimilar to CareSaver, who have partnered with KeepCup to give KeepCup vouchers to their customers who refer a friend to join Australian Ethical (Australian Ethical, 2020). Keep Cup is an Australian company whose values of sustainable practices (KeepCup, 2020) align with Australian Ethical's values in investments choices. Through a brand alliance with KeepCup, Australian Ethical has been able to leverage KeepCup's sustainable image to confirm its brand identity, creating a stronger brand position in the market (Besharat & Langan, 2014). Appropriate brand alliances also provide shared value-creation, creating awareness of the brand to new and existing customers of each brand through sharing of databases (Kippenberger,

2000). There are many examples of successful brand alliances to market or promote a new brand. One is General Motors UK, who aligned with Visa to build brand awareness of a new Vauxhall model using Visa's customer database (Besharat & Langan, 2014).

Other ways companies can look to create brand awareness is through storytelling on social media (Ku, 2019). Social media has transformed how we communicate, being used not only for personal but for commercial activities. Companies can leverage social media to build brand awareness through brand ambassadors or influencers (Smith, Kendall, Knighton, & Wright, 2018). Influencers are those that have gained a following on social media and can influence their followers through their recommendations, experiences or actions (Smith et al., 2018). Influencers often attribute their followings to their honesty, openness and quality of posts, therefore many are less inclined to influence in purchase decisions as they see themselves as information-providers (Smith et al., 2018). They place importance on aligning themselves with brands that coincide with their values, to keep their honesty and integrity intact. Hahn (2019) explains that marketing firms often rely on various metrics to identify local social influencers. Alternative methods are to determine who is the most influential member of a community that holds similar values to your organization and work with them to create brand awareness (Hahn, 2019). For this to be successful the influencer must possess similar values to the organization it is dealing with. Both brand alliances as above and influencers are another way CareSaver could look to promote their brand; relating to RQ4 on

the promotion of ethical funds. New Zealand has more and more climate change and eco-influencers who are gaining significant followings. One example is Kate Hall from the Hibiscus Coast, who is an eco-influencer and blogs about eco-friendly products and ways of living (Wilkes, 2019). Others relevant influencers in NZ are Raven Maeder and Sophie Handford who are the national coordinators of School Strike for Climate NZ (Forrester, 2019).

4.5 Summary

In summary, the benefits of ethical investing found in the literature are that they produce equal or higher returns when compared with traditional investments. Ethical funds and investments also benefit from lower systematic risk in times of economic duress, such as the GFC and during the COVID-19 pandemic. This means that their returns are likely to be more stable than that of traditional investments. Their long-term risk is even more favourable than traditional investments, as they seek sustainable companies to invest in.

The Colmar Brunton survey showed that 2 in 3 New Zealanders would consider moving their investments to a fund that aligned with their values if they discovered their current fund did not. Research also showed that investors want an authority or independent platform to compare different investment options based on the activities or industries in which they invest. Through looking at ways to communicate and promote ethical investments, it was found that not only is a comparison platform required, but also brand awareness of a fund. This has been achieved in the past by similar funds such as Australian Ethical's

alliance with Keep Cup. Word of mouth, friends or social media influencers is also a method to promote and create brand awareness.

5.0 METHOD

The design used to conduct my research was exploratory and qualitative (Denscombe, 2017). Data collected from methods 1 – 3 was primarily qualitative data; that is words and text obtained through literature, surveys and interviews (Denscombe, 2017). Qualitative research for this project was chosen as this is a small-scale project and data was analysed as it was collected from the literature review, survey and personal communications with various parties in the investment industry. The primary data for this research is the survey, while the secondary data is the literature review.

Qualitative research is used to establish a baseline definition of ethical investing and confirm the assumption of a negative perception of ethical investments. This was conducted by a literature review, along with interpretations of the literature on public perception. To validate the findings within the literature and to gain further insight into people's investment habits and methods used to seek investment advice, a survey was conducted. The survey was derived from the insights within the literature review, along with communications with CareSaver, Mindful Money and the FMA. The survey aims to answer RQ2, RQ3 and RQ4, and to identify factors or methods that influence investment decisions, to derive recommendations for CareSaver, to increase brand awareness and promotion of

their ethical funds.

6.0 DATA COLLECTION AND ANALYSIS

6.1 Question 1

Question one showed that 89.51% of respondents invest in managed funds (such as a KiwiSaver scheme). A further 30.86% invested in shares as well, while only 13.58% of respondents selected ‘other’, however, once the responses were analysed, most of the ‘other’ were also managed funds or shares. The remaining 3% of respondents that also selected ‘other’, indicated investments such as cryptocurrencies and bonds.

Table 1. Revised data from Question 1

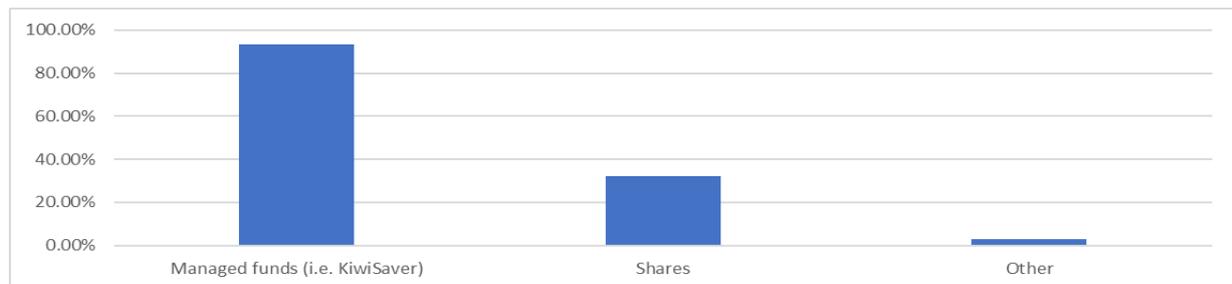


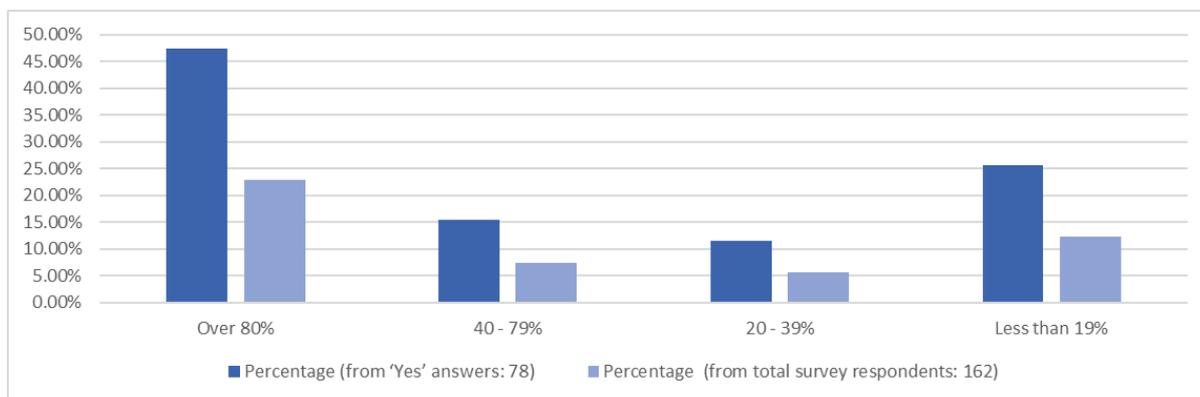
Table 1 above shows the revised data with the ‘other’ personal responses put into the appropriate categories; 93.21% of respondents invest in managed funds (including KiwiSaver), 32.10% also invest in shares, while 3.09% invest in other activities such as currency exchange, bonds and cryptocurrencies. When the data

was viewed according to gender, it showed that females and males equally invest in managed funds, both sitting at 93%. However, men were 25% more likely to also invest in shares; 46% of males also invest in shares while only 21% of females do.

6.2 Question 2

Question 2 asked if people had made a conscious decision to invest in shares, KiwiSaver or other managed funds, that aligned with their values. If yes, they were asked to give an approximate percentage of total investments. If answering no, they were asked why? Out of the 162 total respondents, 48.15% answered yes (the minority). The 48.15% who selected yes were categorized into groups based on the percentage indicated. Table 2 below shows this range.

Table 2. Data from Question 2: ‘Yes’ responses.

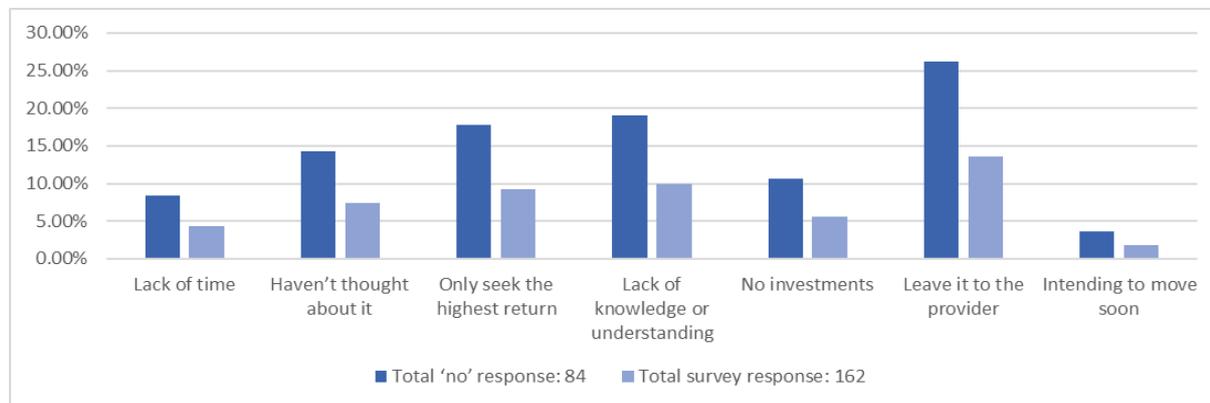


Comparing the percentage of ‘yes’ answers that indicated over 80% of their investments were invested in line with their values, with the total survey population, shows that 22.84% of respondents have investments at a significant

level that align with their values. This may not mean they are ethical investments, as the question did not specify ethical, however, these findings do disqualify this group from CareSaver's target market (Kotler & Keller, 2016) as they are already investing at a level that aligns with their values. The remaining 'yes' responses that have 79% or less of their investments in activities that align with their values is around 25%. This group could present an opportunity for CareSaver to pursue. This question also answers RQ2: Do the ethical values of people match the reality of their investment? The answer to RQ2 is in-part, no, based on the data above, which is consistent with the findings of (Kyle, 2004; Mackenzie & Lewis, 1999) above in the literature review; people possess ethical values but do not always invest according to them. However, as Table 2 above shows, 22.84% do invest at a level that is in line with their values, whether they be ethical or otherwise, answering RQ2; 77.17% do not invest in line with their values. This 77.17% includes a portion of the respondents who answered yes, however as they indicated their level of investments that aligned with their values was below 79%, this groups them to a potential target market for CareSaver. When the data was compared against the gender metric, it showed 50.53% of females selected 'yes' and 47.62% of males selected 'yes'. This is only a small difference and although females are slightly more inclined to invest in line with their values, consisted with the findings of Hofmann et al. (2009) above, the close-range shows us that CareSaver can remove gender from their marketing metrics; as both men and women almost equally invest according to their values.

The total number of 84 respondents selected ‘no’ to question 2 of the survey; or 51.85% (the majority). This question asked for a short description of why? The responses were grouped into 7 main categories. Table 3 below shows this and their corresponding percentages for both the 51.85% that selected ‘no’ and the entire survey response number. It was evident from this data that a significant percentage trust their provider to choose the appropriate investment for them. It could also be that investors simply don’t care or aren’t bothered if their investments are within an ethical or responsible fund or not. However, some comments within the survey came back as “I am with ASB and I have assumed they would not include unethical investments in their portfolio”, or “KiwiSaver is with BNZ, I am not certain they are ethically investing, they are a little better than they were”, or “I have trust in my share brokerage”. This analysis begs the question, do people realize what their funds are invested in? According to the data below, it would indicate that 13.58% of respondents do not. The remaining 6 categories also give us insights into what hinders people from investing ethically. This is valuable for CareSaver as it eliminates specific categories from target markets such as, ‘Lack of time’ and ‘No investments’. It also presents opportunities from categories such as ‘haven’t thought about it’, ‘lack of knowledge’ and ‘leave it to provider’. These opportunities will be explored further below. The respondents who only seek the highest return also present an opportunity as research has shown that ethical investments do perform better with less risk long term, than traditional investments (Spiller, 2000). The question is how does CareSaver target that market, and communicate the benefits to those investors?

Table 3. Data from Question 2: Categorized ‘no’ responses.

