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**The Impact of Military Culture on the embedding of
Continuous Improvement methodologies within the
New Zealand Army**

A thesis presented in partial fulfilment of the
requirements for the degree of

Master of Quality Systems

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New Zealand

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Abstract

This thesis explores the impact of military culture on the ability for the New Zealand Army to successfully embed continuous improvement methodologies; namely Lean Six Sigma, and whether NZ Army Culture is supportive of the methodology. Current literature discusses both culture and the ability for organisations to change, and this is used as the basis for informing this research. Although the military is representative of the culture from where its members are selected, Military organisations themselves represent a specific occupational culture which is relatively isolated from society. It is this difference that makes the military an interesting organisation to study, and the research will examine whether the traditional norms of military service, the beliefs, ideals and regulations, impact the NZ Army's ability to successfully grow a culture of continuous improvement.

A mixed methods research is used to analyse the relationship between Military Culture, and the New Zealand Army's effectiveness in embedding continuous improvement, with a five part questionnaire/survey being the selected data gathering method. The survey gathers specific information on;

- the training and experience of respondents with Continuous Improvement, and
- the cultural environment that exists in the NZ Army and how this impacts on continuous improvement.

I draw on the findings of the survey and the literature to answer four questions about NZ Army Culture and their journey with continuous improvement, the results of which will be of value to both the NZ Army and academics who are interested in the impact that culture has on making change within organisations such as Military forces.

Statement of Originality

This is a 90 Point Thesis for submission to Massey University for the qualification of Master of Quality Systems (MQS). This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Mark Richards

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- Appendix 1. Individual respondent OCAI Graphs – 4 to a page
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Glossary

3CI	Courage, Commitment, Comradeship, and Integrity
CDF	Chief of Defence Force
CN	Chief of Navy
CVF	Competing Values Framework
Dx	Defence Excellence
F35	Future 35 – our strategy to 2035
LTGEN	Lieutenant General
LSS	Lean Six Sigma
NZDF	New Zealand Defence Force
OCAI	Organisational Culture Assessment Instrument
RNZN	Royal New Zealand Navy

1. Introduction

In 2010, Chief of Defence Force (CDF) Lieutenant General (LTGEN) Rhys Jones, stated in the New Zealand Defence Force (NZDF) Future 35 (F35) – Our strategy to 2035 document (New Zealand Defence Force, 2010) that;

- he wanted to maintain a continuous improvement environment.
- he wanted to be able to measure the effectiveness of improvements in productivity and performance, and
- he wanted to eliminate low value or wasteful activities, improve processes, and conduct an organisational cultural audit to ensure the culture within the defence force would support his plans.

In 2012, the NZDF embarked on a journey of organisational excellence. This followed the success of the Royal New Zealand Navy (RNZN) who became the first public sector organisation in New Zealand, and only the third New Zealand business in 10 years to win a Baldrige Gold award from the New Zealand Business Excellence Foundation (RNZN, 2009). In accepting the award, Chief of Navy (CN) said that this demonstrated that the Royal New Zealand Navy is receptive to change and new ways of doing business, and in order to support a high operational tempo in a financial environment that is always constrained, RNZN had to focus on continuous improvement in technology, business processes and the training and employment of their people.

In his introductory speech at the launch of the Defence Excellence (Dx) program, LTGEN Jones made the following comments (Jones, 2012);

- The NZDF needs to be an organisation that is focussed on adaptation, seizing opportunities and continuing to be on the leading edge.

- Whether you are uniform or civilian, full-time, part-time, an operational unit, a middle support unit or a depth organisational support unit, you all have a key role to play.
- To ensure our leaders and commanders are provided with the appropriate tools, we are adopting and adapting a system to be known as the Defence Excellence programme. It is not a programme in terms of “this is another project we’re bringing in”. Defence Excellence is what we will use to change our entire philosophy of how we command and control; how we will run the NZDF.
- The Defence Excellence programme will pick up on those tasks and activities that we do well because excellence isn’t something totally new for all of us.
- Defence Excellence is not just a programme or style of work that we do for the next year, or during my tenure, or for the next 5 - 10 years. What we are going to do now with Defence Excellence is change our culture, our ethics and our values. This requires enduring leadership and organisational commitment. We need to make and embed these changes so that we are focussed on that continual drive for improvement, that continual drive for us to be a highly respected and highly effective organisation in what we do.
- Defence Excellence matches the command philosophy of directive control, of being able to empower subordinates and give them the guidance, the tools and the resources. Defence Excellence will provide our people with that clear vision that this is an organisation that will change and will adapt; it allows them to see and understand where we need to go.

As part of the implementation of LTGEN Jones’s plan, the NZDF undertook an organisational culture review to aid in understanding the current culture in each of the three services, and amongst the 4th service, the civilian Staff. In this review (Ballantyne & Rasmussen, 2013), Schein’s Model of Organisational Culture was used as the basis

for the research, where culture is defined as a complex network of ideas, values, beliefs, behaviour and physical objects. Schein (1996) (in Howard, 1998, p. 231) argues that culture is one of the most powerful and stable forces operating in organisations. Schein also said that culture exists at three levels (Schein, 1984, in Howard, 1998, p. 232):

Assumptions – Those things we assume to be true without thinking about them (Howard, 1998, p 234). Strongly held understandings about the way things work.

Values – Values are important and lasting beliefs or ideals shared by members of an organisation. They have a major influence on a person's behaviour and attitude and serve as broad guidelines in all situations (Business Directory).

Artefacts – These are the most concrete components of culture. Artefacts may be physical evidence of culture, such as architecture, attire or décor. Artefacts also include explicit communicators like rites, rituals and ceremonies (Deal, 1985; Sathe, 1983, 198; Trice & Beyer, 1984, in Howard, 1998, p. 232). The things you can see, touch, or hear.

Subsequent to the Organisational Culture Project of 2012-2013 there have been two employee engagement surveys, one in 2015 and one in 2016, and a smaller 'pulse' survey consisting of five questions targeting specific focus areas that NZDF was focused on improving. The results of these will also be presented later in this document.

The aim of this thesis is to explore the culture within the New Zealand Army to determine whether or not the right environment exists to support and maintain Continuous Improvement. The primary tool being used to undertake the analysis is the Organisational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn, based on the Competing Values Framework. Additionally, the research also intends to gather information about the Defence Excellence Program, in particular the training that NZ Army personnel have had in the chosen improvement tools and methodology, the subsequent experience those personnel have had in using the tools,

and a series of additional questions about leadership and management support, innovation, and employee empowerment.

I draw on over 30 years experience as a uniformed member of the NZ Army to suggest that change in a Hierarchical organisation such as the military, is not normally an easy task, especially when you are asking personnel at all levels to look at ways to do things better, and drive change from within the organisation. Part of the issue may be that some personnel have a perception that the organisation is in a constant state of change, and there is no time to get used to one change initiative, before a new one commences. Or perhaps there are just too many changes occurring at the same time and personnel are struggling to keep up with these. This thesis does not consider the change initiatives. Instead it is using the OCAI and Competing Values Framework to answer four questions.

Question 1. Is there any significant difference between the 'Now' and 'Preferred' cultures of the NZ Army?

Question 2. Will continuous Improvement perform better under the 'Preferred' culture?

Question 3. Does the 'Clan' culture profile positively support the embedding of continuous improvement within the NZ Army?

Question 4. Does the 'Hierarchy' organisational culture profile negatively impact the embedding of continuous improvement within the NZ Army?

In February 2016 I left full-time uniformed service with the NZ Army and was re-engaged as a New Zealand Defence Force civilian. It was while I was in uniform that I became interested in culture and continuous improvement after attending a Structured Improvement Activity Facilitators Course through the Defence Excellence program.

As part of the implementation of NZDF's excellence journey with the Defence Excellence Program, a number of contractors were engaged to develop and implement an improvement methodology. The key contractor employed by NZDF came from a

background with Lockheed Martin in the United States, and he brought with him the entire Lockheed Lean Six Sigma training program. He developed this into a series of courses, and started to train the NZDF. The program was vigorously adopted, with many improvement initiatives being set in motion. Most of these were in the Logistics, where unsurprisingly the environment suited the use of that methodology. I attended my first training course with Defence Excellence about two years into the program. At that time I started to read information on the NZ Army website that spoke of a 'culture of continuous improvement'. I wasn't overly convinced that there was such a culture, or if there was, it didn't appear to be as strongly supported or active as was the case within Logistics organisations. While all this was going on, I was in the process of completing a Post-Graduate Diploma in Quality Systems through Massey University. While attending a block course for one of the papers in that program of study, the program leader informed us that the University had developed a Masters program that would allow those studying towards the PG Dip to transfer across and complete a Masters thesis instead of continuing with the PG Dip. I was personally at a point in my study where the transition was relatively easy, and so I began my journey of exploration into the impact that military culture has on NZ Army's ability to successfully embed continuous improvement methodologies, namely Lean Six Sigma, and an eventual qualification as Master of Quality Systems.

This thesis is presented in six parts. The literature review assists with understanding culture and the specific nature military culture, Lean Six Sigma as a methodology for improvement, and the Competing values framework as an instrument for assessing the culture of an organisation. Following on from this is some scene setting where we look at the 2012 NZDF Organisational Culture Project, a discussion on the methodology used for the data collection and analysis, and then the final three parts covering the results of the data collection, some discussion about those results, and the conclusions and recommendations based on the four questions being asked.

2. Literature Review

Understanding Culture

Culture is an acquired product of group experience and therefore can only appear where there is a definable group with a significant history (Hildebrandt, Kristensen, Kanji & Dahlgaard, 1991, p. 3). While writing about Quality Management in the US Military, Duffek and Harding (Duffek & Harding, 1993) comment that the hierarchical rank system on which the military must depend to function properly is both an inherent and important element of the workplace culture; at the same time, this characteristic presents an obstacle to lateral and bottom up communication within the organisation. Free flow of ideas in all directions is essential to the success of any quality management effort.

What makes men and women who serve in the armed forces do what they do, and act the way they act? Joseph, Soeters, Winslow and Weibull (in Caforio, 2006, pp. 237-238) provide an insight into military life by suggesting that military organisations represent a specific occupational culture which is relatively isolated from society. They say that;

- Military people not only work in separated barracks and bases, but they also live there frequently, and sometimes their wives and children as well.
- Cadets and recruits get training in specific schools and academies, where a sense of uniqueness is emphasised; and they wear uniform which makes them, in a highly visible way, distinct from most other workers.
- The military requires a lot from their personnel. During active duty personnel are on permanent, 24-hour call, and their leave is subject to cancellation.
- They can be ordered to far-off places on short notice.
- The jobs are dangerous and potentially life threatening, and for this reason the servicemen and women are usually armed or at least equipped with protective instruments and materials.
- If necessary, the military can make use of legitimised violence.

- The military is state funded, ie; non-commercial.
- That there are multiple cultures within the military organisation such as Army, Navy and Air Force.

Alvesson and Billing, 1997, p.103 (in Caforio, 2006, p. 238) state that culture is a set of meanings, ideas and symbols that are shared by the members of a collective and that have evolved over time. Hoefstede (1991, p. 5) (in Caforio, 2006, p. 238) suggests that culture is a collective programming of the mind, which distinguishes the members of one group or category of people from another. Beker, 1982 (in Caforio, 2006, p. 239) uses the metaphor of music to explain culture;

“Music is usually performed by a group of people. The process of music making by a group of people may differ substantially. The performance of the national anthem in a football stadium is based on everyone singing the same words and the same tune in harmony with each other. The tune like the words are shared by all, and the total sounds fine, without any real conducting. In a symphony orchestra everyone is playing different pieces of music, which comprise a totality. However, every section of the orchestra plays a different part. Each part masters their own piece of music and they may or may not be aware of the other parts exact music. Nonetheless, the total sounds beautiful, thanks to the specific instructions and skills of each section and thanks the performance of the conductor.

Jazz improvisation is something else again. The individual musicians master their instrument and have shared understandings of the principles of the music. However, what emerges is fairly unpredictable and is created by the social interaction of the musicians in the performance. Although the musicians use basic themes as frames of reference, the actual play is thus irregular and can never be repeated. It is needless to say that direct leadership in this type of musical performance is low-key or absent”.

Martin and Winslow (in Caforio, 2006, p. 239) describe three ways of looking at culture, which correspond to the three examples of musical performance described above by Beker.

1. The Integration Perspective.
 - a. A pattern of thoughts and priorities gluing all members of the group together in a consistent and clear manner.
 - b. Cultural homogeneity within the whole group reigns.
 - c. The group is seen as a 'little society' on its own where organisational consensus is reached.
2. The Differentiation perspective.
 - a. Emphasis is on sub-cultures within the group.
 - b. The culture of the whole group is seen as a mosaic of sub-cultures that are hard edged and largely homogeneous in their internal characteristics.
 - c. This is demonstrated in the differences between Army, Navy and Air Force or to the different categories of men and women, Non-commissioned officers, and officers.
 - d. Within the sub-cultures clarity and consensus exist, but the sub-cultures are pieces of the whole.
3. The Fragmentation perspective.
 - a. The existence of general frames of reference within the group.
 - b. The multiplicity of views within the group (micro-cultures).
 - c. Complex cultures result in chaos and political change, even anarchy and jungle-like behaviour.
 - d. Loosely connected cultural elements.

Winslow (2000) (in Caforio, 2006, pp. 239-240) highlights that a vast amount of literature on Military culture is based on the Integration perspective. This approach appeals to

military commanders as the perspective provides information that can be handled in a comprehensible way, and can easily be connected to the dream of a 'strong' culture, where 'all noses point in the same direction' and internal debates and struggles are absent.

Organisational culture is defined as the general pattern of mind-sets, beliefs and values that members of the organisation share in common, and which shape the behaviours, practices and other artefacts of the organisation which are easily observable (Sathe, 1985; Schein, 1985; in Prajogo, 2005, p. 1103). The term 'Organisational Culture' also refers to a set of properties in the work environment, perceived directly or indirectly by the people who live and work there, and is assumed to influence motivation and behaviour (Litwin & Stringer, 1968; in Davison, 2007, p. 249). The resulting patterns of behaviour are perpetuated; new members are required to adapt to the pattern (Juran, 1989; in Davison, 2007, p. 249).

Understanding Military Culture

The military organisation, being one of the oldest and traditionally most prominent examples of a formal organisation, has attracted considerable attention from social scientists (Caforio, 2006, p. 240). Lang (1965) (in Caforio, 2006, pp. 240-243) points to three specific aspects of military life.

1. The '*communal*' character of life in uniform. This specific character seems to be one of the clearest differences between uniformed and ordinary life. It relates to the degree to which the control of the organisation extends to various aspects and stages of personal life, much more than ordinary organisations.
2. Emphasis on '*hierarchy*'. More prominent in the military and other uniformed organisations.

3. *'Discipline and Control'*. There is a 'chain of command' that sees a downward flow of directives, authority, responsibility and accountability. This chain of command simply aims at the execution of orders. The reverse of this is that at all levels are focused on meeting the directives and commands of their commanders.

There are not only differences between military and other organisational cultures, but considerable cultural differences exist within the military itself. Moskos (1973) (in Caforio, 2006, p. 245) says that more traditional, institutional cultural features in the military are most pronounced in labour-intensive support units, combat forces, and presumably at senior command levels. On the other hand, Moskos says that occupational cultural features will accelerate where functions deal with education, clerical administration, logistics, medical care, transportation, construction, and other technical tasks such as Information and communications technology.

Reger et al (Reger, Etherage, Reger & Gahm, 2008, p. 22) in writing for the Military Psychology journal, state that a culture includes a language, a code of manners, norms of behaviour, belief systems, dress and rituals, and that it is clear that the Army (in this case the US Army, and the same can be said for the NZ Army) represents a unique cultural group. Reger et al., (2008) then proceed to provide further explanation of these 'unique features'.

- a) Vocabulary (Reger et al., 2008, pp. 24-25). Specialised vocabulary is important not only for proper communication, but also to understand unspoken dynamics. The vocabulary of the Army is a core cultural characteristic that all members of the Army learn.
 - Acronyms are commonly used within the Army to facilitate communication.
 - Specialised terms are used to discuss numerous procedural issues, such as posting (transfer), Terminal Date (end of current engagement),

March-In (all the administrative things that need to be addressed when one arrives at a new location and/or new appointment).

b) Rank (Reger et al., 2008, pp. 25-26). Rank also plays a fundamental role in Army communication.

- Soldiers, Non-Commissioned Officers, Warrant Officers and Officers represent discreet groups with unique roles and corresponding power. Within each of these groups, additional levels of rank are important and clearly indicated on uniforms.
- Rank represents important implications for relationships, but the nature of the relationships is complex.
- In many settings, a lower ranking individual is expected to know when to defer to authority. However, in other situations, advice and initiative from lower ranking individuals may be appreciated, valued, and even expected.

c) Manners and Norms of Behaviour (Reger et al., 2008, pp. 26-27). Within any cultural group there is always a wide range of beliefs. However, a specific cultural group is defined, in part, by a shared set of beliefs that affect the thinking and behaviour of many members of the group.

The unique culture of the New Zealand Army has been shaped and defined by a range of complementary influences. These include (New Zealand Defence Force, 2015);

- the martial traditions of the British soldier and the Maori warrior;
- our history, heritage and experience of war; and the characteristics of wider New Zealand society.

New Zealand Army culture helps develop and maintain esprit de corps, gives a sense of our place as New Zealanders and especially as New Zealand soldiers, and informs our doctrinal approach to operations.

- **Vision** - To be a world-class Army with mana. We will deliver our prescribed outputs and conduct the range of roles government asks of us to a world-class standard.
- **Mission** - To provide world-class operationally focused land forces that are led, trained and equipped to win.
- **Ethos** - To serve New Zealand loyally and honourably.
- **Values**
 - Courage - Courage includes both physical and moral courage: those with physical courage overcome their fear in the face of danger; while those with moral courage make difficult decisions and have the conviction to stand by their principles in the face of adversity.
 - Commitment - Commitment is displayed when personnel work together as one team in serving the interests of all New Zealanders, putting others before self when necessary.
 - Comradeship - Comradeship is the basis of all Army teams. It means looking after each other, understanding that more can be achieved by working as a team than as individuals.
 - Integrity - Integrity requires honesty, sincerity, reliability and consistency.

As previously mentioned, the NZDF undertook an organisational review in 2012. (Ballantyne & Rasmussen, 2013). Table 1 presents a summary of the NZ Army's cultural aspects, definition and artefacts as drawn from the 2012 culture study. This table follows the three levels outlined earlier by Schein. The first and second columns represent the deep assumptions, the third column (Definition) is the reasons why (espoused beliefs), and the fourth column presents all the artefacts. Over 60 different artefacts are represented in this table, and each one plays an important part in the culture of the NZ Army.

Table 1 - Summary of current organisational culture within the New Zealand Army.

	Culture Aspects	Definition	Artefacts
History	History is a source of learning, inspiration and connectedness	<ol style="list-style-type: none"> 1. History is relevant and can influence today. 2. We can learn from the past. 3. People need to be connected to a history, to know their roots. 4. People can relate and aspire to stories from history better than they can emulate a list of desirable attributes. 	<ol style="list-style-type: none"> 1. Ceremonies. 2. Flags 3. Rituals (official/unofficial). 4. Pictures and Photos. 5. Stories. 6. Maori Traditions
Soldier Identity	We must get people to internalise the soldier identity (pride, professionalism, self-discipline, effort, will to win) and group identity until it becomes ingrained	<ol style="list-style-type: none"> 1. Identity is internalised until it becomes part of who we are - exists within people. 2. Group or unit level identity can be stronger than organisational identity. 3. Identity grows from historical context. 4. Identity as a group, therefore behaviour reflects on the whole group (both positive and negative). 5. Reputation of NZDF/service/group. People have expectations of the military (eg; that they can trust them) when you are part of the military you live up to/become those things. 6. Pride in self inspires you to higher standards. 7. Pride and Mana - pride drives us to do better, and gives us confidence. When we are proud it communicates to the public that NZDF is 'good'. 8. Standards of behaviour are higher (and associated punishments are harsher) than outside the organisation. This is because there is a need for people to meet a minimum standard of behaviour to be effective, and if people don't then chaos will ensue: 'shit fight'. Behaviour must meet the standards of civilian and military law and ethical standards. 9. Standards define what is 'good' enforcing standards communicates what is good. 	<ol style="list-style-type: none"> 1. Uniform. 2. Discipline and standards: dress standards, marching, salutes, etiquette (including mess etiquette). 3. Professional: competence, committed (eg; don't pull 'sickies'), punctual, excellence, non-acceptance of failure. 4. Aggression. 5. Confidence. 6. Assertiveness. 7. Directness. 8. Arrogance. 9. Toughness. 10. Easy-going and likeable. 11. Kiwi can-do attitude. 12. Problem solving. 13. Number 8 wire approach. 14. Pride and Mana. 15. Loyal and uniformity.

	Culture Aspects	Definition	Artefacts
Achieve more through Teamwork	We achieve more through teamwork .	<ol style="list-style-type: none"> 1. We achieve more with teamwork. 2. We have cohesion within small teams, competition between small groups. 3. At a team level we must be able to trust in ability and intentions of others, predict how others will behave under stress of combat. 4. Cohesion and teamwork allow us to achieve operational goals. 5. People are driven by the idealistic notion of altruistic service. 6. They derive pride and a sense of meaning from service, and are willing to make great personal sacrifices for this. 7. They want to contribute to a collective purpose rather than only individual goals and gain a sense of belonging from doing this. 	<ol style="list-style-type: none"> 1. Sense of shared purpose/common goals. 2. Esprit de corps. 3. Service and sacrifice - willingness to serve. 4. Commitment.
Sacrifice & Service	To make sacrifices and serve the group is the only way. The group will look after you.	<ol style="list-style-type: none"> 1. Organisation has duty of care to personnel for sacrifices they make. 2. Principles of equity, parity and fairness. 3. Loyalty/ the social or psychological contract reflects the partnership between the service person and the country. 4. A dependency also exists between the military and service persons' family. 5. Pay and recognition demonstrate value. 	<ol style="list-style-type: none"> 1. Conditions of service. 2. PT. 3. Health and fitness facilities. 4. family support services and celebrations. 5. Medals.
Belonging	Our bonds run deep . Army provides a sense of belonging for people. Belonging acts as a motivator for personnel which benefits the organisation	<ol style="list-style-type: none"> 1. Belonging increases contribution and willingness to sacrifice. 2. We need cohesion and the focus to achieve a common goal, or we become fragmented. 3. Trust is the currency of the organisation. 4. Belonging allows us to take greater risks because of mutual reliance. 	<ol style="list-style-type: none"> 1. Community. 2. Camaraderie. 3. Competitiveness. 4. In group and out of group behaviour. 5. Intimidation.

	Culture Aspects	Definition	Artefacts
Go to War and Win	We must be able to go to war and fight to win	<ol style="list-style-type: none"> 1. To succeed on the mission we must be able to meet operational demands ' we can go to war and fight and win'. 2. Operational success follows from discipline and conformity. 3. Operational effectiveness gives a sense of meaning or purpose that motivates individuals. 4. We are interdependent with other nations and organisations. 5. Success in our organisation is absolutely critical because failure is not an option. 6. The role of the military is to operate as the 'insurance policy' for the nation. 	<ol style="list-style-type: none"> 1. War-orientated military behaviour and equipment (Combat PT and training, military exercises, Military Justice, weapons, parade grounds) 2. Security (Barriers, fences, gates, guard huts, ID Cards). 3. Achievement oriented approach (purposeful, goals, deployments)
Command & Control	The Command and Control System is needed to impose order in a complex and chaotic environment (Battlefield)	<ol style="list-style-type: none"> 1. Everyone must 'buy-in' to the command environment in order for it to work. 2. Leaders are grown from within, so subordinates know they have shared experiences, increasing trust, and buy-in to following directives from leaders. But leadership can become disconnected. 3. Our work involves making decisions with high cost. 4. Personnel in our organisation respect the rank that a leader holds as the commander has the authority and responsibility. 5. People are hierarchical by nature and the military system formalises it. 6. Order and structure controls self- interest or disobedient behaviour. 7. We use 'command teams' to create balanced leadership and better decision making. 8. Our structure with the separation between soldiers and officers is organised so that everyone has support, but is distanced from certain groups in order to facilitate the need to send people into harm's way during war-fighting. 9. We are trained and allowed to kill so we need more rules and control to keep that in check. 	<ol style="list-style-type: none"> 1. Control. 2. People do as they are told. 3. rank, rules, regimentality. 4. structure. 5. orders. 5. authority.

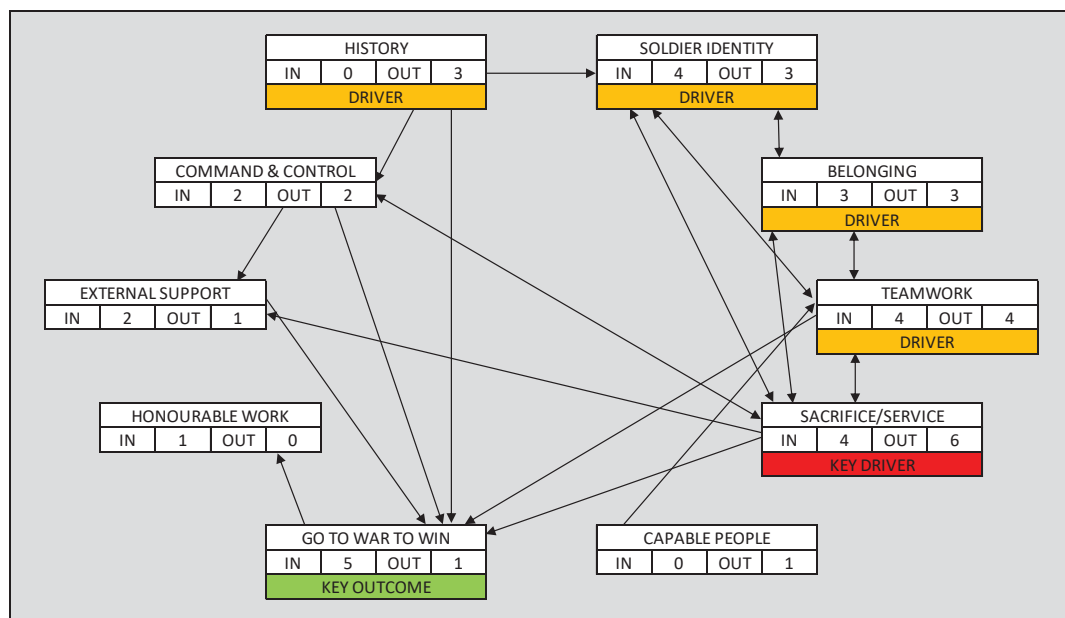
	Culture Aspects	Definition	Artefacts
External Support	The Trust of Outsiders (public, other nations, Government) in us supports all we do. We need them.	1. NZDF is dependent on many external groups for different inputs that lead to mission success. 2. NZDF must have a good reputation with these groups. 3. Reputation is based on what people see but not an accurate reflection of what we actually are/do.	1. NZDF Brand. 2. Public perceptions & expectations of what the military is like (based on TV/Movies) vs reality.
Honourable Work	Our organisation does Honourable work	1. Army and NZDF is an honourable organisation. What we do is worth it. 2. We want to part of something worth celebrating, to have honour. 3. The pursuit of excellence is part of the culture and people are driven by that value.	1. Government and public support. 2. Pride in Service and NZDF. 3. People conducting traditions and ceremonies seriously and with honour. 4. War memorials and ANZAC day commemorations.
People are the Capability	People are the Capability	1. At an individual level our people must have courage under fire, be able to face the horrors of war, and are fit and healthy to fight. 2. Morale is key to winning. 3. We require mental and physical resilience. Our people must be equipped to win.	1. Health and fitness focus. 2. Physical requirements of the job. 3. Military equipment.

Ballantyne & Rasmussen, 2013

The strength of each of the cultural aspects and their relationship to one another produces some interesting, but not unexpected results. Figure 1 is a paradigm map/relationship diagram of the key cultural aspects identified in the NZDF study. The arrows in the diagram represent the relationships or interconnections between assumptions that were apparent from the analysis. Figure 1 has been altered slightly from the 2013 original (Ballantyne & Rasmussen, 2013), in that the double ended arrows in the original diagram have been removed and replaced by single ended arrows. This has been amended on the basis of my experience as a member of the New Zealand Army for approximately 30 years at the time of completing this thesis, and what I believe to be the stronger relationship between each of the assumptions.

Once all the relationships have been represented in this way, the number of arrows into and out of each factor are counted. Those with the arrows moving out are 'drivers' or 'causes', and those with in-coming arrows are 'outcomes' or 'effects'. The key outcome or effect for the New Zealand Army from the information gathered by Ballantyne and Rasmussen (2013) is to 'Go to War, and win', closely followed by 'sacrifice and service'. Key drivers contributing to this outcome are 'sacrifice and service' as the principle influencer, with 'teamwork', 'belonging', 'soldier identity' and 'history' as other supporting drivers.

Figure 1 - Relationship diagram of current New Zealand Army culture



adapted from Ballantyne & Rasmussen, 2013

There is considerable debate as to whether culture is something an organisation 'has' or something an organisation 'is' (Smircich, 1983, p. 347). These are also known as the theoretical perspectives of organisational culture and consider whether organisational culture is an 'independent' or 'dependent' (internal) variable ie; is organisational culture something an organisation has or is? (Maull, Brown, & Cliffe, 2001, p. 304)

a) Culture as an independent variable.

Cultural 'pragmatists' define culture as something that an organisation 'has' – a set of variables to be managed in the pursuit of organisational objectives (Martin, 1985). Not only is culture 'manageable', but it is also the function of organisational leaders to manage culture (Tichy, 1983). Viewing culture as an independent variable looks at how it is imported into the organisation through membership. This view takes as its key premise that there are specific characteristics of 'good' cultures that are universal and easily imported into an organisation (Maull et al., 2001, p. 304).

b) Culture as a dependent variable.

Cultural 'purists' see culture as something an organisation 'is'. Culture is a socially constructed system of beliefs, meanings and values (Martin, 1985). It emerges from the social interaction of organisational members and is the product of shared symbols and meanings (Smircich, 1983). As a dependent variable, organisations are themselves culture-producing phenomena and are essentially social instruments which produce goods and services, and, as a by-product, they also produce distinctive cultural artefacts such as rituals, legends and ceremonies (Smircich, 1983, p. 344). Accordingly, each culture is a unique product of its history, development and present situational issues. (Maull et al., 2001, p. 304).

Culture is the glue that holds the organisation together. It expresses the values or social ideals and shared beliefs, which are manifest in the specialised language that is unique to each organisation and which are a product of the history and operational experience within the organisation. Culture as shared values and beliefs gives identity to members and generates commitment beyond 'self' and enhances social stability. It is also a sense-making device that guides and shapes behaviour (Maull et al., 2001, p. 304).

These shared symbols and meanings are reinforced by Johnson and Scholes (1984) (in Irani, Beskese, & Love, 2004) who define corporate culture as being 'the deeper level of basic values, assumptions and beliefs, which are shared by members of an organisation'. These values, assumptions, attitudes and beliefs are reflected within an organisational culture. Johnson & Scholes go on to say that they are manifested in many ways such as rites, rituals and routines that take place within an organisation, the language used, the stories, the legends and myths that are told and re-told, the symbols, logos and artefacts that are found throughout the organisation. Williams et al. (1994) define culture as 'the way we do things around here' or 'the way we think about things around here'. Maull et al., (2001) (in Irani et al., 2004) say that the key feature is that culture is taught to new members as the correct way to behave, thus perpetuating organisational survival and growth.

Much of literature suggests that employees in a strong organisational culture have a sense of mission, which may in turn improve productivity. In essence, individuals within a strong organisational culture know what is expected of them and thus react positively when confronted with change. Conversely, employees involved with a weak organisational culture tend to spend a great deal of time deciding what they should do and how they should do it (Irani et al., 2004, p. 646). Sinclair and Collins (1994) comment that there appears to be fairly broad agreement among management gurus, consultants and senior management teams that culture is a key factor underpinning success in terms of developing the necessary commitment to any form of change.

Employee attitude surveys are a favourite tool which are used to gauge employee opinion on a wide range of factors (Kinlaw, 1992, in Sinclair & Collins, 1994, p. 25). While these can provide pointers in the analysis of culture, they at best merely give a flavour of current feeling, and so have no real ability to trace historical dimensions of organisational culture and ask 'why are things like this today?'

In order to improve the odds of success when attempting to introduce any change into an organisation, managers should first comprehensively examine their organisation's underlying culture and the operating climate created and constantly influenced by that culture (McNabb & Sepic, 1995, p. 370). This is what Ballantyne and Rasmussen's 2012 study for NZDF set out to understand.

Schein, 1985 and Wilson, 1989 (in McNabb & Sepic, 1995, pp. 371-372) suggest that all organisations have individual and unique cultures. Because the culture dictates what behaviours are acceptable, it also establishes the ways that problems are addressed, spells out how relationships are defined and supported, and establishes how work is done. Once a culture is established, it affects everyone and is extremely difficult to change. By interacting with personnel, leadership styles of senior managers, and other factors, culture creates a specific climate of operations in the organisation. The product of the interaction of culture, climate, and people is a set of processes, procedures, and policies that legitimises and direct the organisation's work (McNabb & Sepic, 1995, p. 372). McNabb & Sepic continue by saying that culture and climate must therefore be measured before a change initiative is begun and, if necessary, must be adjusted to improve the acceptance of change.

Lean Six Sigma

Six Sigma is most commonly recognised as a tool for understanding statistical variation within products and processes, the aim being to reduce variation and to produce more consistent functionality or process output – leading to better processes, more reliable products, lower costs and ultimately happier customers (Halliday, 2001 in Davison & Al-Shaghana, 2007, p. 250). However, the term six sigma refers to a management philosophy, or structured management program aimed at reaching this goal (Pyzdek, 2001; Truscott, 2003; in Davison & Al-Shaghana, 2007, p. 250). The Six Sigma

Management programme includes (Caulcutt, 2001; Truscott, 2003; in Davison & Al-Shaghana, 2007, p. 250):

- The creation of an organisational structure to support the initiative. A striking feature of the Six Sigma infrastructure is that it is based on a high profile group of employees known as Champions, Master black belts/mentors, Black belts and Greenbelts. Black belts are high potential employees who devote much, if not all, of their time to leading process improvement projects. Named after martial arts judo belts, these employees facilitate and act as champions and standard bearers for Six Sigma throughout the organisation.
- Training a high proportion of staff in core competencies, including statistics, interpersonal skills, problem solving, project management etc.
- Taking a team-based project-by-project improvement approach. Projects are chosen on the basis of business improvement, and use the Define, Measure, Analyse, Improve, and Control (DMAIC) methodology.
- Using recognition and reward schemes that support the initiative.

It recognises the contribution that all members can make to the success of the organisation, and ensures that those involved are familiar with the methodology. Six Sigma is also a key value creation enhancement that functions particularly well as part of the 'Hierarchy' (Control) quadrant of the Competing Values Framework that will be discussed shortly (Cameron, 2006, p. 33).

According to Wright (1996) (in Davison & Al-Shaghana, 2007, p. 252), a culture where everyone in an organisation has a passion for excellence begins with a vision of the future or Mission Statement that can capture the imagination and motivate employees and others – this begins with the chief executive, but must be communicated to the rest of the organisation. We will see in Section 3 that there are some issues with communication, but we will also see that progress is being made.

Two years after the launch of the Dx Program (Jones, 2012) two of the NZDF Dx Black belt contractors engaged to implement Lean Six Sigma into the NZDF provided the following observations (Allen & Kumar, 2015);

- Attendance at LSS training was voluntary. There was no selection process or directive that military personnel were to attend. There were no incentives for attending, and no disincentives for non-attendance.
- There was an unrealistic expectation that the program would have good penetration within the organisation after two years, and there were no KPI's or milestones set in order to assess the level of success of the program. Records were kept, but they were not measured against any set criteria. Of the improvement activities completed, time and cost savings were recorded, but not against any targets.
- Leadership were the drivers, but not everyone was willing to take it up.
- Uniformed and non-uniformed staff viewed the program differently, with uniformed staff indicating that the program 'fell outside' what happens on operations'. ie; 'if we don't use this on operations, why should we use it in peace-time'. They didn't see the benefits of the program having any effect on their ability to conduct military operations.
- The military already has a robust, detailed and effective problem solving process, and so 'selling the idea' was not an easy task.
- There was a much greater uptake from personnel involved in logistics operations ie; warehousing, technicians. This group could see the benefits of the program to their business.
- The NZDF posting (transfer) cycle was difficult to factor in (usually occurs every three years, sometimes earlier), and this doesn't help embedding. It takes time to establish trust, and the transfer cycle causes people to move and new relationships need to be developed.

The Competing Values Framework

The Competing Values Framework (CVF) has been named as one of the 40 most important frameworks in the history of business. It was developed in response to the need for a broadly applicable model that would foster successful leadership, improve organisational effectiveness, and promote value creation (Cameron, Cameron, DeGraff, & Thakor, 2006, pp. 5-6). The basic framework consists of two dimensions that express the tensions or 'competing values' that exist in all organisations. Graphically, one dimension can be drawn vertically and the other horizontally, resulting in a two-by-two figure with four quadrants as represented in Figure 2.

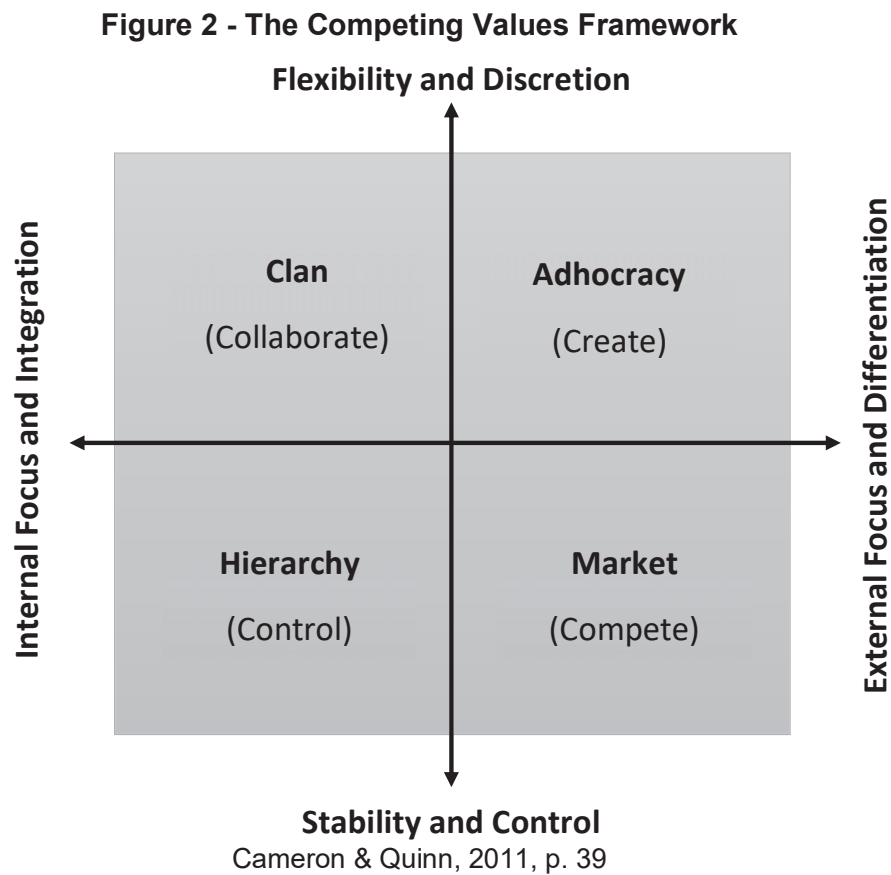
The CVF was initially developed from research on the major indicators of effective organisations (Cameron & Quinn, 2011, pp. 38-41). Key questions asked in the investigations were:

- What are the main criteria for determining if an organisation is effective?
- What key factors define organisational effectiveness?
- When people judge an organisation to be effective, what indicators do they have in mind?

Campbell, Brownas, Peterson, and Dunnette (1974) (in Cameron & Quinn, 2011) created a list of 39 indicators that they claimed represented a comprehensive set of all possible measures for organisational effectiveness. These were submitted to a statistical analysis, and two major dimensions emerged that organised them into four main clusters. The first dimension is the flexibility-control axis that describes two contrasting orientations, between that which reflects flexibility and spontaneity and that which reflects stability and control. The second dimension is the internal-external axis that also describes two orientations, with one being oriented towards maintenance and improvement of the existing organisation and the other being focused on adaptation and interaction with the external environment (Prajogo & McDermott, 2005, pp. 1104-1105).

Cameron and Freeman (1991) (in Howard, 1998, p. 236) examined the competing values framework as a model of culture by asking survey respondents to read four scenarios and distribute 100 points among them according to how similar they were to their respective organisation's culture. The character of the scenarios was based on the competing values framework. They concluded that an organisation's domain of excellence may be described by its cultural type, as identified by the competing values framework.

Figure 2 illustrates the relationships of these two dimensions to one another.



What is notable about the four core values is that they represent opposite or competing assumptions. Each continuum highlights a core value that is opposite from the value on the other end of the continuum – flexibility versus stability, internal versus external. The dimensions therefore produce quadrants that are also contradictory or competing on the

diagonal. Each quadrant has been given a label to distinguish its most notable characteristics. (Cameron & Quinn, 2011, p. 40).

In order to present the culture plots later in this paper, I have altered the CVF model in Figure 2 slightly. The main reason for this was MS Excel, and my ability to produce 8 axes radar charts. I was quite some distance into my data analysis and chart construction when I realised that it is possible to display all my charts in the format at Figure 2. Later in this paper you will see charts that have been rotated 45 degrees to the right, with the current vertical and horizontal dimension axes now on the diagonals from bottom left to top right, and top left to bottom right, and the quadrants going from bottom left, top left, top right and bottom right, to left quadrant, top quadrant, right quadrant, and bottom quadrants. See the charts at Appendix 1.

The Organisational Culture Assessment Instrument (OCAI) is an instrument that allows an organisation to diagnose the dominant orientation of the organisation based on the core culture types. It also assists in diagnosing the organisation's cultural strength, cultural type, and cultural congruence. (Cameron & Quinn, 2011, p. 41)

The four culture types of the Competing Values Framework analysed by the OCAI are;

- a) The Hierarchy (Control) Culture. This is based on stability and control along with an internal focus. It is characterised by a large number of standards with the objective of achieving efficiency, process standardisation, product standardisation and so on. (Gimenez-Espin, Jimenez-Jimenez, & Martinez-Costa, 2012, p. 680). A mantra for this quadrant might be: 'better, cheaper, and surer'. Possessing a substantial degree of statistical predictability is one of the hallmarks of this quadrant. Six Sigma is one of the quality enhancements associated with this quadrant (Cameron et al., 2006, pp. 32-33). Further explanation of the Hierarchy culture is shown below (Cameron & Quinn, 2011, pp. 41-43);

- This is characterised by a formalised and structured place to work.
- Procedures govern what people do.
- Effective Leaders are good coordinators and organisers.
- Maintaining a smooth running organisation is important.
- The long-term concerns of the organisation are stability, predictability, and efficiency.
- Formal rules and policies hold the organisation together.
- Hierarchy cultures are characterised by a controlling environment.

b) The Market (Compete) Culture. This cultural type looks for an external perspective through which to differentiate it from its competitors, intended to produce a market leader, but uses stability and control to achieve its goals of internal and external competitiveness and productivity (Gimenez-Espin et al., 2012, p. 680). A mantra of the competitive quadrant might be: 'compete hard, move fast, and play to win. This sounds very similar to the outcome of Ballantyne and Rasmussen (2013) culture study of 'go to war and win' as seen in Figure 1 (Cameron et al., 2006, p. 34). Further explanation of the Market Culture is provided by Cameron & Quinn (2011, pp. 43-46).

- A results orientated workplace.
- Leaders are hard-driving producers and competitors who are tough and demanding.
- The glue that holds the organisation together is an emphasis on winning.
- The long-term concern is on competitive actions and achieving stretch goals and targets.
- Success is defined in terms of market share and penetration.

- Outpacing the competition and market leadership are important.
- c) The Clan (Collaborate) Culture. Clan culture is based upon flexibility and internal focus. In it the organisation acts like a family, promoting teamwork , commitment and involvement (Gimenez-Espin et al., 2012, p. 680). A mantra for this competence might be: 'human development, human empowerment, human commitment' (Cameron et al., 2006, p. 38). The Clan culture is typified by (Cameron & Quinn, 2011, pp. 46-48);
- A friendly place to work where people share a lot of themselves.
 - It is like an extended family.
 - Leaders are thought of as mentors and perhaps even as parent figures.
 - The organisation is held together by loyalty and tradition.
 - Commitment is high.
 - The organisation emphasises the long-term benefit of individual development, with high cohesion and morale being important.
 - Success is defined in terms of internal climate and concern for people.
 - The organisation places a premium on teamwork, participation and consensus.
- d) The Adhocracy (Create) Culture. An adhocratic culture fosters flexibility, but its orientation is external. Its objectives include creativity, risk taking, individuality and initiative. (Gimenez-Espin et al., 2012, p. 680). A mantra for the Create quadrant might be: 'create, innovate, and envision the future' (Cameron et al., 2006, p. 36). Specifically, the characteristics of a Ahocracy/Create culture are as follows (Cameron & Quinn, 2011, pp. 49-51);
- Dynamic, entrepreneurial, and creative work-place.

- People stick their necks out and take risks.
- Effective leadership is visionary, innovative and risk oriented.
- The glue that holds the organisation together is commitment to experimentation and innovation. The emphasis is on being at the leading edge of knowledge, products and services.
- Readiness for change and meeting new challenges are important.
- The organisation's long-term emphasis is on rapid growth and acquiring new resources.
- Success means producing unique and original products and services.

Applicability of the Competing Values Framework/Model

Organisational Leadership

As suggested by Cameron & Quinn (2011, pp. 52-54) most organisations develop a dominant cultural style. When an organisation is dominated by the ***hierarchy culture***, the most effective managers/leaders – those rated most successful by their subordinates, peers, and superiors and those who tend to move up quickly in the organisation – demonstrate a matching leadership capability. That is, they are good at organising, controlling, monitoring, administering, coordinating, and maintaining efficiency. When an organisation is dominated by the ***market culture***, the leaders rated as most effective tend to be hard-driving, whip-cracking, commanding competitors. They are good at directing, producing results, negotiating, and motivating others. When dominated by the ***clan culture***, the most effective leaders in the organisation are parent figures, team builders, facilitators, nurturers, mentors and supporters. Effective leaders in organisations dominated by the ***adhocracy culture*** tend to be entrepreneurial, visionary, innovative, creative, risk orientated, and focused on the future. The highest-

performing leaders – as rated by their peers, superiors, and subordinates as the most highly effective – have developed capabilities and skills that allow them to succeed in each of the four quadrants.

Organisational Effectiveness (Cameron & Quinn, 2011, pp. 54-56)

- The criteria for effectiveness most highly valued in a ***hierarchy culture*** are efficiency, timeliness, smooth functioning and predictability. The dominant operational theory that drives organisational success is that control fosters efficiency (elimination of waste and redundancy) and therefore effectiveness.
- The criteria for effectiveness most highly valued in a ***market culture*** are achieving goals, outpacing the competition, increasing market share, and acquiring premium levels of financial return. The dominant operational theory that drives operational success is that competition creates an impetus for higher levels of productivity and therefore higher levels of effectiveness.
- In a ***clan culture***, the criteria of effectiveness most highly valued are cohesion, high levels of employee morale and satisfaction, human resource development and teamwork. The operational theory that dominates this culture type is that employee involvement and participation foster empowerment and commitment. Committed, satisfied employees produce effectiveness.
- Finally, the ***adhocracy culture*** most highly values new products, creative solutions, cutting-edge ideas, and growth in new markets as the dominant effectiveness criteria. The underlying operational theory is that innovation and new ideas create new markets, new customers, and new opportunities.

3. NZDF Organisational Culture Project and Employee Engagement Surveys.

NZDF Organisational Culture Project

The NZDF Organisational Culture Research Project of 2012 (Ballantyne & Rasmussen, 2013) set out to identify current culture and the perceived cultural path to meeting future requirements. In late 2012, 50 focus groups were consulted across the three services (Navy, Air Force and Army). Participants in the focus groups represented a range of ranks, locations and both military and civilian personnel. Participants were asked to articulate and discuss the organisational culture using the Schein model as a Framework. Researchers in the organisational research team then reviewed and coded the content (audio and written notes) into themes to identify concepts at each level of culture and to generate paradigm maps. Workshops were held with members of each service to seek feedback on the single service paradigm maps. The paradigm map for Army; with minor changes to reflect the stronger relationship as previously discussed, is at Figure 1 (Page 17).

In order to understand the single service cultures within the NZDF, one first has to understand the overarching NZDF culture. Table 2 presents a summary of the current and future cultural characteristics of the NZDF and the three Services, Navy Army, Air Force, and highlights the similarities across the organisations. Further it includes an explanation of the associated artefacts, what personnel recommend keeping going forward, what they recommended stopping, linkages with other cultural elements, and Single Service differences.

Table 2 - Comparison of current cultural characteristics across NZDF

NZDF	NAVY	ARMY	AIR FORCE
Role, Mission, Output focus. The NZDF and Single Services are highly mission and output focused.	Must do what it takes to get ships to sea. Navy's purpose and reason for existing are operations and missions, and ability to achieve outputs.	Go to war to win. Must be able to meet operational demands. Operational success follows from discipline, training and conformity.	Do what is necessary to achieve the mission. Unique niche. Diverse outputs.
Single Service differences and sub-cultures. The Services do have different cultures – a product of their different operational environments and tempo.			
Uniqueness. The military is unique due to its unique role. Ask members to do things most would not.	Uniqueness. A core feature of identity that helps retain and attract the right people.		
Identity. There are different layers or levels of identity that come with belonging to NZDF – NZDF, Service, Unit, Team.		Internalise the soldier identity. It is who they are. Pride, professionalism, self-discipline, effort, will to win.	
Sense of purpose, What drives people. NZDF members tend to be driven by a sense of purpose and a belief that they are doing meaningful work.	Navy does meaningful work. Members driven by a desire to serve or belief in commitment to a higher purpose for mates and country.	Honourable work. NZ Army is an honourable organisation. What NZ Army does is worth it.	Deliver through collaborative teamwork. Need all the 'cogs in the wheel' working together to get the job done effectively and safely. Teamwork maximises outputs.
Lifestyle. It's not just a job, It's a lifestyle. On duty 24/7.	Work hard, Play hard. The lifestyle supports the organisations need to achieve outputs and the members need to unwind and sustain morale.		

NZDF	NAVY	ARMY	AIR FORCE
History and tradition. History and traditions are part of the uniqueness and identity.	History. Shaped what we do today. Provides direction for the future. Have a legacy to live up to.	History. A source of learning, inspiration and connectedness.	
Hierarchy and Structure. More hierarchical than most organisations. Fits the purpose.	Hierarchy. Essential to military business. Provides clarity of command and responsibility.	Command and Control. To impose order in a complex and chaotic environment.	Responsibility. A flatter hierarchy than other services, tend to empower junior personnel more. Trust in subordinates. All have valuable roles to play.
Groups and Belonging. A strong sense of belonging and 'mateship'. Friends for life.		Achieve more through teamwork. Cohesion within small teams. Want to contribute to a collective purpose rather than individual goals. Sacrifices and service to the group. The group will look after you. The NZDF has duty of care to personnel for the sacrifices they make. Bonds run deep. Sense of belonging. Belonging increases contribution and willingness to sacrifice. Cohesion and focus to achieve a common goal.	A safe place to be open, honest and contribute. Sociable, friendly, inclusive. Welcoming of others. Trust in your mates and a sense that 'someone's got your back'. Junior ranks have more of a voice and are encouraged to speak up.
Valuing People. 'Give and Take' – in recognition of sacrifices and demands expected of personnel.	Navy is a social, collective entity of 'like minds'. To deliver expected outputs and function at their best, members must work together, trust and be trusted. A duty of care, and culture of 'give and take'.	People are the capability. People must have courage, healthy and fit, and able to face the horrors of war. Morale is the key to winning	Belong to a community that supports one another. A strong sense of community. Members and families rally round in times of need. Care for people as if they are family.

NZDF	NAVY	ARMY	AIR FORCE
Safety. Military operations are inherently risky. Members are equipped with the intent of minimising risks.			Aviation safety. No room for errors as the consequences are significant. Dangerous work where attention to detail is essential.
Can do attitude. 'Number 8 wire' attitudes differentiate NZDF from other militaries.	Can do attitude. The core persona of the Navy is pride, professionalism, discipline and a 'can do' attitude.		
'Right' way to do things. Clarity and direction are paramount to how NZDF operates. Aim to reduce ambiguity.			
'Right' way to be. Professional. It's a risky job. In some situations there is no scope for error.			
Uniform. Evokes pride and confidence for those who wear it. A 'badge of honour'.			
Wellness. Morale, satisfaction, and wellbeing are pivotal to the functioning of NZDF.			
Equipment. Military equipment are the 'tools of trade' to meet outputs as directed by the Government.			Achieve what they do through the use of equipment. Equipment is fundamental to achieving outputs.
Care about image, reputation, public perceptions. Image is important. Affects funding, credibility, recruitment, retention, pride, public support.	Image is everything. It is important that personnel and the organisation are valued by the public and the government.	The trust of outsiders is essential. Including public, government, other nations supporting NZDF in all they do. NZDF is dependent on public perception and reputation.	Credible and Relevant. Conscious because image affects funding, credibility, recruitment and retention, public support.

NZDF	NAVY	ARMY	AIR FORCE
Language and style of interaction. Heavy use of acronyms and jargon aims for efficiency. Much of the jargon and language relates to unique tasks NZDF does.	Talk, Look and act the part. Language supports our identity, belonging, camaraderie and cohesion.		
Community, self-containment. Self-containment of bases enables flexibility and efficiency.			
Raise, train and sustain. Recruitment and retention are pivotal to sustaining NZDF. Need to recruit and keep the 'right' people.			

Ballantyne & Rasmussen, 2013

Many of the single service characteristics identified in Table 2 could just as easily fit against any number of the NZDF characteristics, and there are components of each one, that if broken down could populate all the empty fields in the table. For the purposes of the comparison I have chosen the 'best fit' based on the description and commentary for each of the individual service characteristics, and placed them as such.

Figure 3 (Page 36), also included as part of the NZDF Organisational Culture project (Ballantyne and Rasmussen, 2013), identifies the common themes that emerged from the NZDF Culture Research, and captures what underpins both current culture as well as the perceived cultural path to meeting NZDF's future requirements. The seven themes were ALL represented within each of the single Service cultures.

The themes are presented separately, however are interlinked and overlap in many ways.

- The underlying assumptions are an example of the deeper level of generally unconscious thinking that drives behaviour.
- There are various assumptions that can be associated with each theme and which may drive different types of behaviour.
- The examples from current culture give further detail of the scope of each theme.
- The suggested future direction examples are ideas from personnel about what might be required to support NZDF's success in the future.

Table 3 (Pages 37 to 38) presents some of the anticipated changes that respondents and focus groups identified as needing to be considered as part of the future context in which the NZ Army and the NZDF may be operating in the next 15 to 20 years.

Table 4 (Pages 39 to 42) presents the future culture characteristics that are suggested for the NZDF to survive and thrive in the future (2035) context described by Table 3.

Figure 3 - NZDF Culture 'How we do things around here'

Theme	Example of underlying assumption	Examples from current culture.	Suggested Future Direction
Team focussed – we belong and can trust one another	"Our operational outputs require us to work as a team, one person cannot achieve alone".	Shared experiences create a sense of belonging and trust. Our shared goals drive what we do.	The team values talent and diversity – mil and civ.
Proud of our profession – and highly regarded	"Pride in what we do enables people to make personal sacrifice".	There is a right way of being. Reputation is important for relevance and credibility.	Actively Promote ourselves and our work to the public.
Well trained and equipped to perform	"Our people are our capability".	Raise, train and sustain like-minded individuals. Trust in our specialist skills and equipment to reduce risk.	Work smarter with smarter resources. Respect, retain and develop our unique talent. Speak up about safety.
Agile – in our thinking and behaviour	"Our small size means we need to be agile and adapt".	Kiwi can-do attitude. Individual innovation.	Agile, learning organisation where innovation is taught and change embraced.
Clear direction and purpose – from top to bottom	"Hierarchy is required for our success and is a source of inspiration"	Operationally focused with a strong history, tradition and hierarchy.	Clarity of vision and mission with a strong operational focus.
A strong community – where people feel accepted, valued and supported	"A sense of community ensures we will go the extra mile".	The environment is social, a lifestyle not a job. People and their families are supported.	The organisation cares for and supports our people. The work hard and play hard lifestyle is maintained.
Defined sense of identity – celebrate our uniqueness	"Our unique identity helps attract and retain the right people".	Unique Kiwi Military. Service for our country. Strong and protected single Service cultures.	Shared NZDF Identity exists in addition to retaining strong single service cultures.

Ballantyne & Rasmussen, 2013

Table 3 - Anticipated changes to NZDF future operating context

Shifts in the Social Landscape
Changing Demographics - Some key demographic shifts are expected to affect NZDF by 2035. These include:
<ul style="list-style-type: none"> • Greater ethnic diversity • Increasing Asian population • Religious diversity • Aging population and workforce • Increased gender diversity • More civilians. Military only in operational roles
Shifts in the Organisational Landscape
Changing Demographics - It is expected that NZDF will be more integrated (Joined-up) by 2035. This includes:
<ul style="list-style-type: none"> • Increase joint activity and operations • One Service, 'One Force' • More inter-agency collaboration • Possible shift in Uniform and identity • People may identify with a different organisation/entity • The Single Service cultures are different and increasing jointness needs to be managed carefully
Changes to Structure and Governance - There is expected to be some changes to the way NZDF is structured and governed by 2035:
<ul style="list-style-type: none"> • Anticipated change in structure/command • Changes in doctrine • Increased centralisation and alignment, in move towards 'One Force' • Increased pressure on Defence real estate and changes in location of bases and infrastructure
Personnel Management - Changes to the personnel environment and conditions are anticipated:
<ul style="list-style-type: none"> • Some expectation of better pay in the future • Reduction and removal of conditions of service, benefits and perks • Retention remains a challenge • Career paths taken over by a shift to more transient careers • Rise in flexible working hours • Links to technology and innovation
Training - It is expected that there will be more time and resources dedicated to training:
<ul style="list-style-type: none"> • More advanced training • Link to flexibility and Total Defence Workforce
Culture and Lifestyle - It is anticipated that the culture and lifestyle currently experienced/enjoyed by personnel may change:
<ul style="list-style-type: none"> • Lifestyle and a sense of community may diminish • Travel opportunities may be different • Increased commercialisation • Greater outsourcing

Change and Uncertainty - There are mixed views about the anticipated tempo of change looking forward to 2035:
<ul style="list-style-type: none"> • More change, upheaval and uncertainty in some areas, with other areas that won't change but remain constant • There needs to be an improvement in communication about the future
Change in nature and type of operations - It is expected that the location, genesis, and nature of operations may shift by 2035:
<ul style="list-style-type: none"> • Change in operational focus linking to political changes • Greater presence and emphasis on our EEZ and the Pacific • Alliances and relationships may change • Increase in aid activities • Increasing conflict and security threats, and closer to home • Nature of conflict may be different • We may be under another Nations command, or even be part of Australia • More complex conflict, and more specialised response
Shifts in the Environmental and Political Landscapes
Environmental/Societal Changes - Changes anticipated in the local (NZ) and global environment are expected to have an impact on the NZDF and its future operations. These include:
<ul style="list-style-type: none"> • Environment and climate change • Economic changes • Local and Global political changes • Increased political interference • Societal changes, changes in social norms • Possible shift towards becoming more nuclear
Resourcing - There are mixed views and expectations about how NZDF would be resourced looking towards 2035:
<ul style="list-style-type: none"> • Some expected growth of both personnel numbers and equipment • Funding and resourcing challenges • Less emphasis on personnel, more on equipment • Growth of the organisation will be affected by involvement in war
Public Relations - There is likely to be increased public scrutiny of the organisation in the future:
Shifts in the Technological Landscape
Technology and Equipment - It is expected that the organisation will possess more advanced technology and equipment by 2035:
<ul style="list-style-type: none"> • Military culture lags behind the private sector • An increase in automation including greater use of unmanned vehicles. • Changes in capabilities and equipment • Improved facilities • Technology will impact the way we interact. • Green energy systems

Ballantyne & Rasmussen, 2013

Table 4 - Future NZDF cultural characteristics required for the future 2035 context

Diverse
<ul style="list-style-type: none"> • Become more accepting/encouraging of diversity • Expand from an emphasis on biculturalism to multiculturalism • Cater for different religious beliefs • Expand recruiting campaigns and target markets • Develop strategies for an older workforce in light of aging population • Adapt policies for changing demographics • Adapt mind-set towards generational differences and expectations • Improve retention of female personnel • Become more uniquely 'kiwi' • Build profile as a 'desirable employer' to attract diverse talent
Joined Up
<ul style="list-style-type: none"> • More integrated, or 'joined up' across the services • Tri-service/Joint training and courses • More co-operation, less tribalism • Working and training with other services • Accepting that we have to work together more – there is no choice
Talent Centric
<ul style="list-style-type: none"> • Improve HR/career management processes • Improve talent management approach • Improve feedback • Focus on retention/improve retention • Adapt to the changing nature of military careers • Career development for civilians • Improved resettlement support
Civilian-Military integration
<ul style="list-style-type: none"> • Establish equal treatment between military and civilian staff • Overcome the 'us and them' mentality with military verses civilian • Civilians involved in operations • Invest more in civilian staff professional development • Joint courses involving civilians • Involve civilians and reservists more in culture
Strong, Transparent Leadership
<ul style="list-style-type: none"> • Increased accountability and transparency • Robust decision making • Effective delegation • Leadership development • Improved succession planning of leadership

Communication and consultation
<ul style="list-style-type: none"> • Enhance the flow of inter-rank communication • Enable frank communication to 'higher ups' • Visibility of leaders 'on the front line' • Genuine consultation with personnel, engage and listen • Enhance cross-service/joint communication • Use multiple mediums to communicate
Supporting and valuing people
<ul style="list-style-type: none"> • Focus on people, not just equipment • Encouraging and facilitating well-being and Work-Life balance is key • Limit absence from families • Enhance sense of community and cohesion • Manage workloads better • Recognise and reward our people • Address inequities • Recognition for serving country
Agile and Adaptable
<ul style="list-style-type: none"> • Improve ability to adapt and change • Policies need to be adapted to reflect the changing work environment • Faster and more agile in response to situations • More flexible, modular approach • Leverage the Kiwi 'can do' uniqueness • Radical shift in both mind-set and technology • Learn from mistakes
Change Savvy
<ul style="list-style-type: none"> • More open and accepting of change • 'Evolutionary' rather than 'revolutionary' approach to change • Best practice in management • More robust planning and decision making with respect to change • Trial changes, evaluate impacts, be prepared to reverse where necessary • Break down 'old school/new school' barriers • Less red tape and bureaucracy • Maintain knowledge and standards
Smarter with Resources
<ul style="list-style-type: none"> • Address financial wastage • Consider not just money saving but money making opportunities • Need to be realistic about what we can achieve with allocated resources
Unique identity and 'Militaryness'
<ul style="list-style-type: none"> • Maintaining military culture and ethos • Keeping identifiers of uniform and other distinctions • Celebrate and promote uniqueness • Keep military features of 'Mission Command' and 'Benevolent leadership'

Learning Organisation – Information and Knowledge management
<ul style="list-style-type: none"> • Sharing and reinforcing lessons learned • Improve individual and organisational knowledge management • Build knowledge base of personnel through recruitment and development • Make information and knowledge more reading accessible • Unified approach to metrics across NZDF
Innovative
<ul style="list-style-type: none"> • Remove barriers to innovation • Foster and reward innovation • Challenge outdated modes of thinking • Ramp up continuous improvement and Defence Excellence • Make use of innovation forums, websites and focus groups
Clear Structure and process
<ul style="list-style-type: none"> • Clear distinction between operations and administrative structures • Less stove pipes across the organisation • Lead innovation and technological advancements • Work smarter not harder • Consistency between civilian and military regulations • Improve standards and discipline
‘High Tech’ – Technology and Equipment
<ul style="list-style-type: none"> • Become more ‘high tech’ • Advanced technology will change the way we work • Ability to work faster, more efficiently, more effectively and more flexibly
Well Trained
<ul style="list-style-type: none"> • Invest more in our people • More technical, technology focused training • Adapt training to match incoming generations and greater diversity • More joint orientated training • More operationally focused training • Include civilians in training opportunities • Improved ‘induction’ training • Improve attitudes and buy-in to training • Become a ‘learning organisation’
Clarity of Vision and Mission
<ul style="list-style-type: none"> • Operate more internationally, with greater inter-agency operability • More ‘global’, less ‘commonwealth’ alliances • More proactive and forward looking • Clear goal and vision across the organisation • Promote and celebrate the positives

Strong Reputation
<ul style="list-style-type: none"> • Need a more active approach to Public Relations • Promote what we do and achieve • Educate the public on our role and rationale • Increased transparency and accountability to the public • Network and engage with other external agencies • Become better connected and politically aware

Ballantyne & Rasmussen, 2013

Employee Engagement Surveys

Census 2015 and 2016.

Following the 2012 NZDF Organisational Culture Survey, NZDF undertook an Engagement Survey to ascertain individual employee commitment to their organisation's goals and values, and their motivation to contribute to the organisation's success. It involved perceptions of how individuals and others are treated by their leader and the organisation. These perceptions shaped people's feeling and beliefs, which in turn drive their attitudes and behaviours. Those who are more engaged are likely to try harder, perform better and are less likely to leave. Two engagement surveys have been completed. The first in 2015 (New Zealand Defence Force, 2015a) resulted in a 65.7% response rate from across the NZDF. This equates to 7,540 personnel. The 2016 survey achieved a better response rate of 75.4%. (New Zealand Defence Force, 2016a).

Both surveys contained identical questions grouped under 13 key themes, with the 2016 survey including an additional question on Safety. The group themes are as follows;

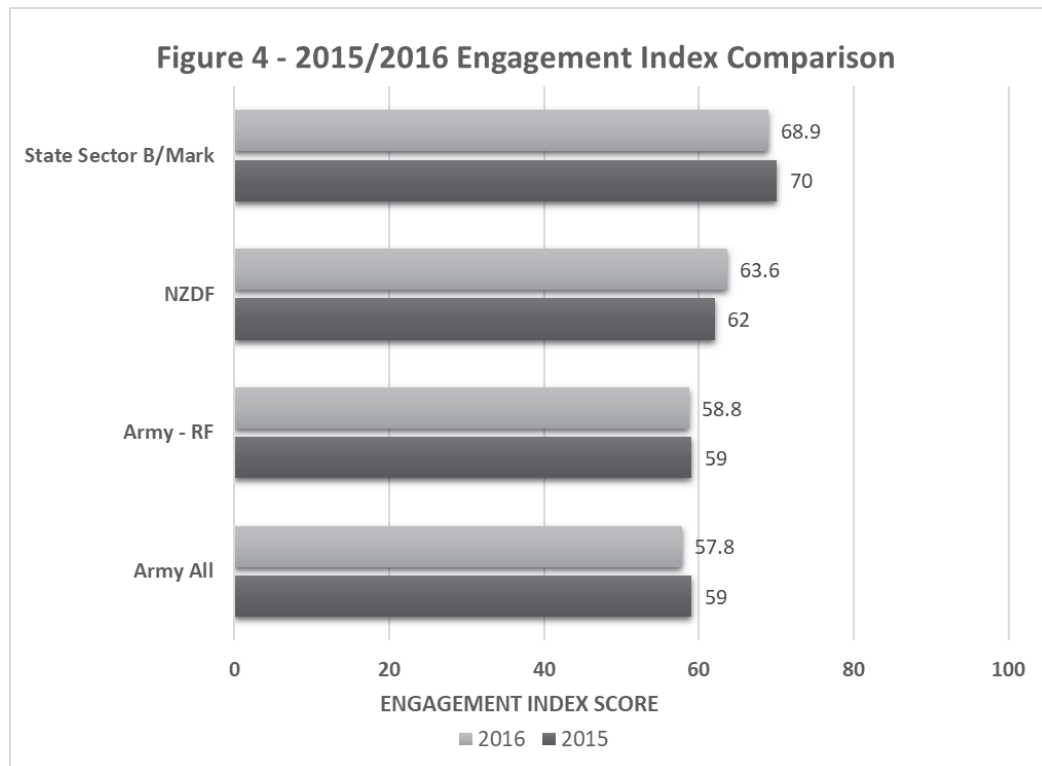
- NZDF Common Purpose
- Single Service Common Purpose
- Unit Common Purpose
- Quality and performance focus
- Communication and co-operation
- Wellbeing

- Safety (2016 survey only)
- The person I report to
- My team
- My job
- Learning and development
- Performance and feedback
- Reward and recognition
- **Overall perceptions**
- Taking Action
- Final thoughts

The engagement index is the average score of the six 'overall perceptions' questions. The results were compared to the 'State Sector Benchmark'. Figure 4 shows the Engagement Index of the NZ Army and NZDF against the state sector benchmark for both the 2015 and 2016 surveys.

Figure 4 shows that that NZ Army's engagement index is below that of the state sector benchmark, with NZDF's engagement index slightly higher than Army. By comparison, the RNZAF engagement index from the same survey for 2015 is 64% (New Zealand Defence Force, 2015a) and 2016 is 66.8% (New Zealand Defence Force, 2016a) with RNZN at 60% for 2015 (New Zealand Defence Force, 2015a) and 61.2% for 2016 (New Zealand Defence Force, 2016a). Army overall has the lowest engagement index of the three services.

When comparing individual question responses, an 'agreement index' was used. This is represented as a percentage of respondents that rated a question high, or very high, agree or strongly agree.



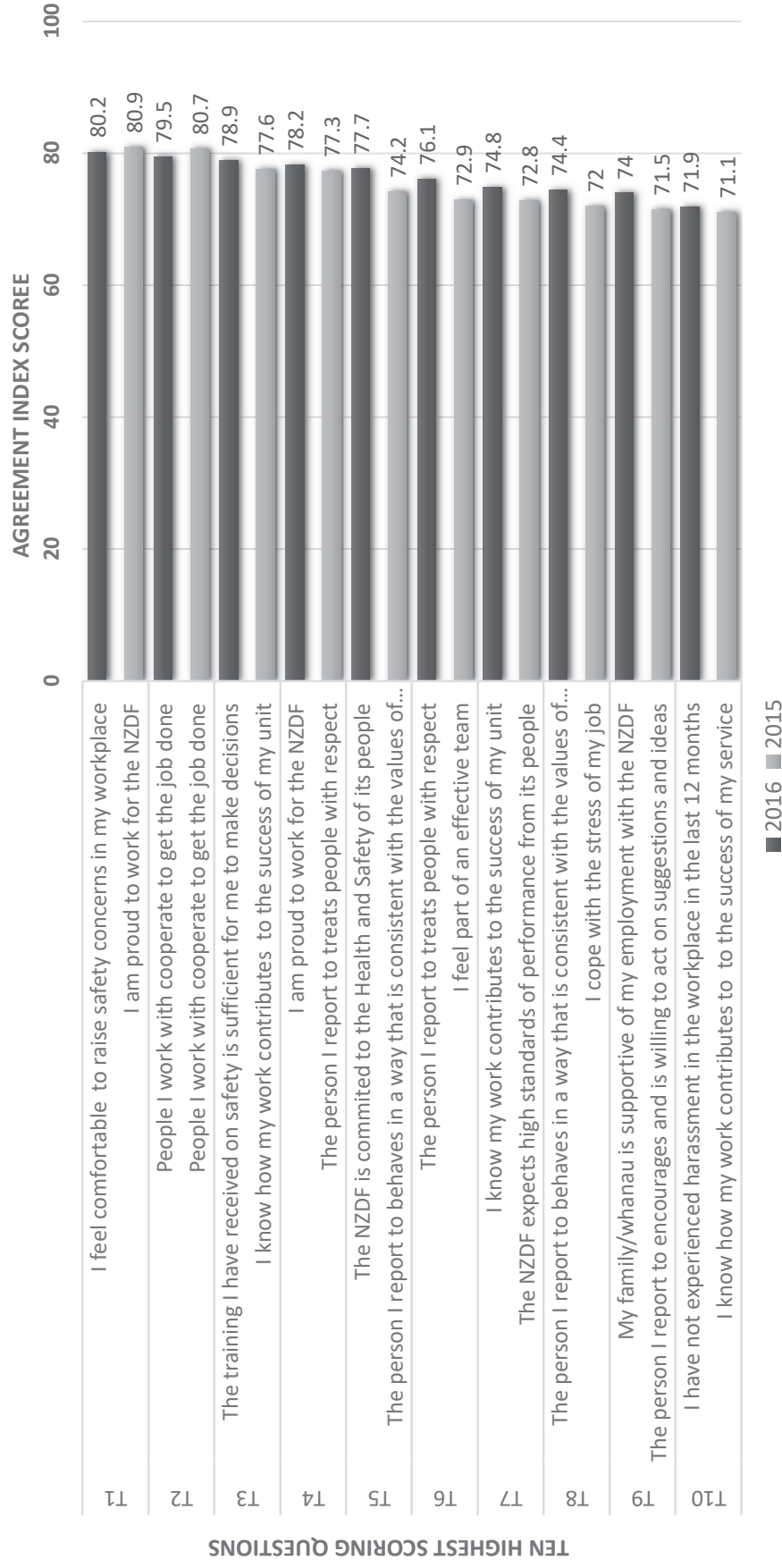
from NZDF Engagement Survey (New Zealand Defence Force, 2015), (New Zealand Defence Force, 2016)

Figure 5 (Page 46) compares the 'agreement index' of the top ten questions from both surveys. Table 5 (Page 48) lists the top ten questions for both years, and shows their comparative positions over those years. *Note* – Responses T1, T3, and T5 from 2016 relate to safety, however this is a category of questioning not included in the 2015 survey.

In relation to previous comments about 'safety' questions, I was interested to see how the questions from both years would line-up if the safety questions were removed from the 2016 results. The rationale for this was to only show results for those questions that were the same over both years. This does not detract in any way from the significance of the safety questions, and how personnel rate these, but makes both years results simpler when comparing the same source information. The results of the comparison without safety questions is shown at Figure 6 (Page 47). Table 6 (Page 48 and 49) compares the relative position of the questions in Figure 6 (no safety questions), the

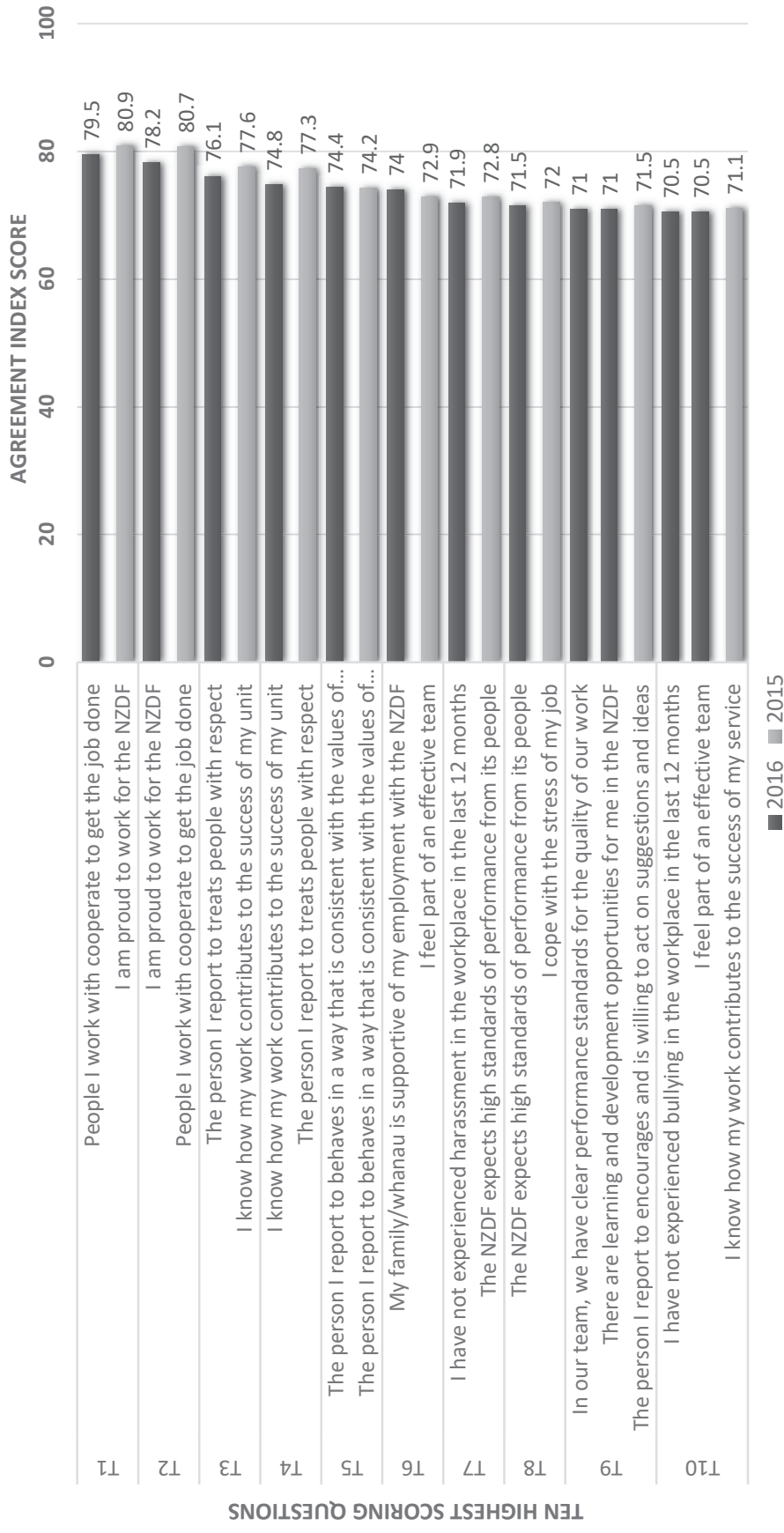
difference in position from 2015 to 2016, and their relative movement and the percentage difference.

Figure 5 - Top 10 Question Response Comparison 2015 and 2016



from NZDF Engagement Survey (New Zealand Defence Force, 2015a), (New Zealand Defence Force, 2016a, 2016b)

Figure 6 - Top 10 Question Response Comparison 2015 and 2016 (Less Safety)



from NZDF Engagement Survey (New Zealand Defence Force, 2015a), (New Zealand Defence Force, 2016a)

Table 5 - Comparison of position of Top 10 questions from 2015 and 2016 Census

Question	Position	
	2015	2016
I feel comfortable to raise safety concerns in my workplace		1
I am proud to work for the NZDF	1	4
People I work with cooperate to get the job done	2	2
The training I have received on safety is sufficient for me to make decisions		3
I know how my work contributes to the success of the unit	3	7
The NZDF is committed to the Health and Safety of its people		5
The person I report to behaves in a way that is consistent with svc values	5	8
The person I report to treats people with respect	4	6
I feel part of an effective team	6	
The NZDF expects high standards of performance from its people	7	
I cope with the stress of my job	8	
My family/whanau is supportive of my employment with the NZDF		9
The person I report to is encourages and is willing to act on suggestions & ideas	9	
I have not experienced harassment in the workplace in the last 12 months	10	
I know how my work contributes to the success of my Service		10

from NZDF Engagement Survey (New Zealand Defence Force, 2015a), (New Zealand Defence Force, 2016a). **Note** - Safety question responses are highlighted.

Table 6 - Comparison of Top 10 question response positions 2015/2016 Census (less Safety questions)

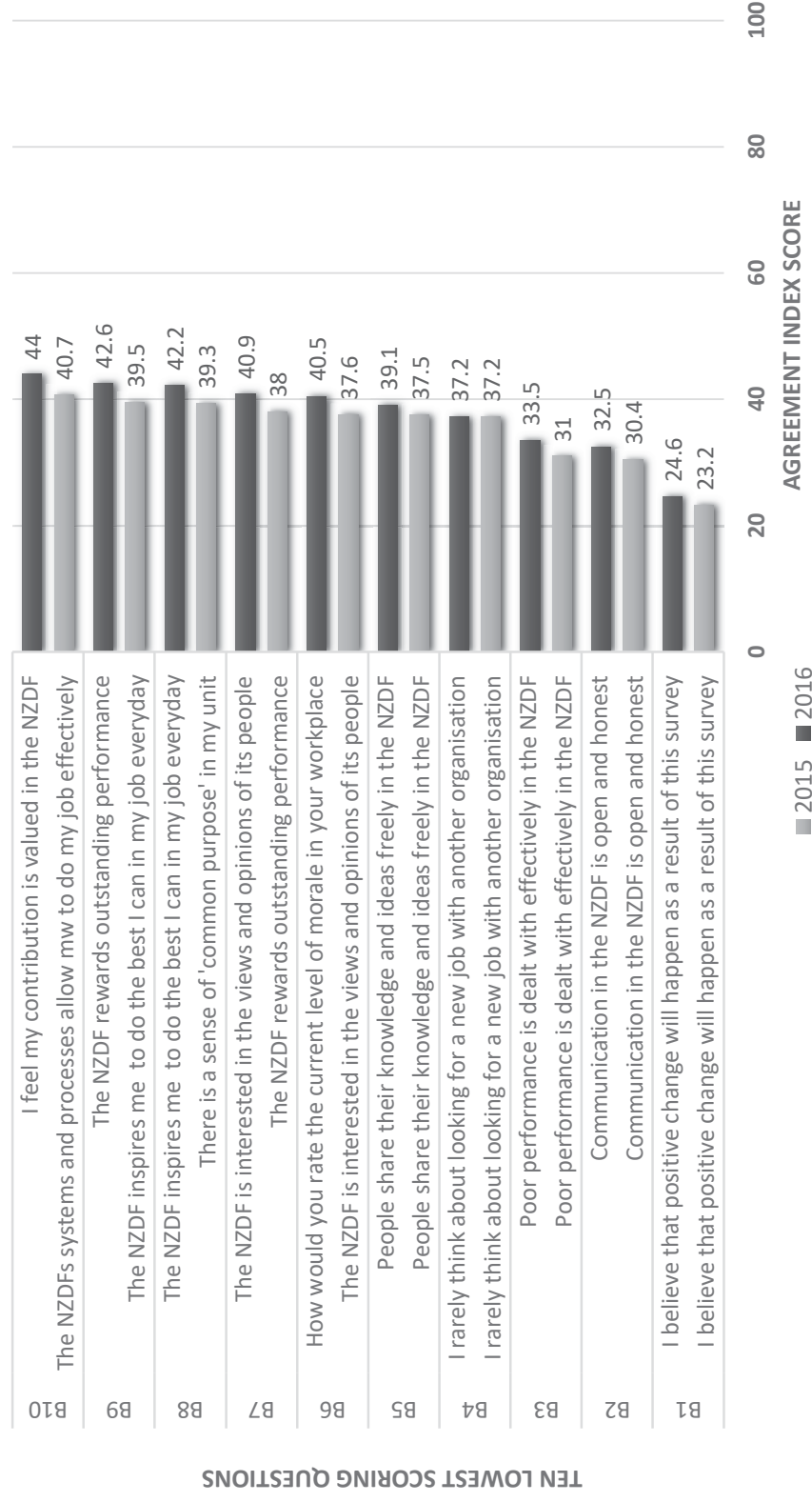
Question	2015	% Score	2016	% Score	Diff 2015-2016	% Diff
People I work with cooperate to get the job done	2	80.7	1	79.5	Up 1	-1.2
I am proud to work for the NZDF	1	80.9	2	78.2	Down 1	-2.7
The person I report to treats people with respect	4	77.3	3	76.1	Up 1	-1.2
I know how my work contributes to the success of the unit	3	77.6	4	74.8	Down 1	-2.8
The person I report to behaves in a way that is consistent with svc values	5	74.2	5	74.4	NC	+0.2
My family/whanau is supportive of my employment with the NZDF	-	-	6	74	-	-
I feel part of an effective team	6	72.9	10=	70.5	Down 4	-2.4
I have not experienced harassment in the workplace in the last 12 months			7	70.5		

Question	2015	% Score	2016	% Score	Diff 2015-2016	% Diff
The NZDF expects high standards of performance from its people	7	72.8	8	71.5	Down 1	-1.3
I cope with the stress of my job	8	72	-	-	-	-
In our team, we have clear performance standards for the quality of our work	-	-	9=	71		
There are learning and development opportunities for me in the NZDF	-	-	9=	71	-	-
The person I report to encourages and is willing to act on suggestions and ideas	9=	71.5	-	-	-	-
I have not experienced bullying in the workplace in the last 12 months	-	-	10=	70.5	-	-
I know how my work contributes to the success of my service	10=	71.1	-	-	-	-
Average score of top 10		75.1		73.5		

from NZDF Engagement Survey (New Zealand Defence Force, 2015a), (New Zealand Defence Force, 2016a)

In total, seven questions from both the 2015 and 2016 surveys appear in Figure 6, and a further seven questions appear in either 2015 or 2016 results, but not both. Also noted is that the average rating of the top 10 questions from 2015 is slightly higher than the average rating of the top 10 questions from 2016. At the other end of the spectrum are the 10 questions that received the worst, or lowest scores across both years. These are represented in Figure 7 (Page 50). There were no responses to any safety questions in the worst 10 answers. It is difficult to compare the ten worst and ten best responses to the two benchmark groups for the 2015 and 2016 census, as some of the questions do not have any agreement index benchmark recorded. However of those that are recorded, with a few exceptions, the NZ Army individual question agreement index is less than the agreement index for NZDF, State Sector and Uniform Benchmarks.