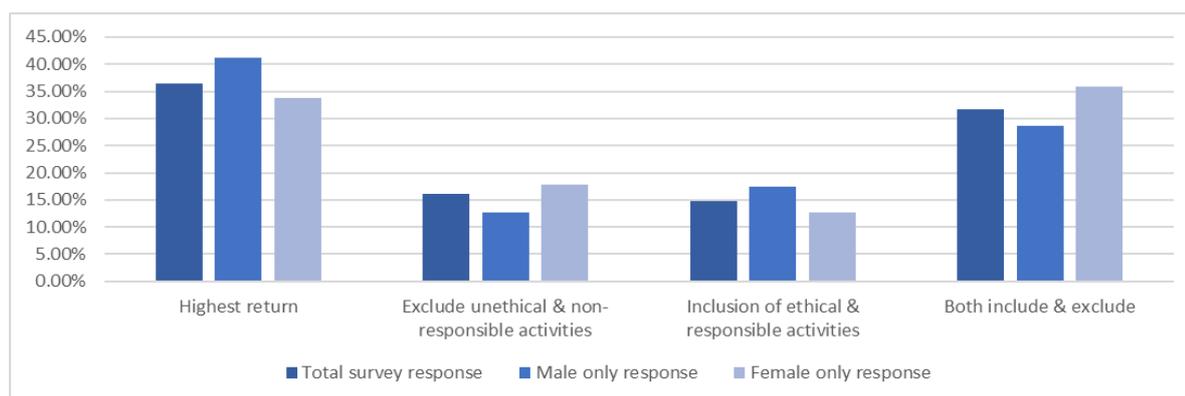


6.3 Question 3

Question 3 asked what investment your preference over others would be. Out of the four possible answers, ‘highest return’ had a response of 36.42%. The data in Table 4 below also showed that females have a slightly higher tendency to want to invest ethically or responsibly. The remaining options were those investments that include, exclude or both include and exclude ethical and responsible activities. The total percentage that selected one of these three remaining options was 62.58%. This means that 62.58% of investors want to engage in investments that are ethical or responsible, either by including or excluding certain activities, or both. However, comparing this question to question 2 around values aligned with actual investment, we can see that 48.15% already do invest (some partially) in line with their values. This leaves a gap of approximately 13% of investors that place the most importance on ethical values but are not investing in line with those values. Whether it be lack of time, understanding or naivety in leaving it to the provider, we need to communicate with this 13% in a way that

addresses the reasons specified in question 2, that will activate them to shift their investments to an ethical fund aligned with their values.

Table 4. Data from Question 3.



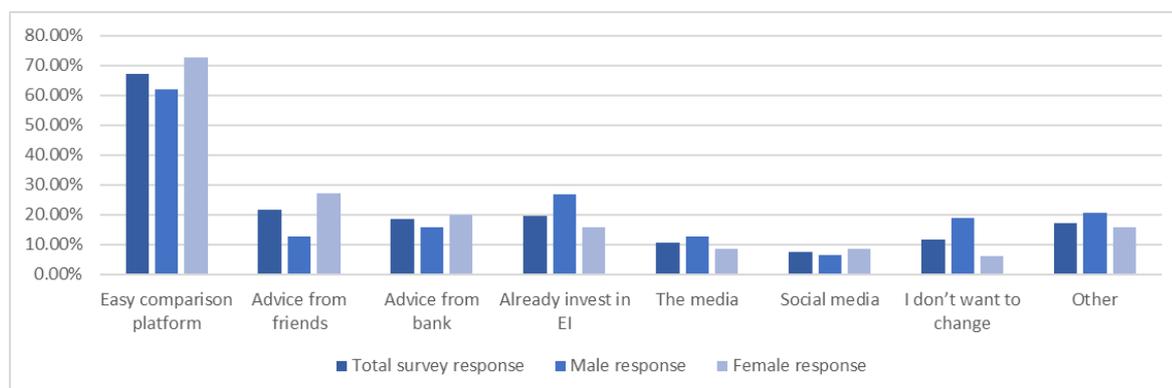
6.4 Question 4

This brings us to question 4 which was devised in aim to answer RQ3: What factors will influence perception of ethical investing? Table 5 below shows the eight different categories that were used to gain insight into what influences people to change to ethical or socially responsible investments.

Respondents were asked to choose one-to-three options. Interestingly both males and females rated the first option the highest; a quick and easy platform to compare different investment portfolios. A platform such as this does exist, called Mindful Money (Mindful Money, 2020). Mindful Money is a website where you see what activities your current KiwiSaver is in, as well as fill out a short questionnaire to find a fund that aligns with your values. Mindful Money is an independent registered charity, meaning users can feel confident that there is

no ulterior motive when advising on a fund. Although Mindful Money exists, it is not well known therefore its value is somewhat depreciated. Recent articles on various media outlets such as Sorted (Hartmann, 2020) and the NZ Herald (Coates, 2020) have given Mindful Money more website visitors according to K. Swainson (personal communication, February 11, 2020) from Mindful Money, but they still need more visitors. As found in the data above, there is not a shortage of people wanting a website such as this, so the question is, why are they not already visiting and how do we get them there? The next highest category was advice from friends at 21.6% for the entire survey respondents. Women are two times more likely to ask advice from friends than males are, indicating that they are less confident with establishing a view based on their own research (Graham, Stendardi, Myers, & Graham, 2002). In answer to RQ3, the factors that will influence people the most to change to an ethical fund are, a comparison platform, financial advisors and advice from friends through word-of-mouth.

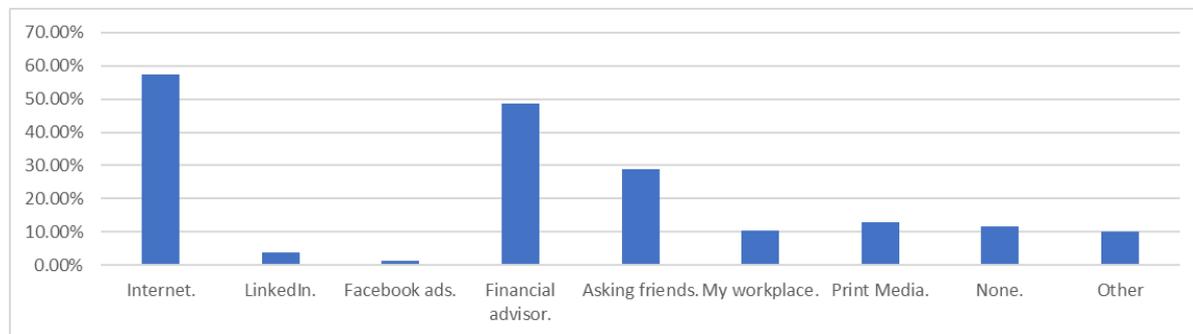
Table 5. Data from Question 4.



6.5 Question 5

The data from question 5 helps to derive recommendations for CareSaver, asking respondents where they look for investment information or advice. There were nine categories to choose from, with the choice of selecting one to three options. These categories are similar to those in question 4 above, which were derived from the survey completely by Colmar Brunton (2019). The data in Table 6 below showed that 57.41% of the total responses use the internet to find information. This compared with question 4 above shows that the platform 67.28% seek, should be internet-based such as Mindful Money. The next highest category was financial advisors (FA) at 48.77%. I wondered if there was an untapped market in financial advisors and if CareSaver could run workshops of conferences for FA's to learn about ethical investments. Speaking with S. Leach (personal communication, February 10, 2020) from CareSaver, I learnt that financial advisors usually promote certain investments or funds with which they have a relationship and pay commissions, therefore CareSaver would need to forge relationships with financial advisors to promote their funds. Given the financial cost to CareSaver, I don't see this as a viable option to communicate the benefits of ethical investments. The next most significant category was advice from friends at 29.01%. This is slightly higher than the 21.6% in question 4 above, who would be influenced by friends to change. This indicates that there is a strong word-of-mouth opportunity in promotion of ethical investments.

Table 6. Total response data from Question 5.



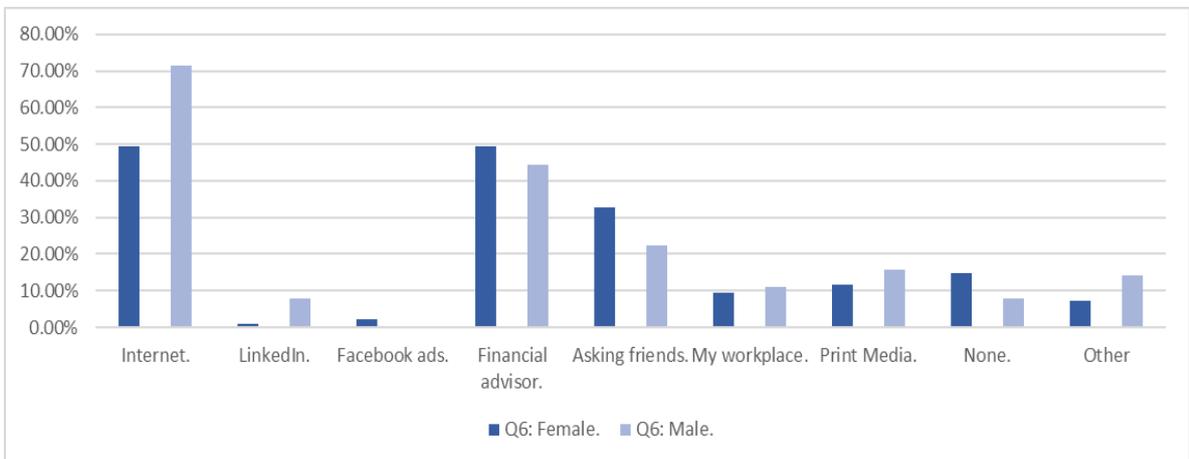
If 57.41% of people are searching using the internet, what are the likely keywords being inputted that Mindful Money or CareSaver would need to use in their search engine optimisation (SEO) to capture these potential clients? There also needs to be something to trigger people to go to the internet and search, like the awareness or knowledge that their current fund is not aligned with their values. As the survey conducted by Colmar Brunton (2019) points out, 2 in 3 New Zealanders would consider moving if they learned their current fund was engaged in activities misaligned with their values. According to G. Boyes (personal communication, February 26, 2020), the FMA would like to look at further guidance and clearer disclosure and visibility for the consumer to understand the activities in which funds invest. Currently, the only NZ website to do this is Mindful Money. Other platforms such as Sorted's Smart Investor (Sorted, 2020) do provide a comparison tool; however as per discussion with G. Boyes (personal communication, February 26, 2020), it was difficult to use ethical metrics in this tool as there is no consensus of what is ethical. Boyes also explained current regulations regarding disclosure and noted that there are issues

around this. KiwiSaver fund managers need only disclose in their Product Disclosure Statement whether or not it is a scheme that takes responsible investment, including ESG considerations, into account (KiwiSaver Act, 2006). I discovered this register is difficult to find and decipher for the average person and it also does not give information on industries or activities in which funds are invested. Possible ‘labelling’ of different activities in which each fund invests, could be the answer for consumer awareness, as opposed to only a disclosure if ESG factors are considered.

Mindful Money’s website answers part of RQ4: matching people’s values with their investments, however, how to get people there is the challenge. This question sought to provide insight into this. As per table 7 below, female answers were: Internet, 49.47%; Financial advisors, 49.47%; Asking Friends, 32.63%. Significant data showing females asking friends about financial issues were also found in question 4 above. Table 7 indicates the high male categories were 71.43% internet (indicating that they feel more confident in their own research ability), 44.44% financial advisor. For females, asking friends was a significant response along with the internet. As discussed in the literature review influencers are recognised by their followers as people of whose advice they can be assured, some even have an emotional connection with them at a ‘friend’ level. This isn’t surprising as influencers gain their following from demonstrating honesty, integrity and openness (Smith et al., 2018). CareSaver could leverage these influencers and align with an influencer with a significant following, who share their values of ethical practices and sustainability, to

promote their brand and ethical investments. It is critical that influencers are researched thoroughly to ensure they are reputable before a relationship is sought with them. This answers the first and last part of RQ4: How can we communicate the benefits of ethical investments and match people’s values with their investments by the promotion of ethical funds?

Table 7. Female and Male data from Question 5.



7.0 CONCLUSION

Primary data was collected from a survey, conducted to understand if people invest in line with their values and what might influence them to change their investments to ethical funds. The primary data was also assisted with interviews from professionals within the investing industry to gain further insight from the data. The survey gained 162 respondents, 93.21% of which invest in managed funds such as KiwiSaver; males were 25% more likely to also invest in shares

than females. Secondary data was gained through a synthesis of the literature. Both data sources aid to answer the research questions for this report.

7.1 RQ1

In answering RQ1 on perception, it was found that people do have a negative perception of ethical investments. It was realised through the literature and the Colmar Brunton (2019) survey that a lack of credible options and insufficient independent information comparing activities and returns give people a negative perception of ethical investments. It was also discovered people perceive that ethical investments underperform when compared with traditional investments. Research has found this is not the case, with ethical investments performing at a similar level, or higher, as well as benefitting from reduced systematic risk.