Figure 7 - Worst 10 Question Response Comparison 2015 and 2016



from NZDF Engagement Survey (New Zealand Defence Force, 2015a) (New Zealand Defence Force, 2016a)

Following the completion of the 2015 and 2016 Census, the overall focus areas identified for NZ Army were;

- 2015
 - Visionary Leadership – by sharing a clear and inspiring vision of the future state, leaders can help focus energy, direct effort and drive organisational success. It is important that messages about the future are aligned across the organisation and that personnel receive consistent and continued reinforcement of this vision. Personnel across the organisation need to understand the shared vision and their role in achieving it.
 - Two-way Communication – Clear and transparent communication is vital to ensuring the shared vision is achieved. Decisions and messages about priorities need to reach people and be relevant to them, including not only the 'what' but also the 'why' and 'how'. Communication is not a one way process, people at all levels need to be involved, participate in decisions and feel their opinions and concerns are heard and taken seriously.
- 2016
 - Leadership and Common purpose – This is a carry on from 2015. Need to ensure that vision and common purpose is understood at all organisational and rank levels. It is important that all members understand the 'why' we are here and they can clearly see how 'what they do at work' links to the larger mission and common purpose.
 - Responding to Performance – recognising hard work, achievements and success across the organisation, as well as addressing poor performance. When members do a good job, they need to know that, and we need to also be comfortable having conversations with those

not performing so well and see how the organisation can support them to improve.

Pulse Survey

The Annual Engagement Surveys of 2015 and 2016 measured 'engagement as a whole, and identified two key areas of focus for the coming year. A smaller survey, the 'Pulse' survey conducted in April 2016 (New Zealand Defence Force, 2016c), consisted of five questions designed to target specific areas that NZDF and each of the services was focused on improving. The results acted as a snapshot of engagement that highlighted and refocused if required the NZDF and NZ Army attention in anticipation of the next Annual Census. The response rate from across NZDF was 46.1%, down 19.6% on the 2015 Census, and 29.3% less than the 2016 Census. That aside, the results saw;

- a positive increase around openness and honesty of communications and action on engagement. Notably there was a 14% increase of those who thought '*communication in the NZDF is open and honest*'.
- A slight increase in responses around clarity of vision and pride in the Defence Force, basically the NZDF is 'holding ground' in that area, and
- A slight decrease in the number of people who have had a meaningful performance conversation in the previous six months.

So what does this mean? The Pulse survey indicates that NZDF and Army are generally tracking in the right direction. Seeing some positive movement however does not mean that NZDF and Army have completed the engagement journey. Far from it. There is still room for improvement. Of particular concern is that over 2/3rds of the organisation has not had a conversation with their leader/manager regarding engagement. Having that conversation is the first step in making the improvements in the work place that members want to see.

The culture of an organisation is shaped by many factors – some of which can be changed, and some which might be intractable. Organisations adapt to their external environments by designing responsive structures and systems, adopting relevant technologies, and developing and harvesting members' skills and qualities (Cooke and Szumal, 2000; in Balthazard, Cooke, & Potter, 2006, p. 714) . Though constrained by its environment, an organisation makes a number of 'choices' which, collectively, eventually define its culture. (Schein, 1983; Sathe, 1985; in Balthazard, 2006, pp. 714-715), suggest that these choices are influenced by the philosophy of the organisation, the values of top management, and the 'assumptions' of founding principals and succeeding generations of organisational leaders.

4. Methodology

The key Organisational Culture data gathering method chosen was the Organisational Culture Analysis Instrument (OCAI), a simple, yet workable tool for diagnosing organisational culture. This should not be confused with the Organisational Culture Inventory (OCI) developed by Drs Robert Cooke and J. Clayton Lafferty (Human Synergetics International, 2015). The OCAI developed by professors Robert Quinn and Kim Cameron, is a validated instrument, based on the Competing Values Framework of Denison and Spreitzer (1991) (in Prajogo & McDermott, 2005, p. 1104). It is a theoretical model that is now the dominant framework in the world for assessing organisational culture (Cameron & Quinn, 2011, p. 35), and has been used by over 10,000 companies worldwide, to look at 'now' and 'preferred' cultures in an organisation. Mozaffari (2008) writes that the framework itself was experimentally derived and found to have a high degree of face and empirical validity, and that additionally the Competing Values Framework was identified as having a high level of reliability matching or exceeding that of other instruments commonly used in the social and organisational sciences (Cameron and Ettington, 1988; Cameron and Quinn, 2006; Berrio, 2003; in Mozaffari, 2008, p. 680). Quinn and Rohrbaugh (1983), Rohrbaugh (1981) (in Howard, 1998, pp. 234-235) initially derived the competing values model by exploring relationships among notions of organisational effectiveness. They asked academic experts to assess the similarities across various measures of effectiveness, and analysed the data with multidimensional scaling. Howard (1998) goes on to comment that the two primary dimensions reflected preferences for either structural control or flexibility and focusing on either internal or external constituents. Crossing these two dimensions at their centres, therefore, identified four distinctive organisational types. Each of the quadrants was characterised by particular objectives and/or preferred processes for achieving objectives, the means-end third dimension. Each of the four quadrants had a conceptual polar opposite.

Quinn (1988) (in Howard, 1998) subsequently labelled the quadrants to refer to four types of organisational culture – Hierarchy (Control), Market (Compete), Clan (Collaborate), Adhocracy (Create).

Cameron and Quinn's approach to diagnosing and changing organisational culture offers six advantages (Cameron & Quinn, 2011, p. 24)

- It is practical – it captures key dimensions of culture that have been found to make a difference in organisations' success.
- It is efficient – the process of diagnosing and creating a strategy for change can be accomplished in a reasonable amount of time.
- It is involving – The steps of the process can include every member of the organisation, but they especially involve all who have a responsibility to establish direction, reinforce values, and guide fundamental change.
- It is both qualitative and quantitative – the process relies on quantitative measurement of key cultural dimensions as well as qualitative methods including stories, incidents and symbols that represent the immeasurable ambience of the organisation.
- It is manageable – the process of diagnosis and change can be undertaken and implemented by a team within the organisation – usually the management team. Outside diagnosticians, culture experts, or change consultants are not required for successful implementation.
- It is valid – the framework on which the process is built not only makes sense to people as they consider their own organisation but is also supported by an extensive empirical literature and underlying dimensions that have a verified scholarly foundation.

Cameron and Quinn conclude by saying that this tool is a critically important strategy in an organisation's repertoire for changing culture and improving performance.

The OCAI is probably the most frequently used instrument for assessing organisational culture in the world today (Cameron & Quinn, 2011, p. 27). It has been found to not only be an accurate assessment of organisational culture, but significant relationships have been found between culture as assessed by the OCAI and a variety of indicators of organisational effectiveness. Cameron and Quinn (2011) say that the instrument has been used in a variety of industry sectors, including military organisations, and it is designed to help identify the organisations current culture or the culture that exists today. The same instrument then helps to identify the culture that organisation members believe should be developed to match future demands of the environment and the opportunities to be faced by the organisation in the coming 5 years (Cameron & Quinn, 2011, p. 28).

As part of the literature review, I noticed that the OCAI had been used within military organisations. I approached them and asked if they had any results that might be useful for this study (Richards, 2016). The response I received said that the OCAI Institute use the ISIC (International Standard Industrial Classification of all Economic Activities) that only has "Public Administration and defence; compulsory social security" with no further specification. This meant they had no specific military data as it was all 'lumped together' under the ISIC. Later in this paper I will use one of Cameron and Quinn's (2011) Average Culture Plots for Public Administration, to compare against the NZ Army culture plots developed from the research.

The OCAI looks at six dimensions of organisational culture each with four alternatives. 100 points are divided among the four alternatives, as with the Cameron and Freeman (1991) study, depending on the extent to which each alternative is similar to the respondents own organisation. A higher number of points is given to the alternative that is most similar to the organisation, conversely a lower number of points is given to the alternative that is least similar.

Table 7 (Page 57 and 58) presents the six dimensions and four alternatives.

Table 7 - OCAI Key Dimensions and alternatives

Dimension 1 - Dominant Characteristics
a) The organisation is a very personal organisation. It is like an extended family. Members share a lot of themselves with others.
b) The organisation is a very dynamic innovative organisation. Members are willing to stick their necks out and take risks.
c) The organisation is very results oriented. A major concern is with getting the job done. Members are very competitive and achievement oriented.
d) The organisation is a very controlled and structured place. Formal procedures generally govern what members do.
Dimension Two - Organisational Leadership
a) The leadership in the organisation is generally considered to exemplify the core values of courage, comradeship, commitment and integrity.
b) The leadership in the organisation is generally considered to exemplify entrepreneurship, innovation, or risk taking.
c) The leadership in the organisation is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
d) The leadership in the organisation is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.
Dimension Three - Leadership of Employees
a) The management style in the organisation is characterized by teamwork, consensus, and participation.
b) The management style in the organisation is characterized by individual risk-taking, innovation, freedom, and uniqueness.
c) The management style in the organisation is characterized by hard-driving competitiveness, high demands, and achievement.
d) The Management style in the organisation is characterized by security of employment, conformity, predictability, and stability in relationships.
Dimension Four - Organisational Glue
a) The glue that holds the organisation together is loyalty and mutual trust. Commitment to this organisation runs high.
b) The glue that holds the organisation together is commitment to innovation and development. There is an emphasis on being on the cutting edge.
c) The glue that holds the organisation together is the emphasis on achievement and goal accomplishment.
d) The glue that holds the organisation together is formal rules and policies. Maintaining a smooth-running organisation is important.

Dimension Five - Strategic Emphasis
a) The organisation emphasises personal development. High trust, openness, and participation persist.
b) The organisation emphasizes the acquiring of new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.
c) The organisation emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.
d) The organisation emphasizes permanence and stability. Efficiency, control and smooth operations are important.
Dimension Six - Criteria of Success
a) The organisation defines success on the basis of human resources, teamwork, employee commitment, and concern for people.
b) The organisation defines success on the basis of having unique or the newest products. It is a product leader and innovator.
c) The organisation defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.
d) The organisation defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.

Cameron & Quinn, 2011, pp. 30-32

Based on the analysis of the data collected from the OCAI and other data gathered from the survey, I chose to use 'count' and 'percentage' measurement for presentation of the results. The OCAI is totally dependent on the weighting that is given to each set of four questions for both the Now and the Preferred culture. Individual values have been calculated as well as overall values counted and averaged. Demographic groups have been identified, and again a count of numbers as well as percentages has been used in the analysis of the data to draw conclusions. These have been supported by a variety of graphs, charts, tables and figures.

5. Results

Constructing an Organisational Culture Profile for the NZ Army

The main purpose of developing a culture profile is to identifying what kind of culture change if any, is required. It can be difficult to identify or describe an organisations culture, but having an understandable picture of the culture makes it easier to implement change in a consistent, coherent, and consensual way. Once a culture profile has been identified, as well as each of the six culture attributes, these can be interpreted from several different perspectives (Cameron & Quinn, 2011, pp. 80-81).

At least six comparisons are available;

1. The type of culture that dominates the organisation
2. Discrepancies between the current and preferred future culture
3. The strength of the culture type that dominates the organisation
4. The congruence of the culture profiles generated on different attributes and by different individuals in the organisation
5. A comparison of the organisations culture profile with the average culture profiles of almost one thousand organisations as rated by approximately fourteen thousand of their managers
6. Trends from over two decades of work using the OCAI

These comparisons will be discussed in Section 6 of this Thesis.

The initial approach to gathering data was to undertake a number of one on one interviews with senior leadership of the NZ Army, and conduct a series of focus groups covering a broad cross-section of ranks, trades and locations, and to distribute a questionnaire. The interviews did not occur due to the operating tempo and the availability of personnel, and only one Focus Group was used to test and validate the questionnaire. I was not overly concerned about the lack of interviews with senior leadership, as the key information I needed to understand the cultural environment was

the OCAI, as the OCAI relies on quantitative measurement of key cultural dimensions as well as qualitative methods including stories, incidents and symbols that represent the immeasurable ambience of the organisation (Cameron & Quinn, 2011, p. 24)

After a number of discussions with Organisational Research staff from the New Zealand Defence Force, it was recommended that a survey which took no longer than 20 minutes to complete, that was distributed at the right time of the year, would provide the best opportunity for gathering the data I was seeking. Several other research projects were occurring in and around mine, and so identifying a suitable window was essential. The survey was designed to gather sufficient demographic information so that analysis could be done on a variety of demographic groupings, while retaining anonymity of the respondents. It also asked questions relating to the training that service members had received on continuous improvement, along with their experience using the methodologies, and generic questions about innovation, leadership, and organisational culture. Six versions of the survey were developed and tested by a focus group of five personnel, before settling on the final version.

The final survey version is presented in Five parts.

- **Part 1** – Demographics
- **Part 2** - Defence Excellence Training
- **Part 3** – Individual respondent experience using the tools taught by the Defence Excellence program
- **Part 4** – General questions about innovation and continuous improvement in the NZ Army
- **Part 5** – The Organisational Culture Analysis Instrument (OCAI)

Further discussion with New Zealand Defence Force Organisational Research recommended that a random sample of 400 personnel from across NZ Army would provide sufficient useful data for the purposes of my research. The original date for distribution of the survey was mid 2016, however due to circumstances beyond my

control the date shifted to December 2016, and finally February 2017. A link to the online survey was emailed to all participants, along with full instructions, inviting them to participate in the survey. Responses were received from 91 personnel, representing a response rate of 22.75%. A total of 30 respondents from the original 91 have been dropped from the sample due to incomplete responses. This left 61 useable responses (15.25% of the original 400 invited) that formed the data set for all analysis in this research. No follow-up was made with the 30 respondents who provided incomplete data, nor was there any follow-up with the 309 personnel who chose not to participate.

Renowned statistician John W. Tukey (1977) (in Cameron & Quinn, 2011, p. 73) contended that the most effective way to interpret numbers is to plot them, draw pictures with them, chart them, or graph them. The pictures give people a better sense of what the numbers mean than a statistical test or a sophisticated mathematical technique. He said that it is possible to see more relationships, do more comparisons, and identify more interesting patterns by analysing images and representations than by simply looking at the results of numerical analysis. On this basis, the responses for each part of the survey discussed in this paper are presented using a table of data, and bar charts for the more 'visually' inclined.

The questions that participants were asked in each part of the survey are as follows;

Part 1 – Demographic Information.

1. Participants were asked to select their current employment status with the NZ Army from one of five options;
 - a. Full-time military
 - b. Part-time Military
 - c. Part-time civilian
 - d. Full-time civilian
 - e. Reservist

2. Participants were then asked to indicate with a 'Yes' or 'No' answer if they were 'posted' (the position they are employed against) to an Army specific appointment?
3. If their answer was 'no' to the previous question, they were asked to enter in a free text field the 'service' where they were currently employed. Note: all survey participants are part of the NZ Army, but as is normal career management practice, NZ Army personnel are employed in non-NZ Army positions. This question was to establish how many completing the survey were not currently working directly for the NZ Army at the time of the survey.
4. Participants were asked to identify a general work location from five options;
 - a. Upper North Island
 - b. Central North Island
 - c. Lower North Island
 - d. South Island
 - e. Other.
5. A question regarding the Military rank or civilian grade was asked, and five 'bracketed' options were provided.
 - a. Private to Corporal/Grade 5 to 8
 - b. Sergeant to Warrant Officer Class 1/Grade 9 to 14
 - c. Second Lieutenant to Major/Grade 15 to 18
 - d. Lieutenant Colonel and Colonel/Grade 19 to 22
 - e. Brigadier and above/above Grade 22
6. Next, participants were asked to identify which employment group best described the type work they did. Five groups were offered;
 - a. Combat
 - b. Combat support
 - c. Logistics and Supply chain
 - d. Other support services

- e. Corporate Headquarters
7. Gender details were requested. This was a free text field.
 8. In order to ascertain the ethnic group to which respondents felt most closely associated with, four options were provided;
 - a. New Zealand Maori
 - b. NZ European
 - c. Pacific Islander
 - d. Other European
 - e. Other
 - f. a free text box to insert the appropriate ethnic affiliation if none of the provided options were acceptable
 9. Details of age were requested based on the following groupings;
 - a. less than 20
 - b. 20 to 24
 - c. 25 to 29
 - d. 30 to 39
 - e. 40 to 49
 - f. 50 to 59
 - g. 60 plus
 10. The questionnaire then asked for participants to select how long they had served in the New Zealand Army from five options.
 - a. one to two years
 - b. three to four years
 - c. 5 to 9 years
 - d. 10 to 14 years and
 - e. 15 years plus
 11. The final question in this section sought to identify the highest level of academic achievement for each participant. The option available were;

- a. New Zealand Certificate
- b. NCEA or equivalent
- c. under-graduate degree
- d. diploma
- e. post-graduate degree

The responses to part one of the survey for the 'sample population' are shown in Table 8A (Page 65) and for the 'Focus Group' in Table 8B (Page 65). This shows the breakdown by percentage of how the 61 participants answered each question. Figure 8A (Page 66) and Figure 8B (Page 67) show the results of Table 8A only, in bar chart format.

The questions in this section were structured to maintain the anonymity of the respondents, yet gather sufficient data to conduct worthwhile comparative analysis.

Table 8A - Sample Population responses to questions from Part 1 of the survey

1.1 Employment Status			1.2 Currently posted to Army			1.3 If not posted to Army, Where posted?		
Full-time Military	52	85.25%	Yes	48	78.69%	NZDF	12	19.67%
Part-time Military	1	1.64%	No	13	21.31%	Air Force	1	1.64%
Part-time Civilian	0	0%						
Full-time Civilian	7	11.48%						
Reserve	1	1.64%						
1.4 General Work Location			1.5 Rank / Pay grade			1.6 Employment Group		
Upper NI	8	13.11%	Pte to Cpl, Gde 5 to 8	21	34.43%	Combat	12	19.67%
Central NI	23	37.70%	Sgt to WO1, Gde 9 to 14	38	62.30%	Combat Support	12	19.67%
Lower NI	18	29.51%	2nd Lt to Maj/Gde 15 to 18	0	0.00%	Logistics and Supply Chain	18	29.51%
Sth Island	11	18.03%	LTCOL to COL, Gde 19 to 22	2	3.28%	Other Support Services	15	24.59%
Other	1	1.64%	Brig & above/above Gde 22	0	0.00%	Corporate HQ	4	6.56%
1.7 Gender			1.8 Ethnic Affiliation			1.9 Age		
Male	50	81.97%	NZ Maori	15	24.59%	20 to 24	6	9.84%
Female	11	18.03%	NZ European	39	63.93%	25 to 29	8	13.11%
			Pacific Islander	0	0.00%	30 to 39	16	26.23%
			Other European	3	4.92%	40 to 49	15	24.59%
			Other	4	6.56%	50 to 59	9	14.75%
						60+	7	11.48%
1.10 Length of Service			1.11 Level of Academic Achievement					
1 to 2	1	1.64%	NCEA or equivalent	11	18.03%			
3 to 4	7	11.47%	NZ Certificate	16	26.23%			
5 to 9	14	22.95%	Diploma	12	19.67%			
10 to 14	8	13.11%	Under-graduate Degree	17	27.87%			
15+	31	50.82%	Post-graduate Degree	5	8.20%			

showing percentage responses to each question.

Table 8B - Focus Group responses to questions from Part 1 of the survey

1.1 Employment Status			1.2 Currently posted to Army			1.3 If not posted to Army, Where posted?		
Full-Time Military	1	20.00%	Yes	1	20.00%	NZDF	4	80.00%
Part-time Military	0	0.00%	No	4	80.00%			
Part-time Civilian	0	0.00%						
Full-time Civilian	4	80.00%						
Reserve	0	0.00%						
1.4 General Work Location			1.5 Rank / Pay grade			1.6 Employment Group		
Upper NI	0	0.00%	Pte to Cpl, Gde 5 to 8	0	0.00%	Combat	0	0.00%
Central NI	0	0.00%	Sgt to WO1, Gde 9 to 14	4	80.00%	Combat Support	0	0.00%
Lower NI	4	80.00%	2nd Lt to Maj/Gde 15 to 18	0	0.00%	Logistics and Supply Chain	5	100.00%
Sth Island	0	0.00%	LTCOL to COL, Gde 19 to 22	1	20.00%	Other Support Services	0	0.00%
Other	1	20.00%	Brig & above/above Gde 22	0	0.00%	Corporate HQ	0	0.00%
1.7 Gender			1.8 Ethnic Affiliation			1.9 Age		
Male	3	60.00%	NZ Maori	0	0.00%	20 to 24	0	0.00%
Female	2	40.00%	NZ European	5	100.00%	25 to 29	0	0.00%
			Pacific Islander	0	0.00%	30 to 39	2	40.00%
			Other European	0	0.00%	40 to 49	0	0.00%
			Other	0	0.00%	50 to 59	2	40.00%
						60+	1	20.00%
1.10 Length of Service			1.11 Level of Academic Achievement					
1 to 2	1	20.00%	NCEA or equivalent	0	0.00%			
3 to 4	0	0.00%	NZ Certificate	2	40.00%			
5 to 9	0	0.00%	Diploma	0	0.00%			
10 to 14	1	20.00%	Under-graduate Degree	3	60.00%			
15+	3	60.00%	Post-graduate Degree	0	0.00%			

showing percentage responses to each question.

Figure 8A - Bar Charts: Sample Population results for Part 1 of the survey showing percentage responses to each question.

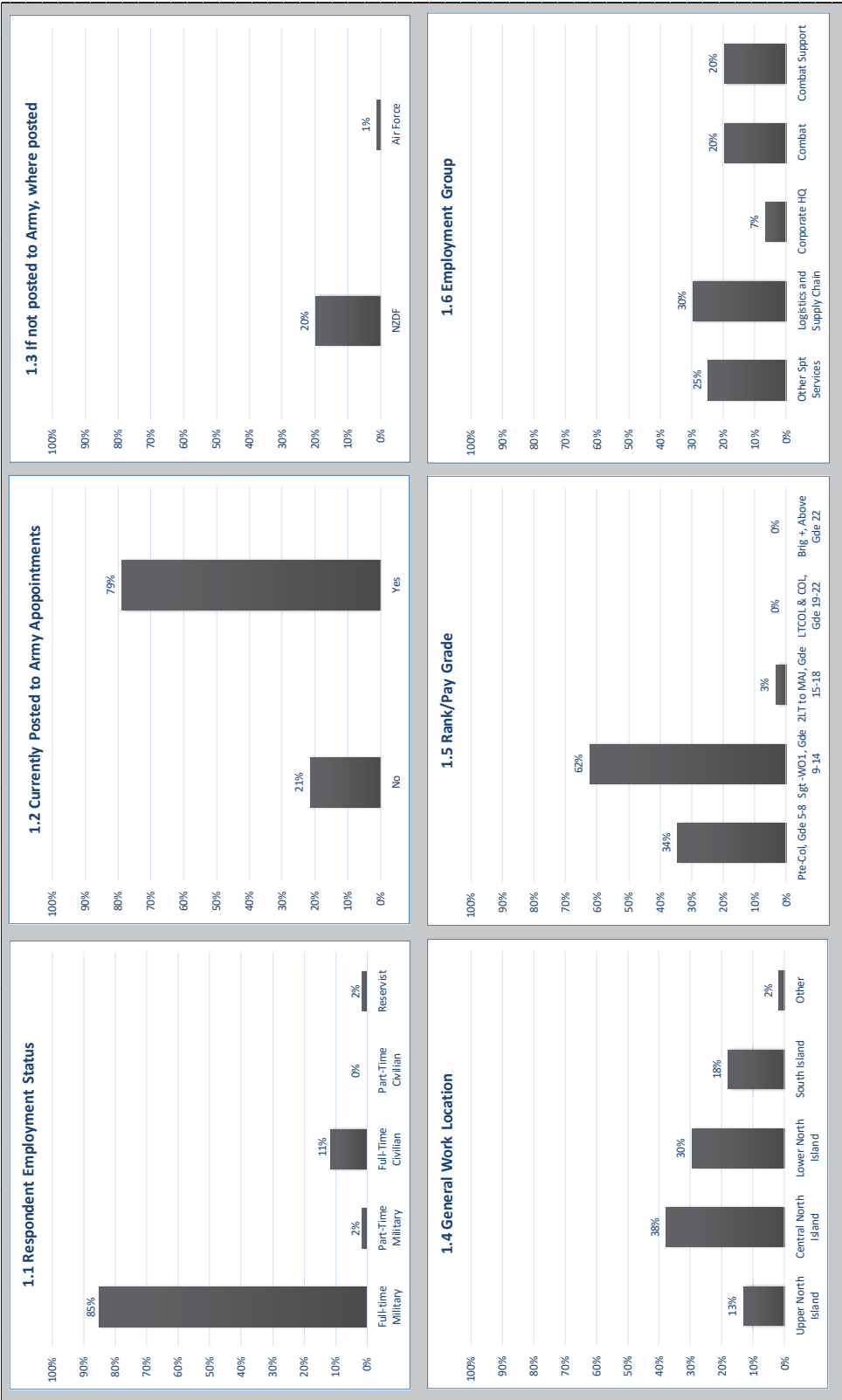
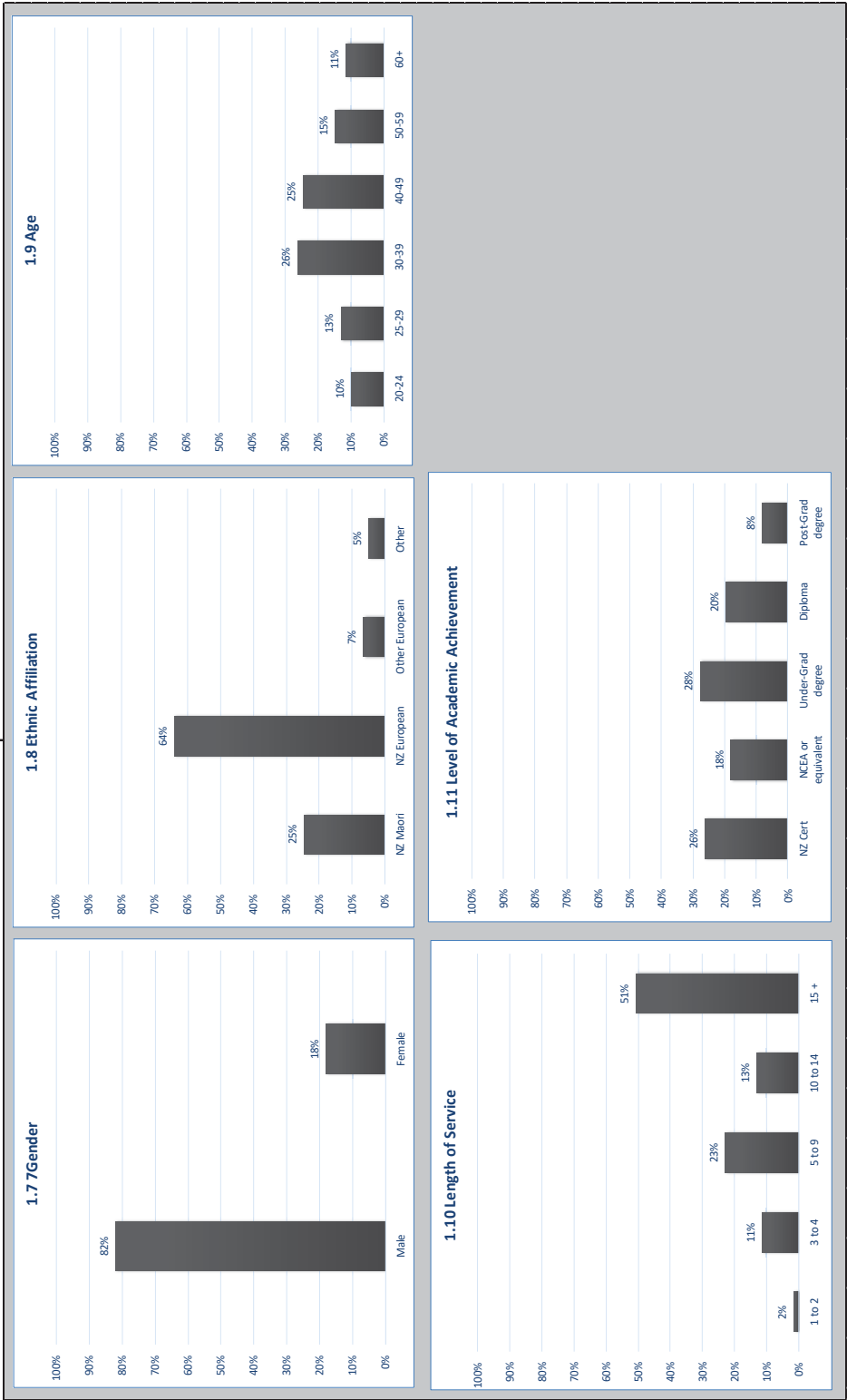


Figure 8B - Bar Charts: Sample Population results for Part 1 of the survey (Continued) showing percentage responses to each question.



Part 2 – Training. This section of the questionnaire asked questions specifically about the Defence Excellence Program. The following questions were asked;

1. Had respondents completed an NZDF Defence Excellence course? The answer choices were either 'Yes' or 'No'.
2. For those who answered 'No' to the previous question, they were asked if they were interested in completing an NZDF Defence Excellence training course. Again this was a 'Yes' or 'No' response.
3. Those who answered 'Yes' to the first question in this series, were asked to indicate which courses they had completed. Five options were provided;
 - a. White Belt
 - b. Green Belt
 - c. Black Belt
 - d. Lean for Leaders
 - e. Dx Orientation
4. Participants were then asked to respond to the statement "NZDF Dx training provides useful process improvement tools and techniques". A five point Likert Scale was used for this response with the following options;
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
5. Survey participants were then asked whether they thought that the Lean Six Sigma skills taught by NZDF would be sought after by other organisations. The response options to this statement were 'Yes', 'No, and 'Maybe'.

6. Next, participants were asked to rate on a 5 point scale the likelihood that they would leave the NZDF and take up a full-time job using their Defence Excellence skills. The responses were;
 - a. Highly unlikely
 - b. Unlikely
 - c. Indifferent
 - d. Likely
 - e. Highly Likely
7. The final question in this part asked participants to provide additional comment regarding the NZDF DX Program. 26 respondents commented, and their feedback is provided in Table 9 below.

Table 9 - Responses to 'further comments question' Part 2

I have never heard of any "NZDF Dx Training program" to be honest.
No Idea what this is about.
All the information is taught throughout the military command courses 'What if!'
I have little understanding of NZDF Dx training courses.
I don't know what these are.
I don't know what an NZDF Dx course is.
Dx training is good for defence but it needs to be applied individually to each service, many of the process review aspects are not as applicable to all the personnel heavy environments within the Army but are useful for areas such as workshop flow.
I was not aware that there was DX program in place.
I am not fully aware of the NZDF Dx training program or the Lean Six Sigma skills.
Not sure what any of this mean. I don't know what an NZDF Dx training course is.
I have no idea what Dx training is or what the lean six sigma skills are.
I we like to see the skills introduced earlier in a soldiers/officers service. I have wanted to get onto on one of these courses for some time.
No exposure to this.
Sorry, Haven't done the course yet.
I have no idea what the NZDF DX training course is, what is it for, and what relevance it would have.
Unaware of what the Dx training is and what of the Lean Six Sigma skills are, so I cannot make any judgements in regards to these. I have ticked 'Maybe' in the skills just so that I can continue with the survey.

Did the White Belt and have never used it since. There are already appreciation processes in place in NZDF.
Any tool that aims to improve the way we approach and solve problems or improve our processes is valuable. In my current job we do this through applying the JMAP process. My concern with Dx and other processes that we have adopted in the NZDF is that they are seen as business tools, not military tools, and are therefore not embraced by our people. This is based on a series of issues that include non-military terminology, that to most in the NZDF they are perceived as tools that are not for us. In short we should keep with military terminology and a common language that is inclusive.
I haven't heard of a "DX" Training Program.
I have had very little to no exposure to the above subject therefore cannot provide a response based off reason or experience.
In all the years I have worked for NZDF I have near seen or heard of NZDF Dx training, so do not know what it is.
The Lean Six Sigma training was excellent, however I have not been provided with the time to put a lot of what was taught into practise due to other BAU tasks that consume most of my days.
I do not know what an NZDF DX Training Program is nor do I know what the six sigma skills are.
I have never heard of the Dx Training Program or the Lean Six Sigma skills so cannot give a better answer than what is annotated.
I have no idea what a Dx training program is, or what the Six Sigma Skills is.
Unfortunately the information to attend these programmes does not flow out through the whole of the reserve force chain as it should do. 'One Force'. I have heard about it though.

Generally speaking, around 80% of the comments in Table 9 (highlighted) indicate that the respondents have not heard of, nor have they had exposure to the Dx program.

Table 10A (Page 71) and Table 10B (Page 71) present the results of the data collection from Part 2 of the Survey for both the sample population (Table 10A) and the Focus Group (Table 10B).

Table 10A – Sample Population responses to questions from Part 2 of the survey showing percentage responses to each question.

2.1 Attended Dx Training			2.2 # Interested in Dx Training			2.3 Dx Courses completed		
Yes	9	14.75%	Yes	28	45.90%	White Belt	8	13.11%
No	52	85.25%	No	24	39.34%	Green Belt	1	1.64%
			No response	9	14.75%	Black Belt	0	0.00%
						Lean 4 Leaders	0	0.00%
						Dx Orientation	1	1.64%
2.4 Dx Training provides useful Tools			2.5 LSS sought by other organisations			2.6 Leave NZDF for full-time LSS job		
Strongly Disagree	1	1.64%	Yes	17	27.87%	Highly unlikely	3	4.92%
Disagree	1	1.64%	No	2	3.28%	Unlikely	2	3.28%
Neutral	43	70.49%	Maybe	42	68.85%	Indifferent	3	4.92%
Agree	12	19.67%				Likely	1	1.64%
Strongly Agree	4	6.56%				Highly Likely	0	0.00%
						No response	52	85.25%

Table 10B. Focus Group responses to questions from Part 2 of the survey showing percentage responses to each question.

2.1 Attended Dx Training			2.2 # Interested in Dx Training			2.3 Dx Courses completed		
Yes	4	80.00%	Yes	0	0.00%	White Belt	3	60.00%
No	1	20.00%	No	1	20.00%	Green Belt	2	40.00%
			No response	4	80.00%	Black Belt	0	0.00%
						Lean 4 Leaders	0	0.00%
						Dx Orientation	0	0.00%
2.4 Dx Training provides useful Tools			2.5 LSS sought by other organisations			2.6 Leave NZDF for full-time LSS job		
Strongly Disagree	0	0.00%	Yes	4	80.00%	Highly unlikely	0	0.00%
Disagree	0	0.00%	No	0	0.00%	Unlikely	2	40.00%
Neutral	2	40.00%	Maybe	1	20.00%	Indifferent	1	20.00%
Agree	2	40.00%				Likely	1	20.00%
Strongly Agree	1	20.00%				Highly Likely	0	0.00%
						No response	1	20.00%

Figure 9 (Page 73) shows the results of the data from Table 10A as individual bar charts for each question.

Part 3 – Experience. Part 3 of the survey asked questions specifically about experience of the Dx programme and continuous improvement. The questions asked were;

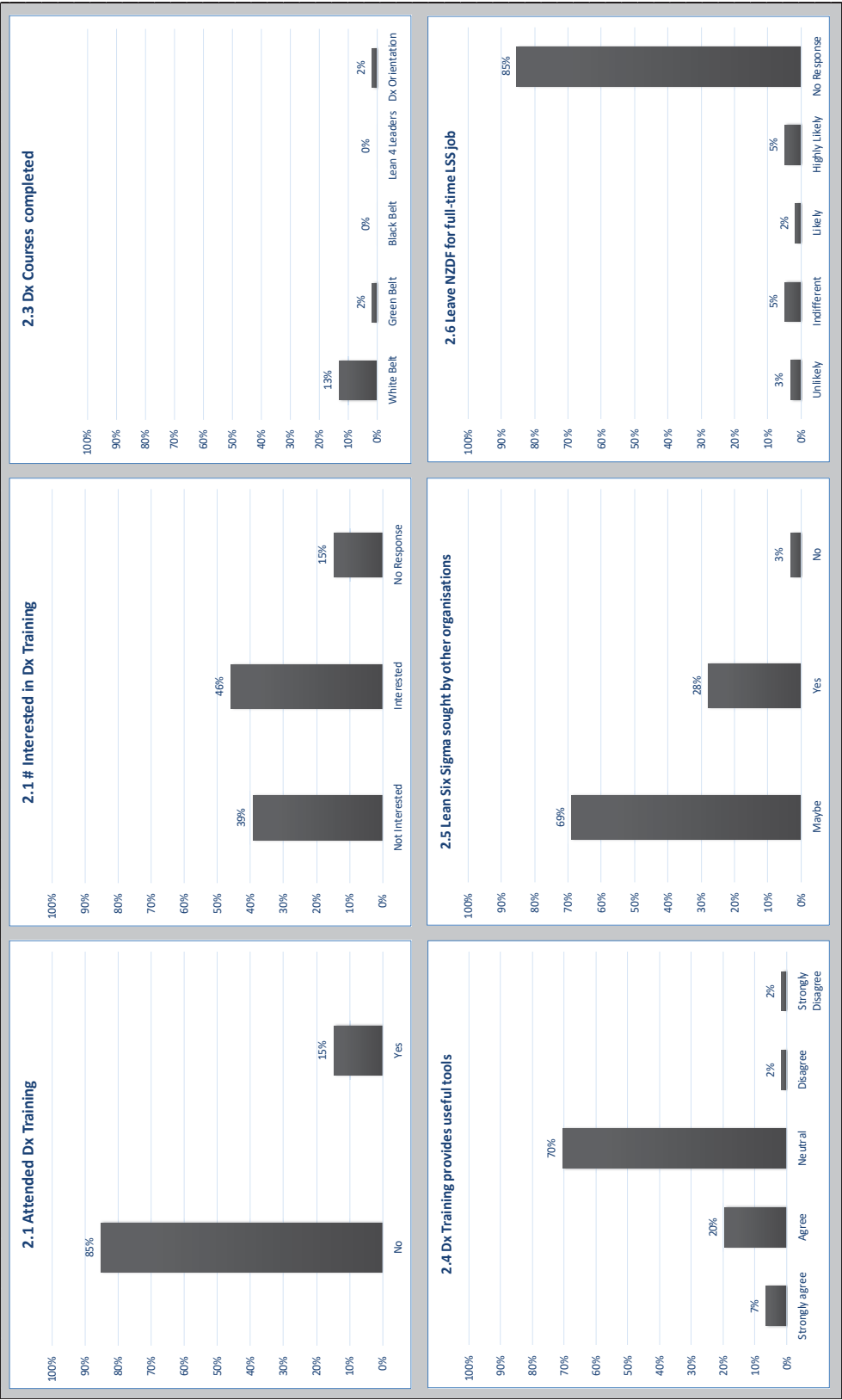
1. Practical experience using the Lean Six Sigma and other continuous improvement tools taught on the Dx courses is essential. Survey participants were provided with a 5 point Likert grading scale and asked to rate their level of experience against the following;
 - a. No experience
 - b. Below Average experience

- c. Average experience
 - d. Above Average experience
 - e. Experienced
2. The next question asked participants to identify whether they had used the skills learned from the Dx training, in the workplace. The response options were 'Yes', 'No', and 'Not applicable'.
 3. Question three was a free text box, and asked respondents that if they had not had an opportunity to use the skills from a Dx course in their workplace, could they explain the reasons for this. These particular responses are presented in Table 11 below. Of the 14 responses, 9 (64%) have not heard of the Dx program.

Table 11. Responses to Part 3, Question 3.

I don't know what it is.
Already been completed using the military aspect of the course
I have been away on either operations or study leave for the past 2 years and have not heard of or experienced these courses. Either this is recently introduced or not part of my sphere.
I was not aware that there was a DX course
Don't actually know what it is!
What exactly is NZDF Dx????????????????
Sorry, Haven't done the course yet.
Actually not aware of Dx training so therefore haven't used it in the workplace.
Instead of using Dx skills I use the appreciation process.
Excuse my ignorance I have never heard of a Dx course or what it's about???
The opportunity to complete the course never presented itself, although I was happy for selected members of my team to complete the process. My conclusion being that we ended up with a disparate team using different skills and language. On one hand this provided an opportunity for different approaches and perspectives. However, I think it would be beneficial for us all to be on the same page. This requires Dx training to be included in promotion courses.
Due to the high individual coursing requirements for Officers and being in a currently conducting sub unit command, time is valuable resource and doing a week + course that take me away from primary job is not inviting.
Do not know what Dx training is or what type of courses there is for this Dx training.
I have never heard of the training or the skills prior to this survey.

Figure 9. Bar Charts showing results for Part 2 of the survey showing percentage responses to each question.



4. Training is no good without putting the skills to good use. Participants were asked to identify how effective or ineffective the Dx skills had been in bringing about change. The rating options provided were;
 - a. Ineffective
 - b. somewhat ineffective
 - c. Neither ineffective or effective
 - d. somewhat effective
 - e. effective
5. The next question asked participants to state the number of Dx Improvement activities they had participated in. The following options were available;
 - a. None
 - b. one to five
 - c. six to ten
 - d. 11 to 15
 - e. 16 plus
6. Then survey participants were asked to state the number of Dx process improvement activities they had facilitated. The response options were;
 - a. None
 - b. one to two
 - c. three to five
 - d. six to ten
 - e. eleven or more

7. The final question for this set asked that if the skills taught by the NZDF Dx team are not used as part of your primary job role or responsibilities, did they have time in their work schedule to dedicate to continuous improvement. The response choices were – ‘Yes’, ‘No’, ‘Sometimes’.
8. There was also a section that asked for any further comments on Part 3. Four additional comments were received as shown in Table 12.

Table 12. Additional responses to Question 8, Part 3.

I Still don't know what this is about.
I always look for continuous improvement.
Sorry, Haven't done the course yet.
I think targeting those who have completed the relevant training would be more useful for this survey.

The data tables for the responses of the sample population and Focus group to Part 3 questions are shown in Tables 13A and 13B below. Figure 10 (Page 77) shows the responses gathered for Table 13A in chart format.

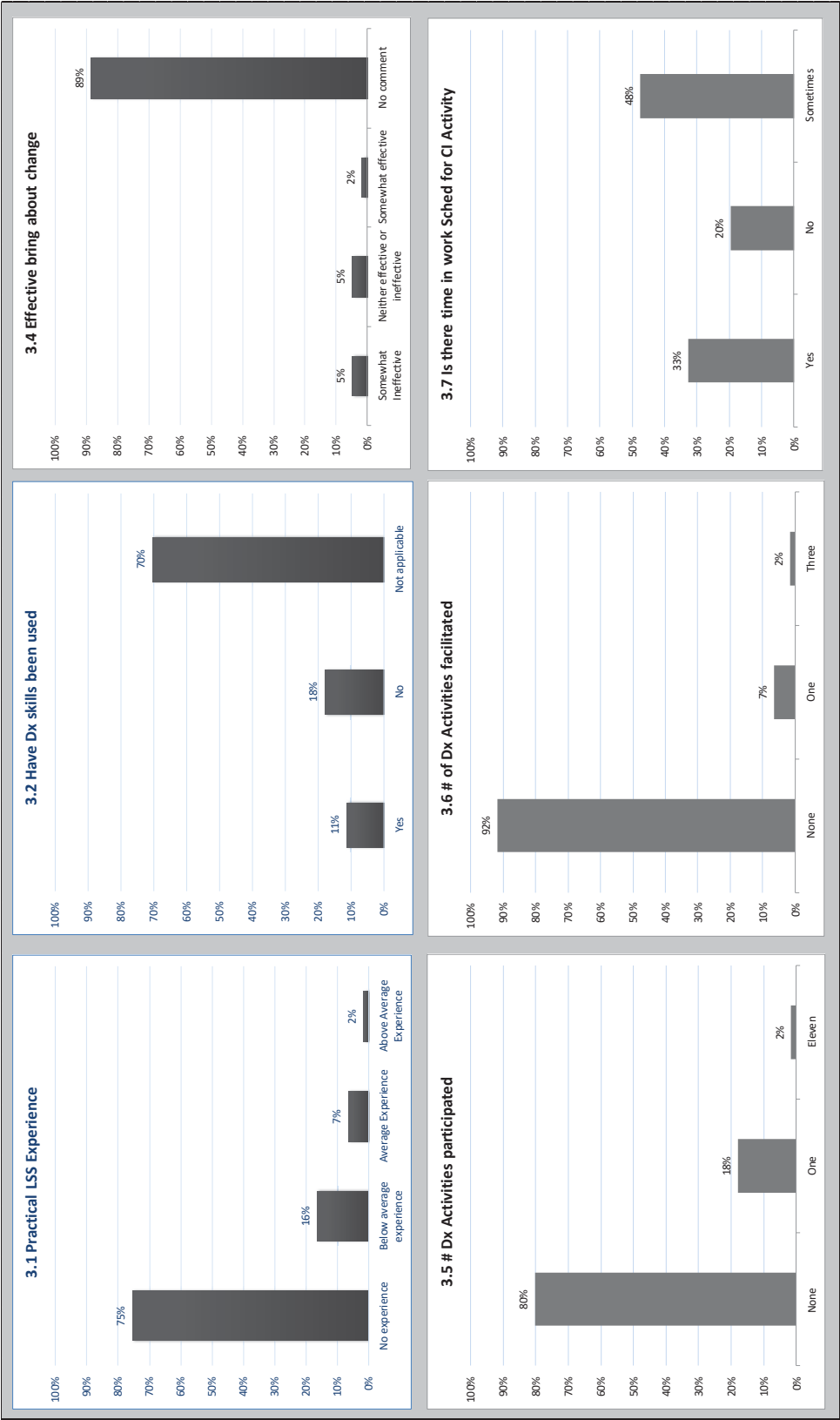
Table 13A. Sample Population responses to questions from Part 3 of the survey showing percentage responses to each question.

3.1 Practical LSS Experience			3.2 Have Dx Skills been used			3.4 Effective bring about change		
No experience	46	75.41%	Yes	7	11.48%	Ineffective	0	0%
Below Average	10	16.39%	No response	11	18.03%	Somewhat ineffective	1	1.64%
Average	4	6.56%	Not Applicable	43	70.49%	Neither effective or ineffective	3	4.92%
Above Average	1	1.64%				Somewhat effective	3	4.92%
Experienced	0	0.00%				No comment	54	88.52%
3.5 # Dx activities participated			3.6 # Dx activities facilitated			3.7 Is there time in work sched for CI acty		
None	49	80.33%	None	56	91.80%	Yes	20	32.79%
1 to 5	11	18.03%	1 to 2	4	6.56%	No	12	19.67%
6 to 10	0	0.00%	3 to 5	1	1.64%	Sometimes	29	47.54%
11 to 15	1	1.64%	6 to 10	0	0.00%			
16 or more	0	0.00%	11 or more	0	0.00%			

Table 13B. Focus Group responses to questions from Part 3 of the survey showing percentage responses to each question.

3.1 Practical LSS Experience			3.2 Have Dx Skills been used			3.4 Effective bring about change		
No experience	2	40.00%	Yes	3	60.00%	Ineffective		0%
Below Average	0	0.00%	No response	1	20.00%	Somewhat ineffective		0.00%
Average	2	40.00%	Not Applicable	1	20.00%	Neither effective or ineffective		0.00%
Above Average	1	20.00%				Somewhat effective	3	60.00%
Experienced	0	0.00%				No comment	2	40.00%
3.5 # Dx activities participated			3.6 # Dx activities facilitated			3.7 Is there time in work sched for CI acty		
None	2	40.00%	None	3	60.00%	Yes	1	20.00%
1 to 5	2	40.00%	1 to 2	1	20.00%	No	2	40.00%
6 to 10	0	0.00%	3 to 5	0	0.00%	Sometimes	2	40.00%
11 to 15	0	0.00%	6 to 10	0	0.00%			
16 or more	1	20.00%	11 or more	1	20.00%			

Figure 10. Bar Charts showing results for Part 3 of the survey showing percentage responses to each question.



Part 4 – General Questions. This part asks participants some general questions about Innovation and continuous improvement within the NZ Army. Respondents are asked to indicate their agreement with each of the questions on a five point Likert scale, with the scale options being;

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly agree

The questions asked are as follows;

1. Innovation is a part of our culture, and it is part of Army's long-term strategy for continuous improvement.
2. Within Army units, formations and staffs, there are already great ideas 'out there'.
3. Dx is about empowering individuals at all levels of Army to generate and implement improvement ideas.
4. Leadership supports improvement initiatives at all levels across the organisation.
5. Management/Leaders are committed to developing a culture of CI.
6. Continuous Improvement plays an important part of who we are.
7. Within my unit we are continuously reviewing and improving the way we do things.
8. The culture of the NZ Army is changing because of Innovation and Continuous Improvement.

9. The current culture within NZ Army encourages people to identify areas for improvement.
10. The culture within my organisation allows ideas to be put forward and considered.
11. The culture within my unit needs to change in order for Continuous Improvement to flourish.
12. Within my team we are encouraged to find new methods and ways of doing things.
13. Members of the NZ Army are regularly rewarded and recognised for new ideas.
14. The structure within my organisation facilitates lateral and bottom-up communication regarding Continuous Improvement and Innovation.
15. Senior leadership follows up on suggestions for improvement.
16. The NZ Army adapts effectively to change.
17. The final question asked respondents to provide any further comments, of which 8 respondents did so. Their comments are in Table 14 below.

Table 14. Responses to Part 4, Question 17

It is 'my way or the highway' attitude at Defence College, 'Do what I say', not what the client wants,
Within my role we have been in a period of continuous change for so long I don't remember BAU or Steady state. We have to be progressive with ideas as we are continually doing more with less resources
Suggestions in the form of Service papers and investigative panels come up with ways to improve things, but a lot are ignored or Snr Management procrastinates and it never happens.
Sorry, haven't done the course yet, but agree with most comments.
Driving an organisation from the bottom up is not direction; nor does it focus elements to target the areas seen as critical in a time relevant manner.
We have been training the same way a rifleman would have trained 30 years ago, even though technology has advance ten-fold

I strongly believe in the NZ Army's ability to adapt to change within the tactical and operational environment based on our people, size, history and national psyche. I also believe we seek simple and workable solutions. To build on this culture we need to utilise those aspects of our planning processes, SOP's and TTP's that work. Moreover, we must be careful not to use terminology and processes that do not fit the military. I have witnessed many attempts at trying to make business models fit the military approach. I saw this occur with the balanced scorecard and lamented at the time and effort spent in trying to adapt a tool that told us nothing about our training, equipment and people that we didn't already know. I have also seen this occur with the employment of consultants who know nothing about our business, except what they glean from interviews, and then try and adapt their business models to our way of conducting business, and fail. I cannot comment on whether this has occurred with CI, but only provide it as an observation. As an Army we come from a strong culture of innovation and adapting to change. We use simple processes (SMEAC, JMAP etc) to achieve this result and we trust our people

Whilst there is a will to conduct continuous improvement within the NZDF, very few are resourced and holistic change is not achieved as we fail to change doctrine or procedures, Process is lacking in a number of areas, and until that is sorted ideas, etc are generally isolated to a short period of time prior to being diluted back to status quo.

Tables 15A (Below) and 15B (Page 81) provide the individual question responses for this section of the survey.

Table 15A. Sample Population responses to questions from Part 4 of the survey

Q #	Number (#)					Percentage (%)				
	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	0	4	9	40	8	0.00%	6.56%	14.75%	65.57%	13.11%
2	0	1	6	43	11	0.00%	1.64%	9.84%	70.49%	18.03%
3	0	4	40	14	3	0.00%	6.56%	65.57%	22.95%	4.92%
4	0	13	11	32	4	0.00%	21.31%	18.03%	52.46%	6.56%
5	2	10	18	28	3	3.28%	16.39%	29.51%	45.90%	4.92%
6	0	4	11	36	10	0.00%	6.56%	18.03%	59.02%	16.39%
7	0	7	15	34	5	0.00%	11.48%	24.59%	55.74%	8.20%
8	3	9	25	21	3	4.92%	14.75%	40.98%	34.43%	4.92%
9	3	4	11	42	1	4.92%	6.56%	18.03%	68.85%	1.64%
10	2	4	13	36	6	3.28%	6.56%	21.31%	59.02%	9.84%
11	3	16	18	15	9	4.92%	26.23%	29.51%	24.59%	14.75%
12	1	3	19	29	9	1.64%	4.92%	31.15%	47.54%	14.75%
13	5	8	28	19	1	8.20%	13.11%	45.90%	31.15%	1.64%
14	2	7	17	33	2	3.28%	11.48%	27.87%	54.10%	3.28%
15	3	15	28	14	1	4.92%	24.59%	45.90%	22.95%	1.64%
16	4	13	21	20	3	6.56%	21.31%	34.43%	32.79%	4.92%
AVG	1.75	7.63	18.13	28.50	4.94	2.87%	12.50%	29.71%	46.72%	8.09%

showing number (#) and percentage (%) responses to each question

Table 15B. Focus Group responses to questions from Part 4 of the survey

Q #	Number (#)					Percentage (%)				
	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	0	0	1	3	1	0.00%	0.00%	0.00%	60.00%	20.00%
2	0	0	1	2	2	0.00%	0.00%	0.00%	40.00%	40.00%
3	0	0	2	3	0	0.00%	0.00%	0.00%	60.00%	0.00%
4	0	0	2	3	0	0.00%	0.00%	0.00%	60.00%	0.00%
5	0	0	3	2	0	0.00%	0.00%	0.00%	40.00%	0.00%
6	0	0	3	2	0	0.00%	0.00%	0.00%	40.00%	0.00%
7	1	1	1	2	0	20.00%	20.00%	20.00%	40.00%	0.00%
8	0	1	2	2	0	0.00%	20.00%	20.00%	40.00%	0.00%
9	0	0	3	2	0	0.00%	0.00%	0.00%	40.00%	0.00%
10	1	0	2	2	0	20.00%	0.00%	0.00%	40.00%	0.00%
11	0	1	2	2	0	0.00%	20.00%	20.00%	40.00%	0.00%
12	1	0	1	3	0	20.00%	0.00%	0.00%	60.00%	0.00%
13	0	0	3	2	0	0.00%	0.00%	0.00%	40.00%	0.00%
14	1	0	2	2	0	20.00%	0.00%	0.00%	40.00%	0.00%
15	0	0	3	1	1	0.00%	0.00%	0.00%	20.00%	20.00%
16	0	0	3	2	0	0.00%	0.00%	0.00%	40.00%	0.00%
AVG	0.25	0.19	2.13	2.19	0.25	5.00%	3.75%	3.75%	43.75%	5.00%

showing number (#) and percentage (%) responses to each question

To graphically show all the data collected from this part of the questionnaire in one chart would be confusing and messy. Therefore, I have chosen to show the results in three parts. Firstly, I will show the percentage of respondents who selected 'agreed' or 'strongly agreed' to the questions/statements given in Part 4 (Figure 11 – Page 84). Secondly, I will show the results for those who selected the 'neutral' option (Figure 12 – Page 85), and lastly I will present the results for those who selected 'Strongly Disagree' or 'Disagree' (Figure 13 – Page 86). In Figures 11 and 13 I have added two additional lines to identify the mean for each of the categories, and one line in Figure 12.

Of note in Figure 11;

- The percentage of respondents who selected Agree or Strongly Agree are represented in the 'clustered column' component of the chart.
- The total of the combined Agree and Strongly Agree percentage is represented by the diamond shape data points above each cluster, with their total percentage annotated.

- The Mean for the Agree scores is represented by the horizontal line annotated 46.72%.
- The Mean for the Strongly Agree scores is represented by the horizontal line annotated 8.09%.
- The overall Mean for combined Agree and Strongly Agree responses is represented by the horizontal line annotated 54.82%
- 9 questions returned a total Agree/Strongly Agree percentage greater than the average for the total Agree and Strongly Agree responses (Q1, Q2, Q4, Q6, Q7, Q9, Q10, Q12, and Q14)
- All other questions had combined scores less than the combined mean, with 6 questions (Q3, Q8, Q11, Q13, Q15, and Q16) all returning combined scores less than the average of the individual 'agree' scores alone.

Further analysis of these results will be discussed later in this paper.

Of note in Figure 12 – those who recorded a 'Neutral' response to Part 4 of the survey;

- The top 5 for responses in order are Q3, Q13 and Q15 (all equal value), Q8 and Q16.
- The 5 lowest scoring Neutral responses, in order from lowest (1) to highest (5) are Q2 (9.84%), Q1 (14.75%), with Q4, Q6 and Q9 all scoring 18.03%.
- The horizontal line annotated 29.71% is the mean of all the neutral response scores.

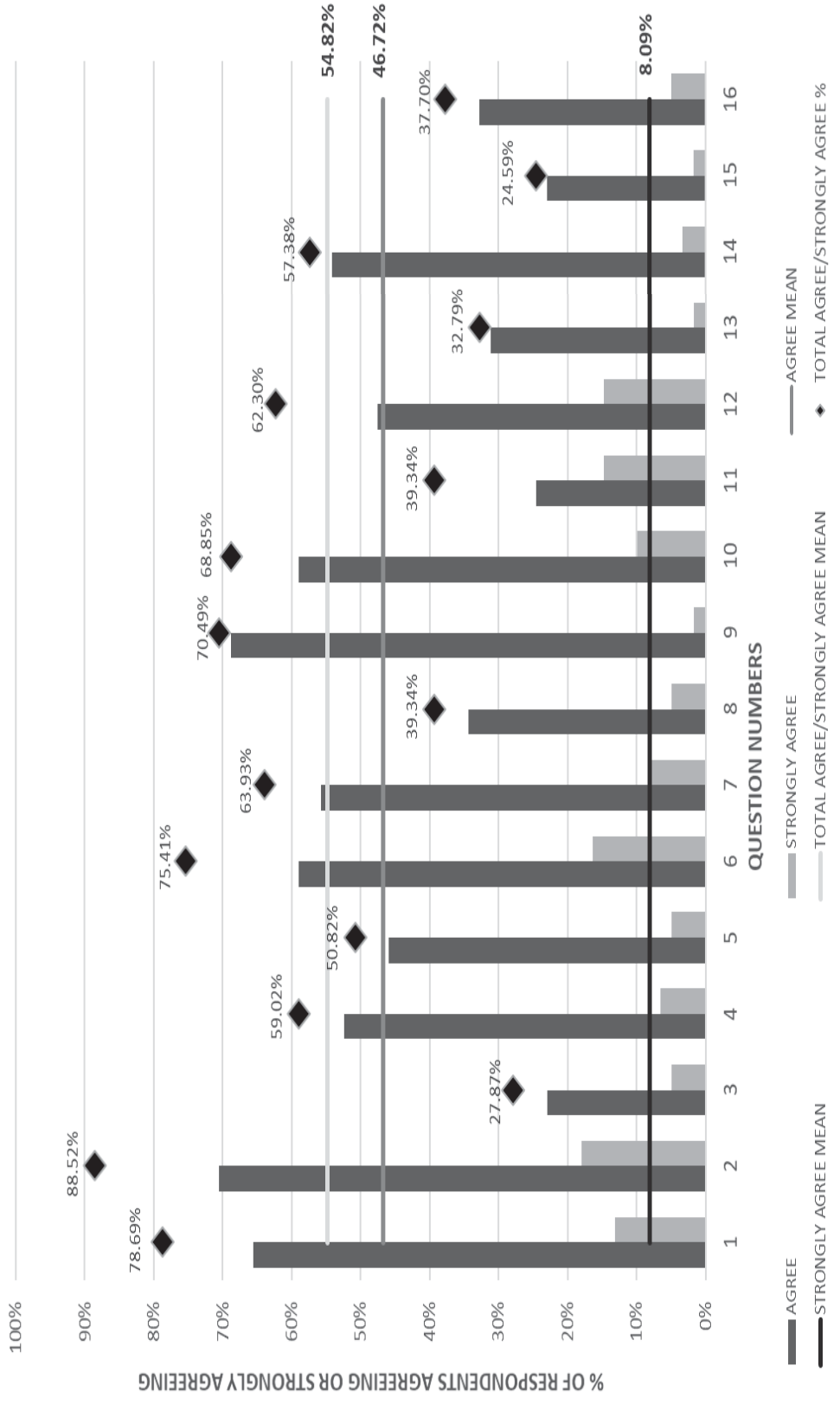
The graph at Figure 13 represents the scores for each question in Part 4 of the survey in 'clustered column' format for those who responded as Strongly Disagree or Disagree to the question or statement made in each question.

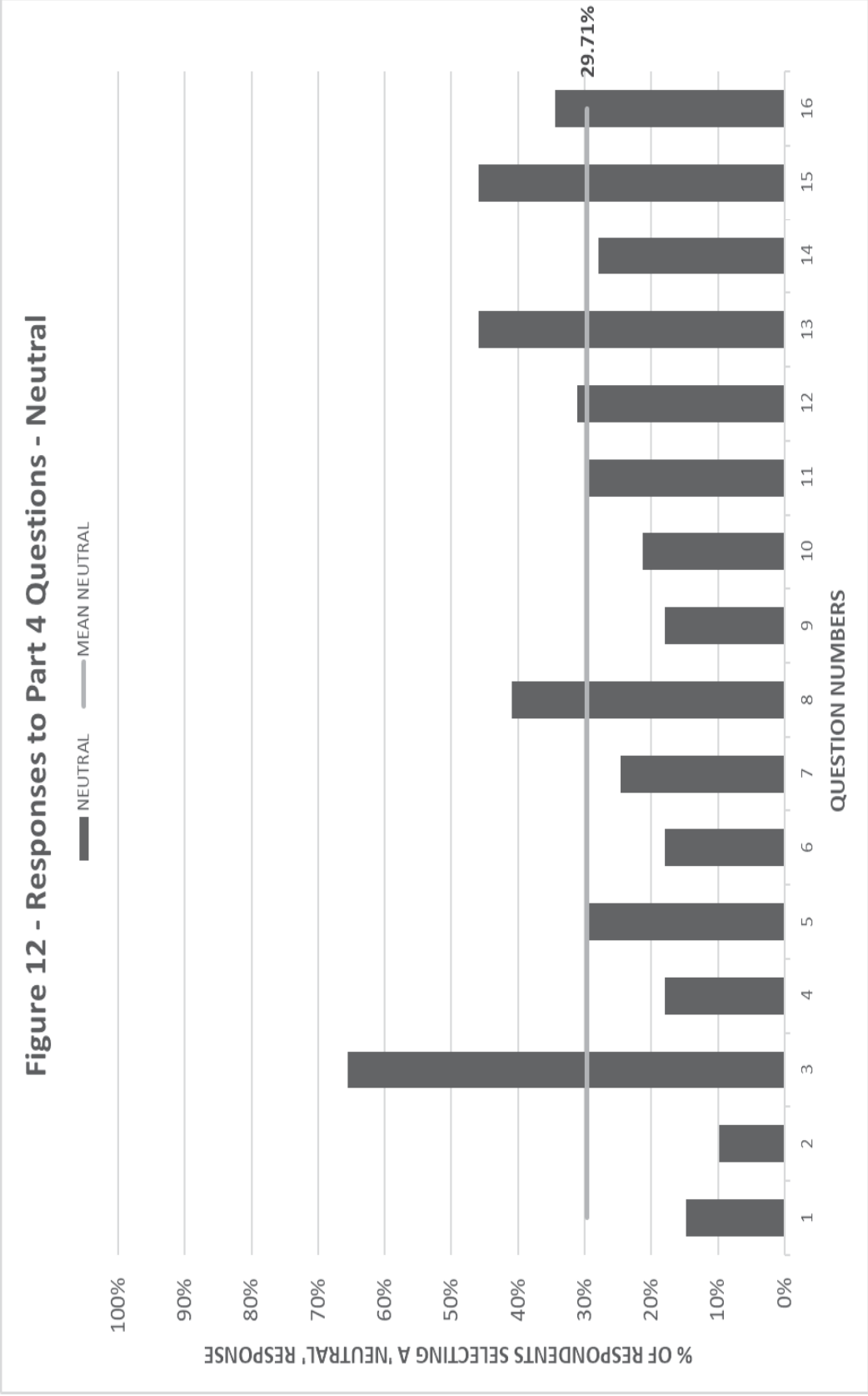
- The total of the combined Strongly Disagree/Disagree percentage is represented by the diamond shape data points above each data cluster with the total percentage annotated above each data point.

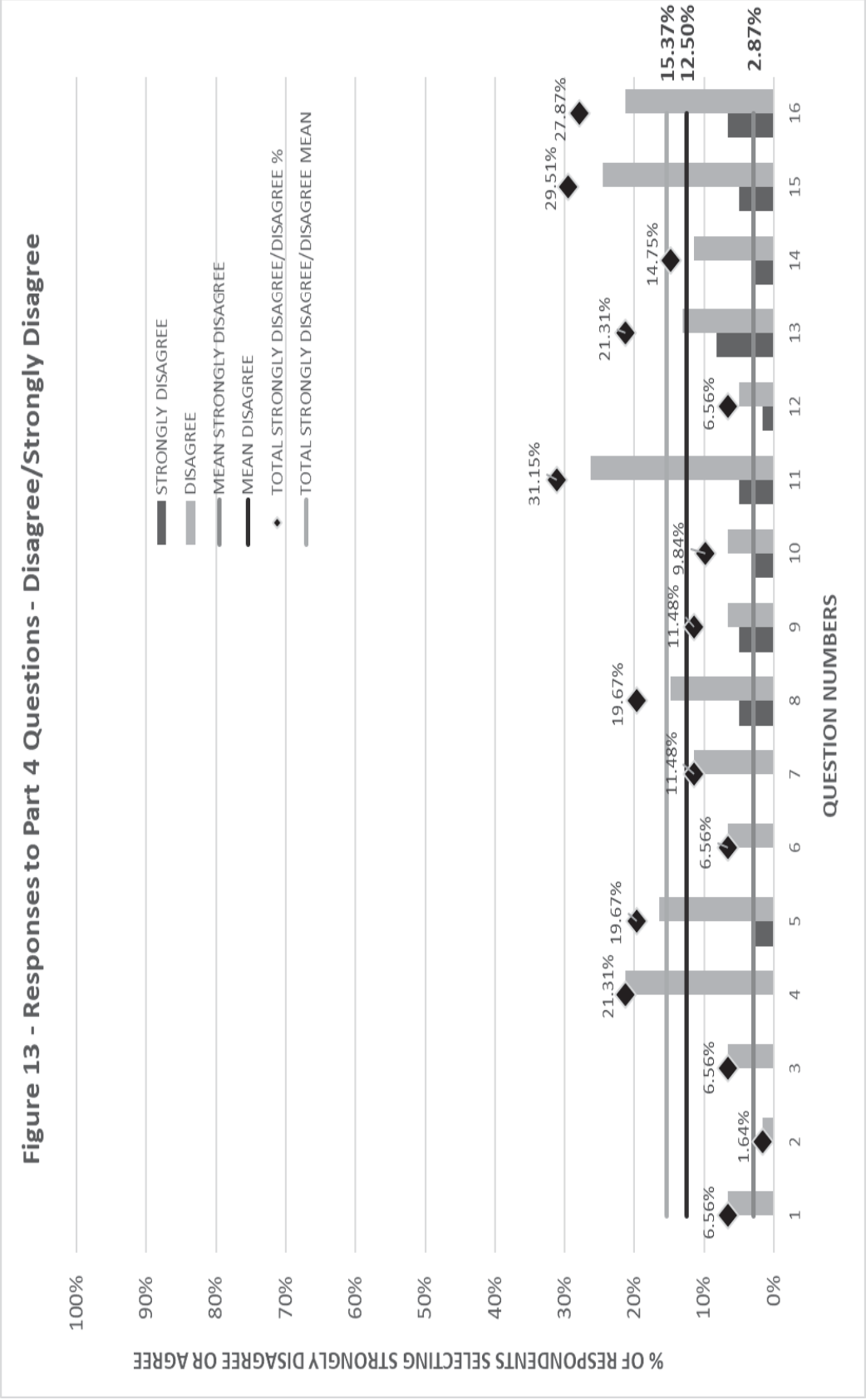
- The Mean for the Strongly Disagree scores is represented by the horizontal line annotated 2.87%.
- The Mean for the Disagree scores is represented by the horizontal line annotated 12.50%.
- The overall Mean for combined Strongly Disagree/Disagree responses is represented by the horizontal line annotated 15.37%
- The top 5 combined results, in descending order are Q11 (31.15%), Q15 (29.51%), Q16 (27.87%), Q4 and Q13 (21.31%).
- The 5 lowest scores, ie; those questions that the sample population said the Strongly Disagree or Disagree with the least are, in ascending order, Q2 (1.64%), Q1, Q3, Q6 and Q12 (6.56%).

Further analysis of these results will be discussed later in this paper.

Figure 11 - Responses to Part 4 Questions - Agree/Strongly Agree







Part 5 – The Organisational Culture Assessment Instrument

The question set used for this is as per Cameron and Quinn (Cameron & Quinn, 2011, pp. 30-32) with minor changes to their wording. The slight change in wording made some questions more military focused, as I felt the wording was 'too business orientated', however I am unsure as to whether or not these changes have had any significant impact on the result. I was unable to find any specific research that suggested the altering of the questions would diminish the effect of the survey. The results gathered so far do not indicate any decrease in the impact or effect of the overall result, and should further data collection be done within the NZ Army using the OCAI, it may be prudent to consider running the standard and altered wording through some focus groups to see if any major differences can be identified, before the main data collection occurs.

The changes I have made are highlighted in **Bold** in the right hand column of Table 16. Apart from the obvious change of 'Organisation' to 'NZ Army', the following changes were made;

- Question 2.a. '**Courage, comradeship, commitment and integrity (C3I)**' replaces 'mentoring, facilitating, or nurturing'.
- Question 4.a. 'Loyalty and mutual trust, Commitment to this organisation runs high' are replaced by '**C3I**, and **Loyalty to the NZ Army runs high**'.
- Question 4.d. '**Aggressiveness and winning are common themes**' has been added.
- Question 5.d. 'Resources' has been replaced by '**Skills**', and 'prospecting for opportunities are valued' has been replaced by '**ideas are encouraged**'.
- Question 5.c. 'Hitting stretch targets and winning in the marketplace are dominant' has been replaced by '**Winning on operations is important**'.
- Question 6.b. The wording '**the best and latest equipment. The NZ Army is an equipment leader** and innovator', replaces 'having unique or the newest products. It is a product leader and innovator'.

- Question 6.c. 'winning in the marketplace and outpacing the competition. Competitive market leadership is key' has been replaced by 'winning **on the battlefield. NZ Army must be able to go to war and fight to win. Winning is the key**', and
- Question 6.d. 'Dependable delivery, smooth scheduling, and low-cost production are critical' has been replaced by '**Doing more with less. Value for money**'.

Table 16. Comparison of Standard OCAI and NZ Army OCAI Questions.

<u>Cameron and Quinn Original</u> (Cameron & Quinn, 2011, pp. 30-32)	<u>New Zealand Army Culture Survey</u>
Dimension 1 - Dominant Characteristics	
a) The organisation is a very personal organisation. It is like an extended family. Members share a lot of themselves with others.	a) The NZ Army is a very personal organisation. It is like an extended family. Members share a lot of themselves with others.
b) The organisation is a very dynamic innovative organisation. Members are willing to stick their necks out and take risks.	b) The NZ Army is a very dynamic innovative organisation. Members are willing to stick their necks out and take risks.
c) The organisation is very results oriented. A major concern is with getting the job done. Members are very competitive and achievement oriented.	c) The NZ Army is very results oriented. A major concern is with getting the job done. Members are very competitive and achievement oriented.
d) The organisation is a very controlled and structured place. Formal procedures generally govern what members do.	d) The NZ Army is a very controlled and structured place. Formal procedures generally govern what members do.
Dimension Two - Organisational Leadership	
a) The leadership in the organisation is generally considered to exemplify mentoring, facilitating, or nurturing.	a) The leadership in the NZ Army is generally considered to exemplify the core values of courage, comradeship, commitment and integrity.
b) The leadership in the organisation is generally considered to exemplify entrepreneurship, innovation, or risk taking.	b) The leadership in the NZ Army is generally considered to exemplify entrepreneurship, innovation, or risk taking.

c) The leadership in the organisation is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	c) The leadership in the NZ Army is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
d) The leadership in the organisation is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	d) The leadership in the NZ Army is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.
Dimension Three - Leadership of Employees	
a) The management style in the organisation is characterized by teamwork, consensus, and participation.	a) The leadership style in the NZ Army is characterized by teamwork, consensus, and participation.
b) The management style in the organisation is characterized by individual risk-taking, innovation, freedom, and uniqueness.	b) The leadership style in the NZ Army is characterized by individual risk-taking, innovation, freedom, and uniqueness.
c) The management style in the organisation is characterized by hard-driving competitiveness, high demands, and achievement.	c) The leadership style in the NZ Army is characterized by hard-driving competitiveness, high demands, and achievement.
d) The Management style in the organisation is characterized by security of employment, conformity, predictability, and stability in relationships.	d) The leadership style in the NZ Army is characterized by security of employment, conformity, predictability, and stability in relationships.
Dimension Four - Organisational Glue	
a) The glue that holds the organisation together is loyalty and mutual trust. Commitment to this organisation runs high.	a) The glue that holds the NZ Army together is based on C3I. Loyalty to the NZ Army runs high.
b) The glue that holds the organisation together is commitment to innovation and development. There is an emphasis on being on the cutting edge.	b) The glue that holds the NZ Army together is commitment to innovation and development. There is an emphasis on being on the cutting edge.
c) The glue that holds the organisation together is the emphasis on achievement and goal accomplishment.	c) The glue that holds the NZ Army together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.
d) The glue that holds the organisation together is formal rules and policies.	d) The glue that holds the NZ Army together is formal rules and policies. Maintaining a smooth-running organisation is important.

Maintaining a smooth-running organisation is important.	
Dimension Five - Strategic Emphasis	
a) The organisation emphasises personal development. High trust, openness, and participation persist.	a) The NZ Army emphasises personal development. High trust, openness, and participation persist.
b) The organisation emphasizes the acquiring of new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	b) The NZ Army emphasizes the acquiring of new skills and creating new challenges. Trying new things and ideas are encouraged .
c) The organisation emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	c) The NZ Army emphasizes competitive actions and achievement. Winning on operations is important .
d) The organisation emphasizes permanence and stability. Efficiency, control and smooth operations are important.	d) The NZ Army emphasizes permanence and stability. Efficiency, control and smooth operations are important.
Dimension Six - Criteria of Success	
a) The organisation defines success on the basis of human resources, teamwork, employee commitment, and concern for people.	a) The NZ Army defines success on the basis of human resources, teamwork, employee commitment, and concern for people.
b) The organisation defines success on the basis of having unique or the newest products. It is a product leader and innovator.	b) The NZ Army defines success on the basis of having the best and latest equipment . The NZ Army is an equipment leader and innovator.
c) The organisation defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	c) The NZ Army defines success on the basis of winning on the battlefield . NZ Army must be able to go to war and fight to win. Winning is the key .
d) The organisation defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.	d) The NZ Army defines success on the basis of efficiency. Doing more with less. Value for money .

Figure 14 (Page 92) and Figure 15 (Page 93) present the results of the six core organisational attributes identified by the OCAI (Now and Preferred) for the Focus Group and Sample Population for Organisational Characteristics, Organisational Leadership, Management of Employees, Organisational Glue, Strategic Emphasis, and Criteria for Success, then present the overall 'Now' and 'Preferred' culture which is determined by averaging each of the organisational attribute scores for each culture type.

Figure 14. Focus Group OCAI Organisational Attribute and Overall results.

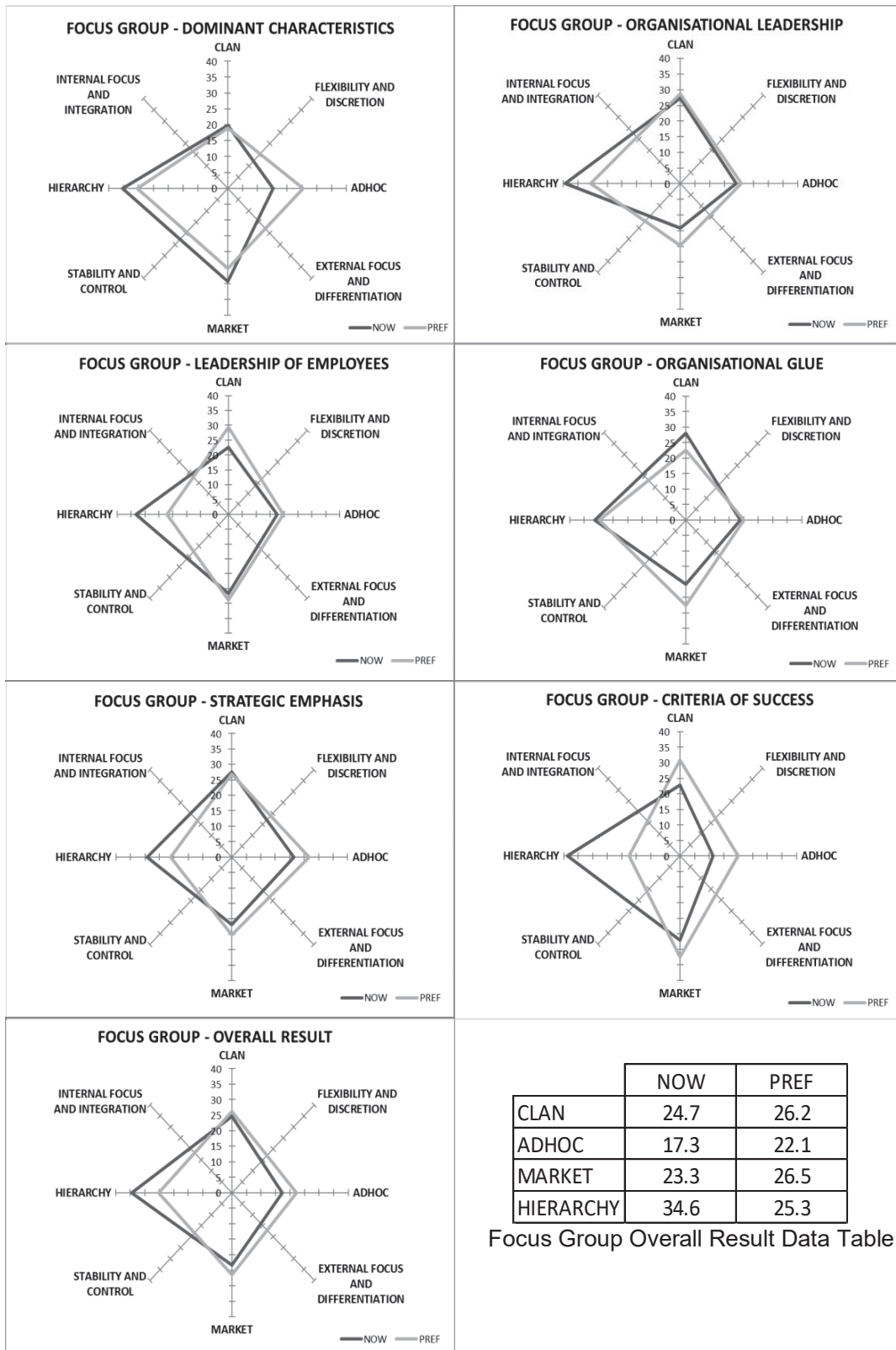
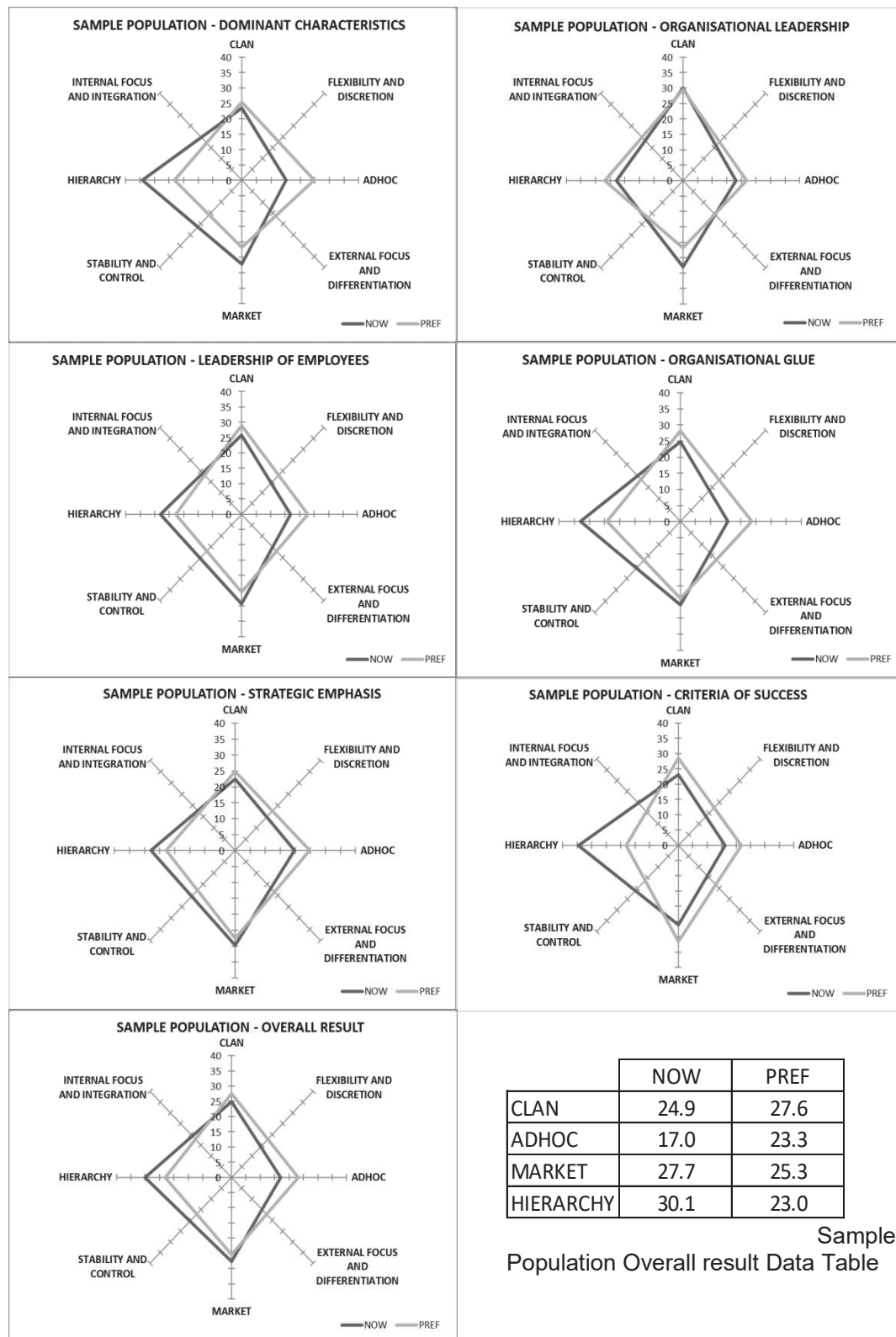


Figure 15. Sample Population OCAI Organisational Attribute and Overall results.



The data tables for the overall results in Figures 14 and 15 are shown together in Table 17 to demonstrate the difference between both sets of data.

Table 17. Difference between Now and Preferred results for the OCAI overall organisational culture profile of the Focus Group and NZ Army sample population.

	NOW			PREFERRED		
	F/GRP	SAMPLE	DIFF	F/GRP	SAMPLE	DIFF
CLAN	24.7	24.9	0.2	26.2	27.6	1.4
ADHOC	17.3	17.0	0.3	22.1	23.3	1.2
MARKET	23.3	27.7	4.4	26.5	25.3	1.2
HIERARCHY	34.6	30.1	4.5	25.3	23.0	2.3

The axes for the results in Figures 14 and 15 are identical, in order to allow comparison against the same reference points. The results as shown in the charts for the Focus Group and the main survey respondents are reasonably similar. In Figure 15 The 'Now' Market Culture score for the overall result, is dominant over the 'Preferred' Market score, but in the same chart for the Focus Group at Figure 14, The 'Preferred' market score is higher. In both charts the Clan score is very closely scored, with the bigger differences appearing in the Hierarchy and Adhoc scores.

6. Discussion

Part 1

Tables 8A and 8B (Page 65) show the full results of the demographic data gathered in Part 1 of the questionnaire for the Sample Population responses (Table 8A) and Focus Group responses (Table 8B). Not including the Focus Group responses, a total of 91 New Zealand Army personnel responded to the questionnaire, which represents a response rate of 22.5%. Of this number, 30 questionnaires (32.9% of those who responded) were unable to be used as they were missing data from Parts 1 to 4, and more importantly from Part 5, the OCAI section of the questionnaire. Only those responses with all questions completed were used for the analysis.

Of the 61 responses, 11 women and 50 men responded; 77% were aged 30 and over. 63.9% of respondents had worked for the NZ Army for more than ten years. A total of 96.7% of respondents were 'non-commissioned' between the rank of Private and Warrant Officer Class One (Civilian Pay Grades 5 to 14), with only two 'commissioned' respondents above the rank of Major (Civilian Pay grade 15 and above). 34.4% (21 respondents) were below the rank of Sergeant (Civilian pay grade 5 to 8), with 62.3% (38 respondents) comprising those of the ranks of Staff Sergeant to Warrant Officer Class One.

For the employment grouping results, 24 personnel (39.3%) were in a Combat or Combat Support trade, with 18 respondents (29.5) selecting Logistics and Supply chain. With regard to geographical spread, 80.3% of respondents were from the North Island with the highest concentration of respondents coming from the Central North Island area (23 personnel, 37.7%). Finally in this summary, The majority of respondents associated themselves with the NZ European ethnic group (63.9%), with the remaining spread across NZ Maori (24.5%) and Other/Other European combined of 11.5%.

Part 2 and Part 3.

The next few paragraphs relate to Defence Excellence Training questions and responses, and to the questions relating to individual experience using the tools taught by the Defence Excellence program. Table 9 (Pages 69 to 70) and Table 10A (Page 71) provide the data and results for Part 2 of the Survey for the sample population, while Tables 11 (Page 72), 12 (Page 75), 13A (Page 76), and Figure 10 (Page 77) provide the data for the responses to Part 3. Table 10B (Page 71) provides data from the Focus Group responses in Part 2, and Table 13B (Page 76) provides Focus Group responses to Part 3.