7.2 RQ2

Answers to question 2 of the survey found that roughly 49% of respondents do invest in line with their values; however only half of that group (or 22% of the total response) invest at a level above 80% of their entire portfolio which align with their values. This leaves around 77% of the respondents that either does not invest in line with their values or are investing at a level that is below 79% of their entire portfolio. Answering RQ2: Do the ethical values of people match their investments? Respondents that do not invest in line with their values (53%) were grouped into 7 categories according to their descriptions. The most significant reasons why people did not invest according to their values were, 'leaving it to the provider' and 'lack of knowledge or understanding'. These two

groups made up 23.46% of the total respondents which presented an opportunity for CareSaver as this segment may want to invest ethically but lay trust in their provider or does not possess the knowledge to compare funds to make an informed decision. Trust in the provider for some stems from regulations that do not require providers to disclose their investments in a way that is visible to the consumer. Currently, the only regulatory disclosure requirement is whether a fund manager takes responsible investing, such as ESG factors, into account. Further, it is difficult for investors to find out their firm's investment portfolio. Therefore, consumers are not aware of what activities their investments are in. Regulatory changes may be required around disclosure and visibility of investment activities for fund managers.

7.3 RQ3

The survey found that 62.58% of respondents place more importance on ethical investments (whether that be the inclusion or exclusion of certain activities, or both), whereas only 36.42% want the highest return. When asked what would influence people to change their investments, 67.28% selected 'a quick and easy platform to compare different investment portfolios'. Mindful Money is such a platform. It uses a short questionnaire to identify values and aligns them with a KiwiSaver fund provider. Another key finding was asking advice from friends, at 21.6%, with Females significantly more likely to allow friends to influence a change to ethical investment. The literature review showed that social media influencers followers view them emotionally, as friends (Smith et al., 2018). Therefore, in answer to RQ3, according to both the primary and secondary data,

a platform to compare different investment portfolios and advice from friends are the two main factors influencing the perception of ethical investments.

7.4 RQ4

In order to find out how to promote ethical investments and answer RQ4, respondents were asked where they look for investment information or advice. Data showed 57.41% use the internet, with the next highest being financial advisors at 48.77%, then asking friends at 29.01%. It is clear from questions 4 and 5 of the survey, that investors seek a platform on the internet to guide them to an investment aligned with their values. However, as evidenced above, 23.46% will not do this, either because they trust in their provider or lack of understanding or knowledge. Financial advisors could be an opportunity to explore to enhance promotion and word-of-mouth, however, due to their commission requirements, I do not see it as a financially viable option. Within the literature review, Hofmann et al. (2009) found there is no specific demographic of ethical investors. However, environmentally friendliness was shown to be one common indicator of ethical investors. Brand alliances, such as the example of Australian Ethical and Keep Cup, is another promotion tool that can increase brand awareness. RQ4 asked: How can communicate the benefits of ethical investing and match people's values with their investments by the promotion of ethical funds? Both the primary and secondary data found that we can communicate using the internet, targeting individuals who already possess environmentally friendliness while utilizing a comparison platform for people to match their values with investments. Promotional tools such as brand alliances

through value-aligned companies, or social media influencers are one way to increase brand awareness.

8.0 RECOMMENDATIONS

Recommendations are set out below providing clarity in answering RQ4 and advise on strategies to promote ethical investments in the NZ market. They will explain how CareSaver can communicate the benefits of ethical investments, matching people's values with their investments by the promotion of ethical funds. From the conclusion above, it is evident that consumers will use the internet as their first avenue of investment information or advice. However, because people do not understand or lay trust in their provider, they are not aware that a change may need to be made to align with their values.

Mindful Money is a comparison tool for consumers to use to source a fund that aligns with their values. The Mindful Money website holds promotional value for CareSaver. It promotes CareSaver's brand and values by showing the activities in which they do and do not invest. As CareSaver is the only NZ fund not currently investing in fossil fuels, it is often recommended as a match to people's values; as environmental degradation and fossil fuels are a primary concern for investors (Colmar Brunton, 2019). Once potential customers are aware of this, they will take action to move their funds. To convert leads to customers, organisations must look at increasing conversion rates and/or the number of leads. Increasing leads can be obtained by increasing awareness

through website leads. Increasing the visitors on CareSaver or Mindful Money website (the primary platform investors look to) is a simple fix; Google Ad words, however, does not solve the problem of awareness and cause of action. Google Ad words or SEO are the last links in the chain, but they are dependent on the outcomes of the following objectives. Therefore, it is imperative that these objectives, as part of the recommendation, are followed in the order set out below. The exceptions are objectives ‘a’ and ‘b’ which can be achieved before or after one another.

1. CareSaver to align with sustainable companies and social media influencers, whose values align with their own ethical, socially responsible and sustainable values. Build a targeted marketing campaign utilizing aligned companies and influencers databases through cross-pollination of customers who possess ethical values. These companies must have great reputations and integrity with genuine ethical practices or actions.

a. Objective 1:

Form a brand alliance with two value-aligned companies within NZ who service mass-market industries by the end of December 2020.

Outcome:

Increased brand awareness for CareSaver through alignment with companies that service mass markets.

This recommendation stems from examples of companies who aligned with similar value-led organizations, to leverage each other and promote brand awareness. Aligning with a company possessing similar values and utilizing their database will give CareSaver access to a portion of the 62.58% that place more importance on ethical values than high returns. For alignment with other companies to be successful, CareSaver must offer something in return. This could be by the way of buying units of their products for every member who joins CareSaver, similar to Australian Ethical's arrangement with Keep Cup. To implement, CareSaver would need to begin research into potential NZ companies whose values are in alignment with theirs. Background research into these companies would need to explore all stakeholders to mitigate risks of mistakenly aligning with a company that could hurt CareSaver's image through unethical practices or activities, however far down the supply chain. CareSaver can do this with their inhouse resources currently. Once value-aligned companies have been identified and risk reviewed, CareSaver can approach each of them to propose a brand alignment and negotiate the terms (what each will gain) of the alignment.

b. Objective 2:

Form an alliance with one ethical or environmental social media influencer with a minimum of 15,000 followers by the end of December 2020.

Outcome:

Increased brand awareness and awareness of ethical funds through influencer promotion of CareSaver.

CareSaver to connect with climate change influencers/advocates that have a wide reach of followers and seek an alliance. Upon a successful alliance, influencers would then share information on CareSaver's funds and promote the inclusions and exclusions of certain industries that align with the influencer and their followers' values. As influencers are concerned with honesty and integrity to ensure their followers stay loyal, their 'fee' would likely be small, or zero. Their motivation to influence on behalf of CareSaver would be the promotion of ethical funds, that benefit the environment or climate change; activities the ethical influencer is already passionate about. There are also other advantages to connecting with an influencer whose values are in line with CareSaver, that is they are passionate about the cause and topic, which is then delivered more authentically than paying a brand ambassador to simply promote through sponsorship. Influencers have been found to relate to their followers as 'friends' therefore, the segment from the survey of 21.6% that seek advice from friends can be influenced this way directly and indirectly, through word-of-mouth. This recommendation seeks not only to influence but to create brand awareness for CareSaver. As above, the risks of this are similar, CareSaver would need to conduct in-depth research to ensure that the influencer is credible, with no

negative publicity that could harm CareSaver's reputation. CareSaver has connected with 'Ethically Kate', an ethical NZ influencer, during the compilation of this report, after discussion of this recommendation with them. This has been successful with Kate agreeing to align with CareSaver and promote its funds to her followers via her social media pages.

c. Objective 3:

Build a targeted marketing campaign aimed at databases of objectives 'a' and 'b' above, highlighting other NZ KiwiSaver funds investment activities to create awareness and to launch campaign by the end of March 2021.

Outcome:

Increased consumer awareness and knowledge of what their KiwiSaver funds may be invested in, therefore increasing leads for CareSaver.

Targeting this market that already possesses environmentally friendliness, would capture some of the 23.46% that lay trust in their provider and lack of understanding or knowledge of KiwiSaver or investments. The marketing campaign should promote both CareSaver and Mindful Money's websites. It is important to also promote Mindful Money as it is an independent not-for-profit whose comparison tools can align funds with the investor's values. Consumers are more likely to trust an independent website than promotion from a specific

company. As CareSaver is likely to be recommended as a fund to Mindful Money visitors, it is beneficial for CareSaver to promote Mindful Money. Marketing will need to highlight the banks and KiwiSaver funds that invest in activities that are deemed unethical. The categories to be specifically highlighted are human rights violations, labour rights abuses, environmental degradation, animal testing and abuse (caging), predatory lending and tax avoidance, as these were the most significant issues New Zealanders care about when looking at investments. This gives the consumer the knowledge of what their KiwiSaver might be invested in, so they can make an informed decision; giving them power with knowledge. This will also influence them to internet search for information. This is how CareSaver can communicate the benefits and promote their funds while matching people's values with their investments; answering RQ4. Risks associated with this could be backlash from the banks and other financial institutions highlighted in the campaign, however, provided the information within the campaign is true and accurate with substantiated claims, no legal action can be taken against CareSaver.

d. Objective 4:

Setup SEO with Google Ad words to ensure CareSaver is found through searches from consumer awareness from objective 'c' above, by the end of March 2021.

Outcome:

More visitors to CareSaver's website and increased open opportunities/leads.

The last piece of the puzzle is utilizing SEO with Google Ad words to ensure CareSaver (and Mindful Money) are found when consumers search; as data showed 57.41% will search the internet for information or advice. This would be in the interim until CareSaver organically moves up the search results.

As explained above, this is a simple fix to move to the 'top of the list' on the internet. However, without a call to action, consumers will not go to the internet to look at ethical investments. The targeted marketing campaign above, draws from the databases of objectives 'a' and 'b', to create brand awareness and give knowledge to the 23.46% segment who either 'leave it to/trust the provider' or have a 'lack of knowledge or understanding' of investments.

2. CareSaver to work with the FMA to look at regulations around visibility and disclosure of firms' investments for fund managers.

The survey showed that 13.55% of people trust that their provider is not investing in unethical activities. If consumers want to find out what their fund is

invested in, it is difficult to do so as the current regulations do not require that fund managers disclose the specific industries, in which they have invested. The FMA is interested in investigating how they can review the disclosure requirements, to make it more visible and readily available to the consumer. Based on this, I recommend CareSaver connect with the FMA to work on categorization or metrics for labelling of funds, to give the consumer the knowledge they seek. A risk of this 'labelling' for example, is if it's simply, for example, a '5-star' system, companies could invest in unethical activities but push up their rating with investment into some ethical activities. For this reason, the labelling system needs to be based on categories that include metrics of what industries are included and excluded.

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Does second generation gender bias exist in commercial aviation? Pilot experience and perception

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Abstract

Aviation is still considered a man's world by many. The time to reach young ladies is during their first years of school. Research has shown that although children may change their minds several times about their eventual careers, the possibilities of them selecting a non-traditional role must be nurtured at an early age.

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Commercial aviation from the outside may appear to many as an equal opportunity profession. This is not surprising when a look through research and the aviation industry highlights that male and female airline pilots conduct the same checks and training, wear the same uniform, work the same hours and are remunerated equally for the task (Largrave, 2018). Within the airline environment female pilots recount the difficulties of recognition that arise from their male colleagues, while airline managers believe that they have addressed the gender bias issue and describe it as

‘a job well done’. Their perception is that if women describe a masculine environment and a lack of differentiation, then they have been integrated into the ‘pilot’ community (Davey & Davidson, 2000). Despite these perceptions, female pilots remain highly underrepresented at just over 5% of the global commercial airline pilots (McCarthy, 2018).

The study ultimately seeks to provide airline managers with more information on the existence or otherwise of discrimination. It also offers suggestions and tools for them to implement, in order to help produce an opportunity for a positive environment ongoing for both existing and future female pilots.

Introduction

Take a brief look through history, and it will show the first powered flight being accomplished by the Wright Brothers on 17 December 1903; very shortly after, women worldwide such as Mellie Besse from Germany, were not only becoming involved with flying, but also designing and producing aircraft themselves. Yet almost a century later, only 2% of the world’s leading airline groups are being led by females, and female pilots currently only account for just over 5% of global commercial pilots (McCarthy, 2018).

This research seeks to examine the paucity of females in pilot and management roles in aviation. It does so by a qualitative exploration of second-generation

gender bias and barriers to entry and promotion experienced by current female airline pilots. It aims to gather data related to whether a glass ceiling exists regarding promotion for female airline pilots; the potential barriers to entry for women into aviation and whether second-generation bias is perceived to exist.

1. Literature Review

There are many theories put forward to explain the lack of progression and numbers of women in commercial aviation today, but to conform to the scope of this work, three of the main areas of current academic knowledge are discussed here. The overarching glass ceiling theory; barriers for women in traditionally held male industry; and the notion of bias in the workplace. Although this paper focuses specifically on the aviation industry, discussion in the chapter also encompasses other industries.