Of the 52 personnel in Part 2 who indicated that they have not completed an NZDF Dx training Program, 24 (46.2%) are not interested in attending this training, while the remainder are, or have already attended. 10 personnel have attended some training, with 8 of these personnel (13.1% of the sample population) completing the basic 'A3' individual 'White Belt' improvement activity. Asked whether they thought the skills taught by the Dx program would be sought after by outside organisations, 68.8% thought they 'may be', while 27.8% indicated they 'would be'.

The responses to Part 2 indicated a low level of knowledge about the Dx program in general, with 30% of respondents (18 personnel) of the 24 who chose to provide some additional comment, all stating that they had no idea what the Dx program was about. Other comments see respondents attending the training, but being unable to put this into practice, or defaulting to the widely practiced military problem solving tool called the 'Military Appreciation Process'.

Part 3 asked respondents to identify their level of experience with using the tools taught by the Dx Program. 46% indicated they had no experience whatsoever in using the tools taught by Dx, while 11.48% (7 personnel) indicating that they had used these skills. The perceived effectiveness of the program to bring about change was not rated well. 54 respondents made no attempt to answer this question, and of the 7 who did, one said

the programme was 'somewhat ineffective', three said it was 'neither effective or ineffective', and the final 3 believed it had been 'somewhat effective'. Overall not a great response to this question.

The level of effectiveness and practical experience also had an impact on the number of personnel who had participated in a structured Dx improvement activity, and for those who indicated they had facilitated such activities with response to participation at 19.67% and for facilitation at 8.2%

The responses to Parts 2 and 3 are not greatly supportive of the Dx Program; either in training saturation or involvement in Improvement activities, nor is there much evidence to suggest that the Dx Program and Continuous Improvement has been successfully embedded into the culture of the NZ Army. In saying this however, only 2.4% of respondents to the questionnaire were commissioned Officers (Civilian Grade 15 and above), leaving 97.6% of respondents between the ranks of Private and Warrant Officer Class One – the 'Non-Commissioned' ranks (Civilian grades 5 to 14). It is unfortunate that so few 'Commissioned' personnel responded to the survey, as it is potentially this group who have more influence and involvement with the Dx program than the Non-Commissioned ranks and Army civilian equivalents. Future/continued research into this topic should target the Commissioned Officer ranks to compare against the Non-Commissioned responses, but also provide a wider set of responses covering all ranks.

It would be inappropriate to suggest that Continuous Improvement is successfully embedded within the NZ Army from these results alone, however there is sufficient data and evidence to suggest that within the Non-Commissioned ranks, the embedding of Continuous Improvement and the methodologies taught by the Dx Programme, has some way to go. Further on in this paper I will look more closely at particular groupings of respondents, to see if there are any marked differences which contradict or confirm this.

Part 4 – General Questions.

This part asked participants some general questions about Innovation and continuous improvement within the NZ Army. Each question or statement in this part of the questionnaire asked participants for a response based on a five point Likert Scale, with options ranging from 'Strongly Disagree' through to 'Strongly Agree' for each question or statement. Table 15A (Page 80) and Figures 11 (Page 84), 12 (Page 85), and 13 (Page 86) present the data from the available responses. Table 15A is presented in two parts. The first part shows the **number** of people who responded to the questions, and the second part is the same data but using a **percentage**. The last line in the table titled 'AVG' indicates the average number and the average percentage from each of the columns in the table.

Responses in the combined Agree/Strongly Agree categories range from high of 88.52% to the lowest of 24.59%, making a difference of 63.93%, and a mean score of 54.82% for the combined Agree/Strongly Agree responses. Responses to these categories had the greatest range of data, as well as the highest mean percentage. Figure 11 displays the Agree, Strongly Agree and combined Agree/Strongly Agree scores for all 16 Questions from Part 4. Figure 12 show the scores for the Neither Disagree or Agree category for each question, and Figure 13 provides the scores for the Strongly Disagree/Disagree responses. The top 5 scores and the questions they relate to for each category are discussed below. There will also be some commentary on the questions that received the lowest scores.

Strongly Agree – The top 5 questions and their percentages are;

1. 1st - Q2 (18.03%) - Within Army units, formations and staffs, there are already great ideas 'out there'.
2. 2nd – Q6 (16.39%) - Continuous Improvement plays an important part of who we are.
3. 3rd Equal – Q11 and Q12 (14.75% each)

- Q11 - The culture within my unit needs to change in order for Continuous Improvement to flourish.
 - Q12 - Within my team we are encouraged to find new methods and ways of doing things.
4. 5th – Q1 (13.11%) - Innovation is a part of our culture, and it is part of Army's long-term strategy for continuous improvement.

Agree – The top 5 questions and their percentages are;

1. 1st – Q2 (70.49%) - Within Army units, formations and staffs, there are already great ideas 'out there'.
2. 2nd – Q9 (68.85%) - The current culture within NZ Army encourages people to identify areas for improvement.
3. 3rd – Q1 (65.57%) - Innovation is a part of our culture, and it is part of Army's long-term strategy for continuous improvement.
4. 4th Equal – Q6 and Q10 (59.02% each)
 - Q6 - Continuous Improvement plays an important part of who we are.
 - Q10 - The culture within my organisation allows ideas to be put forward and considered.

Combined Agree and Strongly Agree rating – the top 5 questions and their percentages;

1. 1st – Q2 (88.52%) - Within Army units, formations and staffs, there are already great ideas 'out there'.
2. 2nd – Q1 (78.69%) - Innovation is a part of our culture, and it is part of Army's long-term strategy for continuous improvement.
3. 3rd – Q6 (75.41%) - Continuous Improvement plays an important part of who we are.
4. 4th – Q9 (70.49%) - The current culture within NZ Army encourages people to identify areas for improvement.

5. 5th – Q10 (68.85%) - The culture within my organisation allows ideas to be put forward and considered.

The results confirm the general consensus that within Army units, formations and staffs, there are already great ideas 'out there', with this question (Q2) receiving the highest scores for both Agree and Strongly Agree categories. From the responses provided, there is also acknowledgement that Continuous Improvement plays an important part, that innovation is a key part of Army's long-term strategy, and that NZ Army culture encourages people to identify areas for improvement. However, 39.34% of respondents believe that there needs to be some form of culture change in order for Continuous Improvement to truly flourish.

The questions that received the lowest combined scores for the 'Agree' and 'Strongly Agree' categories from the 16 questions are;

1. 16th – Q15 (24.59%) - Senior leadership follows up on suggestions for improvement.
2. 15th – Q3 (27.87%) - Dx is about empowering individuals at all levels of Army to generate and implement improvement ideas.
3. 14th – Q13 (32.79%) - The structure within my organisation facilitates lateral and bottom-up communication regarding Continuous Improvement and Innovation.
4. 13th – Q16 (37.7%) - The NZ Army adapts effectively to change.
5. 11th Equal – Q8 and Q11 (39.34% each)
 - Q8 - The culture of the NZ Army is changing because of Innovation and Continuous Improvement.
 - Q11 - The culture within my unit needs to change in order for Continuous Improvement to flourish.

These responses, although part of the Agree/Strongly Agree categories, show that less than one third of respondents believe that senior management follow up on improvement ideas, that Dx is actually working, and that there is a suitable structure for the communicating CI and Innovation throughout the organisation.

The final question in Part 4 of the survey asked participants to provide additional comment. Some mixed responses were received. One respondent indicated that although there is a will to conduct continuous improvement within NZDF, very few are resourced, and holistic change is not achieved as the organisation fails to change doctrine or procedures. In contrast to this, a second respondent said that he strongly believes in the NZ Army's ability to change. That particular respondent goes on to say that the NZ Army comes from a strong culture of innovation and adapting to change, with simple processes that achieve results. There is still work to be done with regard to the perception of senior leadership following up on suggestions for improvement, with only 25% of respondents agreeing or strongly agreeing with this statement, with only 37.7% believing that NZ Army adapts effectively to change.

Neutral rating. The five results that received the highest 'Neutral' rating – respondents who could not decide if they Disagreed or agreed with the statement/question are;

1. 1st – Q3 (65.57%) - Dx is about empowering individuals at all levels of Army to generate and implement improvement ideas.
2. 2nd Equal – Q13 and Q15 (45.9%)
 - Q13 - The structure within my organisation facilitates lateral and bottom-up communication regarding Continuous Improvement and Innovation.
 - Q15 - Senior leadership follows up on suggestions for improvement.
3. 4th – Q8 (40.98%) - The culture of the NZ Army is changing because of Innovation and Continuous Improvement.
4. 5th – Q16 (34.43%) - The NZ Army adapts effectively to change.

Almost two thirds of respondents were 'unsure' whether or not the Dx program empowered individuals at all levels to generate and implement improvement ideas, and just over one third not sure if the Army responds well to change. There is also a reasonable number of respondents (45.9%) who are unsure about whether or not senior leadership follows up on suggestions for improvement. The Neutral category scores ranged from 65.57% to 9.84% making a difference of 55.73% and a mean score of 29.71%

Strongly Disagree/Disagree - The range of those responding to these two categories is much less than the Agree/Strongly Agree categories, with the highest combined score of 31.15% and the lowest of 1.64%. This is a difference of 29.51% with a mean of 15.37%.

The top 5 questions/statements that respondents most Strongly Disagree or Disagree to are;

1. 1st - Q11 (31.15%) - The culture within my unit needs to change in order for Continuous Improvement to flourish.
2. 2nd - Q15 (29.51%) - Senior leadership follows up on suggestions for improvement.
3. 3rd - Q16 (27.87%) - The NZ Army adapts effectively to change.
4. 4th Equal - Q4 & Q13 (both 21.31%).
 18. Q4 - Leadership supports improvement initiatives at all levels across the organisation.
 - Q13 - The structure within my organisation facilitates lateral and bottom-up communication regarding Continuous Improvement and Innovation.

Some results make for interesting reading. A couple of these are provided below.

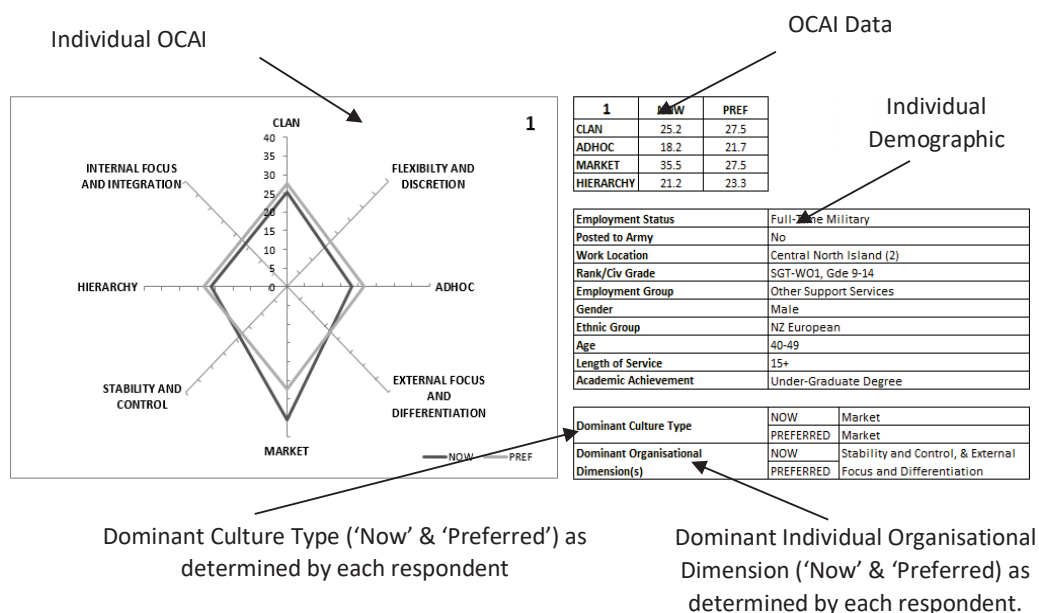
- Q16 - the NZ Army adapts effectively to change.

- 62.3% of respondents 'Strongly Disagree', 'Disagree' or 'neither agree or disagree' with this statement, versus
- 72.13% who 'Strongly agree, 'Agree' or 'neither agree or disagree'.
- Q13 – the structure within the NZ Army facilitates lateral and bottom-up communication regarding Continuous Improvement and Innovation.
 - 67.21% 'Strongly Disagreed', 'Disagreed', or 'neither agreed or disagreed' with the statement, versus
 - 78.69% who 'Strongly Agreed', 'Agreed' or 'neither agreed or disagreed' to this statement.

Part 5.

The next section relates specifically to the OCAI data. In this section we will examine the comparisons introduced in Section 5, Page 59. The overall individual results are shown in Appendix 1 with four results to a page. The layout of Appendix 1 for each respondent is described in Figure 16.

Figure 16 – Explanation of the layout of the information in Appendix 1.



Unlike the axis values provided in Figures 14 (Page 92) and 15 (Page 93), the axis values in the OCAI charts in Appendix 1 are set to the values that best demonstrate the relationship between the individual scores. For example, Respondent 1 has axis values from Zero (0) to Forty (40), unlike Respondent 90 which has values from 15 to 27.

Table 18 (below) provides a breakdown of the total 'Now' and 'Preferred' Dominant culture types and the total 'Now' and 'Preferred' Dominant Organisational Dimensions, by number and percentage, as identified by respondents in the individual results presented in Appendix 1.

Table 18 - percentage of 'Now' and 'Preferred' Dominant Culture Type and percentage of 'Now' and 'Preferred' Dominant Organisational Dimensions obtained from individual OCAI results.

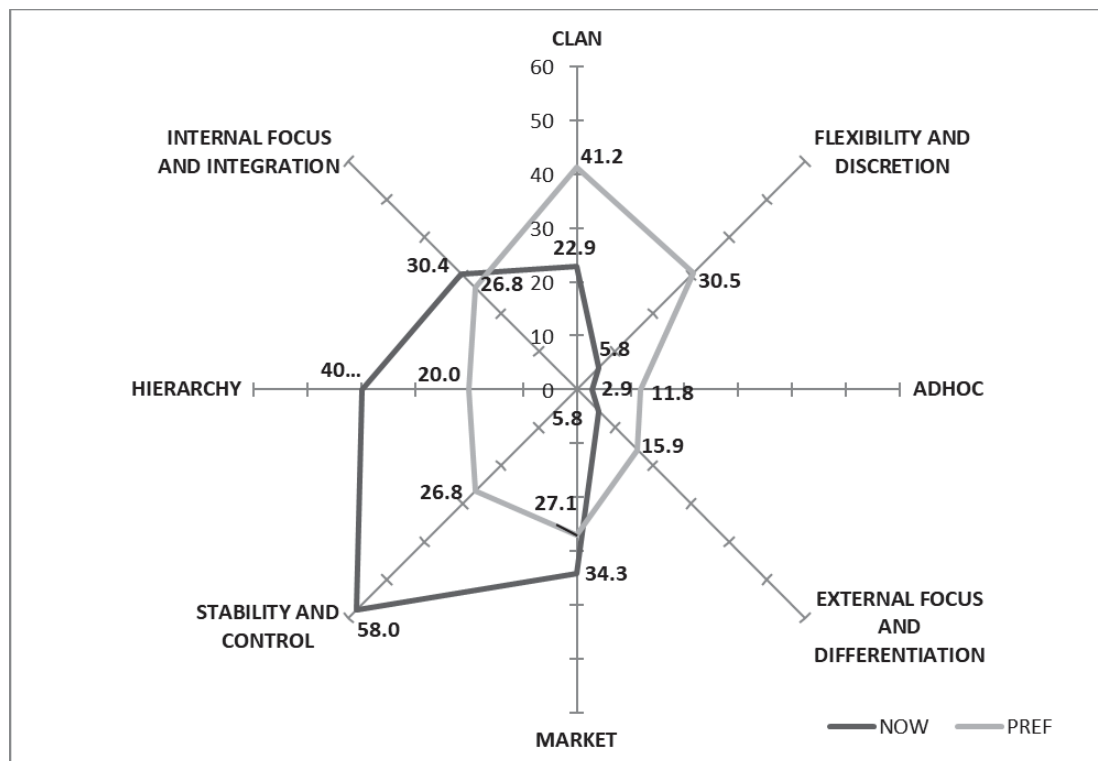
	Dominant Culture Type				Dominant Organisational Dimension(s)			
	Now	%	Preferred	%	Now	%	Preferred	%
Clan	16	22.9%	35	41.2%				
Internal Focus and Integration					21	30.4%	22	26.8%
Hierarchy	28	40.0%	17	20.0%				
Stability and Control					40	58.0%	22	26.8%
Market	24	34.3%	23	27.1%				
External Focus and Differentiation					4	5.8%	13	15.9%
Adhoc	2	2.9%	10	11.8%				
Flexibility and Discretion					4	5.8%	25	30.5%

This information is presented in two ways. First, a table with values (Table 18) – a count of the number of times each culture type and dominant organisation dimension appear in the individual charts at Appendix 1, and secondly a chart, Figure 17 (Page 105) based on the OCAI format and the same data that contributed to Table 18, with the percentages from Table 18 plotted on the chart as single data points, then linked together by lines to form a closed shape.

The results for each respondent (see Appendix 1) provide the dominant culture type and the dominant organisational domain for both the 'Now' and 'Preferred' categories. Where a one respondent shares the same score for different culture types, they are both

dominant, The first example of this can be seen in the data for respondent 1. The dominant 'Now' culture is Market with a score of 35.5, however the dominant 'Preferred' culture is shared between Clan and Market, both with scores of 27.5. Both culture types are counted as dominant for the preferred culture and entered in Table 18.

Figure 17 – Graphical representation of the total percentage of 'Now' and 'Preferred' Dominant Culture Types and 'Now' and 'Preferred' Dominant Organisational Dimensions as gathered from individual the OCAI results.



In order to determine the Dominant Organisational Dimension for each respondent, this was calculated by commencing with the dominant culture type, then ascertaining which culture type has the next highest score. In several instances there have been two equal second highest scores, another with three respondents returning three equal second highest scores, and in one case both the 'Now' and 'Preferred' scores are identical for all four culture types. The area between the highest score, the second highest score 'adjacent' to the highest score, and the intersection of the x and y axes is the Dominant Organisational Dimension as it has the largest area. For example, in the data for

Respondent 2 in Appendix 1, the Dominant Culture Type is 'Hierarchy' with a score of 37.5. The second highest score that is adjacent to 'Hierarchy' for Respondent 2 is 'Clan' at 31.7. The corresponding Organisational Dimension is 'Internal Focus and Integration' as this covers the largest area between the two highest scores and the intersection of the x and y axes.

We can see from the Sample Population Overall Result in Figure 15 (Page 93) that there is a difference between the 'Now' and 'Preferred' cultures. Specifically;

- Clan has increased from a 'Now' score of 24.9 to a 'Preferred' score of 27.6
- Adhoc has increased from a 'Now' score of 17 to a 'Preferred' score of 23.3
- Market has decreased from a 'Now' score of 27.7 to a 'Preferred' score of 25.3
- Hierarchy has decreased from a 'Now' score of 30.1 to a 'Preferred' score of 23.1

The differences in Culture type have also impacted the Organisational Dimensions. Specifically;

- There is less emphasis on Internal Focus and Integration, and Stability and Control in the 'Preferred' model, and greater emphasis on Flexibility and Discretion, and External Focus and Differentiation.

So what does this suggest. The 'Preferred' culture of the NZ Army, ie; the culture that respondents believe is right for the Army in 5 years time, sees;

- a slightly greater focus on teamwork and family
- loyalty and tradition continuing to hold the organisation together
- the long-term benefit of individual development aids both cohesion and morale - a greater 'Clan' focus with less 'Market' focus

The 'Preferred' culture also sees;

- a greater emphasis being placed on creativity, individuality and initiative where people are willing to take risks
- people are entrepreneurial in their approach to issues
- leadership is visionary, innovative and risk orientated
- the glue that holds the organisation together is that of a combined commitment to experimentation and innovation
- a long-term emphasis on growth and acquiring new resources – more 'Adhoc' and less 'Hierarchy'

Conversely, the 'Preferred' culture sees less emphasis being placed on process, procedure, and formal rules, although this is recognised as a necessary requirement for a military organisation, and sees leaders as less competitive and demanding, but still a results oriented workplace.

Considering Cameron and Quinn's comparisons, let us now take a closer look at each of them.

Type. – The quadrant in which the scores are highest is an indication of the dominant culture, and is an indication of the basic assumptions, styles and values within the organisation. Organisational cultures need to have some compatibility with the demands of their environment (Cameron & Quinn, 2011, pp. 81-82).

Figure 18. Sample Population Overall Result OCAI Chart and Data Table

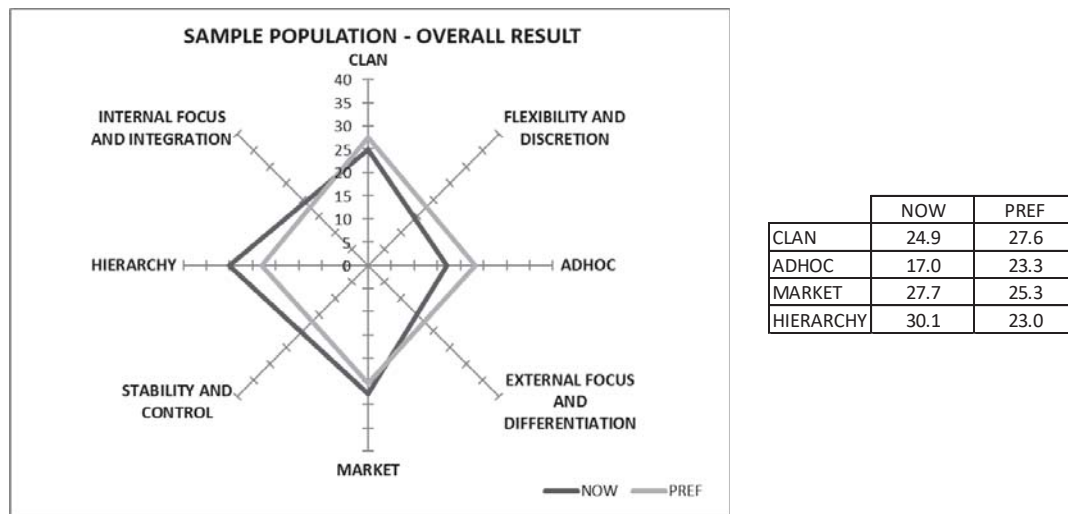


Figure 18 is the OCAI Chart for the overall Sample Population result as shown in Figure 15 (Page 93).

The Left quadrant, representing the 'Hierarchy' (Control) culture has the highest 'Now' score at 30.1. The second highest 'Now' culture score is in the bottom 'Market' (Compete) quadrant with a score of 27.7. The dominant corresponding Organisational Dimension is that of Stability and Control. This makes perfect sense for an organisation such as the NZ Army where there is a formalised structure, multiple hierarchical levels, procedures that govern most of what is done, and formal rules and policies which hold the organisation together.

On the other hand the highest 'Preferred' (Future) score is in the Top quadrant, with 'Clan' (Collaborate) scoring the highest at 27.6 and 'Market' (Compete) scoring the second highest of 25.3 in the bottom quadrant. The dominant organisational dimension for the 'Preferred' culture of 'Flexibility and Discretion' is determined by taking the highest scoring 'Preferred' score - 'Clan' at 27.6, and the second highest 'Preferred' score adjacent to Clan – in this case 'Adhoc' at 23.3. The area between those two points and the intersection of the x and y axes gives the greatest area, and thus the dominant domain. Respondents believe that a culture that is like a family and promotes teamwork, commitment and involvement, is what they want heading into the future. The preferred

culture has a reasonably even spread of all culture types and organisational dimensions, suggesting that a good mix of all four culture types and all four organisational dimensions, where one culture type and one organisational dimension doesn't have a marked dominance over the others, is good.

There is nothing untoward about having a balanced culture where a similar emphasis is placed on each culture type. Look at the following example of Toyota.

Toyota, which has led the world in cutting-edge design while at the same time manufacturing the world's largest selling car, is well known for its production system (a highly developed hierarchy culture), ruthless and highly successful competitive strategy and market muscle (a market culture), cohesion and fierce loyalty among employees (a clan culture), and highly innovative product design and technological breakthroughs (an adhocracy culture). None of the culture quadrants dominates Toyota (Cameron & Quinn, 2011, p. 84).

No ideal culture exists, and every organisation must ascertain for itself the degree of cultural strength required to be successful in its own environment.

Discrepancies. This is the difference between current and future (Now and Preferred) scores. To do this we take a look at the areas of greatest discrepancy between the preferred future culture and the current culture. Because the OCAI uses an 'ipsative' response scale¹ statistically significant differences in scores cannot be computed, and therefore there is a need to be especially sensitive to differences of more than 10 points. However, differences between the 'Now' culture and the 'Preferred' culture of between five and 10 points usually indicates the need for a substantial culture change effort (Cameron & Quinn, 2011, pp. 82-83).

¹ An Ipsative measurement, also called a forced-choice measurement is used in personality questionnaires or attitude surveys in which the respondent must choose between two or more acceptable options (Bowen, 2014).

Looking at the data table for Figure 18 (Page 108) we are able to calculate the differences as follows;

- Clan: 2.7
- Adhoc: 6.3
- Market: - 2.4
- Hierarchy: - 7.1

According to Cameron and Quinn (2011), the differences in the Hierarchy and Adhoc scores suggest that substantial culture change effort will be required, with less effort required in changing the Clan and Market cultures. Figure 18 indicates there is a shift away from the 'Now' Hierarchy profile to the 'Preferred' Adhoc profile. These culture types are at opposite ends of the same scale, and if you change one, this may have an effect on the other without there being too much additional work required. The 'cause and effect' scenario may be something that can be considered as part of any follow-on study into this paper.

Strength. The strength of a culture is determined by the number of points awarded to a specific culture type. The higher the score, the stronger or more dominant that particular culture is rated to be (Cameron & Quinn, 2011, pp. 83-84).

In the case of the overall sample population results in Figure 18 (Page 108), the highest score of 30.1 has been awarded to the Hierarchy culture. This represents less than one third of the total points available, yet it is the dominant current culture, but only slightly ahead of the second highest score of 27.7 awarded to the Market culture type. Together these two account for 57.8% of the total points available. Under the 'preferred' (Future) culture, the highest score is 27.6 for the Clan culture type, making this the dominant culture. The second highest score goes to the 'Market' culture type with a score of 25.3. The combined scores for these two culture type represents a total of 52.9% of the total available points. Interestingly the difference between the top score and second highest

score for both the 'Now' culture and the 'Preferred' culture is almost identical. For the 'Now' culture the difference is 2.4 and for the 'Preferred' culture the difference is 2.3.

The constant in both the 'Now' and 'Preferred' profiles is the second highest scoring 'Market' culture type. The main focus of change has been away from the Hierarchy culture to the Clan culture. Also the range of scores ie; the difference between the highest and lowest scores has gone from 12.9 in the 'Now' culture to 4.6 in the 'Preferred culture, with a more even distribution and emphasis across all culture types and organisational domains.

Congruence. This looks at the alignment of the various aspects of an organisations culture. That is, the same culture types are emphasised in various parts of the organisation. In a congruent culture, the strategy, leadership style, reward system, approach to managing employees, and dominant characteristics all tend to emphasise the same cultural values. By contrast, an organisation with an incongruent culture would have profiles with dramatically different shapes (Cameron & Quinn, 2011, pp. 84-85).

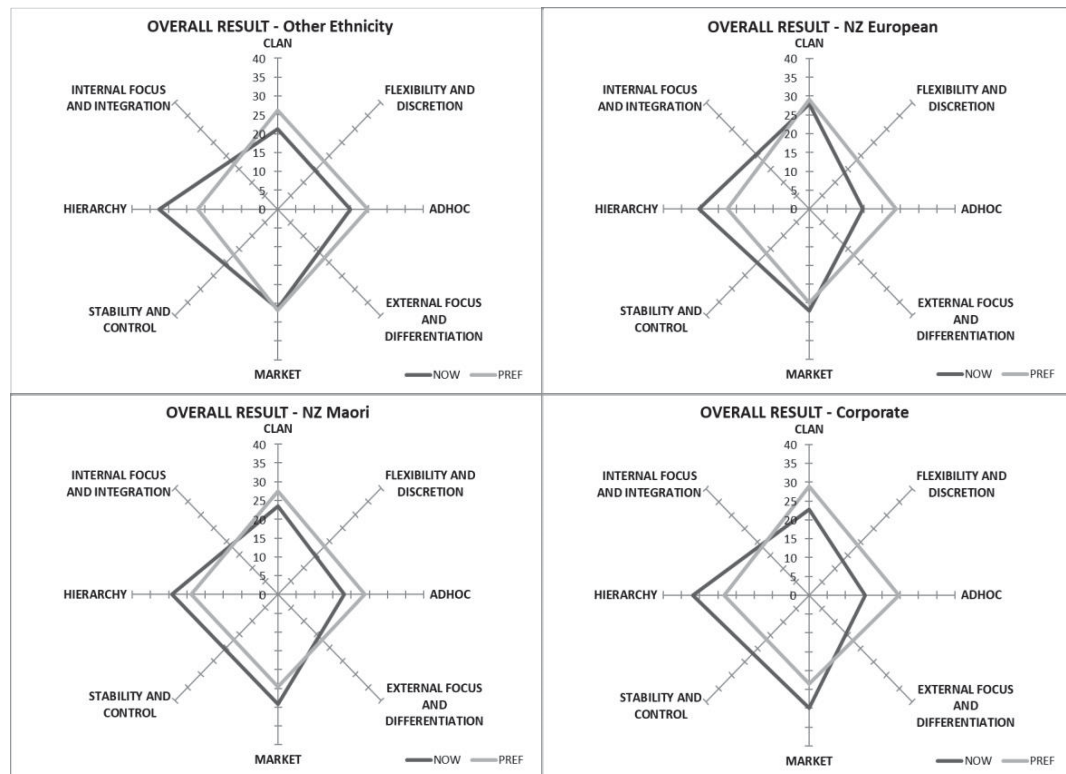
In order to analyse congruence, and by way of direct comparison, we need to view the overall results for different groups captured within the data gathered for this thesis. Table 8A (Page 65) provides a good start point for examining different groups. From that data collected, 19 separate demographic groups have been created, and each has had OCAI charts generated for each of the six attributes, and an overall chart. The 19 demographic groups and group size (in Brackets) are as follows;

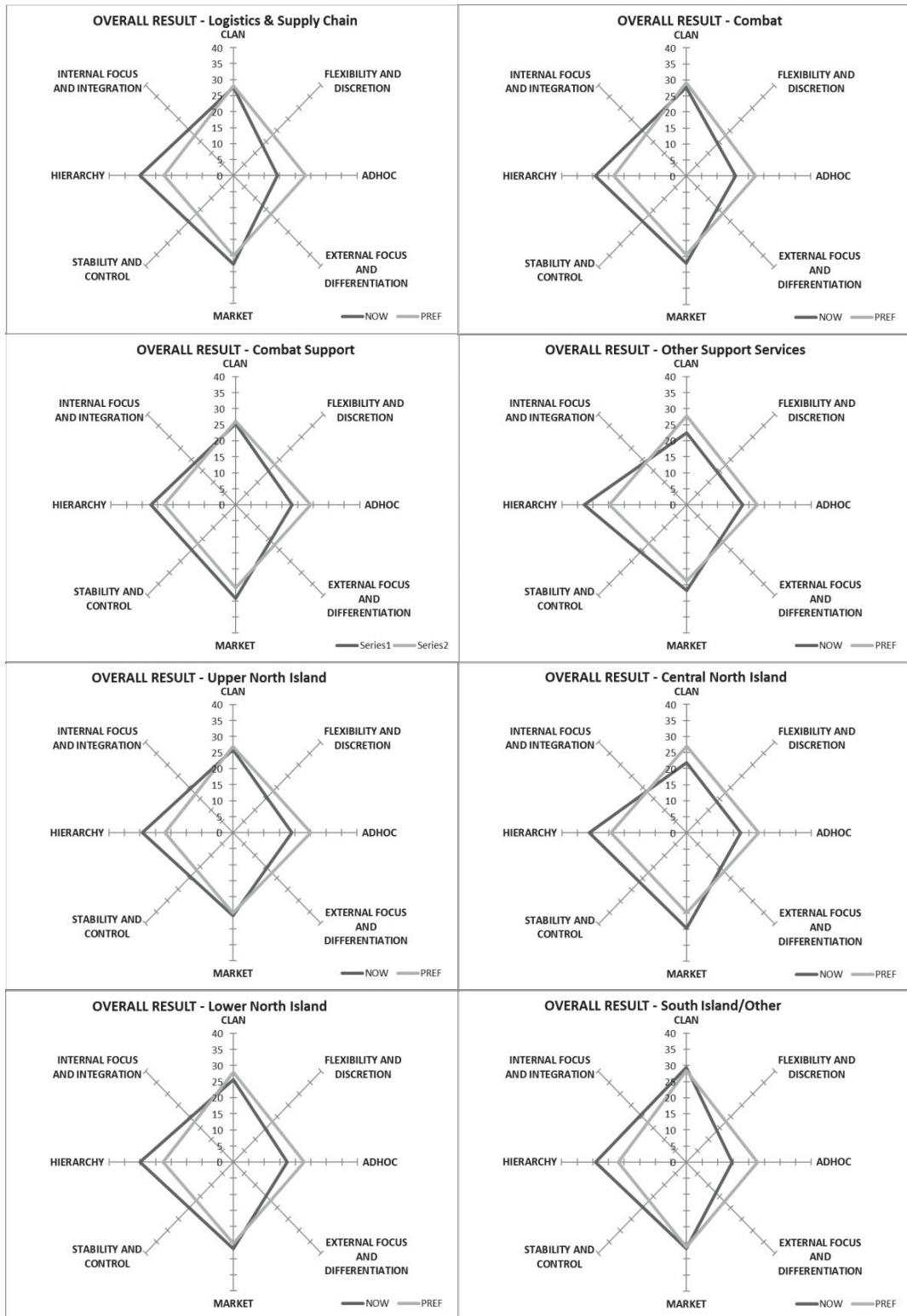
1. Other Ethnicity (7) - This is all those who indicated that the ethnic group they most closely associated with was either 'Other' or Other European'
2. NZ European (39) - Those who indicated that the ethnic group they most closely associated with is 'NZ European'.
3. NZ Maori (15) – Those who indicated that the ethnic group they most closely associated with is 'NZ Maori'.
4. Corporate (4) – Those who classified their employment group as 'Corporate'.

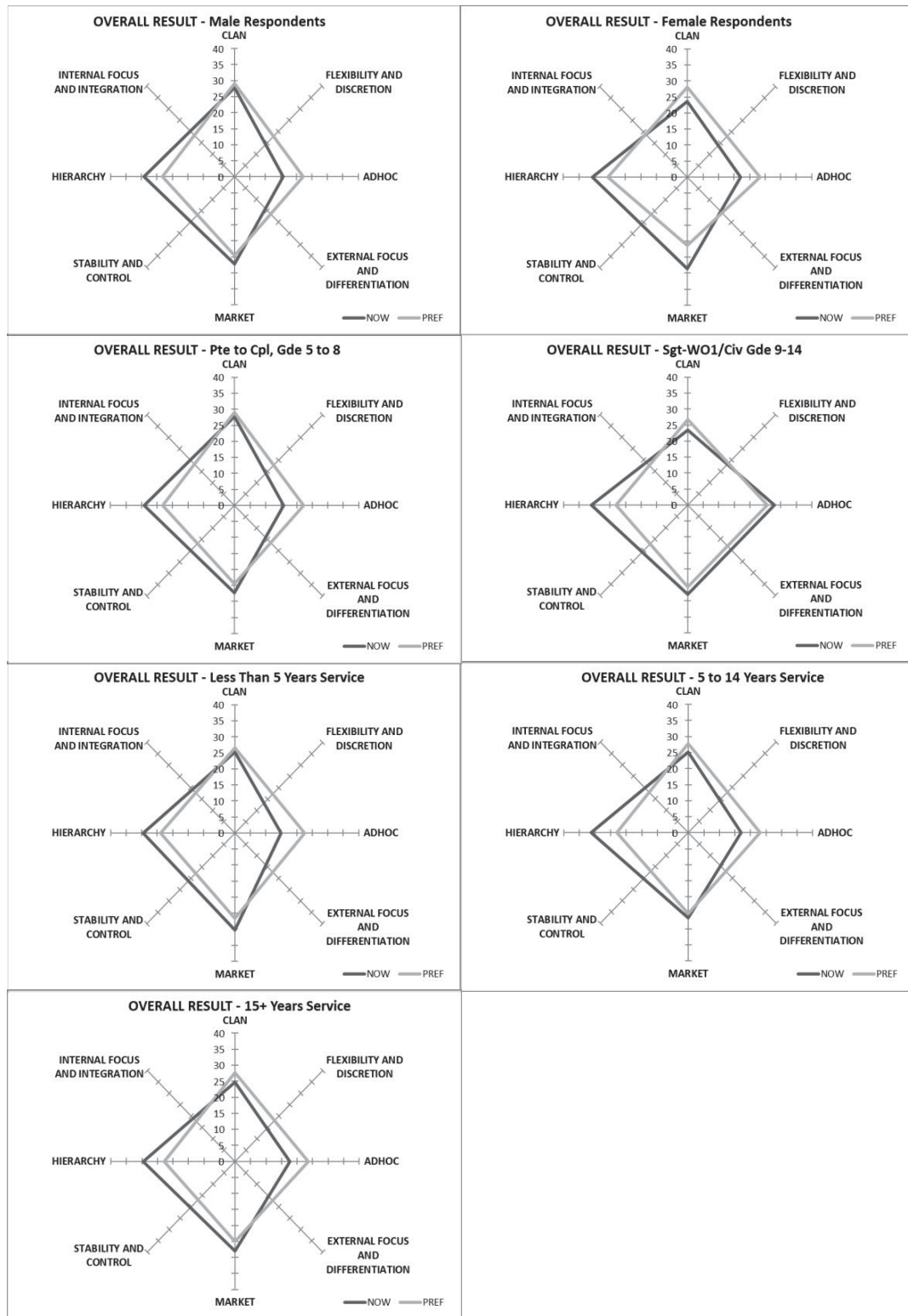
5. Logistics and Supply Chain (18) - Those who classified their employment group as 'Logistics and Supply'.
6. Combat (12) - Those who classified their employment group as 'Combat'.
7. Combat Support (12) - Those who classified their employment group as 'Combat Support'.
8. Other Support Services (15) - Those who classified their employment group as 'Other Support Services'.
9. Upper North Island (8) – Those who selected their general work location as 'Upper North Island'.
10. Central North Island (23) - Those who selected their general work location as 'Central North Island'.
11. Lower North Island (23) - Those who selected their general work location as 'Lower North Island'.
12. South Island/Other (12) - Those who selected their general work location as 'South Island/Other'.
13. Male (50) – Those respondents who classified their gender as 'Male'.
14. Female (11) - Those respondents who classified their gender as 'Female'.
15. Private to Corporal, Civilian Pay Grade 5 to 8 (21) – Those who selected their rank or civilian grade as 'Private to Corporal, Civilian Pay Grade 5 to 8'.
16. Sergeant to Warrant Officer Class 1, Civilian Pay Grade 9 to 15 (38) - Those who selected their rank or civilian grade as 'Sergeant to Warrant Officer Class 1, Civilian Pay Grade 9 to 15'.
17. Less than 5 years service (8) – Those who indicated they had served in the NZ Army for less than 5 years.
18. Five to Fourteen years service (22) – Those who indicated they had served in the NZ Army between 5 and 14 years.
19. Fifteen or more years service (31) – Those who indicated they had served in the NZ Army for fifteen or more years.

The overall result charts for each of the demographic groups identified above are shown in Figure 19 (Pages 113 to 115).

Figure 19. Overall Results charts for Demographic groupings.







The 'Now' and 'Preferred' scores for each of the cultural characteristics in Figure 19 (Pages 113 to 115) along with the scores for the Overall Sample population chart depicted in Figure 18 (Page 108), are presented in separate tables; Tables 19 'Now' Individual scores (Page 118) and Table 20 'Preferred' individual scores (Page 119).

Tables 21 (Page 120) demonstrates the difference between the Total Sample population and the individual demographic 'Now' scores, while Table 22 (Page 121) does the same for the differences between the 'Preferred' scores. Table 23 (Page 122) shows all the differences for all demographic groupings and the total sample population scores.

With regard to Table 21 to 23, a difference between 5 and 10 (both positive and negative) is shaded grey with black text, scores with a difference of 10 or greater (both positive and negative) are shaded dark grey with white text.

Cameron and Quinn (2011) suggest that having all aspects of the organisation clear and focused on the same values and sharing the same assumptions, eliminates many of the complications, disconnects, and obstacles that get in the way of effective performance. The presence of cultural incongruence in organisations often stimulates an awareness of a need for change. Further, Cameron and Quinn (2011) also suggest that when interpreting the cultural congruence, one needs to examine the extent to which the shapes look the same, and to look for discrepancies in the predominant culture types..

In analysing these discrepancies, Cameron and Quinn (2011) recommend;

- Examine the individual plots. To what extent are the shapes of the plots the same?
- Look for discrepancies in the culture types that predominate.
- Do any plots emphasize cultures that are on the diagonal from one another, that is, cultures that are contradictory?
- Look for discrepancies of more than 10 points.

When discrepancies do exist, this may indicate a lack of focus, that the culture is unclear to respondents, or that the complexity of the environment requires multiple emphases in different areas of the organisation (Cameron & Quinn, 2011, p. 86).

The charts in Figure 19 (Pages 113 to 115) all have relatively similar shape, and are not that dissimilar to the shape of the Overall Sample Population chart in Figure 18 (Page 108). However on closer examination of Figure 19, there slightly different shaped 'groups' of charts can be identified.

Shape 1 – Consists of 5 Demographic groups:

- NZ Maori ethnic group
- Corporate employment group
- Other Support Services employment group
- Central North Island Location
- Female Gender Group

This group sees a shift in organisational dimension away from Stability and Control towards Flexibility and Discretion, with a decrease in the 'Now' Market (Compete) and Hierarchy (Control) scores, to increases in 'Preferred' Clan (Collaborate) and Adhocracy (Create) scores.

Shape 2 – Consists of 13 demographic Groups:

- 'Other' Ethnicity
- NZ European ethnic group
- Logistics and Support employment group
- Combat and Combat Support employment groups
- Upper, Lower North Island and South Island/Other locations
- Male gender group
- Private to Corporal/Civilian Pay grade 5 to 8
- all three 'length of service' groups.

Table 19. NOW - Individual Culture Type Scores for Demographic Groupings

NOW - Individual Culture Type Scores for Demographic Groupings																				
	Total Sample Population	Other Ethnicity	NZ European	NZ Maori	Corporate	Logistics & Supply Chain	Combat	Combat Support	Other Spt Services	Upper North Island	Central North Island	Lower North Island	South Island & Other	Male Respondents	Female Respondents	Pte to Cpl, Civ Gde 5 to 8	Sgt-WO1/Gde 9-14	Less Than 5 years service	5 to 14 Years Service	15 + years service
DOMINANT CHARACTERISTICS	CLAN	21.35	28.41	17.95	23.36	24.17	24.24	23.64	21.43	30.22	18.89	25.06	25.32	23.93	21.32	24.84	22.49	25.04	22.98	23.40
	ADHOC	20.26	12.22	15.12	16.33	13.33	15.68	16.83	15.66	14.95	15.86	16.49	12.18	15.15	15.46	14.10	15.56	13.43	15.55	15.42
	MARKET	22.09	23.39	28.48	28.80	24.58	28.64	28.93	25.89	25.42	28.86	24.33	29.53	27.66	25.11	26.67	27.35	27.98	27.66	26.68
	HIERARCHY	34.13	36.30	35.98	38.44	31.51	37.92	31.44	30.59	37.02	29.42	36.39	34.11	32.97	33.26	38.11	34.39	34.60	33.54	33.81
ORGANISATIONAL LEADERSHIP	CLAN	29.95	19.76	34.13	28.39	28.86	35.90	27.03	30.12	25.79	27.80	26.93	31.12	36.23	30.12	34.56	27.79	31.08	31.52	28.86
	ADHOC	18.16	21.46	16.81	16.07	14.32	16.31	20.08	18.57	19.55	23.01	16.73	18.77	18.78	16.70	18.75	18.39	17.21	18.05	18.96
	MARKET	28.00	32.71	27.74	30.09	31.32	25.35	29.41	30.60	29.41	25.67	30.68	28.67	24.65	28.71	26.11	28.22	31.07	27.86	27.79
	HIERARCHY	22.91	26.06	21.31	25.46	25.50	22.44	23.48	20.72	25.26	23.51	24.48	23.47	20.35	22.39	27.11	18.58	25.60	20.64	22.57
LEADERSHIP OF EMPLOYEES	CLAN	25.73	21.26	29.01	25.21	24.95	29.60	25.07	24.06	24.24	25.04	20.85	27.36	33.09	26.02	24.41	29.62	23.46	26.79	24.60
	ADHOC	16.89	18.30	13.82	19.50	16.72	13.67	20.15	18.70	16.85	19.20	16.64	17.22	15.34	17.19	15.53	15.14	17.66	16.39	17.46
	MARKET	29.35	26.70	28.47	26.96	29.10	27.95	30.39	30.27	29.64	30.91	32.78	26.17	26.49	27.71	36.79	27.58	29.84	30.68	
	HIERARCHY	28.04	33.74	28.71	28.33	29.24	28.77	24.40	26.96	29.28	24.86	29.74	29.25	25.07	29.09	23.27	27.66	29.04	25.59	30.02
ORGANISATIONAL GLUE	CLAN	24.78	21.75	24.03	25.41	24.41	24.70	23.74	27.43	22.47	23.09	24.99	24.63	26.58	25.52	22.33	25.43	24.81	19.90	25.36
	ADHOC	15.79	17.50	12.76	19.35	13.37	14.29	16.73	18.52	16.36	18.32	16.15	17.25	11.66	15.98	15.41	15.27	16.12	15.95	16.23
	MARKET	25.85	26.62	26.46	25.33	26.96	26.55	25.26	27.52	26.26	23.16	27.40	26.26	24.87	25.97	26.21	23.71	27.34	28.26	26.05
	HIERARCHY	33.00	34.13	36.75	29.91	35.27	34.46	34.27	26.53	34.91	35.43	31.46	31.86	36.89	32.53	36.04	35.59	31.73	35.90	33.24
STRATEGIC EMPHASIS	CLAN	22.54	22.29	24.70	18.75	18.05	23.75	24.91	23.77	20.31	24.72	19.34	23.71	25.45	22.61	22.20	25.09	20.87	22.69	22.00
	ADHOC	19.74	18.50	18.71	22.86	22.11	16.39	22.05	20.26	20.18	20.67	20.63	21.43	14.90	19.45	21.07	16.73	21.40	15.10	19.67
	MARKET	29.82	25.90	29.95	31.82	31.17	32.78	28.57	32.02	26.95	26.63	32.65	26.86	30.94	30.23	27.92	32.34	28.41	34.52	29.26
	HIERARCHY	27.90	33.31	26.64	26.56	28.67	27.08	24.46	23.94	32.56	27.97	27.37	28.00	28.72	27.70	28.80	25.84	29.32	27.69	28.21
CRITERIA OF SUCCESS	CLAN	23.11	21.49	26.87	25.65	17.02	28.25	21.91	22.88	20.67	24.58	20.26	21.99	29.27	23.48	21.43	26.98	20.87	25.88	23.47
	ADHOC	16.26	23.36	13.75	15.73	9.35	11.81	16.32	16.51	19.60	18.15	17.01	15.39	14.89	15.78	18.45	14.95	17.05	11.98	17.00
	MARKET	26.07	23.64	26.93	32.14	32.65	29.50	24.95	26.16	22.16	23.38	25.43	28.95	24.77	25.36	29.27	25.02	26.57	28.79	21.64
	HIERARCHY	34.56	31.51	32.45	26.47	40.98	30.45	36.82	34.45	37.57	33.89	37.30	33.68	31.08	35.38	30.84	33.05	35.50	33.36	31.02
OVERALL	CLAN	24.93	21.32	27.86	23.56	22.77	27.73	24.48	25.32	22.48	25.91	21.87	21.87	29.32	25.28	23.63	27.75	23.38	25.29	24.71
	ADHOC	17.01	19.90	14.68	18.11	15.37	14.30	18.50	18.23	18.03	19.05	17.37	17.37	14.62	17.05	17.11	15.82	27.96	14.95	16.96
	MARKET	27.71	26.28	27.16	29.14	30.00	27.79	27.87	29.25	26.72	25.86	29.63	29.63	26.87	27.61	28.57	27.24	27.96	30.30	26.48
	HIERARCHY	30.09	32.51	30.31	29.20	31.86	30.19	29.15	27.20	32.77	29.18	31.13	31.13	29.18	30.06	30.70	29.19	30.97	29.45	31.31

Table 20. PREFERRED - Individual Culture Type Scores for Demographic Groupings

PREFERRED - Individual Culture Type Scores for Demographic Groupings																					
	Total Sample Population	Other Ethnicity	NZ European	NZ Maori	Corporate	Logistics & Supply Chain	Combat	Combat Support	Other Spt Services	Upper North Island	Central North Island	Lower North Island	South Island & Other	Male Respondents	Female Respondents	Pte to Cpl, Civ Gde 5 to 8	Sgt-WO1/Gde 9-14	Less Than 5 years service	5 to 14 Years Service	15+ years service	
DOMINANT CHARACTERISTICS	CLAN	25.40	22.29	32.41	22.76	28.97	26.67	23.60	23.84	26.11	27.62	21.87	26.92	28.41	25.68	24.14	29.30	23.01	27.73	26.51	24.01
	ADHOC	24.69	28.00	24.38	23.71	29.72	22.50	27.23	24.32	22.92	25.19	24.47	25.42	23.66	24.90	23.73	22.75	25.47	23.98	24.79	24.80
	MARKET	21.75	25.96	23.24	22.17	22.31	19.48	23.85	25.74	19.58	23.58	23.32	18.67	22.15	23.00	16.09	20.71	22.39	22.25	21.67	21.68
	HIERARCHY	23.21	23.71	20.02	31.38	19.10	24.58	21.01	21.66	25.75	19.81	27.16	20.92	21.32	22.29	27.37	22.15	24.35	24.40	21.65	24.00
ORGANISATIONAL LEADERSHIP	CLAN	29.43	29.97	27.87	31.20	28.73	29.05	31.25	27.46	29.72	25.65	30.24	29.24	30.67	29.30	29.99	29.30	28.88	25.93	29.66	30.16
	ADHOC	21.84	19.99	21.86	22.11	21.44	22.78	21.13	24.03	20.86	26.07	22.46	20.03	20.56	21.80	22.04	22.75	22.60	23.88	21.52	21.54
	MARKET	21.82	23.84	20.31	21.56	20.15	19.56	22.10	24.56	20.24	21.85	21.77	21.04	23.03	22.92	16.81	20.71	21.86	23.21	21.56	21.64
	HIERARCHY	26.92	26.20	29.96	25.13	29.69	28.61	25.53	23.95	29.18	26.42	25.53	29.69	25.74	25.98	31.16	22.15	26.66	26.98	27.26	26.66
LEADERSHIP OF EMPLOYEES	CLAN	28.92	28.67	31.16	30.32	32.68	30.69	26.54	27.91	29.31	26.33	27.29	30.73	31.04	29.35	26.96	31.78	27.67	29.69	29.75	28.13
	ADHOC	22.83	24.18	22.24	23.75	22.32	21.39	25.95	23.85	21.16	25.95	22.22	22.82	21.93	22.54	24.17	20.87	23.67	21.78	21.57	24.00
	MARKET	25.41	26.35	24.68	24.49	22.75	25.69	27.05	24.42	26.80	25.18	26.96	24.97	23.26	25.38	25.57	24.57	25.76	26.15	24.86	25.61
	HIERARCHY	22.84	20.81	21.93	21.44	22.25	22.22	20.46	23.82	22.73	22.54	23.53	21.47	23.77	22.74	23.30	22.78	22.89	22.38	23.83	22.26
ORGANISATIONAL GLUE	CLAN	28.23	23.30	29.42	32.17	30.87	29.58	28.77	27.45	25.45	29.89	29.52	26.84	26.76	27.54	31.38	27.48	28.56	25.94	27.40	29.42
	ADHOC	23.73	27.33	23.86	22.96	24.37	24.17	22.76	24.78	24.06	24.70	21.92	25.06	24.59	24.13	21.92	23.65	23.85	21.26	25.08	23.42
	MARKET	23.89	27.54	22.91	21.78	20.02	22.92	26.45	24.11	23.44	23.78	22.89	24.22	25.40	24.88	19.38	22.65	24.52	24.14	24.61	23.32
	HIERARCHY	24.14	21.83	23.81	23.10	24.74	23.33	22.03	23.66	27.05	21.63	25.68	23.88	23.25	23.44	27.32	26.21	23.08	28.66	22.91	23.85
STRATEGIC EMPHASIS	CLAN	24.86	26.83	26.86	22.40	25.55	26.02	23.31	23.86	25.57	24.97	24.08	25.17	25.83	24.65	25.84	25.62	24.43	25.49	25.55	24.21
	ADHOC	24.72	25.32	26.49	27.08	26.74	26.06	25.66	25.15	22.64	24.34	25.27	23.86	25.19	24.56	25.43	23.71	25.39	24.06	23.33	25.87
	MARKET	27.48	26.90	24.70	27.11	26.30	26.06	29.95	26.97	26.07	25.79	26.53	29.28	27.72	28.48	22.93	26.73	27.50	27.29	28.35	26.91
	HIERARCHY	22.94	20.95	21.96	23.41	21.42	21.85	21.08	24.02	25.72	24.90	24.13	21.69	21.25	22.32	25.80	23.94	22.68	23.15	22.77	23.01
CRITERIA OF SUCCESS	CLAN	28.64	27.93	28.99	30.42	28.08	29.88	27.80	26.52	30.82	27.63	29.37	28.58	28.01	28.35	29.99	30.52	27.66	25.10	27.72	30.22
	ADHOC	21.77	23.15	20.13	20.37	19.42	19.04	21.31	23.32	24.59	24.79	22.85	20.15	20.12	21.47	23.14	22.02	21.46	20.36	21.77	22.13
	MARKET	31.55	30.06	33.77	30.59	29.62	36.96	32.07	29.78	26.25	30.92	27.94	33.52	35.91	32.37	27.81	30.49	31.95	36.88	30.85	30.66
	HIERARCHY	18.04	18.87	17.11	18.62	22.88	14.12	18.83	20.38	18.34	16.66	19.84	17.75	15.97	17.82	19.07	16.97	18.93	17.67	19.67	16.99
OVERALL	CLAN	27.58	26.26	29.04	27.56	28.89	28.09	26.66	26.17	27.83	27.02	27.06	27.06	28.45	27.48	28.05	29.10	26.70	26.65	27.77	27.69
	ADHOC	23.26	24.69	23.69	23.82	24.65	23.37	24.34	24.24	22.70	25.17	23.20	23.20	22.67	23.23	23.41	22.28	25.66	22.55	23.01	23.63
	MARKET	25.32	26.77	24.93	24.62	23.52	25.11	26.91	25.93	23.73	25.18	24.90	24.90	26.24	26.17	21.43	24.51	25.66	26.66	25.32	24.97
	HIERARCHY	23.02	22.06	22.46	23.84	23.35	22.45	21.49	22.91	24.80	22.00	24.31	24.31	21.88	22.43	25.67	23.27	23.10	23.87	23.01	22.79

Table 21. NOW - Difference in Culture Score between Sample Population and each Demographic Grouping

NOW - Difference in Culture Score between Sample Population and each Demographic Grouping																					
		Total Sample Population	Other Ethnicity	NZ European	NZ Maori	Corporate	Logistics & Supply Chain	Combat	Combat Support	Other Spt Services	Upper North Island	Central North Island	Lower North Island	South Island & Other	Male Respondents	Female Respondents	Pte to Cpl, Civ Gde 5 to 8	Sgt-WO1/Gde 9-14	Less Than 5 years service	5 to 14 Years Service	15 + years service
DOMINANT CHARACTERISTICS	CLAN	23.46	-2.11	4.95	-5.51	-0.10	0.71	0.78	0.18	-2.03	6.76	-4.57	1.60	1.86	0.47	-2.14	1.37	-0.97	1.58	-0.48	-0.06
	ADHOC	15.20	5.06	-2.98	-0.08	1.13	-1.87	0.48	1.63	0.46	-0.25	0.66	1.29	-3.02	-0.06	0.26	-1.10	0.36	-1.77	0.34	0.21
	MARKET	27.20	-5.11	-3.81	1.28	1.59	-2.62	1.44	1.73	-1.31	-1.79	1.66	-2.87	2.32	0.46	-2.10	-0.53	0.15	0.78	0.46	-0.53
	HIERARCHY	34.13	2.17	1.85	4.31	-2.63	3.78	-2.70	-3.54	2.88	-4.72	2.26	-0.02	-1.16	-0.87	3.98	0.26	0.47	-0.59	-0.32	0.38
ORGANISATIONAL LEADERSHIP	CLAN	29.95	-10.18	4.19	-1.55	-1.08	5.95	-2.92	0.17	-4.16	-2.15	-3.02	1.18	6.28	0.17	0.13	4.61	-2.16	1.13	1.57	-1.09
	ADHOC	18.16	3.31	-1.34	-2.09	-3.84	-1.84	1.93	0.41	1.39	4.86	-0.24	-1.42	0.61	0.62	-1.46	0.60	0.23	-0.95	-0.11	0.80
	MARKET	28.00	4.71	-0.25	2.09	3.32	-2.65	1.41	2.60	1.41	-2.33	2.68	0.67	-3.35	0.72	-1.89	0.12	0.23	3.07	-0.14	-0.21
	HIERARCHY	22.91	3.15	-1.60	2.54	2.59	-0.48	0.57	-2.19	2.34	0.60	1.57	0.56	-2.57	-0.52	4.20	-4.34	2.68	-2.28	-0.34	1.48
LEADERSHIP OF EMPLOYEES	CLAN	25.73	-4.47	3.28	-0.51	-0.78	3.87	-0.66	-1.66	-1.49	-0.69	-4.88	1.63	7.37	0.29	-1.31	3.89	-2.27	1.44	1.06	-1.13
	ADHOC	16.89	1.41	-3.07	2.61	-0.17	-3.22	3.26	1.81	-0.04	2.31	-0.25	0.33	-1.55	0.30	-1.36	-1.75	0.77	-0.83	-0.50	0.57
	MARKET	29.35	-2.64	-0.88	-2.39	-0.25	-1.39	1.04	0.92	0.29	1.56	3.43	-3.17	-2.85	-1.64	7.44	-1.77	0.49	1.83	-2.55	1.33
	HIERARCHY	28.04	5.71	0.67	0.29	1.20	0.74	-3.64	-1.07	1.24	-3.18	1.70	1.21	-2.97	1.05	-4.77	-0.38	1.00	-2.44	1.98	-0.77
ORGANISATIONAL GLUE	CLAN	24.78	-3.04	-0.76	0.62	-0.38	-0.08	-1.04	2.64	-2.32	-1.69	0.21	-0.15	1.79	0.74	-2.45	0.64	0.03	-4.89	0.58	1.17
	ADHOC	15.79	1.71	-3.04	3.56	-2.43	-1.51	0.94	2.73	0.57	2.53	0.35	1.46	-4.13	0.18	-0.38	-0.52	0.33	0.16	-0.45	0.44
	MARKET	25.85	0.77	0.61	-0.52	1.11	0.70	-0.59	1.67	0.41	-2.68	1.55	0.41	-0.97	0.12	0.36	-2.14	1.49	2.41	0.21	-0.45
	HIERARCHY	33.00	1.13	3.75	-3.09	2.27	1.46	1.26	-6.47	1.91	2.42	-1.54	-1.15	3.89	-0.47	3.04	2.59	-1.27	2.89	0.24	-0.59
STRATEGIC EMPHASIS	CLAN	22.54	-0.25	2.16	-3.79	-4.49	1.21	2.37	1.23	-2.23	2.19	-3.20	1.18	2.91	0.08	-0.34	2.55	-1.67	0.15	0.70	-0.53
	ADHOC	19.74	-1.25	-1.03	3.12	2.36	-3.36	2.31	0.52	0.43	0.93	0.89	1.68	-4.84	-0.29	1.33	-3.02	1.65	-4.65	-0.08	1.26
	MARKET	29.82	-3.91	0.13	2.01	1.36	2.96	-1.24	2.21	-2.86	-3.19	2.84	-2.96	1.12	0.42	-1.89	2.53	-1.41	4.70	-0.92	-0.56
	HIERARCHY	27.90	5.41	-1.26	-1.34	0.77	-0.82	-3.44	-3.96	4.66	0.07	-0.53	0.10	0.81	-0.20	0.90	-2.06	1.42	-0.21	0.31	-0.16
CRITERIA OF SUCCESS	CLAN	23.11	-1.62	3.76	2.54	-6.08	5.14	-1.20	-0.23	-2.44	1.47	-2.85	-1.12	6.16	0.37	-1.68	3.87	-2.24	2.77	-1.52	0.36
	ADHOC	16.26	7.10	-2.51	-0.53	-6.92	-4.46	0.06	0.25	3.34	1.89	0.74	-0.87	-1.38	-0.48	2.19	-1.31	0.79	-4.29	0.52	0.74
	MARKET	26.07	-2.43	0.86	6.08	6.58	3.43	-1.12	0.09	-3.91	-2.69	-0.64	2.88	-1.30	-0.70	3.20	-1.05	0.51	2.72	-4.43	2.44
	HIERARCHY	34.56	-3.05	-2.11	-8.09	6.42	-4.11	2.26	-0.11	3.01	-0.67	2.74	-0.88	-3.49	0.82	-3.72	-1.51	0.94	-1.20	5.43	-3.54
OVERALL	CLAN	24.93	-3.61	2.93	-1.37	-2.15	2.80	-0.44	0.39	-2.44	0.98	-3.05	-3.05	4.40	0.35	-1.30	2.82	-1.55	0.36	0.32	-0.21
	ADHOC	17.01	2.89	-2.33	1.10	-1.64	-2.71	1.49	1.22	1.02	2.04	0.36	0.36	-2.39	0.05	0.10	-1.18	10.95	-2.05	-0.05	0.67
	MARKET	27.71	-1.43	-0.56	1.42	2.28	0.07	0.16	1.54	-0.99	-1.85	1.92	1.92	-0.84	-0.10	0.85	-0.48	0.24	2.59	-1.23	0.34
	HIERARCHY	30.09	2.42	0.22	-0.89	1.77	0.10	-0.95	-2.89	2.67	-0.91	1.03	1.03	-0.91	-0.03	0.60	-0.91	0.87	-0.64	1.22	-0.54

Table 22. PREFERRED -Difference in Culture Score between Sample Population and each Demographic Grouping

PREFERRED -Difference in Culture Score between Sample Population and each Demographic Grouping																					
	Total Sample Population	Other Ethnicity	NZ European	NZ Maori	Corporate	Logistics & Supply Chain	Combat	Combat Support	Other Spt Services	Upper North Island	Central North Island	Lower North Island	South Island & Other	Male Respondents	Female Respondents	Pte to Cpl, Civ Gde 5 to 8	Sgt-W01/Gde 9-14	Less Than 5 years service	5 to 14 Years Service	15 + years service	
DOMINANT CHARACTERISTICS	CLAN	25.40	-3.11	7.01	-2.64	3.57	1.27	-1.80	-1.56	0.71	2.22	-3.53	1.52	3.01	0.28	-1.26	3.90	-2.39	2.33	1.11	-1.39
	ADHOC	24.69	3.31	-0.31	-0.98	5.03	-2.19	2.54	-0.36	-1.77	0.50	-0.21	0.74	-1.03	0.21	-0.95	-1.93	0.79	-0.70	0.10	0.11
	MARKET	21.75	4.21	1.49	0.42	0.56	-2.27	2.10	3.99	-2.18	1.83	1.57	-3.08	0.40	1.25	-5.66	-1.04	0.64	0.50	-0.08	-0.07
	HIERARCHY	23.21	0.51	-3.19	8.17	-4.11	1.38	-2.20	-1.55	2.54	-3.39	3.95	-2.28	-1.89	-0.92	4.16	-1.06	1.15	1.19	-1.55	0.79
ORGANISATIONAL LEADERSHIP	CLAN	29.43	0.55	-1.55	1.77	-0.70	-0.38	1.82	-1.97	0.29	-3.77	0.81	-0.19	1.24	-0.12	0.56	-0.13	-0.55	-3.50	0.24	0.74
	ADHOC	21.84	-1.85	0.02	0.27	-0.40	0.94	-0.71	2.19	-0.98	4.23	0.62	-1.81	-1.28	-0.04	0.20	0.91	0.75	2.04	-0.32	-0.30
	MARKET	21.82	2.02	-1.51	-0.25	-1.67	-2.25	0.28	2.74	-1.57	0.03	-0.04	-0.77	1.22	1.10	-5.00	-1.11	0.05	1.39	-0.26	-0.18
	HIERARCHY	26.92	-0.72	3.04	-1.79	2.77	1.69	-1.39	-2.96	2.26	-0.49	-1.38	2.77	-1.18	-0.93	4.25	-4.76	-0.25	0.06	0.34	-0.26
LEADERSHIP OF EMPLOYEES	CLAN	28.92	-0.25	2.24	1.40	3.77	1.78	-2.37	-1.00	0.39	-2.59	-1.63	1.82	2.13	0.43	-1.96	2.86	-1.24	0.77	0.83	-0.79
	ADHOC	22.83	1.34	-0.60	0.92	-0.51	-1.44	3.12	1.02	-1.67	3.11	-0.61	-0.01	-0.90	-0.30	1.34	-1.96	0.84	-1.05	-1.26	1.17
	MARKET	25.41	0.93	-0.73	-0.92	-2.67	0.28	1.64	-1.00	1.39	-0.23	1.55	-0.44	-2.15	-0.03	0.16	-0.84	0.35	0.74	-0.56	0.20
	HIERARCHY	22.84	-2.03	-0.92	-1.41	-0.59	-0.62	-2.38	0.98	-0.11	-0.30	0.69	-1.37	0.93	-0.10	0.46	-0.06	0.05	-0.46	0.99	-0.58
ORGANISATIONAL GLUE	CLAN	28.23	-4.94	1.19	3.93	2.64	1.35	0.53	-0.79	-2.79	1.65	1.28	-1.39	-1.47	-0.69	3.14	-0.75	0.32	-2.29	-0.83	1.18
	ADHOC	23.73	3.60	0.13	-0.78	0.64	0.43	-0.97	1.04	0.32	0.96	-1.82	1.32	0.86	0.40	-1.81	-0.08	0.11	-2.48	1.34	-0.31
	MARKET	23.89	3.65	-0.99	-2.11	-3.87	-0.98	2.56	0.22	-0.45	-0.11	-1.01	0.33	1.51	0.99	-4.51	-1.24	0.63	0.25	0.72	-0.58
	HIERARCHY	24.14	-2.31	-0.33	-1.04	0.60	-0.81	-2.11	-0.48	2.91	-2.51	1.54	-0.26	-0.89	-0.70	3.18	2.07	-1.06	4.52	-1.23	-0.29
STRATEGIC EMPHASIS	CLAN	24.86	1.96	1.99	-2.46	0.68	1.16	-1.55	-1.00	0.71	0.11	-0.78	0.30	0.97	-0.22	0.98	0.76	-0.43	0.63	0.69	-0.65
	ADHOC	24.72	0.60	1.77	2.36	2.02	1.35	0.94	0.44	-2.08	-0.37	0.55	-0.85	0.48	-0.16	0.71	-1.00	0.67	-0.66	-1.38	1.15
	MARKET	27.48	-0.57	-2.78	-0.37	-1.18	-1.41	2.47	-0.51	-1.41	-1.69	-0.95	1.80	0.24	1.00	-4.55	-0.75	0.02	-0.18	0.87	-0.57
	HIERARCHY	22.94	-1.99	-0.98	0.46	-1.52	-1.09	-1.87	1.07	2.78	1.95	1.18	-1.26	-1.69	-0.63	2.85	0.99	-0.26	0.21	-0.17	0.07
CRITERIA OF SUCCESS	CLAN	28.64	-0.72	0.35	1.78	-0.57	1.23	-0.85	-2.12	2.18	-1.01	0.73	-0.06	-0.63	-0.30	1.35	1.88	-0.98	-3.55	-0.93	1.57
	ADHOC	21.77	1.38	-1.64	-1.40	-2.34	-2.72	-0.46	1.55	2.82	3.03	1.08	-1.62	-1.65	-0.30	1.37	0.25	-0.31	-1.41	0.00	0.36
	MARKET	31.55	-1.49	2.22	-0.95	-1.93	5.42	0.52	-1.77	-5.30	-0.63	-3.60	1.98	4.36	0.82	-3.74	-1.05	0.40	5.34	-0.70	-0.88
	HIERARCHY	18.04	0.82	-0.93	0.58	4.84	-3.93	0.78	2.34	0.30	-1.39	1.79	-0.29	-2.08	-0.23	1.02	-1.07	0.89	-0.38	1.62	-1.05
OVERALL	CLAN	27.58	-1.32	1.46	-0.02	1.31	0.51	-0.92	-1.41	0.25	-0.56	-0.52	-0.52	0.87	-0.10	0.47	1.52	-0.88	-0.93	0.18	0.11
	ADHOC	23.26	1.43	0.43	0.56	1.39	0.11	1.08	0.98	-0.56	1.91	-0.07	-0.07	-0.59	-0.03	0.14	-0.99	2.40	-0.71	-0.25	0.36
	MARKET	25.32	1.46	-0.38	-0.70	-1.79	-0.20	1.60	0.61	-1.59	-0.13	-0.41	-0.41	0.93	0.85	-3.88	-0.81	0.35	1.34	0.00	-0.35
	HIERARCHY	23.02	-0.95	-0.55	0.83	0.33	-0.56	-1.53	-0.10	1.78	-1.02	1.30	1.30	-1.13	-0.58	2.65	0.25	0.09	0.86	0.00	-0.22

Table 23. Difference between NOW and PREFERRED scores – Overall Sample Population and Overall Demographic Groups

Difference between 'NOW' and 'PREFERRED' scores - Sample Population and Demographic Groups																					
	Total Sample Population	Other Ethnicity	NZ European	NZ Maori	Corporate	Logistics & Supply Chain	Combat	Combat Support	Other Spt Services	Upper North Island	Central North Island	Lower North Island	South Island & Other	Male Respondents	Female Respondents	Pte to Cpl, Civ Gde 5 to 8	Sgt-WO1/Gde 9-14	Less Than 5 years service	5 to 14 Years Service	15+ years service	
DOMINANT CHARACTERISTICS	CLAN	1.94	0.94	4.00	4.81	5.60	2.50	-0.65	0.19	4.68	-2.60	2.98	1.86	3.09	1.74	2.82	4.46	0.52	2.68	3.54	0.61
	ADHOC	9.48	7.74	12.15	8.59	13.38	9.17	11.55	7.49	7.26	10.24	8.61	8.93	11.48	9.75	8.27	8.65	9.92	10.55	9.24	9.38
	MARKET	-5.45	3.87	-0.15	-6.31	-6.48	-5.10	-4.79	-3.19	-6.32	-1.84	-5.54	-5.66	-7.38	-4.67	-9.02	-5.97	-4.96	-5.73	-6.00	-4.99
	HIERARCHY	-10.92	-12.58	-15.96	-7.06	-12.41	-13.33	-10.43	-8.93	-11.27	-9.60	-9.23	-13.19	-11.65	-10.97	-10.73	-12.24	-10.25	-9.14	-12.16	-10.51
ORGANISATIONAL LEADERSHIP	CLAN	-0.52	10.21	-6.26	2.81	-0.13	-6.85	4.22	-2.66	3.93	-2.15	3.31	-1.89	-5.56	-0.82	-0.09	-5.26	1.09	-5.15	-1.86	1.30
	ADHOC	3.69	-1.47	5.05	6.04	7.12	6.46	1.04	5.46	1.31	3.06	4.54	3.29	1.79	3.02	5.34	4.00	4.21	6.67	3.47	2.59
	MARKET	-6.18	-8.88	-7.44	-8.52	-11.17	-5.79	-7.31	-6.04	-9.16	-3.82	-8.91	-7.63	-1.62	-5.80	-9.30	-7.41	-6.36	-7.86	-6.30	-6.15
	HIERARCHY	4.00	0.14	8.65	-0.33	4.19	6.18	2.05	3.23	3.92	2.91	1.05	6.22	5.39	3.59	4.05	3.58	1.07	6.34	4.69	2.27
LEADERSHIP OF EMPLOYEES	CLAN	3.19	7.41	2.15	5.10	7.74	1.10	1.48	3.85	5.07	1.29	6.44	3.37	-2.05	3.33	2.54	2.16	4.21	2.52	2.96	3.53
	ADHOC	5.94	5.88	8.41	4.26	5.60	7.71	5.80	5.15	4.31	6.75	5.59	5.61	6.59	5.35	8.64	5.73	6.01	5.72	5.18	6.54
	MARKET	-3.94	-0.36	-3.78	-2.47	-6.35	-2.26	-3.34	-5.85	-2.84	-5.73	-5.82	-1.20	-3.24	-2.33	-11.22	-3.00	-4.08	-5.03	-1.95	-5.07
	HIERARCHY	-5.20	-12.93	-6.78	-6.90	-6.98	-6.55	-3.94	-3.15	-6.54	-2.31	-6.21	-7.78	-1.30	-6.35	0.03	-4.88	-6.15	-3.22	-6.19	-5.00
ORGANISATIONAL GLUE	CLAN	3.45	1.55	5.39	6.76	6.47	4.88	5.02	0.02	2.98	6.80	4.53	2.21	0.18	2.02	9.04	2.06	3.74	6.04	2.04	3.46
	ADHOC	7.94	9.83	11.10	3.60	11.00	9.88	6.03	6.26	7.70	6.38	5.77	7.80	12.93	8.16	6.51	8.38	7.72	5.31	9.74	7.19
	MARKET	-1.95	0.92	-3.55	-3.55	-6.94	-3.63	1.19	-3.41	-2.82	0.61	-4.51	-2.04	0.53	-1.08	-6.83	-1.05	-2.82	-4.12	-1.44	-2.08
	HIERARCHY	-8.86	-12.30	-12.94	-6.81	-10.53	-11.13	-12.24	-2.87	-7.86	-13.79	-5.79	-7.97	-13.64	-9.09	-8.72	-9.38	-8.65	-7.23	-10.34	-8.56
STRATEGIC EMPHASIS	CLAN	2.32	4.54	2.16	3.65	7.50	2.27	-1.60	0.09	5.26	0.24	4.74	1.45	0.39	2.03	3.65	0.54	3.56	2.80	2.31	2.21
	ADHOC	4.97	6.82	7.77	4.21	4.63	9.68	3.60	4.89	2.46	3.67	4.63	2.44	10.29	5.11	4.35	6.98	3.99	8.96	3.67	4.87
	MARKET	-2.34	1.00	-5.25	-4.71	-4.87	-6.71	1.38	-5.05	-0.89	-0.84	-6.13	2.43	-3.22	-1.75	-4.99	-5.62	-0.91	-7.22	-0.54	-2.35
	HIERARCHY	-4.96	-12.36	-4.68	-3.16	-7.25	-5.23	-3.39	0.08	-6.84	-3.08	-3.24	-6.32	-7.46	-5.39	-3.01	-1.91	-6.64	-4.54	-5.44	-4.73
CRITERIA OF SUCCESS	CLAN	5.53	6.44	2.12	4.77	11.05	1.63	5.89	3.64	10.15	3.05	9.12	6.59	-1.26	4.87	8.56	3.54	6.79	-0.78	6.12	6.75
	ADHOC	5.51	-0.21	6.37	4.64	10.08	7.24	4.99	6.81	4.99	6.64	5.84	4.76	5.23	5.69	4.68	7.07	4.41	8.38	4.99	5.13
	MARKET	5.48	6.42	6.84	-1.55	-3.03	7.46	7.12	3.62	4.09	7.54	2.51	4.58	11.14	7.00	-1.46	5.47	5.37	8.09	9.21	2.15
	HIERARCHY	-10.52	-12.64	-15.34	-7.86	-18.10	-16.33	-18.00	-14.07	-19.23	-17.23	-17.47	-15.93	-15.11	-17.56	-11.77	-16.08	-16.57	-15.69	-20.33	-14.03
OVERALL	CLAN	2.65	4.95	1.18	4.00	6.11	0.36	2.18	0.86	5.35	1.11	5.19	5.19	-0.87	2.20	4.42	1.35	3.32	1.35	2.52	2.98
	ADHOC	6.25	4.79	9.01	5.72	9.28	9.07	5.84	6.01	4.67	6.12	5.83	5.83	8.05	6.18	6.30	6.45	-2.29	7.60	6.05	5.95
	MARKET	-2.40	0.50	-2.22	-4.52	-6.48	-2.67	-0.96	-3.32	-2.99	-0.68	-4.73	-4.73	-0.63	-1.44	-7.14	-2.73	-2.29	-3.64	-1.17	-3.08
	HIERARCHY	-7.08	-10.45	-7.84	-5.35	-8.52	-7.73	-7.66	-4.29	-7.97	-7.18	-6.81	-6.81	-7.30	-7.63	-5.03	-5.92	-7.87	-5.58	-8.29	-6.76

The shift with these groups is predominantly along the Hierarchy/Adhocracy axis with a decrease in the 'Now' Hierarchy score and an Increase in the 'Preferred' Adhocracy score. In the majority of cases with these groups, both the 'Now' and the 'Preferred' Clan and Market scores remain relatively close to one another.

Shape 3, in a group by itself, Sergeant to Warrant Officer Class One/Civilian Pay Grade 9 to 14. This group sees both 'Now' and 'Preferred' Market (Compete) and Adhocracy (Create) scores staying within a few points of each other, with the 'Now' scores being dominant. The 'Preferred' Hierarchy (Control) score is less than the 'Now' score, with the 'Preferred' Clan (Collaborate) score being the only 'Preferred' result that has a greater score than the 'Now' equivalent.

Table 21 (Page 120) shows that there only two 'Now' discrepancies of 10 points or more, however there are a number of discrepancies between 5 and 10 points. Table 22 (Page 121) shows very few 'Preferred' discrepancies between 5 and 10 points, and no discrepancies over 10 points. These tables look at differences in scores between the overall sample population and the overall individual demographic groups. Table 23 (Page 122) examines the difference between the 'Now' and 'Preferred' scores for all charts presented in Figure 18 (Page 108) and 19 (Page 113 to 115). Table 23 identifies numerous discrepancies greater than 10 points, with even more discrepancies falling between 5 and 10 points. A (-) score indicates the 'Preferred' Score is less than the 'Now' score, and a (+) score means the 'Preferred' score is greater than the 'Now' score.

Table 23 suggests that there will be numerous challenges achieving the 'Preferred' culture for the demographic groups identified. Overall results for each group shows discrepancies between 5 and 10 points, with one score above 10 points. Across all groups there has been a shift away from the **Hierarchy** culture with all but two groups registering discrepancies between 5 and 10 points. The shift in **Market** scores is also towards the 'Preferred', with all but two groups registering discrepancies less than 5. 'Other Ethnicity' shows a slight positive discrepancy towards a stronger 'Preferred'

Market culture. **Adhoc** scores strengthen in the 'Preferred' culture with all but three discrepancies registering between 5 and 10 points. **Clan** scores strengthen in all but one group towards the 'Preferred' culture, with four groups registering discrepancies between 5 and 10 points, with one group having a slightly stronger 'Now' score.

None of the scores emphasize cultures that are on the diagonal from one another, ie; contradictory, but one demographic group does have a discrepancy greater than 10 points. Of the remaining groups, including the Overall Sample Population result (Circled), there will need to be some substantial culture change effort if they are to succeed in reaching their 'Preferred' dominant culture type in five years.

Should the NZ Army decide to progress culture change as a result of this thesis towards the 'preferred' culture identified by the respondents, a possible option for doing this is detailed below. This sequence is based on ranking the discrepancies for each of the groups. The discrepancies for each of the demographic groups, by culture type, were ranked from lowest to highest. Table 23 (Page 122) provides details of the overall discrepancies from which the rankings were determined. The sequence detailed below reflects the rankings determined by the above calculation. The demographic group that scored lowest in the rankings, ie; seen as the least challenging to change is Sergeant to Warrant Officer Class 1/Civ Grade 9 to 15. Although Table 23 identifies that there is a discrepancy of (-)7.87 for this groups Hierarchy score, this still resulted in the lowest overall ranking relative to the other groups, and this is therefore the first group that could be considered for any culture change initiatives to move them towards their preferred culture type. The number in brackets refers to the total number of respondents who associate themselves with a demographic group. The suggested sequence is;

1. Sergeant to Warrant Officer Class 1/Civ Grade 9 to 15 (38) – *larger number, lowest overall discrepancy ranking*
2. Other Support Services (15)
3. Central (23) and Lower North Island (23) - *equal ranking*

4. Logistics and Supply chain (18), Combat Support (12), and 5 to 14 years service (22) – *equal ranking*
5. Combat (12) and NZ Maori (15) – *equal ranking*
6. More than 15 years service (31), Corporate (4), and NZ European (39),
7. Upper North Island (8) – *equal ranking*
8. Male Respondents (50), and those with less than 5 years service (8) – *equal ranking*
9. Private to Corporal/Civ Grade 5 to 8 (21), and South Island/Other (12) – *equal ranking*
10. Female respondents (11) – small group, 18% of respondents, highest overall discrepancy ranking.

Not included in this sequence is the 'Other Ethnicity' group who were the only group registering an overall discrepancy for one culture type in excess of 10 points. To affect culture change in this group will require significant work. Only 7 respondents to the survey classified themselves as 'Other Ethnic' group, and as such, any effort to change the culture of this group would be better directed elsewhere where a greater impact can be achieved.

Having considered the results for the demographic groupings, it would make sense to conduct some analysis of the individual responses provided in Appendix 1. Figure 20 (Page 126) shows each of the six organisational attributes based on the results of the 61 respondents.

Figure 20. Sample Population Organisational Attribute result charts.

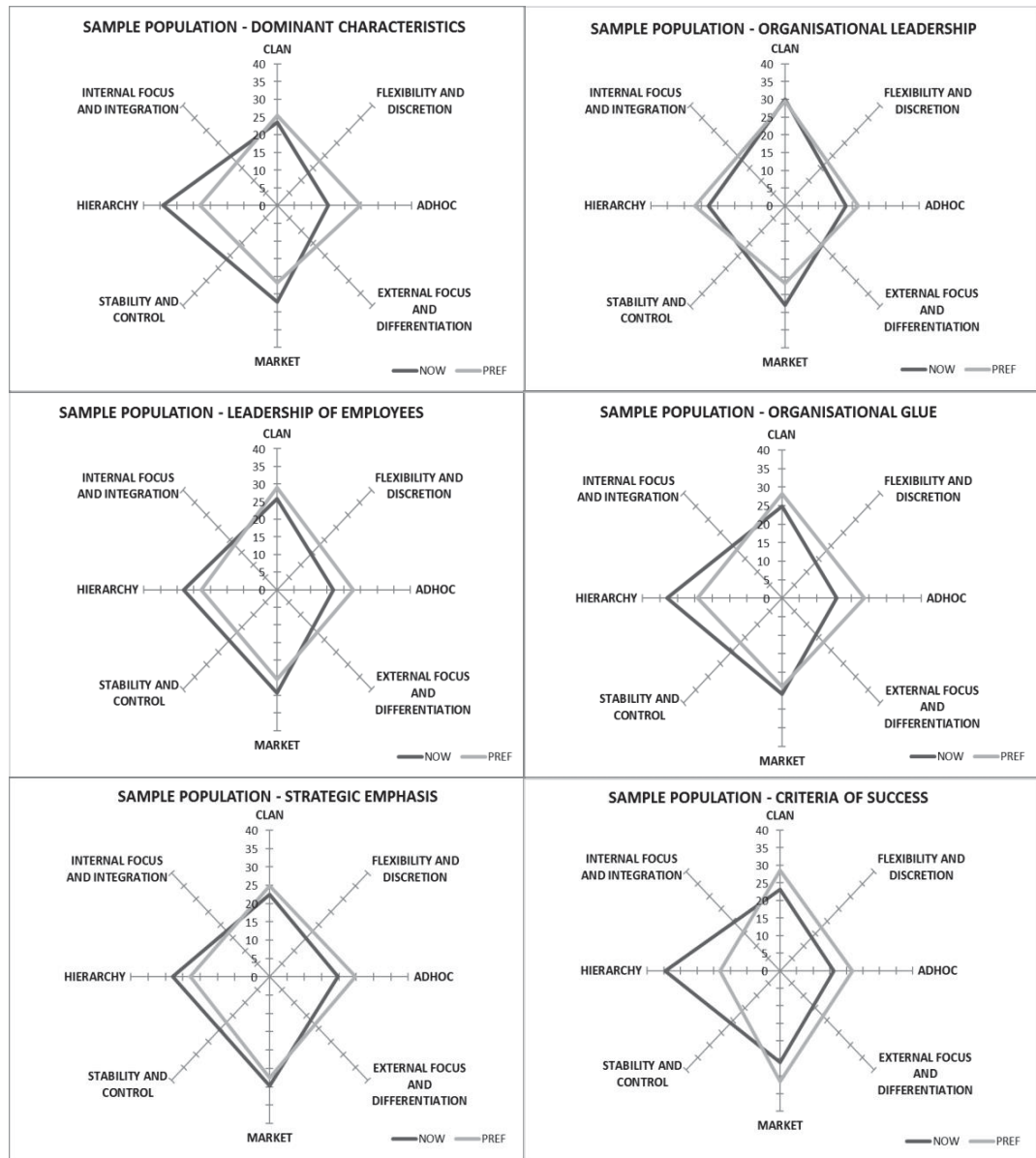


Table 25 (Page 130) is the data table for the differences in 'Now' and 'Preferred' scores for each of the Organisational Attribute charts in Figure 20 above. Note - Figure 20 is a repeat of Figure 15 (Page 93), less the overall result chart and its accompanying data table.