The Glass Ceiling Theory

The Glass Ceiling theory was first recognised in the 1980s by the Wall Street Journal and later used by Morrison (2009) in his academic article “Breaking the Glass Ceiling: Can Women Reach the Top of America’s Largest Corporation?”. This invisible barrier is said to create insidious resistance, towards women’s endeavours to reach senior management levels. According to Ibarra, Ely & Kolb (2013), for women, the subtle gender bias that persists in organizations and in society disrupts the learning cycle at the heart of becoming a leader.

According to Dyrch & Strack (2012) senior management jobs held by women represent just 21 percent globally and only nine percent of CEO positions. They claim women are becoming more highly educated and a greater number of females are graduating from colleges and universities than their male counterparts; and yet there remains a lack of female leaders.

Research conducted earlier by CAPA in 2009/2010 discovered that there were just 15 female CEO's or MDs amongst all the world's airlines.

Scholnick, a former president of the International Aviation Women's Association states that at the entry level the gender mix is more evenly spread; however, females tend to drop out in the critical years of middle to senior management and as such there is no pipeline to keep the flow moving upwards (Whitley, Katz and Park, 2018).

It remains surprising that aviation continues to be slow with integrating females into their organisations as research suggests that there are positive financial gains to be had. Layton & Prince, McKinsey and Company had been investigating diversity in the workplace for several years. Their latest report looked at metrics such as the financial results and the composition of top management boards. They found that companies in the top quartile for gender diversity are 15 percent more likely to have financial returns above their respective national industry means.

Barriers to entry

Work life balance

One of the most significant barriers for women is dealing with work-life balance with regards to having children and raising a family which has traditionally been seen as a predominantly female role. Despite the fact that over 71 percent of mothers with children under the age of 18 are working, Crampton & Mishra (1999) suggest that the organisations hold less favour towards female managers with children. It appears that mothers are scarce in top management positions with 60 percent of top women executives having no children while only five percent of males holding the same positions are childless.

Airlines are no exception when it comes to work-life balance. Due to the unique nature of the airline industry, the work-life imbalance can be a barrier for both male and female pilots due to the nature of the job with its unstable work schedules (McCarthy et al., 2015).

Double-bind dilemma

Another challenge for women is the double-bind dilemma. While women have been accused of possessing a lack of self-confidence, when they do happen to behave assertively, they are subject to a whole other set of consequences, that according to Katty & Shipman (2014), men don't typically experience. Oakley (2000) suggests this creates an impossible dichotomy for those women seeking leadership roles.

careers such as nursing, office administration and teaching.

Corporate culture

Tinsley and Robin (2018) however, state that science does not actually support the claim of a wide variation between genders, and that in fact both genders have greater tendencies to possess more similar attitudes and skill-sets than people would think. They explore the theory that genders are treated differently through a review of organisational structures, corporate ethos and behaviours and find that the solution to women's slow advancement is not to change women or their managers, but to address the conditions that undermine women and reinforce gender stereotypes.

Nurture

Wolf (2018) argues that these traits are created from a young age at school where the foundations for girls deciding on career choice and their self-efficacy are established. She claims teachers tend to encourage boys towards mathematics, science and sport; while girls are led towards art, social work and more passive activities. Furthermore, after childhood in the college years, girls are persuaded towards more stereotypical female

Confidence

Mitchell et al. (2006), argue that it would appear that only women with the traditionally perceived male focus and drive for success are able to achieve their career goals. Zheng (2016) points to the lack of confidence experienced by female

pilots caused by negative attitudes from male leaders, co-workers and passengers, and highlights the high stress this generates. This can be particularly difficult for females working in a male dominated industry or profession which according to Amaratunga, Haigh, Shanmugam, Lee and Elvitigalage (2006) can demotivate women when it comes to developing their careers.

Lack of mentors

One potential solution to these challenges appears to be mentoring. Applebaum et al (2003) suggest the role of mentors and a support mechanism is often seen as invaluable in career progression however research has shown women struggle to advance their careers due to the existence of the ‘old boys’ network’. They indicate that on one hand women are expected to obtain the right training, qualifications, and accreditation to be worthy of the job; while men’s career progression is often assisted from ‘networking’ and ‘benefit of the doubt’ where assumptions are made that men are competent (Applebaum, et. al 2003). In such circumstance, according to Bowling, female mentorship is more important than ever (Forbes, 2018).

Bias in the workplace

Research on discrimination suggests that second generation gender bias could potentially be one of the strongest barriers to women receiving promotion or furthering their professional development within organisations (Carter, 2011; Ibarra et al., 2013; Rifkin, 2015). According to Diehl and Dzubinski (2016), second-generation bias stems from barriers formed from cultural beliefs regarding

gender and organisational practices and structures, as well as social interactions that favour men.

According to Mills (1998), in the first two decades of flying the attributes of heroism and experience came to form a distinctive type of organisational masculinity – the pilot. Mills elaborates by explaining the seven factors which have contributed to such characteristics: The militarisation of flight, the carry-over of wartime symbolism into commercial aviation, airline recruitment practices, the creation of an exclusively male profession, airline strategy; and the development of corporate imagery.

Prejudice has been identified as one of the main inhibiting factors towards the advancement of women in aviation (Davey & Davidson, 2000). They find female pilots are held to a higher standard than their male counterparts.

In line with the literature review that compares and contrasts experiences for women in c-suite management positions within in other industries, this study addresses some of the similar challenges resulting in the lack of female presence relating to the commercial airline pilot ranks.

1. Methodology

In order to examine the phenomena of second-generation gender bias in commercial aviation, data was gathered from a cross section of airline pilots, in particular female airline pilots, from various multinational airlines. The study

sought to capture examples of their career stories and to examine their perceptions of the role and position of women in the airline industry.

Interest was held in exploring the background and experiences of commercial airline pilots, including: what or whom had influenced their career choice, any challenges they had foreseen or experienced in becoming an airline pilot, the influence of a mentor in their career and any experiences they may have had with regards to gender bias and corporate culture in this traditionally male dominated industry. The aim was to make comparisons with previous research on the low number of female commercial airline pilots and the challenges identified. Further, to assess whether there have been any perceived improvements in the conditions for female airline pilots and lastly to highlight any ongoing issues. The findings may assist airline managers when reviewing company strategies and policies with regards to recruitment and retention of female airline pilots.

2. Findings

This section reviews the experiences shared by respondents in both the survey and interviews.

Airlines

Combining both the survey responses and interviews a total of 15 airlines were represented in the study. The airlines ranged from low-cost carriers in Europe, the Caribbean and the Far East; to major National Carriers in North America, Europe,

Australasia and the Middle East. Of the 15 airlines, just one, a North American Airline, was represented by only male pilots; while two airlines, one European and one from the Far East, were represented by only by female pilots. Average experience levels in commercial aviation stood at 8.6 years for females and 16.4 years for males.

Female Pilots

Female respondents ranged from 24 years to 52 years old with the average age being 33.4 years. Of the 48 respondents 35 were married, four divorced, nine were single and only 19 (approx. 39%) had children.

Male Pilots

The average age of male respondents was 48.7 and ranged from 28 years to 63 years. Of the 21 respondents 18 were married/ remarried, eight divorced, and three were single. Seventeen of them had children.

3. Discussion and Recommendations

This paper sought to understand the reasons for low female representation in airline pilots and the potential role that second-generation bias may play. To investigate this phenomenon a review was conducted of the experiences and perceptions of female airline pilots in relation to their career choice, advancement and equality within the airline organisational culture. 69 pilots, 21 males and 48

females participated in an electronic survey of which five male and 10 female pilots were interviewed in order to gain deeper insight into the survey responses. Due to the limited scope of this paper, three main theories were focused on:

Glass ceiling

The first considered the glass ceiling theory where, according to Morrison (2009), invisible barriers are thought to create insidious resistance against women striving to reach senior levels.

Gaining entry and promotion was found to be challenging by many of the female respondents who in line with observations by Dyrch and Strack (2012), experienced resistance and bias when trying to establish themselves in an environment that questions whether they belong at all. Eighty percent of the females interviewed found they had to work harder to prove themselves and to fit in. Twenty-six percent of the respondents with children had taken additional unpaid maternity leave to the detriment of their careers with 79% of female respondents suggesting that more needs to be done.

Barriers to entry

The second theory researched barriers to entry for female pilots. Barriers considered included: work life balance, the double-bind dilemma, corporate culture, nurture, confidence and the lack of mentors. The challenging work life balance due to the nature of shift work and travel, also noted by McCarthy et al.

(2015), was prevalent in responses from 79% of the female participants and 100% of the male pilots interviewed.

The double-bind dilemma was apparent in that 100% of respondents recalled experiences of bias from passengers, colleagues and managers. These were similar to findings by Davey and Davidson (2000) and McCarthy et al. (2015) who reported numerous occurrences of sexist comments forcing females to become ‘un-feminine’ to fit in. Similar findings were evident in responses reflecting the corporate culture of airlines. The traditional military backgrounds identified by Mills (1998) were evident in comments on biased recruitment policies, and the sexist behaviours experienced by female pilots.

Bias in the workplace

The final theory considered was that of bias in the work place and in particular second-generation gender bias. According to Diel and Dzubinski (2016), second-generation bias favours social interactions with men and can be found in organisational structures and practices.

Maternity policies were raised by all respondents as a cultural bias with many respondents referring to experiences with management policies and practices that were deemed punitive and detrimental to a female pilots career.

4. Conclusion

Overall findings in this study are similar to those identified by Davey and Davidson (2000). While the aviation industry appears to have continued to make progress with regards to the attitudes of airline managers and male pilots towards female pilots, it remains slow in changing the male dominant military roots that commercial airline aviation evolved from. These foundations continue to influence behaviours of gender bias. This study found that second-generation gender bias still exists throughout the industry, particularly in the grass roots stages of general aviation training schools. There appears however, to be an improvement in airlines and Aviation Colleges where experiences are more professional; and females are accepted based on their ability and behaviour.

With a worldwide shortage of pilots predicted, if airlines want to attract women into aviation, they will need to do more to expose the younger generations of females to the career option. This could be done through establishing female role models who visit schools and who are used in airline advertisements, which could help to open up the profession to young girls.

While some airlines have recognised the need to adapt policies and practices in order to attract more females into the airline industry, such as affirmative action and quota systems, these have not been well received by all. In fact, in some cases they have been perceived as a step backwards and resulted in insidious resistance of acceptance from male peers and greater gender discrimination. Other airlines have been successful with the implementation of improved rosters, flexi-time and

child care facilities, which have enabled females to continue working while balancing their family commitments.

The work-life balance challenge, along with archaic maternity policies and practices remains one of the greatest barriers for female pilots. As such if airline managers are genuinely serious about attracting and retaining female pilots they will need to focus on this area. Improvements here could help to keep the pipeline open and flowing with females moving through the system to become Captains, trainers and management. The greater the number of talented female pilots and managers involved in this male dominated industry, the more diluted this ‘mans’ world’ perception will become. This will not only add value to the organisation but will empower women towards achieving those c-suite positions that have in the past been relatively unobtainable.

Finally, the notion of evidence-based approaches to better understand the airlines organizational behaviour would assist in introducing new policies and procedures as well as the cultural changes required. These organisations can then formulate cultural and social development programmes to encompass a positive learning orientation, which will offer all employees the opportunity to reach their full potential, to provide a positive environment ongoing for both existing and future women pilots.



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Whakamanatia: Empowering Māori to access primary health care using mHealth technology

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Executive Summary

Introduction

In Aotearoa New Zealand a persisting national issue is the inequities in health status between the indigenous Māori population and non-Māori. The unmet health needs and barriers to accessing primary health care are some of the core factors that sustain the inequities in their health, and this necessitates immediate action.

The introduction of mobile technology and e-health is changing the way health services are delivered, and this positions mobile health (mHealth) technology as an innovative way to address Māori health needs. Of significance is the changing roles of nurses who can substitute for doctors and the changes in traditional health models; where the health consumer and their families are active participants in their health journey, facilitated through smart technology, rather than being the passive receivers of medical services.

Objective/Purpose

This research uses the setting of a nurse-led mHealth service to develop a conceptual model that captures the changing nature of health service delivery that best meets the needs of Māori health consumers. The purpose of the research was to identify opportunities that can optimise and expedite access to primary care services and assist to improve Māori health outcomes. The question that guided this research is ‘What is happening to nurse-led mHealth initiatives and access to primary health care for Māori?’.

Methods

This exploratory study used a kaupapa Māori methodology informed by a constructivist grounded theory method. To explore the perspectives of five primary and public health care nurses, on the use of mHealth technology as a resource to improve access to care for Māori.

Purposeful sampling was used, and the data was collected using individual semi-structured interviews that were digitally recorded, transcribed and analysed using NVivo software. The process of constant comparative analysis, using both transcripts as the primary source and theoretical sampling as the secondary source, was employed until data saturation was reached, resulting in the constructivist grounded theory.