Table 24. Difference in 'Now' and 'Preferred' Scores for Organisational Attributes and the Overall Score for the Sample Population

	DOMINANT CHARACTERISTIC	ORGANISATIONAL LEADERSHIP	LEADERSHIP OF EMPLOYEES	ORGANISATIONAL GLUE	STRATEGIC EMPHASIS	CRITERIA OF SUCCESS	OVERALL RESULT
CLAN (COLLABORATE)	1.94	-0.52	3.19	3.45	2.32	5.53	2.65
ADHOCRACY (CREATE)	9.48	3.69	5.94	7.94	4.97	5.51	6.25
MARKET (COMPETE)	-5.45	-6.18	-3.94	-1.95	-2.34	5.48	-2.40
HIERARCHY (CONTROL)	-10.92	4.00	-5.20	-8.86	-4.96	-16.52	-7.08

To what extent are the shapes the same? Organisational Leadership, Leadership of employees and Strategic emphasis all have similar looking plots to each other, in the same way that Dominant Characteristics, Organisational Glue and Criteria of Success also look similar. The key difference is that in the case of Dominant Characteristics, Organisational Glue and Criteria of Success, there is the presence of a much stronger 'Now' Hierarchy score, than with Organisational Leadership, Leadership of employees and Strategic emphasis. All six graphs have higher scoring 'Preferred' Adhocracy cultures, and the general shift of the shape is away from the Hierarchy culture and the Stability and Control/Internal Focus and Integration dominant dimension, towards a more Adhocratic culture with Flexibility and Discretion/External Focus and Differentiation dominant dimension.

50% of the discrepancies identified in Table 23 (Page 122) are over 5 points, with two of those scores being over 10 points. As previously discussed, differences between the 'Now' profile and the 'Preferred' culture profile of between five and 10 points usually

indicates the need for a substantial culture change effort (Cameron & Quinn, 2011, pp. 82-83).

To change the Dominant Characteristic and Criteria of Success results will take significant effort due to their large discrepancies. Leadership and Organisational Glue results, both of which have two out of the four scores indicating a difference of more than five, will still require effort, but significantly less effort than the first two, with Organisational Leadership and Strategic Emphasis appearing to be the least challenging attributes to change. None of the results shown in Figure 19 (Page 113 to 115) have contradictory cultures, and as shown in Table 23 (Page 122) two results have discrepancies over 10 points, both of which relate to the Hierarchy score.

Taking a look now at Figure 18 (Page 108), this chart looks very similar in shape to the charts for Organisational Leadership, Leadership of employees and Strategic emphasis. Two of the differences between Now and Preferred cultures are less than five points; Clan 2.65, and Market (-)2.4, with the other two culture types having scores greater than five points; Adhocracy 6.25, and Hierarchy (-)7.08. There are no discrepancies over 10 points in the overall result. The discrepancies between 'NOW' and 'PREFERRED' scores for the charts in Appendix 1 are detailed in Table 25 (Page 130). The Table contains the respondent number so that the correct corresponding chart can be identified. Discrepancies less than 5 (both negative and positive) are unshaded, discrepancies between 5 and 10 (positive and negative) are shaded light grey, and discrepancies greater than 10 (positive and negative) are shaded dark grey with white text. In addition, Table 26 (Page 131) displays the discrepancies in columns as detailed in the list below, and also shows which demographic groups each respondent is affiliated to. The discrepancies categories in Table 26 are;

- Respondent with no discrepancies
- Respondents with one discrepancy less than 5 points
- Respondents with two discrepancies less than 5 points

- Respondents with three discrepancies less than 5 points
- Respondents with all discrepancies less than 5 points
- Respondents with one discrepancy over 5 points
- Respondents with two discrepancies over 5 points
- Respondents with three discrepancies over 5 points
- Respondents with all discrepancies over 5 points
- Respondents with one discrepancy over 10 points
- Respondents with two discrepancies over 10 points
- Respondents with three discrepancies over 10 points
- Respondent with all discrepancies over 10 points

It is difficult to identify any pattern in Table 26 to suggest one demographic group or combination of groups has an impact on the discrepancies over another, when compared to other discrepancies. For example; respondents who have indicated that they are based out of the Central North Island, have a mixture of discrepancy scores. Several respondents have no discrepancies over 5 points, while one respondent has all discrepancies recorded as being over 10 points each (Respondent 102). Another group – ‘Logistics and Supply Chain’ have respondents with all discrepancies less than 5 and others greater than 5. Pinpointing a trend or specific groupings that have a more profound effect on the overall Culture result is perhaps a subject for further study.

Table 25. Difference between ‘NOW’ and ‘PREFERRED’ scores for individual respondents

RESPONDENT	1	2	3	10	15	25	26	30	34	37	41	45	64	70	80	84	90	93	102	106
CLAN (COLLABORATE)	2.30	-5.90	-3.30	1.50	-3.20	3.00	12.10	-1.70	7.30	-1.90	-1.60	0.90	2.50	-0.50	1.70	-0.80	-1.50	0.70	17.50	8.30
ADHOCRACY (CREATE)	3.50	7.50	7.50	6.30	4.70	16.80	7.00	6.70	6.10	4.70	1.90	1.20	3.30	2.80	0.00	6.60	0.80	4.40	11.80	15.90
MARKET (COMPETE)	-8.00	13.30	-2.50	-1.90	-1.20	9.50	4.20	1.70	-3.20	12.60	-2.30	-0.70	-1.60	-4.40	0.00	-0.90	0.80	-5.50	-18.90	-0.90
HIERARCHY (CONTROL)	2.10	-15.00	-1.70	-5.90	-0.40	-29.80	-28.10	-6.70	-10.40	-20.10	0.40	-1.80	-4.10	0.10	-1.60	-5.00	0.90	-1.60	-15.00	-23.30
RESPONDENT	118	133	142	145	152	154	167	170	174	176	194	195	204	207	208	209	212	224	230	241
CLAN (COLLABORATE)	-0.80	7.20	8.70	3.40	6.60	2.50	-4.20	-0.80	3.30	8.90	4.20	5.00	0.20	-0.80	2.50	-1.90	8.40	5.70	1.90	6.20
ADHOCRACY (CREATE)	5.90	-0.20	16.00	0.70	2.50	5.00	7.00	0.80	1.70	10.70	9.50	6.70	0.70	4.20	10.90	-0.50	8.30	4.10	9.70	5.00
MARKET (COMPETE)	2.50	-7.50	-17.70	-1.20	-7.50	-3.30	-5.90	0.90	-5.00	-8.60	-1.80	-5.80	-2.00	0.80	-9.20	-0.60	13.30	-3.40	-6.60	-6.80
HIERARCHY (CONTROL)	-7.50	-0.50	-10.40	-3.60	-1.60	-4.20	0.10	-0.90	0.00	-12.80	-13.00	-5.80	1.70	-4.20	-4.20	1.90	-14.10	-6.30	-5.30	-7.30
RESPONDENT	263	267	271	273	275	279	280	289	293	298	302	303	310	311	316	319	324	339	345	351
CLAN (COLLABORATE)	1.40	11.70	5.00	0.00	0.00	4.90	11.60	4.20	-8.30	0.30	-2.40	-4.70	-5.90	8.10	1.40	-2.80	9.80	14.30	10.00	-1.00
ADHOCRACY (CREATE)	0.50	9.20	9.60	0.00	0.00	7.30	10.00	11.70	14.20	0.60	6.40	8.50	12.50	10.60	11.40	9.70	6.30	12.60	8.30	1.20
MARKET (COMPETE)	-1.30	-6.70	-5.60	0.00	-1.60	-8.50	-6.60	-6.60	6.70	-0.90	8.30	4.00	-3.40	-14.20	-7.50	-1.10	-12.50	-0.40	-3.30	-0.60
HIERARCHY (CONTROL)	-0.30	-14.20	-9.50	0.00	0.00	-5.90	-15.00	-9.10	-12.50	0.70	-12.60	-12.50	-3.30	-6.80	-5.90	-9.50	-4.20	-26.40	-15.00	0.40
																				-4.90

7. Conclusion and Recommendations

The purpose of this thesis was to explore the impact of military culture on the ability for the New Zealand Army to successfully embed continuous improvement methodologies; namely Lean Six Sigma, and whether NZ Army Culture is supportive of the methodology. The study set out to answer four questions about the relationship between military culture and the NZ Army's ability to embed continuous improvement across the organisation. These questions are;

Question 1. Is there any significant difference between the 'Now' and 'Preferred' cultures of the NZ Army?

Question 2. Will continuous Improvement perform better under the 'Preferred' culture?

Question 3. Does the 'Clan' organisational culture profile positively support the embedding of continuous improvement within the NZ Army?

Question 4. Does the 'Hierarchy' organisational culture profile negatively impact the embedding of continuous improvement within the NZ Army?

This paper has identified that the Military depends on a hierarchical rank system to function properly, and that this is both an inherent and important element of the workforce culture, but at the same time presents an obstacle to lateral and bottom-up communication within the organisation (Duffek & Harding, 1993). We see that there are many aspects to military life. The communal character of life in uniform, the emphasis on hierarchy, discipline and control, Lang (1965) (in Caforio, 2006), also specific language, code of manners, norms of behaviour, belief system, dress and rituals, (Reger et al., 2008), a 'unique cultural group'. Organisations, of which the NZ Army is no exception, produce distinctive cultural artefacts such as rituals, legends and ceremonies

(Smircich, 1983, p. 344) and its culture is a unique product of its history, development and present situational issues. (Mauil et al., 2001, p. 304).

As identified in Figure 1 on page 17 of this paper, the key outcome of the NZ Army is 'to go to war and win' (Ballantyne & Rasmussen, 2013). This is supported by 'sacrifice and service', 'teamwork', 'history', 'soldier identity', and 'belonging'. We discovered that culture is the glue that holds the organisation together, it is unique to each organisation, and they are a product of the history and operational experience within the organisation (Mauil et al., 2001). A key feature being that culture is taught to new members as the correct way to behave, (Mauil et al., 2001) (in Irani, 2004).

In order to construct an organisational culture profile for the NZ Army, and answer the four questions which are the subject of this study, it was essential to gather data about the culture that exists within the NZ Army. This was done by taking an in-depth look at the NZDF Organisational Culture project undertaken in 2012 (Ballantyne & Rasmussen, 2013), the NZDF Employee Engagement Surveys of 2015 and 2016, and my own survey. Key to this was the ability to diagnose the NZ Army cultural strength, cultural type, and cultural congruence using the Competing Values Framework and the Organisational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011).

Let us now take a look at the results for each of the questions that this thesis is answering.

Question 1. Is there any significant difference between the 'Now' and 'Preferred' cultures of the NZ Army? *Yes. There is significant difference between the current and future cultures of the NZ Army, as assessed using the OCAI tool, which suggests that there is significant work to be undertaken to move the culture from 'Now' to 'Preferred'.*

Figure 18 (Page 108) shows the OCAI chart of the overall result for all 61 respondents. It also shows the values of each of the data points in the chart. The 'Now' result is represented by the 'Black' line, with the lighter line representing the 'Preferred' culture.

The chart in Figure 18 shows that there has been a shift away from a dominant 'Now' Hierarchy culture towards a stronger 'Preferred' Adhoc culture. The difference in the 'Now' and 'Preferred' Hierarchy score sees a decrease of 7.08 points, with Adhoc receiving an increase of 6.52 points. There has been some, but relatively minor shift in the Clan and Market scores with Market dropping 2.4 points between the 'Now' and 'Preferred' cultures and Clan increasing in strength by 2.65 points in the 'Preferred' culture.

This shift in scores indicates that respondents prefer (in five years) a culture that has more focus on teamwork and family, loyalty and tradition, creativity, individuality and initiative, an entrepreneurial approach to issues, innovative and risk orientated visionary leadership, a commitment to experimentation and innovation, with a long-term emphasis on growth. The 'Preferred' culture also sees less emphasis being placed on process, procedure, and formal rules, although this is recognised as a necessary requirement for a military organisation, and sees leaders as less competitive and demanding, but still a results oriented workplace.

Although the difference in 'Now' and 'Preferred' scores for both the Hierarchy and Adhoc cultural types may not seem great, we are reminded of Cameron and Quinn (2011) comment that differences between five and 10 points usually indicates the need for a substantial culture change.

Noting that the NZDF Employee Engagement Surveys of 2015 and 2016 measured 'engagement as a whole' and identified two key areas of focus for the coming year, the smaller NZDF 'Pulse' survey conducted in between the larger Engagement surveys,

indicated that NZ Army is generally tracking in the right direction, but they have some way to go (New Zealand Defence Force, 2016c).

Question 2. Will continuous Improvement perform better under the 'Preferred' culture? *No. The 'Preferred' culture is not the ideal for the performance of continuous improvement in the NZ Army.*

The preferred culture sees a greater focus on the Adhoc (Create) culture type, and less emphasis on the Hierarchy (Control) culture. Organisations who excel in a Adhoc culture effectively handle discontinuity, change and risk. Individual leaders are gifted visionaries and futurists, inclined towards risk, and unafraid of uncertainty. They allow for freedom of thought and action among employees so that rule breaking and stretching beyond barriers are common characteristics. Organisational effectiveness is associated with entrepreneurship, vision and constant change (Cameron et al., 2006, p. 36). The Now Hierarchy (Control) culture sees less emphasis placed on having clear lines of decision making authority, rules and procedures are not standardised, and control and accountability mechanisms are not as strong. An Adhoc culture emphasises the glue that holds the organisation together as commitment to experimentation and innovation, and being at the leading edge of knowledge, products and services. This type of culture is most frequently found in industries such as aerospace, software development, think-tank consulting and filmmaking where power flows from individual to individual or from team to team, unlike in the military which has a centralised power or authority relationship (Cameron & Quinn, 2011, p. 49).

Being agile and adaptable, innovative, more 'high tech', and change savvy are all accepted cultural characteristics required for NZ Army to function in the future 2035 context, however the military is generally dominated by rules, with a hierarchical structure that has to impose order in a complex and chaotic environment ie; the battlefield, in order to survive.

As alluded to earlier in this paper, statistical process control and other quality control processes like six sigma are the domain of Hierarchical (Control) dominated organisations.

Question Three – Does the ‘Clan’ organisational culture profile positively support the embedding of continuous improvement in the NZ Army? *Maybe.*

Even though members of the NZ Army have a sense of belonging to the same ‘large family’, and it is a generally a good place to work, it does not have the same impact on continuous improvement as the Hierarchy culture does, but there is some suggestion that ‘cohesion through consensus’ and ‘satisfaction through involvement’ may play a supporting role to the Hierarchy culture in positively embedding continuous improvement.

The Overall plots for the sample population resulted in an increase of 2.7 in the ‘Preferred’ Clan score. In the case of a discrepancy, this is less than 5 points, and is not significant. What this does mean though is that respondents want opportunities to develop and there is some uncertainty about the culture and they are looking to solidify that. They want more cohesion through consensus and satisfaction through involvement (Cameron et al., 2006, p. 38). The difference is not great between the ‘Now’ and ‘Preferred’ scores, but it has indicated that respondents place slightly more emphasis on this than they do under the ‘Now’ culture. Other aspects of the Clan culture are that workplaces are friendly places to work where people share a lot of themselves, it is like an extended family, leaders are thought of as mentors and perhaps even as parent figures, the organisation is held together by loyalty and tradition, and commitment is high.

Some of the strategies that can be employed to facilitate the need of the respondents include implementing programs to enhance employee retention, fostering teamwork and decentralised decision making.

Question 4 – Does the ‘Hierarchy’ organisational culture profile negatively impact the embedding of continuous improvement within the NZ Army? No.

The Hierarchy culture does not negatively impact the embedding of continuous improvement in the NZ Army. It enhances it and supports it and is essential to its success.

This has partly been answered in the commentary for question 2.

The ‘Now’ culture is dominated by the ‘Hierarchy’ culture type with a score of 30.1 compared to the ‘Preferred’ score of 23.0, and a slightly higher ‘Now’ Market culture score of 27.7 compared to the ‘Preferred’ culture score of 25.3. The discrepancy between the ‘Now’ and ‘Preferred’ Hierarchy score of 7.1 indicates that substantial culture change effort will be required if the culture is to shift to the preferred model as shown in Figure 18. Possessing a substantial degree of statistical predictability is one of the hallmarks of the Hierarchy/Control quadrant. Six Sigma is one of the quality enhancements associated with this quadrant (Cameron et al., 2006, pp. 32-33).

A ‘Hierarchy’ culture type best suits initiatives such as the Defence Excellence program and Lean Six Sigma. Formalised and structured work places, procedures that govern what people do, leaders who are good coordinators and organisers, the long-term concerns of organisational stability, predictability, and efficiency are key to the success of a hierarchy culture, so too are the rules and policies hold the organisation together (Cameron & Quinn, 2011). The dominant operational theory that drives organisational success is control, as this fosters efficiency (elimination of waste and redundancy) and therefore effectiveness (Cameron & Quinn, 2011, pp. 54-56).

Summary and Recommendations.

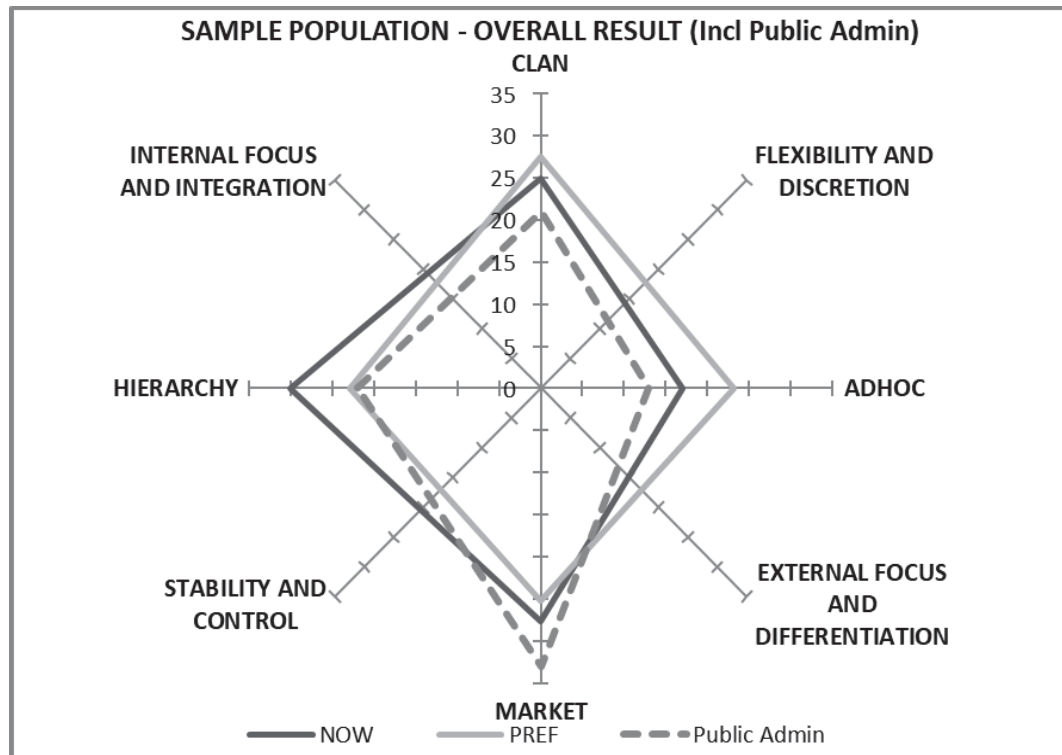
Competing values, competing preferences and competing priorities exist in any organisation (Cameron et al., 2006, p. 44). Activities in the four quadrants compete for constrained resources. Because every organisation faces constrained resources, allocating more assets to one quadrant will diminish the value creation potential of the quadrant diagonally across. Any move toward one quadrant will typically pull the organisation away from the diagonally opposite quadrant (Cameron et al., 2006). Almost all organisations develop a dominant culture type. Particular types of cultures form as certain values, assumptions, and priorities become dominant as the organisation addresses challenges and adjusts to changes (Cameron & Quinn, 2011, p. 159).

It is acknowledged that the Adhoc culture is the 'Preferred' culture type identified by respondents to this research, and that their data forms the basis of my analysis. The data suggests that in order for Continuous Improvement to become embedded as part of the NZ Army culture, the dominance of the Hierarchy culture type must continue. There are however some changes that the NZ Army could make to facilitate change amongst certain groups within the organisation that will have an impact on the overall result, and one such method has been suggested on pages 124 and 125 of this paper. The Preferred culture does however represent a more 'balanced' approach. On Pages 105 & 106 of this paper I provided an example of a 'balanced' approach taken by Toyota and said at that point that there is nothing untoward about having a balanced culture where a similar emphasis is placed on each culture type. The Competing Values Framework identifies 'trade-offs' and tensions that are present in any culture, and helps to identify which elements within the organisation - for example, efficiency measures (Hierarchy/Control quadrant), employee engagement activities (Clan/Collaborate quadrant), innovation strategies (Adhoc/Create quadrant), or approaches relating to customer service (Market/Compete quadrant) – can be emphasised (Cameron et al., 2006, pp. 16-17).

Earlier in this thesis I indicated that we would take a look at the average culture plot for Public Administration to compare against the NZ Army culture plots developed from this research. The reason for using the average Public Administration plot and not a comparable 'Military' one, is due to the United Nations ISIC (International Standard Industrial Classification of all Economic Activities) publication which does not have a separate 'Military' classification (United Nations, 2008). Cameron and Quinn (2011) provide a number of average culture profiles for various industry groups (Cameron & Quinn, 2011, pp. 87-91). One of these is a plot for public administration, and the chart is an average of 43 recorded 'Public Administration' groups that have gone through the OCAI. This plot is a little different to the NZDF 'Now' and 'Preferred' plots, as it has a dominant 'Market' focus, and without any more definitive information; including the age/currency of the data set, or if there are in fact any 'Military' organisation included in the 43 groups assessed, I simply present this plot to generate further discussion, and allow readers to draw their own conclusions. Figure 21 shows the 'Now' and 'Preferred' culture plots from my research, with an additional 'dashed' plot for the average 'Public Administration' Culture Profile (Cameron and Quinn, 2011, p. 91).

Cameron and Quinn (2011) set out numerous activities for stimulating thinking about activities to initiate culture change in each quadrant, and move any organisation forward. A copy of one set of suggested methods titled 'Hints for initiating organisational culture change in each Quadrant' is attached as Appendix 2 to this paper (Cameron & Quinn, 2011, pp. 209-219). If the NZ Army considers acting on any of the outcomes of this paper, it is highly recommended that these are considered prior to commencing any potential changes.

Figure 21. NZ Army 'Now' and 'Preferred' Overall Culture Plots with ISIC Average Public Administration Plot.



Many aspects of the Competing Values framework have not been analysed by this paper, but could be included as part of further study into the cultural preferences within Army, some of these additional areas include;

- The role of Human Resource Management
- Corporate Missions and Visions
- Critical management skills
- Personal Management Skills profiles
- Additional assessment instruments to supplement the OCAI Methodology
- Formulas for organisational culture change
- Leadership competency, effectiveness, and behaviour
- Financial Performance

The focus of this thesis has been on identifying individual and collective dominant cultures and dominant organisational dimensions, gathering information about the Defence Excellence program, and individual experiences with continuous improvement. Pages 85 to 88 of this paper discussed the rationale for making minor changes Cameron and Quinn's (2011) OCAI questionnaire. From the data gathered, I cannot determine if this has had an impact on the overall result, however should further data collection be done within the NZ Army using the OCAI, it may be prudent to consider running the standard and altered wordings through a focus group or two to see if any major differences can be identified, before the main data collection occurs.

I was a little disappointed in the overall response to the data collection plan. Whether this was a matter of timing, or was just 'another one of those surveys that we have to fill out', I am unsure. However, of the 61 useful responses received, only two were from the commissioned officer ranks, with 38 Senior Non-Commissioned Officers/Warrant Officers or civilian equivalents, and 21 were Junior Ranks or their civilian equivalents responding. I believe there is scope to continue data collection within NZ Army and build on the results gathered for this thesis. In particular, data from commissioned officers would be useful in order to do a comparison with the data already collected for the 'enlisted' ranks. The data collection could also be extended to the other services in order to develop their cultural profiles, and eventually an NZDF profile. This then leads into continuation of data at collection at regular intervals to identify how/if the cultural profile is changing over time.

This thesis has analysed data from a small group of respondents that gives a 'snapshot' in time of the current and future cultural profiles of the NZ Army. There is good justification to continue the data gathering, not just for the purposes of future academic writing, but for use by the New Zealand Defence Force, and I look forward to being able to have those discussions with them in the near future.

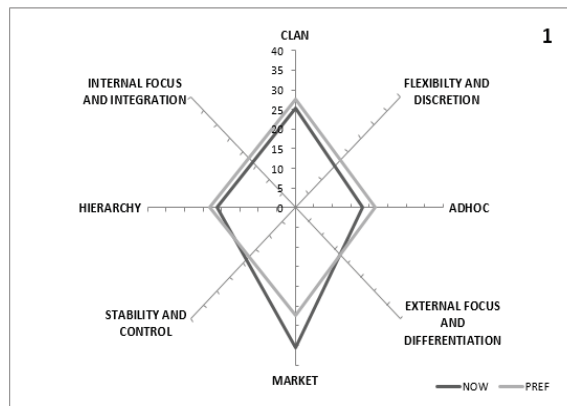
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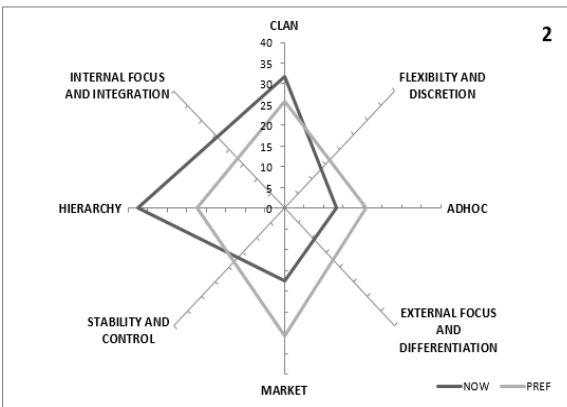
Appendix 1. Individual respondent OCAI Graphs – 4 to a page



1	NOW	PREF
CLAN	25.2	27.5
ADHOC	18.2	21.7
MARKET	35.5	27.5
HIERARCHY	21.2	23.3

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	NZ European
Age	40-49
Length of Service	15+
Academic Achievement	Under-Graduate Degree

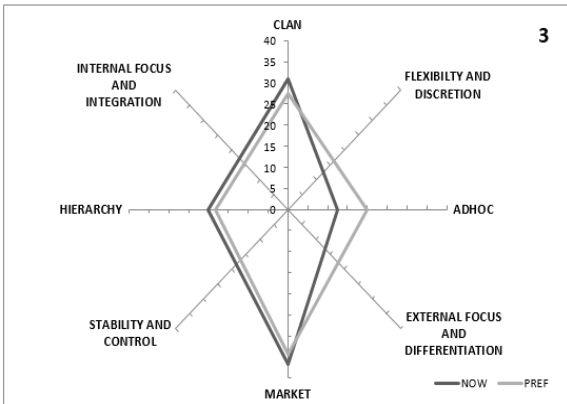
Dominant Culture Type	NOW	Market
	PREFERRED	Market and Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stab & Ctrl, and Int Focus & Int



2	NOW	PREF
CLAN	31.7	25.8
ADHOC	13.3	20.8
MARKET	17.5	30.8
HIERARCHY	37.5	22.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	10 to 14
Academic Achievement	Diploma

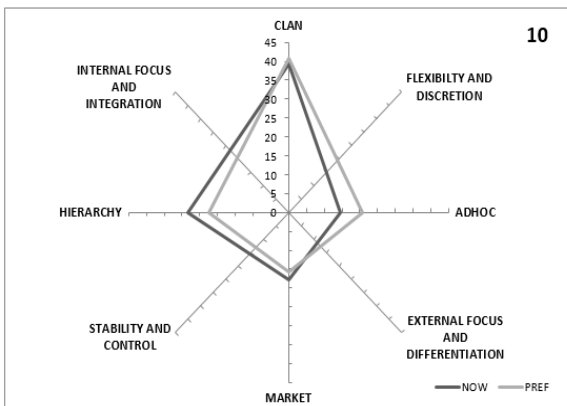
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Stability and Control



3	NOW	PREF
CLAN	30.8	27.5
ADHOC	12.5	20
MARKET	36.7	34.2
HIERARCHY	20	18.3

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	5 to 9
Academic Achievement	Under-Graduate Degree

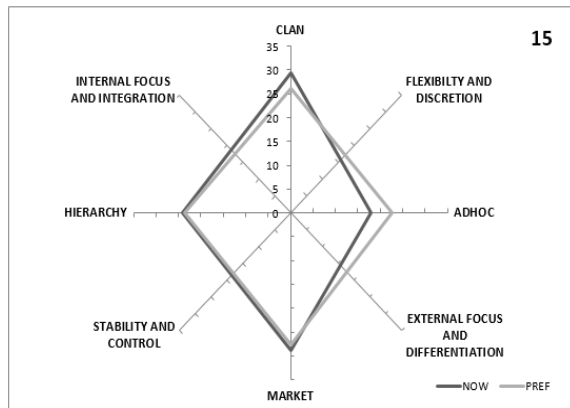
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



10	NOW	PREF
CLAN	39.3	40.8
ADHOC	14.5	20.8
MARKET	17.7	15.8
HIERARCHY	28.4	22.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Other Support Services
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	5 to 9
Academic Achievement	NZ Certificate

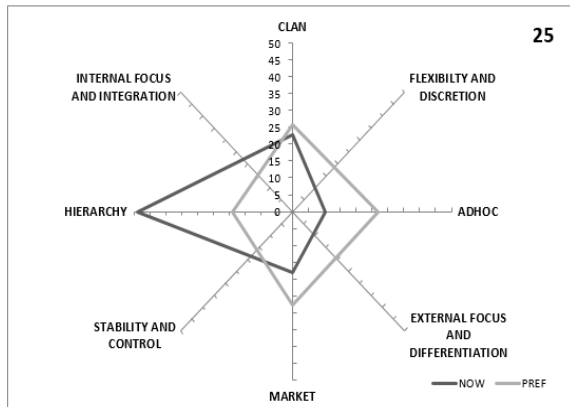
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Flexibility and Discretion



15	NOW	PREF
CLAN	29.3	26.1
ADHOC	17.9	22.6
MARKET	28.8	27.6
HIERARCHY	24	23.6

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	10 to 14
Academic Achievement	Under-Graduate Degree

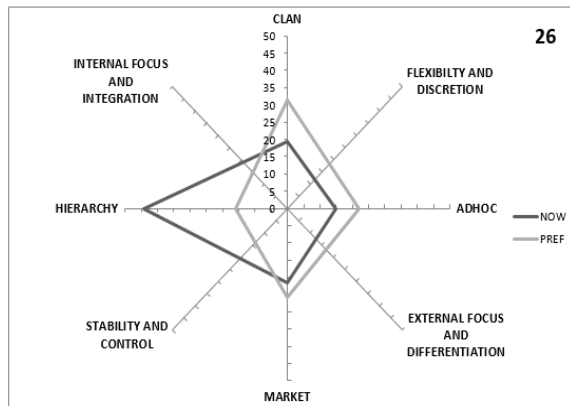
Dominant Culture Type	NOW	Clan
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Stability and Control



25	NOW	PREF
CLAN	22.9	25.9
ADHOC	10.2	27
MARKET	18.1	27.6
HIERARCHY	48.8	19

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	10 to 14
Academic Achievement	Under-Graduate Degree

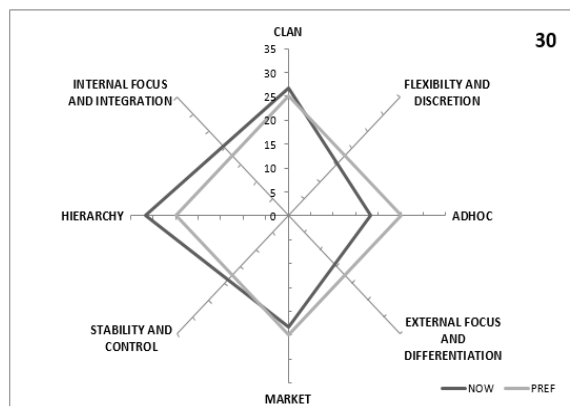
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Adhoc
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Ext Focus and Differentiation



26	NOW	PREF
CLAN	19.2	31.3
ADHOC	15	22
MARKET	21.7	25.9
HIERARCHY	44.2	16.1

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	Other
Age	40-49
Length of Service	15+
Academic Achievement	Diploma

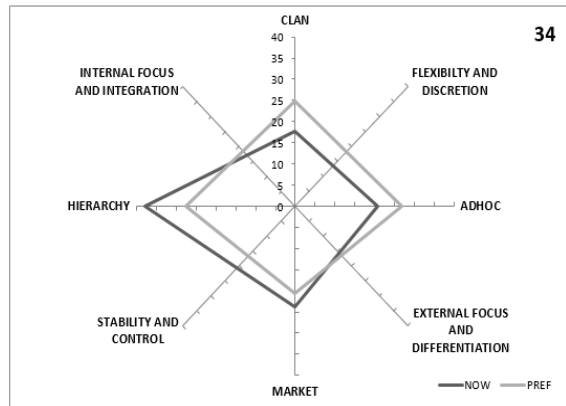
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



30	NOW	PREF
CLAN	26.7	25
ADHOC	18.3	25
MARKET	23.3	25
HIERARCHY	31.7	25

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	25-29
Length of Service	5 to 9
Academic Achievement	Under-Graduate Degree

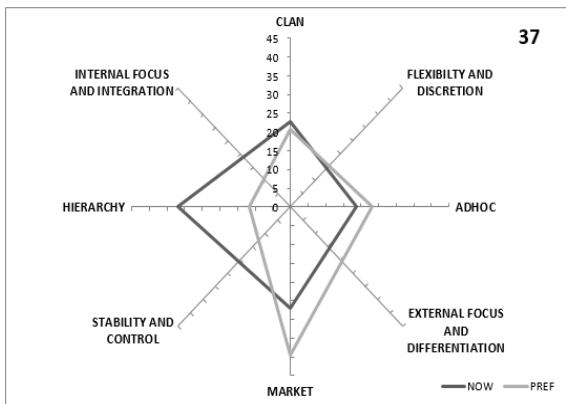
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	All evenly distributed
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	All evenly distributed



34	NOW	PREF
CLAN	17.6	24.9
ADHOC	20.7	26.8
MARKET	23.7	20.5
HIERARCHY	38	27.6

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	NZ Maori
Age	40-49
Length of Service	15+
Academic Achievement	NZ Certificate

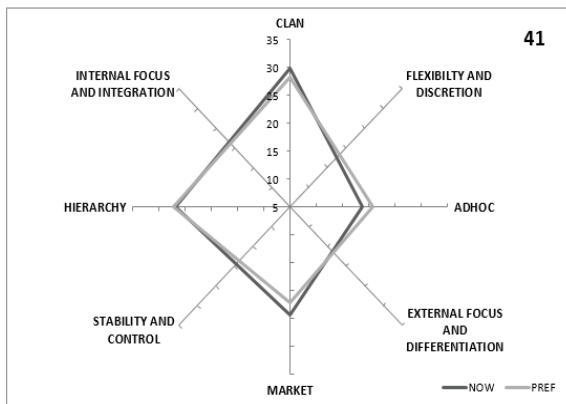
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



37	NOW	PREF
CLAN	22.7	20.8
ADHOC	18.6	23.3
MARKET	26.9	39.5
HIERARCHY	31.8	11.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	25-29
Length of Service	5 to 9
Academic Achievement	Under-Graduate Degree

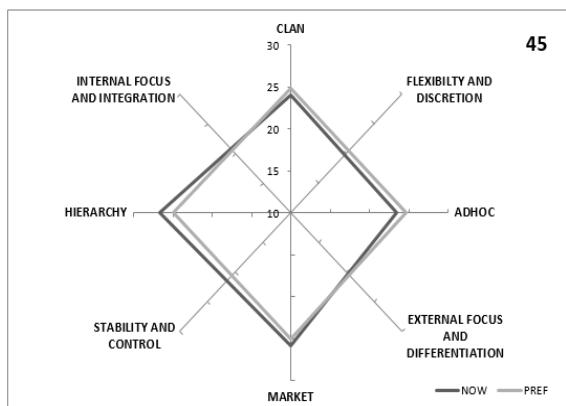
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



41	NOW	PREF
CLAN	29.8	28.2
ADHOC	18.8	20.7
MARKET	24.4	22.1
HIERARCHY	26.9	27.3

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	25-29
Length of Service	5 to 9
Academic Achievement	NZ Certificate

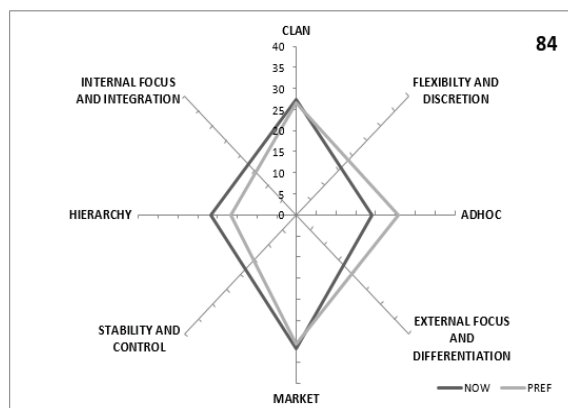
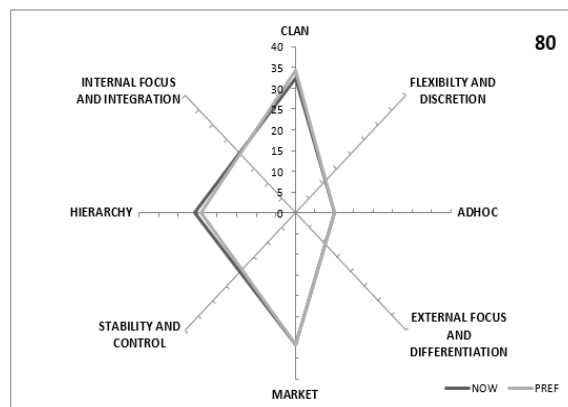
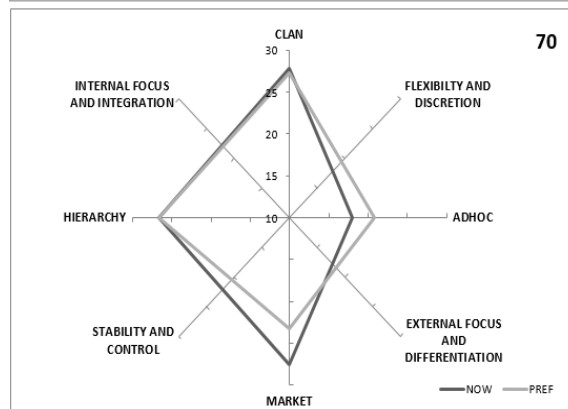
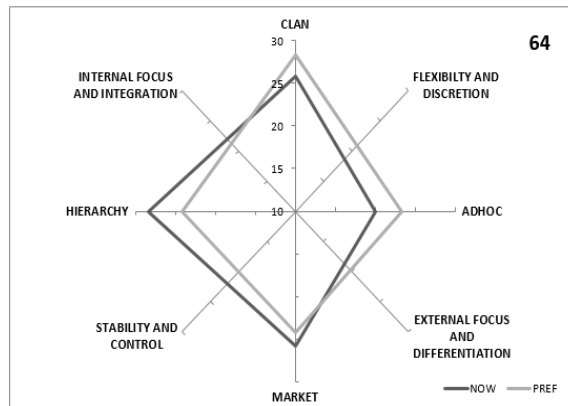
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration



45	NOW	PREF
CLAN	24	24.9
ADHOC	23.5	24.7
MARKET	25.8	25.1
HIERARCHY	26.7	24.9

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	Other European
Age	50-59
Length of Service	10 to 14
Academic Achievement	NCEA or equivalent

Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



64	NOW	PREF
CLAN	25.8	28.3
ADHOC	20	23.3
MARKET	25.8	24.2
HIERARCHY	28.3	24.2

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	Diploma

Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Even Stab & Cont, Int Focus & Int
	PREFERRED	Internal Focus and Integration

70	NOW	PREF
CLAN	27.8	27.3
ADHOC	18	20.8
MARKET	27.6	23.2
HIERARCHY	26.6	26.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	20-24
Length of Service	5 to 9
Academic Achievement	NZ Certificate

Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration

80	NOW	PREF
CLAN	32.5	34.2
ADHOC	10	10
MARKET	31.7	31.7
HIERARCHY	25.8	24.2

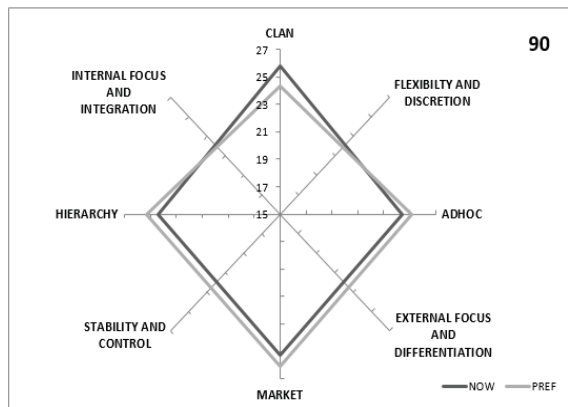
Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	40-49
Length of Service	15+
Academic Achievement	Under-Graduate Degree

Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration

84	NOW	PREF
CLAN	27.5	26.7
ADHOC	19.2	25.8
MARKET	31.7	30.8
HIERARCHY	21.7	16.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	50-59
Length of Service	15+
Academic Achievement	Post-Graduate Degree

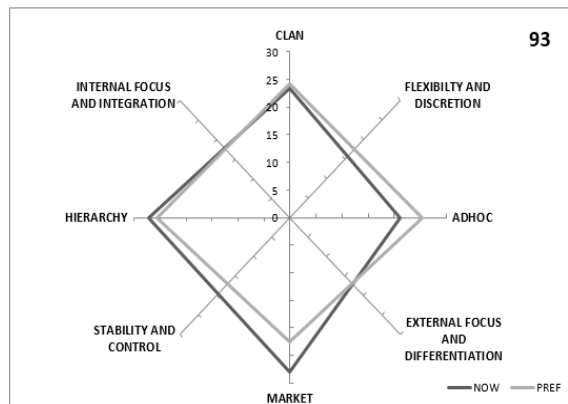
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



90	NOW	PREF
CLAN	25.8	24.3
ADHOC	24.4	25.2
MARKET	25.3	26.1
HIERARCHY	24.4	25.3

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ Maori
Age	40-49
Length of Service	15+
Academic Achievement	Diploma

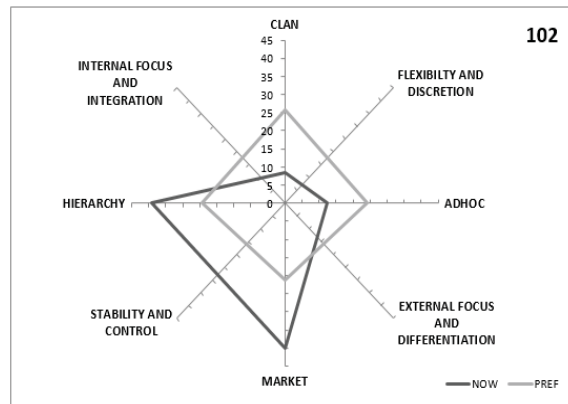
Dominant Culture Type	NOW	Clan
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Even Int Focus & Int, Flex & Discr
	PREFERRED	Stability and Control