Findings/Results

Conceptually, the research identified that Māori population groups can be empowered to engage with primary care services if the design includes consultation and collaboration with iwi (tribes) and hapū (sub tribes) and collaborates with local health and social services. In addition, an equity lens should be included in the mHealth service delivery.

Furthermore, this research highlights the consumer demand for services that offer convenience, flexibility in access and allows for greater transparency of their health records. This view challenges traditional health models and highlights the shift in the health consumer's attitude towards doctors, as being the only solution for their health care needs.

Discussion and Conclusion

This research expands on previous work in the utilisation of mHealth technology to optimise access to primary care services for indigenous populations. The proposed conceptual model 'whakamanatia', signifies implications to clinical and organisational practice and can be used to inform the design of future mHealth solutions to enhance indigenous health outcomes.

Introduction

Background

Mobile health (mHealth) technology, led by public health nurses, is proposed as an efficient way to improve access to care and health outcomes (Aitken, 2018; Becker et al., 2014; Catalani, Philbrick, Fraser, Mechael, & Israelski, 2013). Specifically, a nurse facilitating access to a clinician through a web-based application using cloud-based smart technology on a mobile device. Is proposed as a more cost effective and efficient method to expedite access to primary health care for Māori, in ways that current mainstream services do not (WHO, 2011).

The benefits of this model of care include the ability to enable a greater outreach within the community and to facilitate faster access to online health professionals, clinicians, specialists, health promotional resources and prescription medications that can be delivered to the patient's school or home (Free et al., 2010). However, the drawbacks of mHealth include a lack of sustainable funding, its potential to be impersonal, and there are security concerns such as the safe transmission of patient data on the open web (Lee, 2012). Therefore, the possibility of leveraging the use of mHealth technology by nurses to increase outreach and access to primary care necessitated further exploration to determine the suitability of this approach (MoH, 2017).

Multiple factors motivated the study into the use of mHealth to improve outreach to Māori population groups. These factors include population-based challenges, such as inequities in health outcomes between Māori and non-Māori; increasing

rates of preventable diseases for Māori, such as diabetes and rheumatic fever; population growth issues and strained human and financial resources in primary health care (Free et al., 2010; Pingree et al., 2010). There is also a greater potential to reduce transaction costs and leverage mobile technology to deliver health services to a broader population than what is currently achieved through traditional face-to-face modes of delivery (Free et al., 2010).

Another factor to consider is the concept of unmet needs for primary health care, which is more common among Māori population groups compared to non-Māori, which is a public health concern (Anderson, Mills, & Eggleton, 2017; Davy et al., 2016; Lee & North, 2013; Te Karu, Bryant, & Elley, 2013). Unmet health needs are more evident in high needs' populations, where poverty, overcrowding in homes and lack of access to primary care are the main drivers for poor health outcomes. For example, Whitehead and Dahlgren (2006) explain that a key predictor of health is an individual's position on the social gradient, that is measured by income, education, occupation and area of residence. The concern is that the wealthy, who are at the top of the gradient, lead healthier and longer lives as they have the financial capacity to address their health concerns, whereas those near the bottom are twice more at risk of premature death and illness (Hatcher et al., 2011).

Overarching recommendations from the WHO and MoH indicate that addressing the needs of high needs' populations through targeted interventions is one way of levelling access to health care (Allan & Smylie, 2015; Ministry of Health, 2018a;

Reid et al., 2017; Sheridan et al., 2011; Whitehead & Dahlgren, 2006). Levelling access is best explained using the Titanic analogy.

In the terrible Titanic disaster when the ship struck an iceberg and began sinking, there were close to “1500 survivors” (Arnquist, 2008, para. 4). Of the 2214 passengers onboard the most prestigious ships of all time, the main survivors were the wealthy first-class passengers, followed by the second-class passengers (middle incomes families) then third class passengers (lower income families). “First class passengers were twice as likely to survive” than the lower class passengers because they had faster access to the life rafts on the top decks (Arnquist, 2008, para. 4). Many of the third-class passengers died, as they could not get to the life rafts in time. They had to navigate to the upper decks through poor visibility and many obstacles. Just as class, gender and wealth affected the passengers’ ability to secure positions on the life rafts and ultimately determined whether they lived or died, provides the analogy for how all New Zealanders are able to access equitable health care (Arnquist, 2008).

Of significance is that if there had been more life rafts or emergency exits to the upper decks, the poorer class passengers might have had a higher chance for survival. Similarly, in Aotearoa New Zealand, socioeconomic status, level of education achievement and income are the core determinants for health (Ministry of Health, 2018c). Our health system could be likened to the prestigious Titanic, where only those with a decent income or education can access its full provisions. Lower income population groups, such as high needs’ Māori communities, may need a ‘lift to the life raft’ through targeted interventions such as mHealth or

kaupapa Māori influenced health initiatives, ‘to be on a level playing field’ with non-Māori (Arnquist, 2008; Marmot 2007, Whitehead & Dahlgren, 2006).

Recent studies indicate that traditional health services are experiencing a paradigm shift from conventional models of care such as the biomedical model, to holistic, value-based and person-centred care (Malmberg et al., 2019; Porter, 2010; World Health Organisation, 2011). Despite the benefits of these initiatives when integrated into primary and public health care services, barriers in access to care for Māori remain (Anderson et al., 2017; Ministry of Health, 2018c; Slater et al., 2013). Reasons for the sustained inequities in health status are multidimensional and complex. However, it is interesting to note that despite decades of persistent failure to correct the inequities in health outcomes between Māori and non-Māori populations, many Eurocentric led Primary Health Organisations in New Zealand continue to receive equity initiative funding. This necessitates governmental review.

According to the New Zealand Human Rights Commission (2016) “the right to health is a fundamental and universal human right”²; and how the right to health is provided “is considered in relation to the availability, accessibility, acceptability

² As cited in the NZ HRC 2016 the right to health is expressed in a number of human rights articles and laws that have been ratified by New Zealand:

- Convention on the Elimination of All Forms of Racial Discrimination (CERD): Article 5(e)(iv),(1965)
- International Covenant on Economic, Social and Cultural Rights (ICESCR): Article 12 (1966)

and quality of health services” (p. 1)³. With the availability of modern resources, it is thought provoking that the disparities in access still exist.

At a macro level, these issues have driven government led health policy to address the barriers to care and the inequities in health outcomes. For example, implementing the third article of Te Tiriti o Waitangi (the Treaty of Waitangi), which provides for the right to equitable care for Māori and informs the development of government led ‘Māori health’ improvement strategies (Reid, Cormack, & Crowe, 2016). Critics such as former National Party and ACT Party Leader Don Brash claim that targeted Māori interventions are racist. Surely, it is the disparities in health status and outcomes that is racist, not the interventions that attempt to correct them.

From a kaupapa Māori lens, the points illustrated here provide the motivation to explore and investigate strategies that foster equitable access and improved health outcomes for Māori.

Research Strategy

Globally, there is limited research that has explored the use of mHealth technology by nurses to enhance access to primary health care for Māori from a cultural kaupapa Māori lens (Verbiest et al., 2018). Therefore, it is important that the

• ³ UN Committee on Economic, Social and Cultural Rights, (2000), General Comment No. 14: The right to the highest attainable standard of health, E/C.12/2000/4.

design of the research could elicit the nurses' experiences and perspectives in a culturally appropriate way. Specifically, this research explores how the nurses engaged with their Māori patients through mobile technology and their perceptions on whether this method was effective to improve access to primary health care services.

The process of conducting this research is depicted in the 'Te Maunga Motuhake' framework presented in Figure 2. Drawing on mātauranga (Maori knowledge), purakau (Story telling) and te Ao Māori (Maori worldview) concepts; the cultural and spiritual aspects highlights the differences between Maori and Eurocentric perspectives.

From a mātauranga (knowledge) Māori perspective, the triangular shaped model depicts maunga motuhake (special mountain) that rises towards the realms of Ranginui (a Māori god known as the Sky Father) that is remote from human settlement, where mountains stand tall amongst the people. There is also a spiritual connection as at the peak of the maunga there were places of great awe and spiritual presence that became a shared connection with their tupuna (ancestors). Inside the shape of the maunga is the process for the constructivist GTM and the heart at the centre of the maunga is the kaupapa Māori methodology. The heart depicts that kaupapa Māori is vital to protecting the participants of the research and is inclusive of their world view. The surrounding terms depict how each part of the research process is inclusive of the Te Ara Tika ethical guidelines, Te Tiriti o Waitangi and kaupapa Māori principles.

Figure 2: Te Maunga Motuhake:

A kaupapa Māori approach to constructivist grounded theory

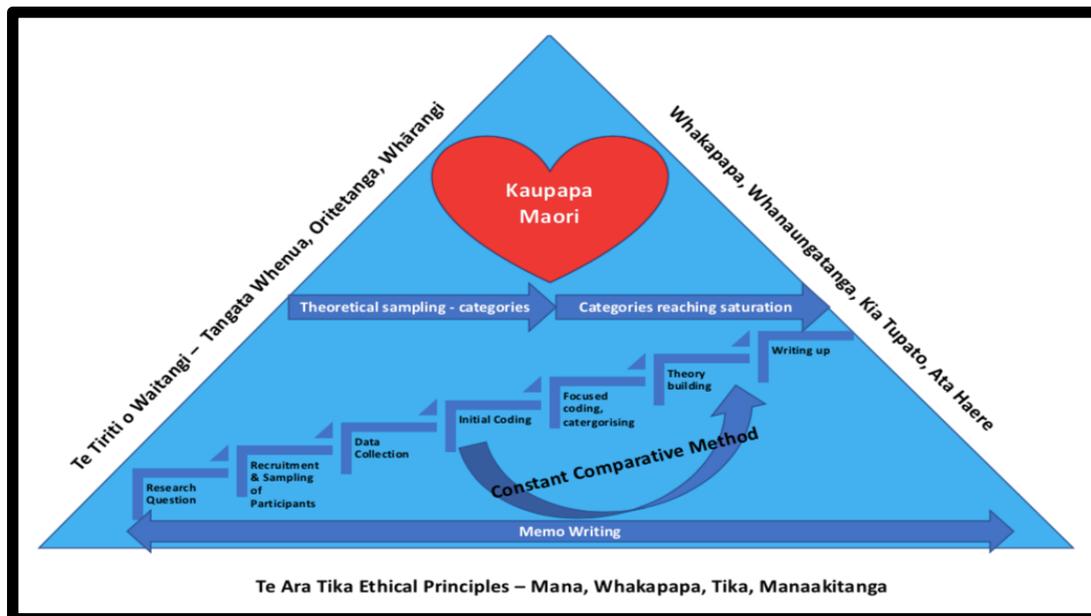


Diagram Source: Tia Ashby

The research process was initiated with a bottom-up approach. From the start of the process to the end, each step in the research process included the core kaupapa Māori and Te Ara Tika ethical principles (Health Research Council of New Zealand, 2010,). The research process started with the question ‘What is happening?’ and an initial literature review was conducted.

The next step was recruitment and sampling of participants. Then data was collected that involved the practice of karakia (prayer), whakawhānaungatanga (establishing relationships), mihi (greeting), outlining purpose and ata haere (moving slowly and allowing time for informed consent). Then the data were

transcribed using NVivo software and rechecked by a word-for-word check via a digital audio device.

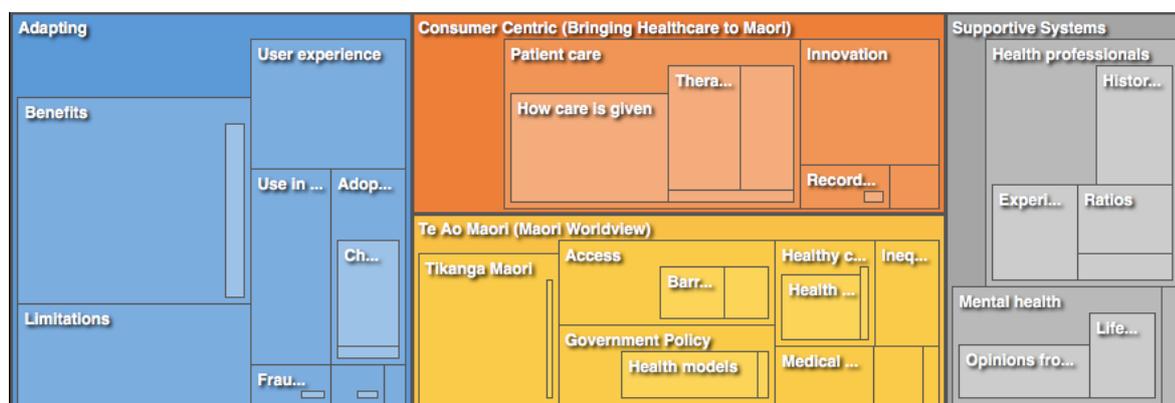
Initial coding was then conducted. After an initial review and analysis of the data, codes were assigned to the emergent themes in the data and an iterative process occurred where codes were grouped into concepts and then broad categories. Abductive reasoning methods were utilised to explore relationships, using a comparative method, and these were linked between the core categories and concepts until saturation of the data occurred. The final step included a secondary literature review and featured the generation of theory that was derived and grounded from the data.

Generating and Constructing Theory

This section explains the analytical process of producing a grounded theory. First, it is important to understand the definition of the term ‘theory’. A theory can be defined as “relationships between abstract concepts and may aim for either explanation or understanding” (Charmaz, 2014). Grounded theory attempts to seek answers for how, what and why questions. The ‘what’ questions attempt to “abstract understandings that theorize relationships between concepts” (p. 228). Interpretive definitions of theory place an emphasis on theorising patterns and connections that allow for “interindeterminacy rather than seeking causality” (p. 228). Furthermore, in this type of theory, emphasis is placed on the subjectivity of the actor and the construction of theory is an emergent process. The final theory is

expressed as a relationship concept (see Figure 8) and is grounded from the data that I collected.

Table 6: Relationships between Core Categories, Sub-categories and their Properties



The sub-categories changed many times through the theoretical saturation and sampling processes. This process was iterative until the relationships linked and reflected the participants' experience, which saturated the core category of empowering Māori to access care through mHealth technology. (Bringing primary health care to the people, mHealth initiatives inclusive of Te Ao Māori (Māori worldview), and having *supportive systems*.) A list of how the theory was generated is shown in Table 7.

Table 7 – Constructing the theory

| Sociological Constructs | Constructual NVivo Nodes |
|--|--|
| Core Category | Sub Categories |
| Improving nurse-led mHealth initiatives to expedite access to care for Māori | Consultation & Governance |
| | Enhancing Communication |
| Sub Categories | Interdisciplinary access & communication |
| Bringing health care to the people (consumer centric health care) | Concepts |
| Inclusive of Te Ao Māori (cultural) worldview | Whakapapa |
| Having supportive systems | Mātauranga Māori |

| | |
|--|--|
| Concepts | Tikanga Māori |
| Ngā Urutau (Adapting) | Tinorangatiratanga (Self-determination) |
| Creating an environment of trust | Benefits and drawbacks to technology |
| Relationships, whānaungatanga | Iwi/Hapu Consultation and Engagement |
| Oritetanga (Equality) | Risk Management |
| Kaupapa Māori (Māori approach) | Properties |
| Whakamanatia (Empowering) | Being culturally responsive |
| Therapeutic Communication | Nursing support |
| Māori Health Models, Mātauranga Māori | Change Management |

Technology adoption

Quality Care

IT support

Properties

IT infrastructure

Power imbalance, Innovation

Interdisciplinary collaboration

Political implications

Cultural competency

Nursing support

Change management, Quality
Care

Evidenced based care,
Consumer Centric

The Literature Review

Introduction

A preliminary literature review was conducted that provided the rationale for this research. The following literature review was conducted to focus on the core

categories and codes that were derived from the analysis of the data. The aim of the review is to develop theoretical sensitisation and to assist in the connection of the literature with the core categories, properties and codes. In addition, the selected core categories will be the focus of the current literature review as the core categories and their properties were considered very important to development of the grounded theory.

The considered literature primarily includes theories from the disciplines of sociology, mātauranga Māori and psychology.

The challenges associated with addressing the barriers in access to care and improving the health outcomes for Māori.

The review of the literature in this paragraph relates to the focused code of barriers in access to primary care and explores the challenges in the relationships between organisational delivery, nursing roles in the delivery of care to health consumers and their whānau.

Research indicates that despite the growing financial and human resources that are available for improving indigenous health, many initiatives have failed to make an impact on health indicators. Mendes, Leite, Langdon and Grisotti (2018) explain that part of the explanation is due to “gaps in the continuity of care, shortages and high turnover among health care workers, and the need to establish intercultural dialogues that promote coordination with traditional dialogues and the dissatisfaction of users towards the system” (p. 1). Addressing these complex

issues is no simple task for health eco-systems that are historically ingrained from their inception with Eurocentric paradigms.

Harfield et al. (2018) explain that indigenous health care services are more likely to succeed in improving the health of indigenous populations due to the provision of holistic services that are tailored to their needs when compared to non-indigenous led services. For example, the eight characteristics that they compared between indigenous and non-indigenous PHC services were “accessible health services, community participation, continuous quality improvement, culturally appropriate, skilled workforce, culture, flexible approach to care, holistic health care and self-determination and empowerment” (p. 6). In their research they found similarities in the characteristics of health service delivery models; however, one characteristic stood out between indigenous and non-indigenous led services and that was the ‘organisational culture’ and the influence of culture on the philosophical underpinning values of the organisation. Harfield et al. (2018) argue that new PHC delivery models that are underpinned by indigenous values are necessary, if any traction is to be gained to improving indigenous health.

Nga Urutau – Cultural Adaptation Theory (necessary for improving service design)

The category nga Urutau (cultural adaptation) relates to the need for decolonising primary care initiatives to improve self-determination for Māori. Although there are many different meanings for cultural adaptation, from a sociocultural anthropology perspective, cultural adaptation can be defined as the ability for human beings to adapt to changes in their environment through cultural

modification (Cohen, 2010). How this perspective relates to improving the service design of mHealth initiatives is that there is a need for adapting both the design of the initiative and the organisational culture that supports the use of the service to reflect the needs of the populations that organisations serve. This action would be an important process that acknowledges the status of Māori and their rights to equitable care.

Self-determination theory

Another theory to consider is self-determination theory (SDT), which provides an explanation for understanding human behaviour and motivation (Brooks et al., 2018). In health, SDT provides a rationale for why some people are motivated to engage in healthy behaviours and with health service programmes. Brooks et al. (2018) explain this process and posit that there are intrinsic human factors that underpin SDT: “inherent needs of autonomy, competency and relatedness that, if satisfied, promote behavioural self-regulation, optimal functioning and growth” (p. 554). Further to this they highlight that when a person’s “basic needs for relatedness is met” there is a positive emotional connectedness that can motivate an individual to engage with health services (Brooks et al., 2018, p. 554). For example, Ratima (2010) asserts that a kaupapa Māori approach should be utilised in health promotion and services to enable Māori to have increased control over their health and well-being. In addition, she argues that “the principle of cultural integrity requires that Māori health promotion is not only culturally appropriate, but that it affirms and strengthens Māori identity” (p. 12). Therefore, SDT is one

way to explain the need for adapting mHealth initiatives to the Māori health consumers requirements.

Applications of cultural adaptation to mHealth design

mHealth approaches through the lens of cultural adaptation theory considers how mHealth initiatives should be tailored to the unique needs of the target health consumer population. Williams, Wang, Burgess, Li and Danvers (2012) argue that nursing interventions should be adapted to suit the unique needs and culture of the target population. They also point out that cultural adaptation is a vital step in process for any new health intervention.

For example, Magalaga et al. (2017) empirically researched the acceptability of a culturally adapted mHealth lifestyle intervention that was used to improve the type two diabetic health outcomes of Filipinos. Over half of the respondents indicated that the cultural relevance of the programme increased their engagement. Over 60% of the respondents indicated that their mindset shifted from that of despair to self-efficacy. In this context, culturally adapted health initiatives were successful if family members were included in the intervention, the intervention used incorporated easy to understand pictorials and included their cultural input into the design. All of these approaches were important factors for the design of mHealth initiatives. However, it is important to note that not all types of mobile technology are effective, as many of the participants in the study indicated that self-recording a

lot of information on their Fitbit mobile device was time consuming, which demonstrates that the intervention has to be user friendly.

Another study to consider is from Racine (2003), who advocates for the use of a post-colonialist theoretical approach to health initiatives to reveal and address health issues that are related to social class, race, gender and ethnicity. Stark, Laurie and Walker (2019) support this notion and articulate that there are underestimations of the power dynamics that can exist between Eurocentric influenced primary health care initiatives compared to non-dominant discourses (Stark, Laurie & Walker, 2019).

Colonialism theory can best be described as research into the practice of exerting control over another country or occupying another country with settlers and economically exploiting the land, whereas post-colonialism theories focus on the consequences of human action due to the exploitation of the people and their lands (Kohn & Reddy, 2017). Whether or not it was intentional, the forced assimilation and acculturation of Eurocentric influences in health care has placed the indigenous New Zealand Māori population on the back foot (Durie, 1999; Racine, 2003; Reid et al., 2017).

For example, in Racine's (2003) study she found that Māori experienced missed opportunities for thorough diagnostic testing to detect health issues in primary care. In addition, outreach and attempts to engage with high risk whānau by primary health care and social services were described as poor by the participants. A rationale for one of these experiences in health care was a nurse not providing

diagnostic testing due to the inflexibility of the protocols. For example, Māori experience high rates of diabetes compared to non-Māori in Racine's study; she interviewed a pregnant women that had a strong history of gestational diabetes in the family, and despite the nurse knowing this patient's family history information she refused to give a post-partum diabetes test due to her being under the age of 35 years.

This highlights that set parameters for nursing protocols require flexibility to include the health needs of Māori. Setting testing for 35 years plus may be appropriate for the population on average but is not appropriate if health services want to improve the overall health status of Māori.

Empowerment Theory – In attempts to address barriers and expedite access

The category of empowerment relates to the social processes of empowering Māori through culturally appropriate mHealth services. Empowerment theory is defined by Shearer (2009) as a “dynamic health process that emphasises the participation of changing oneself and one's environment, recognising patterns, and engaging inner resources for well-being” (p. 1). From an organisational perspective, health empowerment can be fostered by “facilitating one's awareness of the ability to participate knowingly in health and healthcare decisions” (Shearer, 2009, p. 1). The application of kaupapa Māori to the design of mHealth delivery is an integral part of empowering Māori health consumers and the their whānau.

Enabling technology and the uberisation of health care

Enabling smart technology is vital to the delivery of mHealth initiatives. Smart technology can be described as a cognitive computing system “that is capable of making decisions without human intervention” (Thompson, 2015, para. 1). He explains that smart technology incorporates algorithms and machine learning (artificial intelligence) to boost “efficiency and productivity” in human processes.

Fornell (2015) states that the future of healthcare delivery is encapsulated in the term uberisation of health care. Health consumers want convenience, value for money and on demand services that best meet their needs and lifestyles. The term uberisation comes from the uber driver service that transformed traditional taxi services, where people can order a ride from their mobile phones. With close to 90% of the New Zealand population owning a mobile phone and a surge in engagement with social media irrespective of socioeconomic status, there is an opportunity for mHealth to transform health eco-systems (MoH, 2017; WHO, 2011). Digital initiatives have the future potential to address not only Māori health concerns but also that of the general population. For example, if a parent has an unwell child and they have no means of transport she could pull out her mobile phone and through ‘health applications’ could get in touch with outreach primary health care services. Medications can also be delivered through mobile technology; an example of this is the Zoom pharmacy in New Zealand, where a prescription is sent via e-fax from a health organisation to their virtual pharmacy and the medications are delivered to the doorstep of the individual (Zoom Pharmacy, 2019).

A considered aspect to this concept is that in order for the ‘uberisation’ of healthcare to transform New Zealand health eco-systems, the technological infrastructure, skilled personnel and resources need to be available in order to support implementation.

Engaging supportive systems – community teams, marae

As previously discussed, consultations with Māori iwi (tribes) and hapu (sub tribes) are important factors that can empower Māori to take ownership of their health and their whānau (family’s) health and well-being. Similar to Chinese culture, a Māori individual’s whānau is valuable to them and therefore this consideration should be factored into health interventions. Engaging supportive systems also encompasses the need for health organisations and initiatives to work collaboratively to economically make the best use of the available resources and to ensure a holistic approach is utilised.

Indigenous world view – Mātauranga Māori, Te Reo Māori

Including an indigenous world view is important for optimising value-based healthcare. Mātauranga Māori is an epistemology for ways of knowing and its core roots have been established throughout Polynesia (Saddler, 2007). The term encompasses kawa (cultural practices) and tikanga Māori (cultural principles) and is based on intergenerational values and spiritual connections that constantly evolve as Māori make sense of the world around them.

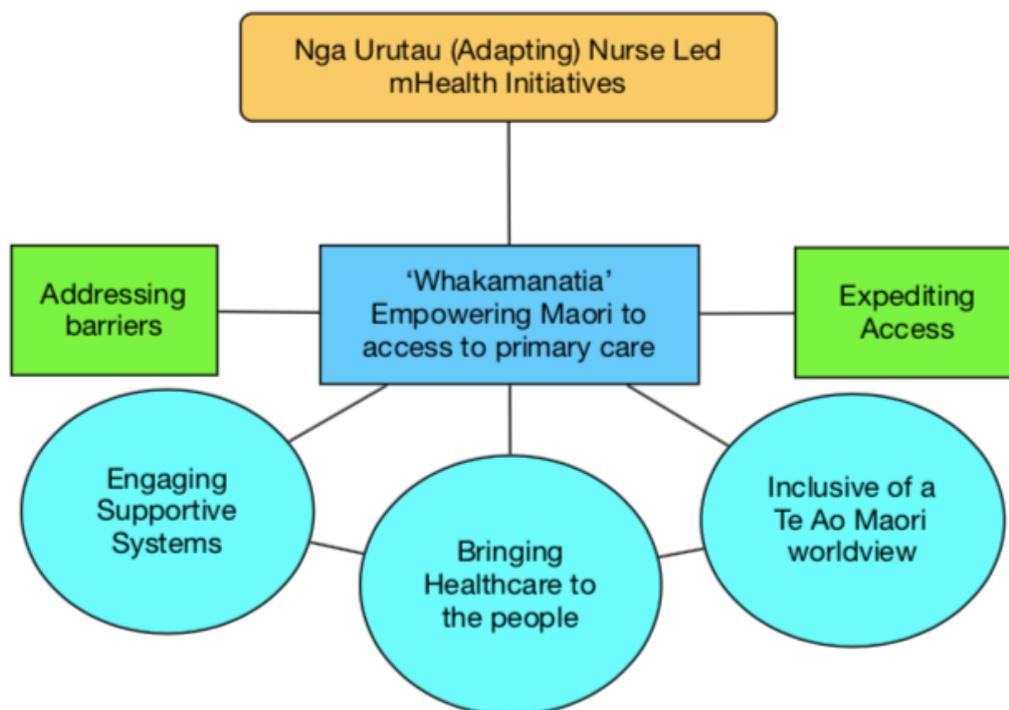


The Derived Grounded Theory

Introduction

This research explored what was happening to nurse-led mHealth initiatives and access to primary health care for Māori. As discussed, the purpose of the research was to develop a theory that can explain how enabling technology can empower Māori to access primary care services. It identifies what improvements may need to be made to improve nurse-led mHealth initiatives to enhance outcomes and expedite access to care for Māori.

Figure 8: Theoretical Conceptual Construct



Participants

Table 9: Participant classifications and attributes

| Pseudonym | Age | Role | Location | Area of practice |
|-----------|-------|------------------------|------------|------------------|
| Kiri | 41-50 | Clinical Nurse Manager | Urban | Public health |
| Mere | 41-50 | Nurse Practitioner | Semi-rural | Primary care |
| Aria | 31-40 | Registered Nurse | Rural | Primary care |
| Maia | 21-30 | Student Nurse | Urban | Public health |
| Kani | 31-40 | Registered Nurse | Rural | Primary care |

The five female Māori nurse participants in this research came from diverse backgrounds and experience (see Table 9) and provided a wealth of information

for the research. The ages of the participants ranged from 21 to 50 years. All nurses had worked in primary or public care and all had used some form of mobile technology to deliver health care to their patients and whānau. Three of the five participants currently work for Māori organisations but have also had previous experience within mainstream primary care services. The other two work for DHBs in Te Tai Tokerau (Northland) and Tāmaki Makaurau (Auckland).

Four of the five participants had experience with a broad range of mobile health devices, such as tablets, mobile phones, wearable devices and laptops, to both communicate with and facilitate access to primary care services for their Māori patients. Two of the participants were very experienced with technology. They both worked in organisations that utilised cloud-based technology that included both telehealth services and virtual facilitation of access to a clinician for their Māori patients. On the other hand, one participant had only recently been given access to a smart phone to send text messages as a form of communication with her patients.

All participants acknowledged that it was a lot more difficult to cope with their Māori patients as they generally had an unmet health need, multiple comorbidities or did not attend their booked appointments. Four participants also acknowledged that the current health care delivery models within their unique organisations needed immediate improvement. Although technology was available, there were socio-political and cultural implications that were hindering progress.

Core Theme: Adapting

In grounded theory research, the core theme is the centre piece to the research model as it brings together the other categories to make sense of the proposed conceptual model (Charmaz (2016). The findings from this research indicate that the core theme ‘Ngā Urutau’ (adapting) is a key socio-cultural process that is necessary for the delivery of nurse-led mHealth initiatives. ‘Ngā Urutau’ refers to the sociological term ‘adaptation’ or the gerund ‘adapting’, defined by Sullivan (2009) as “the manner in which social systems react to their environment, or it will break down” (p. 7).

According to Pottie, Hadi, Chen, Welch, and Hawthorne (2013), culturally-adapted health care is an important factor to consider in health initiatives as it acknowledges the patient's customs, beliefs, values and language. In addition, they explain that the process of ‘cultural adaptation’ may include communicating in the patient's language, matching patients to health professionals from the same ethnicity or implementing health initiatives that reflect the patient's cultural needs. Overall, they argue that culturally-adapted care can improve patient satisfaction, improve health outcomes and address some of the barriers in access to care. The findings from the current research supports these conclusions from Pottie et al. (2013), in that all participants mentioned that Māori patients were more receptive to communicating with a nurse through technology when a kaupapa Māori approach was utilised. The data also show that the process of ‘Ngā Urutau’ (adapting) entails many aspects of care, ranging from the behavioural process of

nurses adapting to innovative methods of delivering patient care to the inclusion of kaupapa Māori into the design and delivery of mHealth initiatives.

Ngā Urutau ‘adapting’ is an important concept that can inform the design of future nurse-led mHealth initiatives. The findings of this research suggest that the term ‘Ngā Urutau’: adapting has different meanings and associations. The key concepts that adapting refers to are the factors associated with the cultural adaptation of nurse-led mHealth initiatives. This includes the need to apply a ‘Te Ao Māori’: a Māori world view in the design and delivery of services to acknowledge the Māori language, cultural customs and needs of the whānau.

‘Ngā Urutau’ adapting also refers to the behaviour of nurses using mHealth technology and the subsequent adapting process that is experienced by nurses. For example, one of the participants explained that “A tikanga Māori perspective on technology linking te Ao Māori domains such as the ‘Te Whare Tapa Wha’ Māori health model’ should be included in mHealth initiatives. In addition, she explained that Māori would adapt to the changes associated with how they communicate with health professionals through mobile technology by asserting “*that anything that can add value or help Māori is beneficial*”. She believes “*that adaptation will occur just like it did with the EFTPOS card*”.

In addition, the data from this research show that, from the nurse's perspective, Māori patients were more receptive to using mHealth communications with the nurse after the nurse explained that the service was a Māori programme. Informed patient centred care and the benefits of using a kaupapa Māori approach offered

security and fostered trust in the use of technology for their health needs. For example, one of the participants noted that,

For the majority of the families, once you explain to them what it was that we were trying to do and give them an explanation and catering it to what they wanted... saying this was a Māori programme for Māori kids and giving them a type of (sort of) security. So they knew that it was coming from their own people and that was something that they really thrived on and they were like really proud of using something like that. I think that really stood out to me. They knew that it was coming from an area developed by Māori for Māori so it was that kaupapa Māori approach.

Another participant added that:

I think they became a lot more receptive when they knew that instead of you just chucking them a piece of paper or the information sheet, through the technology they were given everything and if they had any questions they could contact at any time.

A noticeable theme here is that establishing relationships, convenience and developing trust through cultural adaptation was a key positive indicator when working with Māori. Two of the participants suggested implementing te reo Māori translations as an option and using language that was easy to understand with no medical jargon would be appealing to their Māori patients.

Another participant suggested that the use of mHealth technology allowed two-way communication between the nurse at a clinic and a patient in their home. This convenient process also addressed the negative effects of ‘positions of power’ between the health professional and their Māori patients, a relationship that acts as a barrier for Māori seeking care. Some of the participants observed that there can be a reluctance for Māori to talk directly to medical professionals from the fear of being judged. But through technology this did not appear to be an issue. For example, one of the participants articulated that within health care there is a *“power imbalance and there is a need for Māori to feel valued and have autonomy of their own health needs. There is an opportunity for mHealth to improve access for those who are experiencing mental health issues”*.

One of the participants also mentioned that we are in an era of *“Dr Google and Nurse Google”*. This means that nurses need to *‘adapt’* their practice by educating their patients on the recommended New Zealand health websites that they can go to if they prefer to use these health educational resources. She observes that,

Back then we didn’t have a digitised system, it was all case files from being hard copies to e copy. That happened for 20-30 years and digital technology for whānau has vastly improved and a lot of that even in our whānau now I now know that you’ve got a mobile phone and I mean now that you have Dr Google and nurse Google the main thing that we have to watch is that they can filter that information because there is so much of it.

On the other hand, the rapidly changing primary care environment has created some ambiguity for nurses in the use of mobile technology in their practice. Therefore, 'Ngā Urutau' can also relate to the process of 'adapting' nurse adoption behaviours. This can include instructions on how to use mobile technology in nursing competencies and education and taking steps to ensure cultural competency is frequently applied to their practice.

Data from this research show that nurses' range in behaviour and acceptance of new technology, depending on their age and technology literacy. Three of the participants suggested that age is a common theme that determines user behaviour. Specifically, baby boomers seem to be more resistant to acceptance due to inexperience and unfamiliarity with technology. In contrast, millennials appear to be more 'tech savvy' and keen to use technology to make their job easier. For example, one of the oldest participants in this study that has over 30 years nursing practice argued that:

Some of the old school nurses, maybe one or two, will just not ever get real savvy in it. They wouldn't understand dash boards, they wouldn't understand doing a search and all of that, such as where the results go. The new younger ones that have been trained; they have already come with that knowledge. Like in one day they already have that information with what nurses would have had to apply in 50 years, they get in one day.

By contrast, it was also noted that although millennial nurses might be great with technology, they generally lack the knowledge, experience and confidence to make a sound care plan through technology. Thus, preceptorship was another aspect to consider for delivering quality care. This research suggests utilising an appropriate change management process for nurses that is inclusive of kawawahakaruruhau 'cultural competency' and 'preceptorship' with the technology is an important factor to consider in the 'adapting' process.

Initially, there was uncertainty with the adoption of mHealth technology by the nurse practitioner, due to her unfamiliarity with the technology. However, she mentioned that the 'adapting' process did not take long, as the benefits of having on-demand support from a virtual doctor and being able to see all of her patients in a timely fashion outweighed the drawbacks.

We managed to find a doctor who could provide virtual cover. The technology side of things I was a bit unsure of at the start, but because he could cover me when I needed it, I liked it. Well, he still does actually. During the weeks that I'm on I will say to him that I have got a few patients to be seen and he says that he can assist with providing diagnosis and treatment for them. There are about twenty-five hundred patients, but the doctor does come on site possibly two days a week and there are some weeks when we don't have a doctor at all. Having no doctors on site can pose a risk but having access virtually to him means that we have the mutual support to continue.

Similar comments from other participants noted that a benefit of technology was having rapid access to clinician and specialist support, especially if their patients had complex medical conditions or required specialist intervention.

Core Concept: Empowering Māori

The other core concept ‘empowering’ can be used to include that mobile technology has the opportunity to empower Māori patients and their whānau to take ownership for their health and promptly access primary care services from their home, health clinic or education centre. Roberts (1999) explains that, from a sociological perspective, empowerment is a dynamic term that has many definitions and is viewed as both a process and an outcome. In relation to the findings from this study, ‘empowering’ can be defined as a redistribution of resources and power to enable an individual to exert control over their health (Roberts, 1999). She also emphasises that empirical evidence supports the notion that those who are empowered are healthier than those who are not.

The results from this study indicate that smart mobile technology can enable Māori to access care because it can be tailored to their needs and based around their unique sociocultural and economic circumstances. That is, they can gain access to primary care services at a time that suits them, thus offering convenience and flexibility in access. This is much better than giving them an appointment time and expecting them to turn up (knowing that access is a barrier).

One of the participants explained that a benefit of mobile technology for Māori patients was that it gave *“them more control over their health and well-being. I guess there's potential for better health outcomes for Māori. If there's an increase in access so hopefully that would reduce your morbidity and mortality rates”*.

Another participant posited that technology empowers Māori by having transparency in what the clinician has written about you. She states that *“Access to your own health information is also a benefit for value-based care. Issues with recalling what the doctor told you can be addressed with technology”*. This would be a game changer for New Zealand and in many areas worldwide, as you generally have to apply to obtain your medical notes. This arduous process can be daunting due to the amount of paper or electronic work that it involves.

In addition, a few of the participants agreed that technology has the capability to provide access to online health education resources. Therefore, if Māori have a better understanding of their diagnosis, prevention and the implications of non-compliance, then they are more empowered to take ownership of their health. This could lead to better success in improving health outcomes for Māori. For example, two participants argued that:

Technology benefits in poor compliance to care plans, access to plans from GP can help reinforce and educate the whānau on what they need to know to manage their health condition properly in order to prevent acute hospital admissions.

Properties: ‘addressing barriers’ and ‘expediting access’

The properties of addressing barriers and expediting access are linked to empowering Māori because in order for Māori to access primary care, initiatives need to directly address the barriers. For example, there could be transportation issues (having no vehicle or access to public transport) or financial burdens (having no money for petrol or to pay for public transport). Another factor is that Māori families might have multiple children, including babies and toddlers. So often a barrier is availability of and/or ability to afford childcare to attend the appointment. One of the participants outlined the benefits to using technology in that it addresses the barriers in access. She states that nurse-led mHealth solutions are:

Definitely something that Māori need if they're not accessing it as you can see in the statistics, they are not accessing health care. And I think this is enabling in the way that it is so easily accessible to anybody with a smartphone, basically anybody in this day and age and can access it. It's nice and easy simple and they can read through and if I have any queries they can come straight back to the team and the team can answer those questions. They are on that same level, there's no power imbalance, which I think is massive in the health industry because there is a huge imbalance of power and if Māori want to be on that equal level you need to be treated the same, I think in any culture it is more important for them to feel that sense of pride - it's not taking away everything and working together in that partnership it's not that imbalance of power. So, I think that's a really good benefit of the programme.

The other key finding from the data is that access to care can also be enhanced if the person is seeking treatment for a simple health condition, a condition that does not require a lot of medical investigation. These conditions include skin infections, head lice, scabies, asthma medication or those that only require a repeat prescription. This is in contrast to more complex medical conditions such as cardiovascular or neurogenital disorders that require some form of physical assessment or investigation. For example, two of the participants outlined the streamlined process they used through enabling technology.

We say okay, so this child needs treatment medication and then we can fast-forward the whole process instead of taking them to the local doctor, which is time, money, effort. Technology breaks down those barriers and the team using that technology is there to support.

The key theme from this research is that although some of the participants recognise that there are benefits to using mobile health technology in practice, there are limitations that technology cannot address, especially limitations that stem from poverty. It is interesting to note that despite having the best technology, it is useless if whānau (families) do not have access to it. This is particularly evident in rural areas where access to the internet is sometimes not available or unreliable. Other issues raised included the functionality of the technology from a nursing perspective. For example, power cuts and outages increase the risk to document integrity, as it is a legal requirement to document patient contacts. When this occurs, they have to revert to paper-based documentation. Highlighting the need for risk mitigation frameworks.

Sub-category: Including Te Ao Māori

The sub-category ‘Te Ao Māori’ refers to the inclusion of a Māori world view in nurse-led mHealth initiatives. ‘Te Ao Māori’ is valued by Māori and respecting their culture is necessary to optimise their experience with primary care services and improve their access. Research indicates that historical concerns for the health of Māori still remain due to a categorically defunct health system that stems from the impacts of forced assimilation and colonisation (Davy et al., 2016; Harris et al., 2012; Oda & Rameka, 2012). In addition, some of the participants in the interviews acknowledged that there were issues within the New Zealand health system that surround institutional and political racism.

As we know with the care that we deliver now through government agencies and departments, when you look back to Māori health and colonisation, I guess the system doesn't work basically, particularly in mental health. I find a lot of our whānau are quite apprehensive given the history of mental health and they have this distrust, I guess, in systems anyway because they know their whānau have been locked up or put into hospitals. So yeah, the status quo definitely isn't working, and we need to be looking at the future and how we can use technology, I guess to give better access.

Another participant added that there are sceptical general practitioners who are threatened by nurse-led technology initiatives. She argued that there were differences in the level of funding allocated to Māori primary care services compared to mainstream general practitioners.

A lot of people would have come in judging and won't like this approach to health care because they have got like six doctors and multiple nurses. So they're doing really good. They're doing okay. And then you've got practices like ours where we've got one doctor if we're lucky. And so we've had to use technology and virtual care and we've had to get it and it's the best. I wouldn't work any other way.

Including a 'Māori world view' in initiatives that are intended for Māori aligns with a kaupapa Māori approach to the delivery of patient care.

Sub-category - Bringing Health Care to the People

The sub-category of bringing health care to the people entails the many opportunities that mobile and smart-enabling technologies can provide to health care service delivery. One participant mentioned the benefits that mobile technology can offer for semi-rural Māori. For example, three of the nurse participants have demonstrated that consultations via virtual conferencing (VC) with a clinician do work. They explain that when there is limited access to doctors, the VC option via mobile device is more effective than a making a clinic appointment. This is especially true for some of their patients due to their geographical location. For these patients, driving three hours to a 30-minute appointment with a specialist to the closest city was not economically feasible for high needs communities.

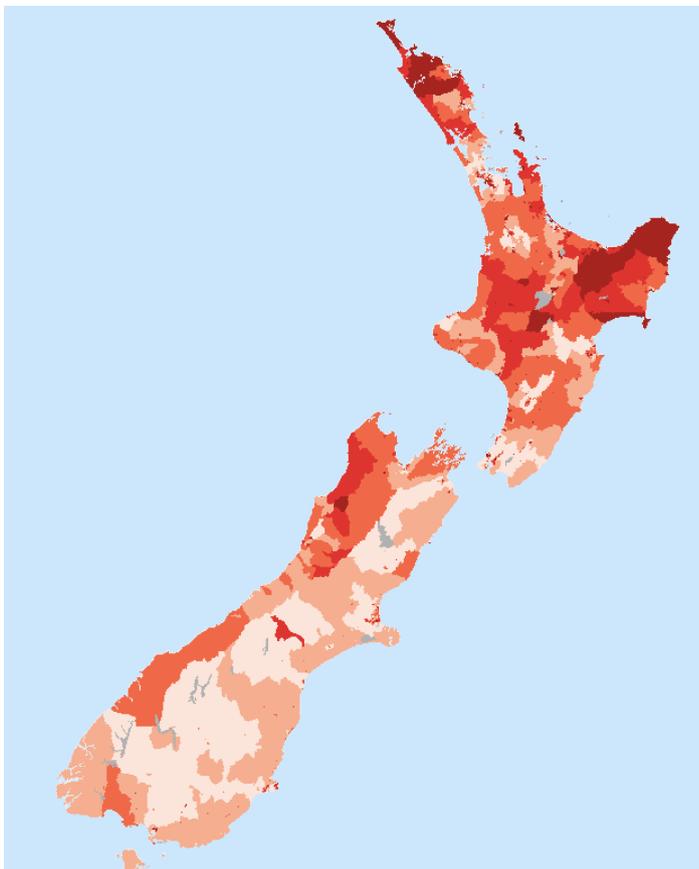
Technology in rural communities can improve accessibility. For example, having access to your own health information and transparency on what was recorded was argued as a key benefit with mobile technology, as there are issues with patients and their whānau recalling what the doctor had discussed, something that can be addressed with technology.

The app program we are using, I think it's just such an easy way for the whole family to get involved. Through this app they could see their child's progress and review the doctor's notes. Therefor, being informed of their care instead of going to the doctors and the doctor giving you a massive spiel that they won't remember. But if you look at the app you could go through what the doctor said and go through all of it, which I liked and this was something that stood out to me, the fact that you could go back and you could look at what's happening. You could stick to the plan and follow that plan and I thought that was a cool thing. You could also address health literacy; you have to use layman's terms to educate them on their medical condition and then you would also provide information around those conditions. They were getting information and they were getting education as well so you're improving health literacy, which I thought was awesome as well. If they don't go to the doctors and if they are not accessing this type of information, then they're not going to get it ever. So, it was a good way to get around it.

An interesting finding from this research is that the geographical areas where technology uptake was useful aligned to the locations on the New Zealand Deprivation map provided by Otago University researchers Atkinson, Salmond & Crampton (2014). This map (Figure 9) outlines where people are most susceptible

to increased environmental risk conditions such as poor housing, overcrowding and lack of access to public health services. This could indicate potential areas for mHealth initiatives to succeed in.

Figure 9: NZ Deprivation Map 2013



- In this map, the dark red areas are the locations that are the most deprived.
- The regions that the participants practiced were the Far North, East Coast, Rotorua/Lake District and the deprived areas within South and West Auckland.

Source: (Atkinson et al., 2014)

Sub-category - Engaging Supportive Systems

The final section in this paper reports the findings for the sub-category of ‘engaging supportive systems’. This term encompasses the diverse teams and organisations that are required to ensure the efficiency and effectiveness of mHealth initiatives. According to Smith, Saunders, and Stuckhardt (2013), health care experience and economic outcomes can be optimised when “patients, their families, other caregivers, and the public are full, active participants in care” (para. 2). This includes interdisciplinary communication and support between health and allied health professionals and information, communication and technology (ICT) support. This sub-category highlights the importance of consultation and iwi/hapū based community services to support those out in the community.

One participant outlines this process and explains how interdisciplinary engagement and support is necessary for mHealth initiatives and facilitating access. For example, after they have logged the case and the clinician approves and generates a prescription then:

The pharmacists can send us a message or an email to say that they've updated their script. So, we communicate with other staff members through emails and text messages as well. And that's probably the best way that we communicate with each other.

The fastest method of communication and the favoured mobile technology for these nurses was their mobile phones. In addition, two of the participants mentioned that to improve the nurses' confidence with using technology, it would be better *“if they had a support person to help with whatever technology we are using”*. Indicating the need for robust preceptorship training.

An important theme from the data is that some of the key support networks for Māori are their whānau (families) and, as part of Māori tikanga (customs), their iwi (tribe) and hapū (sub tribe) are important to their well-being. One of the participants noted that Te Tiriti o Waitangi has had an important effect on Māori. For example, there were a number of organisations that supported nurses in their practice and included Māori cultural and spiritual advisors from local iwi that were available through mHealth technology and this was well received by their Māori whānau that were engaging with their services. This illustrates how engaging with community services can optimise mHealth solutions. Therefore, community support is required to optimise mHealth initiatives and consultation, engagement and collaboration with iwi should occur to assist in the design of mHealth solutions for their people.

Another aspect of engaging supportive systems is the need for mentoring support for nurses. This includes, for example, engaging nurse support through preceptorship or additional training. The research found that there was uncertainty from some nurses to utilise new technology. But once they had received support and were given the opportunity to learn on the job from someone who knew what

they were doing, they could see the value in what mobile health technology could offer.

Implications, Recommendations & Future Research

Limitations

There were limitations to this study, for example, the data collected from a limited sample of five nurses threatens the credibility of the study; however, further time and resources could help to achieve a wider range in data. In addition, due to the complex interrelated factors associated within health access, nurse behaviours and their intentions to adopt was not explored in depth. Nor was the technology aspect explained in depth.

Implications for nursing practice

The findings from this research suggest the following implications and recommendations:

- To ensure the success of mHealth initiatives for Māori, nursing education should include practical digital technology modules, with the inclusion of using different forms of mobile technology for patient care.

- Cultural competency training for nurses should include how to apply Te Tiriti o Waitangi principles into practice, with good practical examples via scenario-based training. In addition, consideration should be given to the frequency of this training.
- If mHealth is a future option for organisations, then preceptors that are experienced in the use of technology for patient care should be matched with the nurses that may need additional support.

Implications for health organisations using smart technology

- Cultural factors should be included into the design of future nurse-led mHealth initiatives for Māori and should involve consultation and collaboration with iwi and hapū community health and social services. The findings from this study suggest that leveraging the support of the community, can optimise the success of the initiative. In addition, the technology should include the option to communicate in Māori.
- In addition, consideration of enabling people to access their own health information in the design of mHealth initiatives could increase transparency on what was written by the clinician and could enhance health literacy and therefore empower the individual to take ownership of their own health.

- If mHealth is future strategy for organisations, then ensuring appropriate access to technology support and having the infrastructure is imperative.

Recommendations for future research and discussions

There were many questions raised in the conduct of this study that necessitate further exploration and investigation. A key question is how can the public health system increase consultation and engagement to effectively design mHealth care initiatives that are targeted towards improving access and care for Māori? In addition, does New Zealand have the technological infrastructure and ICT support necessary to ensure that the technological health initiatives suggested in this research are cost effective to the New Zealand taxpayer? Finally, although the central theme of this research was Māori health care, this research has raised questions on whether mHealth technology could add value to care of the elderly, as some of the participants articulated that this is where an opportunity exists, especially in care homes where there is limited clinician support.

In addition, it was also very interesting to note that political issues and competition between primary care organisations appear to be impacting the collaboration of multidisciplinary teams to deliver optimal value to health consumers. This finding has made me question if these organisations are really interested in helping to improve equity in health care or is this another effect of capitalism. There is also another opportunity here to explore these additional findings.

Lastly, further research is required on the cost effectiveness of mHealth initiatives and the how this model of health care delivery impacts on patient outcomes. Additionally, the implications mHealth initiatives have on nursing practice and expanded scopes of practice should be the focus of a future studies.

Conclusion

This research developed a theory of empowering Māori to access primary care services through enabling technologies; using a kaupapa Māori methodology that was informed by a constructivist grounded theory methodology. The emergent theory proposes that culturally adapted enabling technologies can expedite access and empower Māori by bringing health care to the people. The conceptual model Whakamanatia depicts the relationships that are required to empower the Māori health consumer. This research expands on previous work in the utilisation of mHealth technology to optimise access for indigenous populations.

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