93	NOW	PREF
CLAN	23.5	24.2
ADHOC	21.1	25.5
MARKET	28.1	22.6
HIERARCHY	27.3	25.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	NZ Maori
Age	50-59
Length of Service	15+
Academic Achievement	NZ Certificate

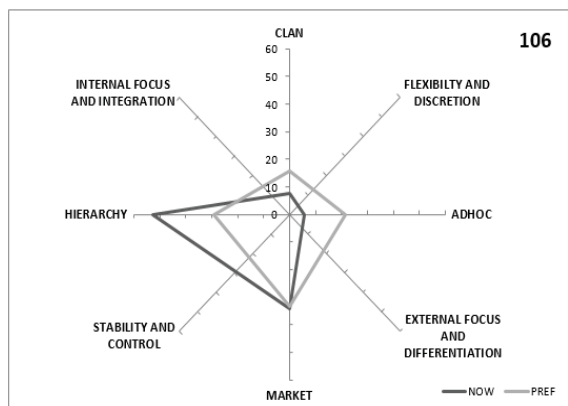
Dominant Culture Type	NOW	Market
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



102	NOW	PREF
CLAN	8.3	25.8
ADHOC	12.4	24.2
MARKET	40.1	21.2
HIERARCHY	39.2	24.2

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Female
Ethnic Group	NZ Maori
Age	40-49
Length of Service	15+
Academic Achievement	Diploma

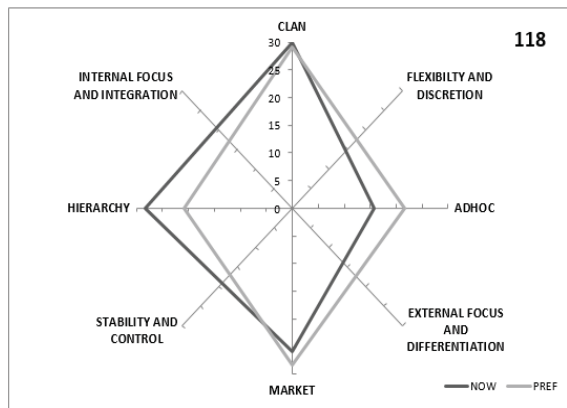
Dominant Culture Type	NOW	Market
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Even Int Focus & Int, Flex & Discr



106	NOW	PREF
CLAN	7.5	15.8
ADHOC	5.8	21.7
MARKET	34.2	33.3
HIERARCHY	52.5	29.2

Employment Status	Part-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	5 to 9
Academic Achievement	NCEA or equivalent

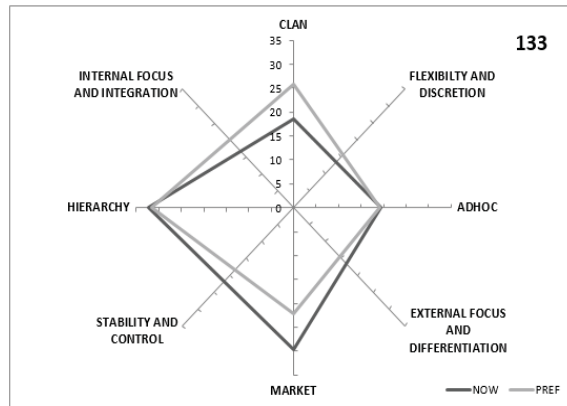
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



118	NOW	PREF
CLAN	30	29.2
ADHOC	15.8	21.7
MARKET	25.8	28.3
HIERARCHY	28.3	20.8

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Other
Rank/Civ Grade	LTCOL & COL, Gde 19-22
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	40-49
Length of Service	15+
Academic Achievement	Post-Graduate Degree

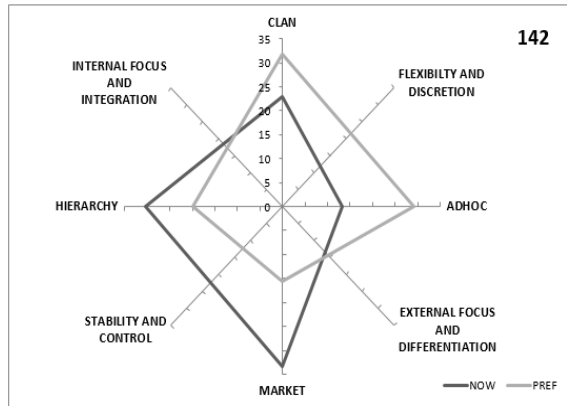
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Flexibility and Discretion



133	NOW	PREF
CLAN	18.6	25.8
ADHOC	19.4	19.2
MARKET	29.7	22.2
HIERARCHY	32.2	31.7

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Female
Ethnic Group	NZ European
Age	25-29
Length of Service	5 to 9
Academic Achievement	NZ Certificate

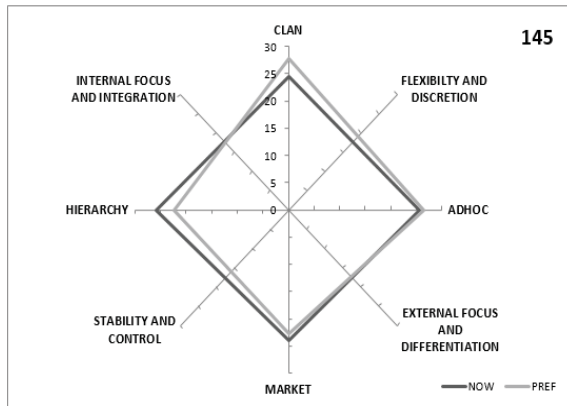
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



142	NOW	PREF
CLAN	23	31.7
ADHOC	13.2	29.2
MARKET	33.4	15.7
HIERARCHY	30.4	20

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Female
Ethnic Group	NZ Maori
Age	40-49
Length of Service	15+
Academic Achievement	NCEA or equivalent

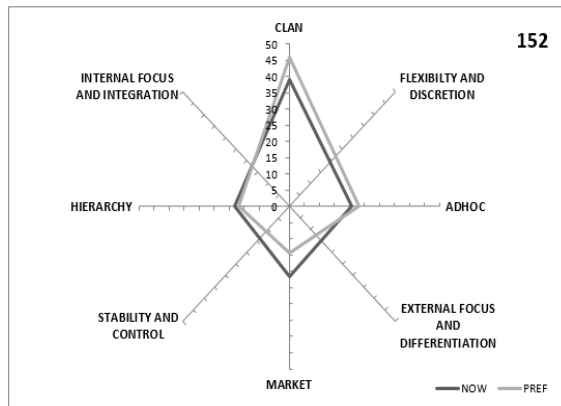
Dominant Culture Type	NOW	Market
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



145	NOW	PREF
CLAN	24.4	27.8
ADHOC	25.7	26.4
MARKET	24	22.8
HIERARCHY	25.9	22.3

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	Other European
Age	40-49
Length of Service	10 to 14
Academic Achievement	Under-Graduate Degree

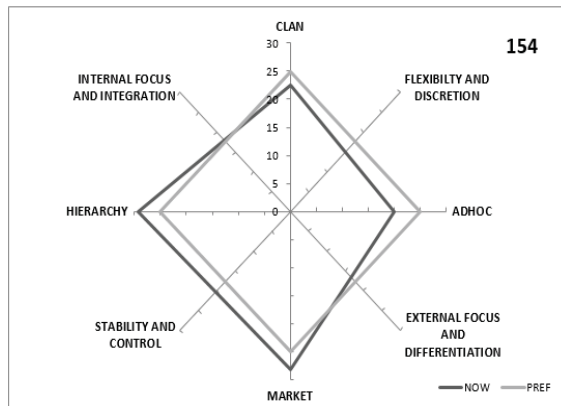
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Flexibility and Discretion



152	NOW	PREF
CLAN	39.2	45.8
ADHOC	20.8	23.3
MARKET	21.7	14.2
HIERARCHY	18.3	16.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ Maori
Age	50-59
Length of Service	15+
Academic Achievement	Under-Graduate Degree

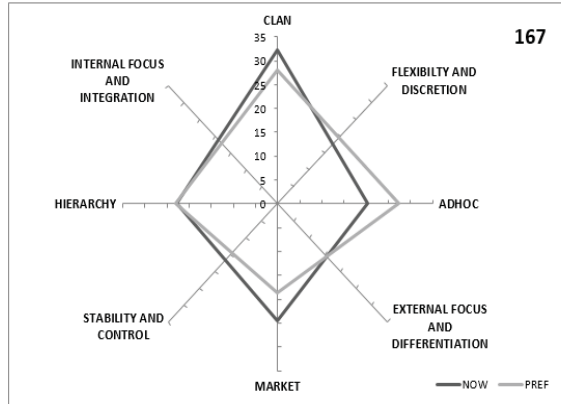
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational	NOW	Flexibility and Discretion
Dimension(s)	PREFERRED	Flexibility and Discretion



154	NOW	PREF
CLAN	22.5	25
ADHOC	20	25
MARKET	28.3	25
HIERARCHY	29.2	25

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	Other
Age	40-49
Length of Service	15+
Academic Achievement	Diploma

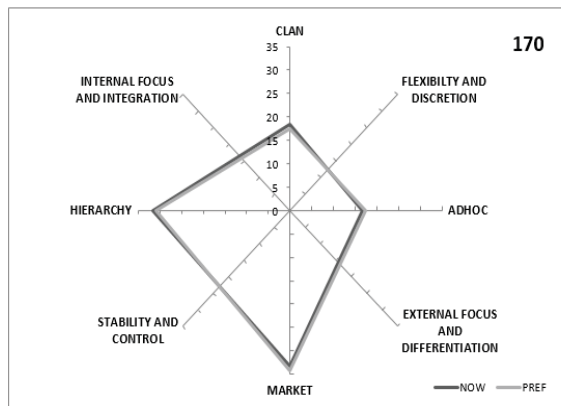
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Evenly distributed
Dominant Organisational	NOW	Stability and Control
Dimension(s)	PREFERRED	Evenly distributed



167	NOW	PREF
CLAN	32.3	28.1
ADHOC	20.3	27.3
MARKET	24.5	18.6
HIERARCHY	22.9	23

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	NCEA or equivalent

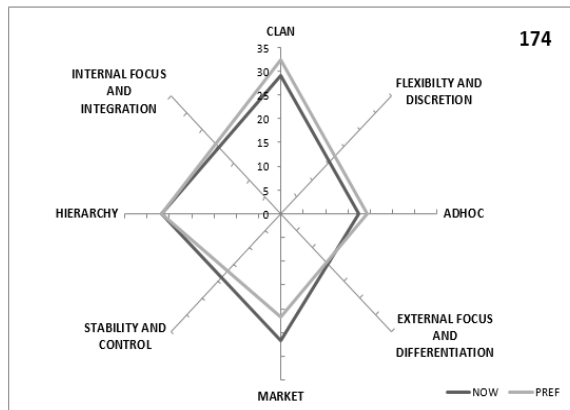
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational	NOW	Internal Focus and Integration
Dimension(s)	PREFERRED	Flexibility and Discretion



170	NOW	PREF
CLAN	18.3	17.5
ADHOC	16.7	17.5
MARKET	33.3	34.2
HIERARCHY	31.7	30.8

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ Maori
Age	60+
Length of Service	15+
Academic Achievement	Under-Graduate Degree

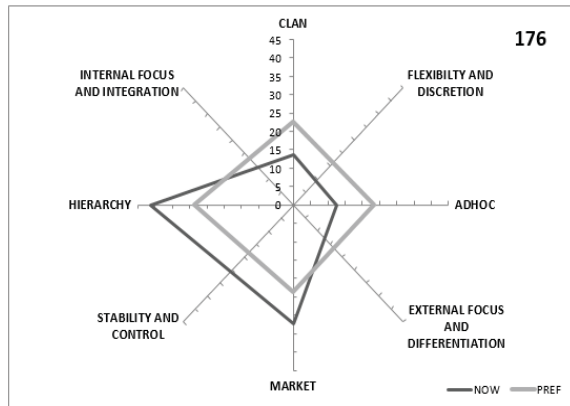
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational	NOW	Stability and Control
Dimension(s)	PREFERRED	Stability and Control



174	NOW	PREF
CLAN	29.2	32.5
ADHOC	17.5	19.2
MARKET	26.7	21.7
HIERARCHY	26.7	26.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Female
Ethnic Group	NZ Maori
Age	20-24
Length of Service	3 to 4
Academic Achievement	NCEA or equivalent

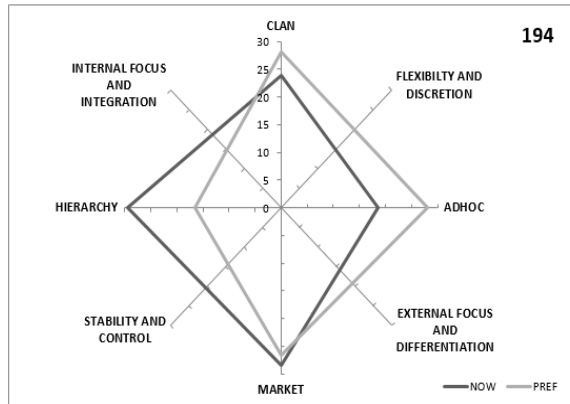
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration



176	NOW	PREF
CLAN	13.6	22.5
ADHOC	12.7	23.4
MARKET	32.2	23.6
HIERARCHY	41.4	28.6

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Other Support Services
Gender	Female
Ethnic Group	NZ European
Age	20-24
Length of Service	3 to 4
Academic Achievement	Diploma

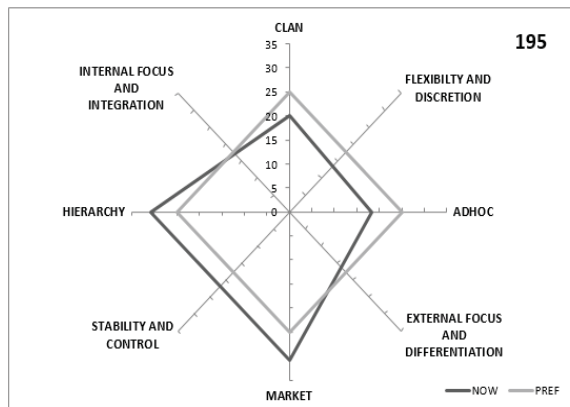
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



194	NOW	PREF
CLAN	23.8	28
ADHOC	18.5	28
MARKET	28.3	26.5
HIERARCHY	29.5	16.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	25-29
Length of Service	10 to 14
Academic Achievement	NZ Certificate

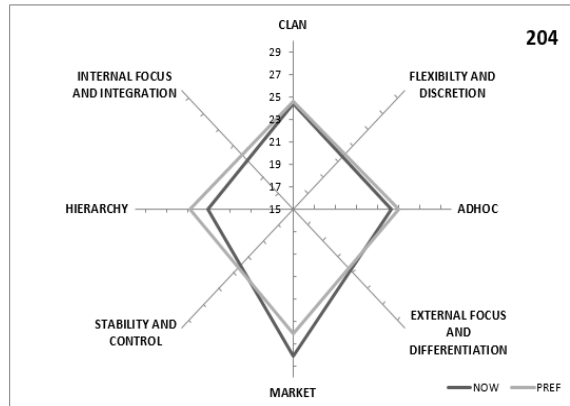
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Even between Clan and Adhoc
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



195	NOW	PREF
CLAN	20	25
ADHOC	18.3	25
MARKET	30.8	25
HIERARCHY	30.8	25

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	NZ Certificate

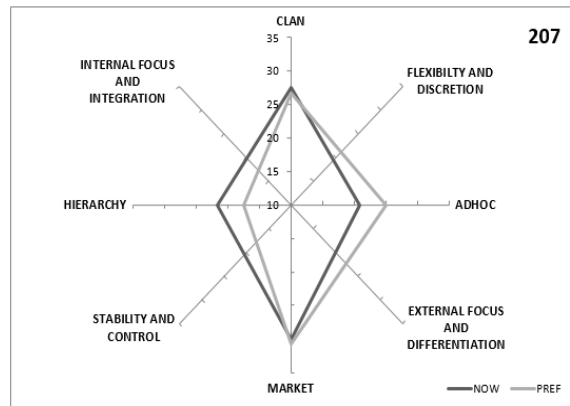
Dominant Culture Type	NOW	Even between Market & Hierarchy
	PREFERRED	All evenly distributed
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	All evenly distributed



204	NOW	PREF
CLAN	24.4	24.6
ADHOC	24.3	25
MARKET	28.1	26.1
HIERARCHY	23.1	24.8

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	Under-Graduate Degree

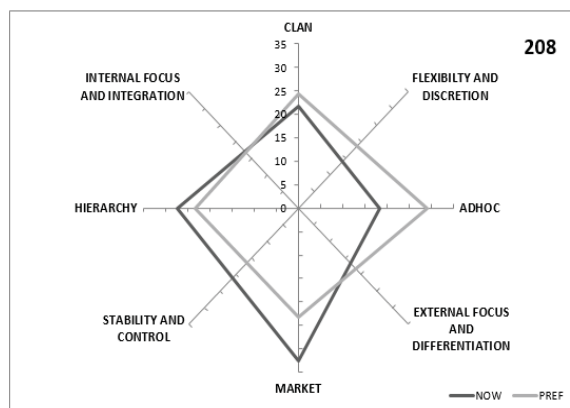
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Ext Focus and Differentiation
	PREFERRED	Ext Focus and Differentiation



207	NOW	PREF
CLAN	27.5	26.7
ADHOC	20.8	25
MARKET	30	30.8
HIERARCHY	21.7	17.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	Other European
Age	50-59
Length of Service	15+
Academic Achievement	Post-Graduate Degree

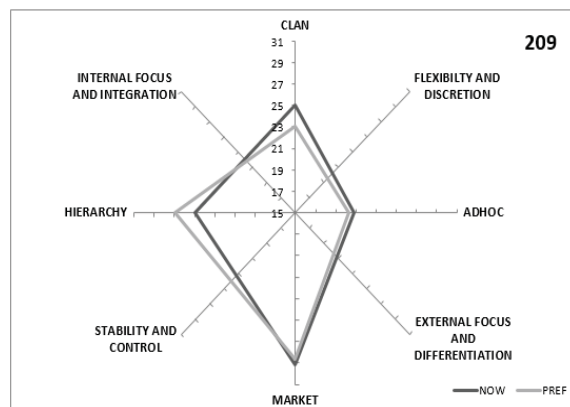
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



208	NOW	PREF
CLAN	21.7	24.2
ADHOC	18.3	29.2
MARKET	32.5	23.3
HIERARCHY	27.5	23.3

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	60+
Length of Service	15+
Academic Achievement	Diploma

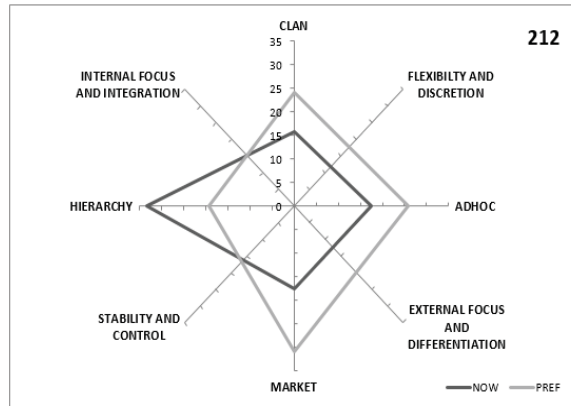
Dominant Culture Type	NOW	Market
	PREFERRED	Adhoc
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



209	NOW	PREF
CLAN	25	23.1
ADHOC	20.8	20.3
MARKET	29.2	28.6
HIERARCHY	25	26.9

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ Maori
Age	40-49
Length of Service	15+
Academic Achievement	Diploma

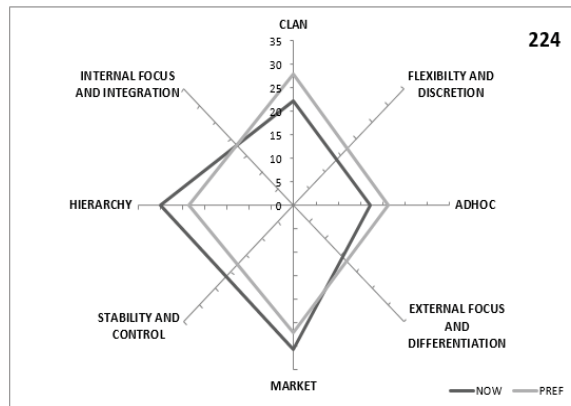
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



212	NOW	PREF
CLAN	15.8	24.2
ADHOC	17.5	25.8
MARKET	17.5	30.8
HIERARCHY	33.3	19.2

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Other Support Services
Gender	Male
Ethnic Group	Other
Age	40-49
Length of Service	15+
Academic Achievement	Under-Graduate Degree

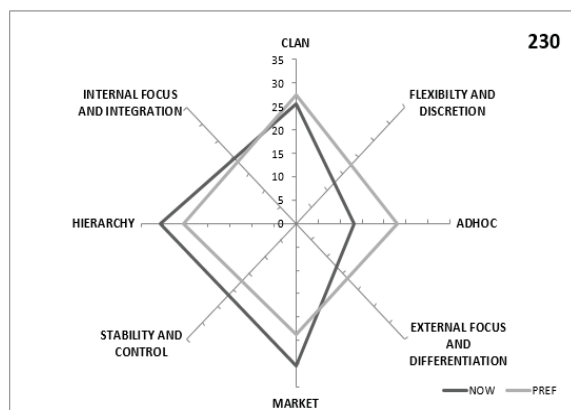
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



224	NOW	PREF
CLAN	22.2	27.9
ADHOC	17.3	21.4
MARKET	30.5	27.1
HIERARCHY	30	23.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Corporate HQ
Gender	Male
Ethnic Group	NZ European
Age	50-59
Length of Service	15+
Academic Achievement	Post-Graduate Degree

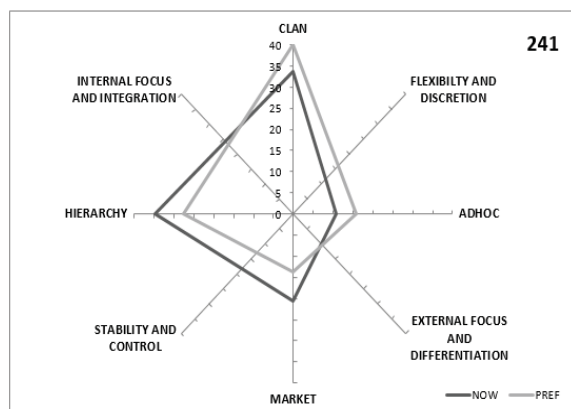
Dominant Culture Type	NOW	Market
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



230	NOW	PREF
CLAN	25.6	27.5
ADHOC	13.3	23
MARKET	30.3	23.7
HIERARCHY	30.8	25.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	20-24
Length of Service	3 to 4
Academic Achievement	NCEA or equivalent

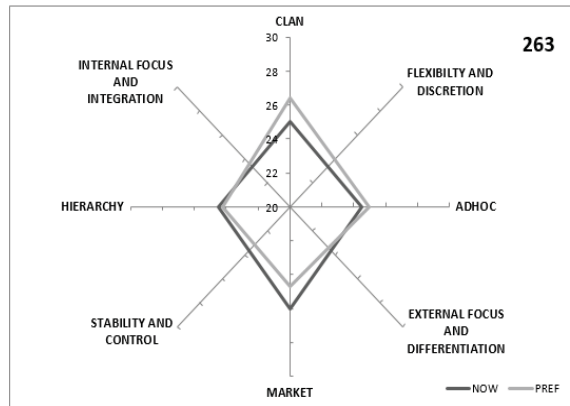
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



241	NOW	PREF
CLAN	33.8	40
ADHOC	10.8	15.8
MARKET	20.6	13.8
HIERARCHY	34.8	27.5

Employment Status	Full-Time Civilian
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Other Support Services
Gender	Male
Ethnic Group	NZ European
Age	50-59
Length of Service	5 to 9
Academic Achievement	NZ Certificate

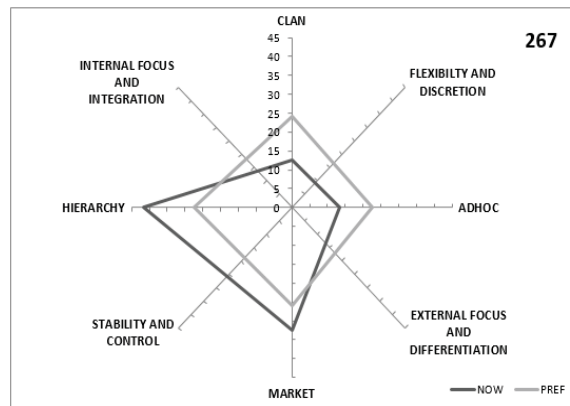
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration



263	NOW	PREF
CLAN	25	26.4
ADHOC	24.5	25
MARKET	26	24.7
HIERARCHY	24.5	24.2

Employment Status	Full-Time Civilian
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Other Support Services
Gender	Female
Ethnic Group	NZ Maori
Age	25-29
Length of Service	5 to 9
Academic Achievement	Under-Graduate Degree

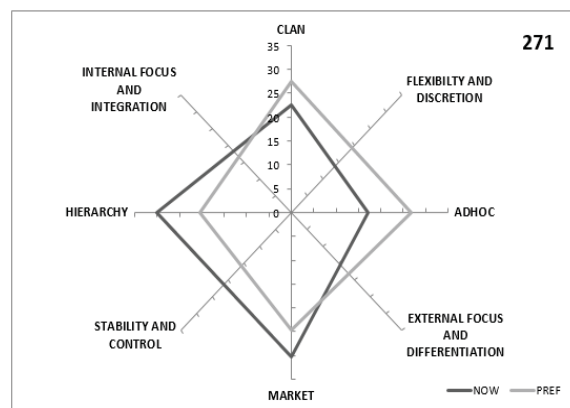
Dominant Culture Type	NOW	Market
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Even Stab & Ctrl, Ext Focus & Diff
	PREFERRED	Flexibility and Discretion



267	NOW	PREF
CLAN	12.5	24.2
ADHOC	13.3	22.5
MARKET	32.5	25.8
HIERARCHY	41.7	27.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	Other
Age	40-49
Length of Service	15+
Academic Achievement	Under-Graduate Degree

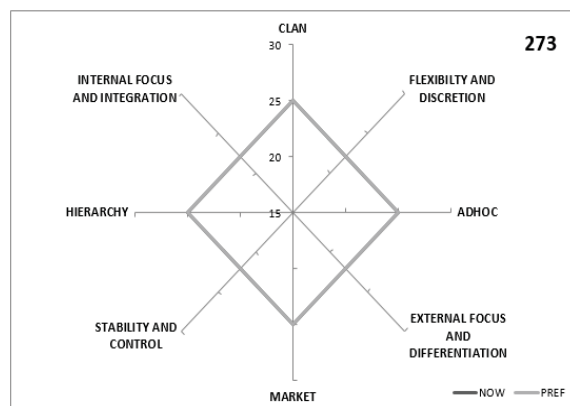
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



271	NOW	PREF
CLAN	22.6	27.6
ADHOC	17.2	26.8
MARKET	30.2	24.6
HIERARCHY	30	20.5

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat Support
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	Diploma

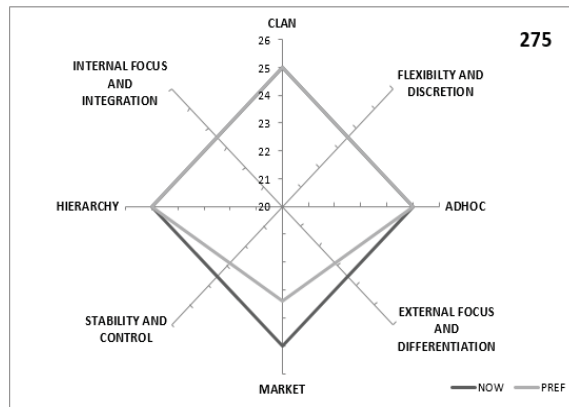
Dominant Culture Type	NOW	Market
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



273	NOW	PREF
CLAN	25	25
ADHOC	25	25
MARKET	25	25
HIERARCHY	25	25

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ Maori
Age	60+
Length of Service	15+
Academic Achievement	NZ Certificate

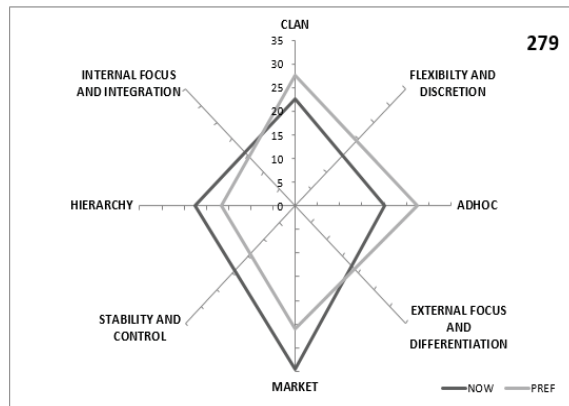
Dominant Culture Type	NOW	All evenly distributed
	PREFERRED	All evenly distributed
Dominant Organisational Dimension(s)	NOW	All evenly distributed
	PREFERRED	All evenly distributed



275	NOW	PREF
CLAN	25	25
ADHOC	25	25
MARKET	25	23.4
HIERARCHY	25	25

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Female
Ethnic Group	NZ Maori
Age	30-39
Length of Service	5 to 9
Academic Achievement	NCEA or equivalent

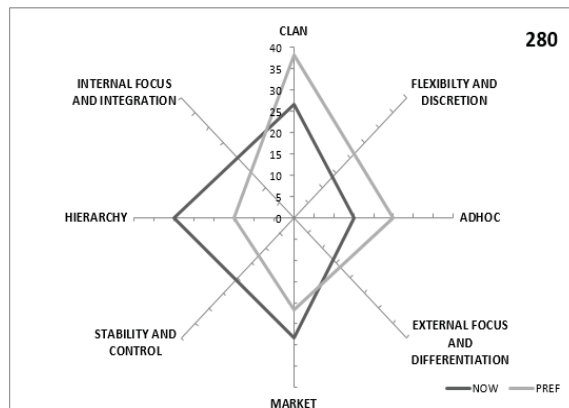
Dominant Culture Type	NOW	All evenly distributed
	PREFERRED	All evenly distr except Market
Dominant Organisational Dimension(s)	NOW	All evenly Distributed
	PREFERRED	Int Focus & Int, Flex & Discretion



279	NOW	PREF
CLAN	22.6	27.5
ADHOC	20.2	27.5
MARKET	34.5	26
HIERARCHY	22.6	16.7

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	LTCOL & COL, Gde 19-22
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	60+
Length of Service	15+
Academic Achievement	Post-Graduate Degree

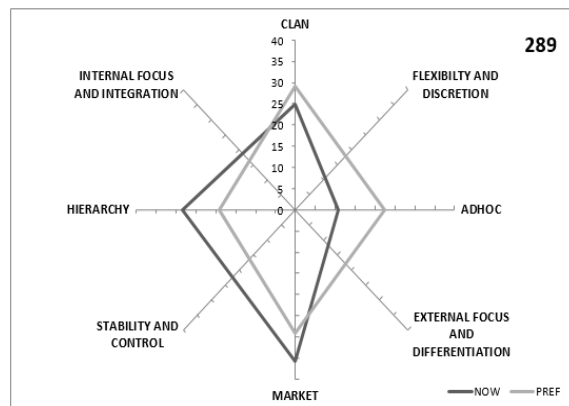
Dominant Culture Type	NOW	Market
	PREFERRED	Even between Clan and Adhoc
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



280	NOW	PREF
CLAN	26.7	38.3
ADHOC	15	25
MARKET	28.3	21.7
HIERARCHY	30	15

Employment Status	Full-Time Civilian
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	60+
Length of Service	10 to 14
Academic Achievement	NCEA or equivalent

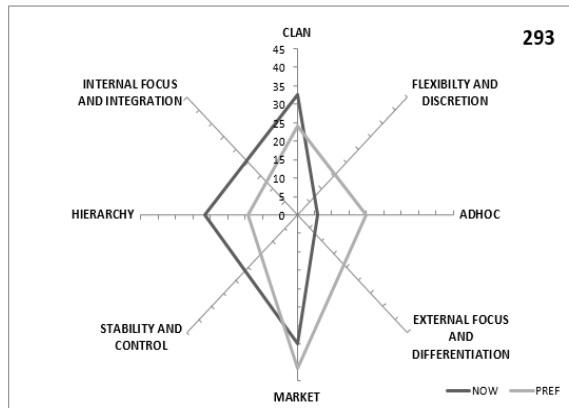
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



289	NOW	PREF
CLAN	25	29.2
ADHOC	10.8	22.5
MARKET	35.8	29.2
HIERARCHY	28.3	19.2

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ Maori
Age	20-24
Length of Service	3 to 4
Academic Achievement	NCEA or equivalent

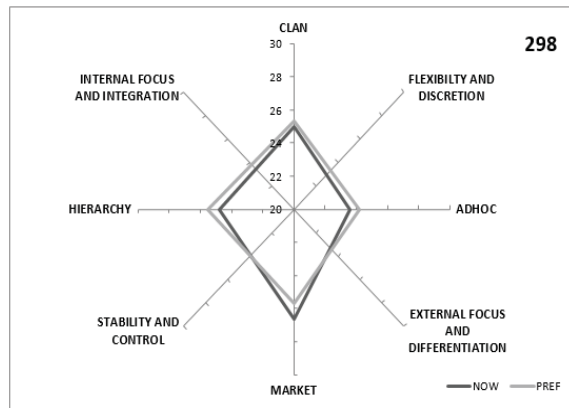
Dominant Culture Type	NOW	Market
	PREFERRED	Even between Clan and Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus & Diff, and Flex & Discr



293	NOW	PREF
CLAN	32.5	24.2
ADHOC	5.8	20
MARKET	35	41.7
HIERARCHY	26.7	14.2

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	20-24
Length of Service	3 to 4
Academic Achievement	NZ Certificate

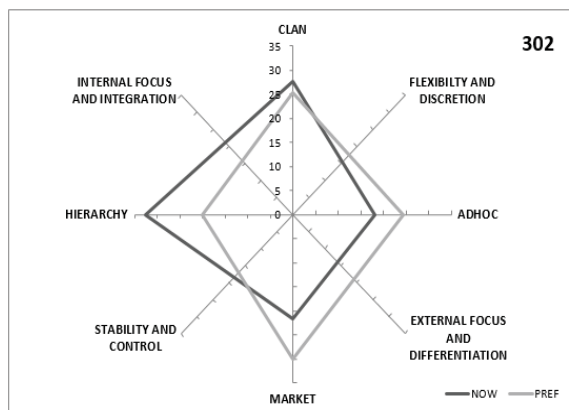
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Ext Focus and Differentiation



298	NOW	PREF
CLAN	25	25.3
ADHOC	23.6	24.2
MARKET	26.6	25.7
HIERARCHY	24.8	25.5

Employment Status	Full-Time Civilian
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Combat Support
Gender	Female
Ethnic Group	NZ European
Age	60+
Length of Service	3 to 4
Academic Achievement	NZ Certificate

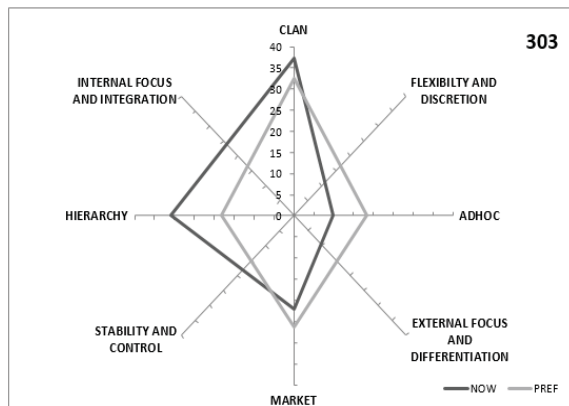
Dominant Culture Type	NOW	Market
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



302	NOW	PREF
CLAN	27.6	25.2
ADHOC	18	24.4
MARKET	21.7	30
HIERARCHY	32.7	20.1

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ European
Age	30-39
Length of Service	10 to 14
Academic Achievement	NCEA or equivalent

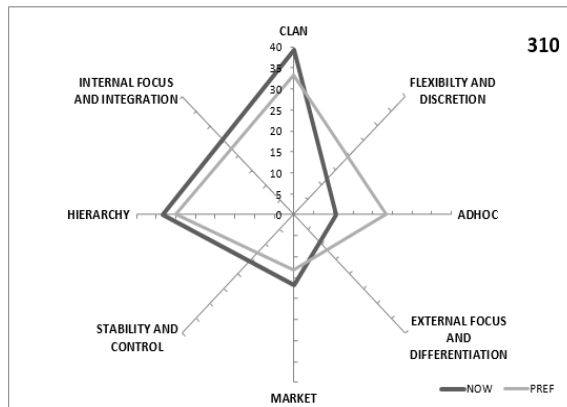
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Market
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Ext Focus and Differentiation



303	NOW	PREF
CLAN	37.2	32.5
ADHOC	9.8	18.3
MARKET	22.2	26.2
HIERARCHY	30.8	18.3

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Male
Ethnic Group	NZ European
Age	40-49
Length of Service	15+
Academic Achievement	NZ Certificate

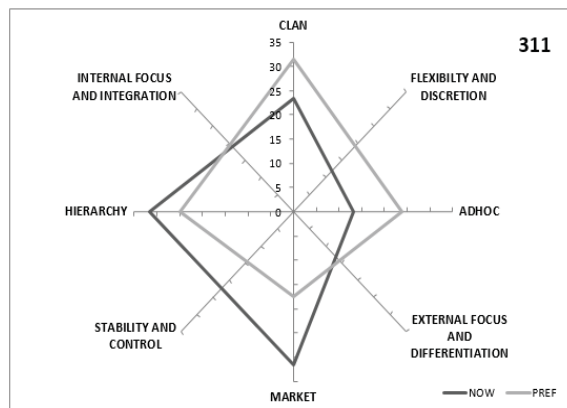
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Int Focus & Int, and Flex & Discr



310	NOW	PREF
CLAN	39.2	33.3
ADHOC	10.8	23.3
MARKET	16.7	13.3
HIERARCHY	33.3	30

Employment Status	Full-Time Civilian
Posted to Army	No
Work Location	South Island
Rank/Civ Grade	PTE-CPL, Gde 5-8
Employment Group	Logistics & Supply Chain
Gender	Female
Ethnic Group	NZ European
Age	40-49
Length of Service	15+
Academic Achievement	NZ Certificate

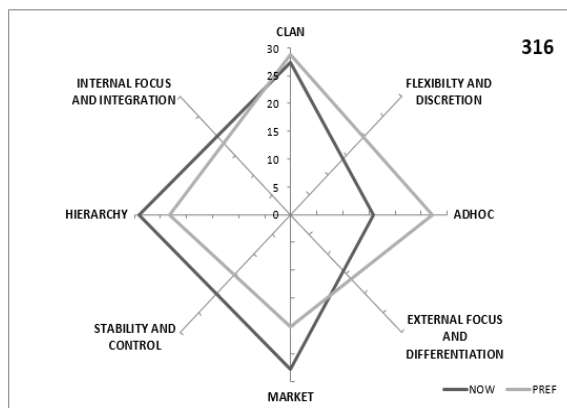
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Internal Focus and Integration



311	NOW	PREF
CLAN	23.3	31.4
ADHOC	13.3	23.9
MARKET	31.7	17.5
HIERARCHY	31.7	24.9

Employment Status	Full-Time Military
Posted to Army	No
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Corporate HQ
Gender	Male
Ethnic Group	NZ European
Age	50-59
Length of Service	5 to 9
Academic Achievement	Diploma

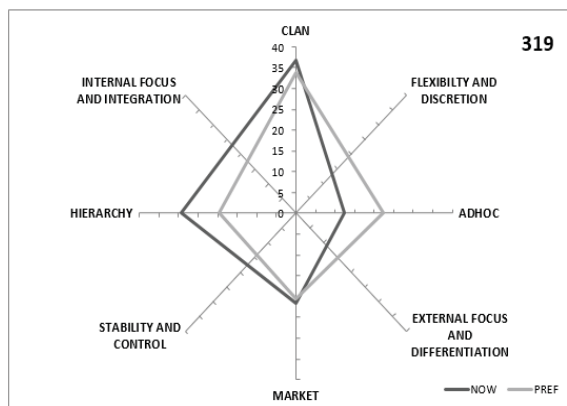
Dominant Culture Type	NOW	Even Market and Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



316	NOW	PREF
CLAN	27.3	28.7
ADHOC	15.8	27.2
MARKET	27.8	20.3
HIERARCHY	29.1	23.2

Employment Status	Full-Time Civilian
Posted to Army	Yes
Work Location	Lower North Island (1)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Corporate HQ
Gender	Male
Ethnic Group	NZ European
Age	25-29
Length of Service	3 to 4
Academic Achievement	Under-Graduate Degree

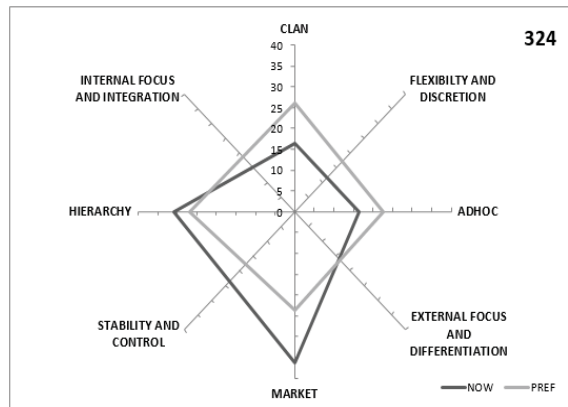
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



319	NOW	PREF
CLAN	36.7	33.9
ADHOC	12.5	22.2
MARKET	21.7	20.6
HIERARCHY	29.2	19.7

Employment Status	Full-Time Military
Posted to Army	Yes
Work Location	Upper North Island (3)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Logistics & Supply Chain
Gender	Female
Ethnic Group	NZ European
Age	30-39
Length of Service	15+
Academic Achievement	Diploma

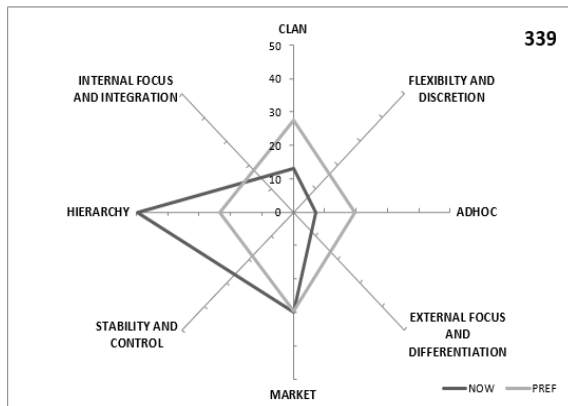
Dominant Culture Type	NOW	Clan
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Flexibility and Discretion



324	NOW	PREF
CLAN	16.4	26.2
ADHOC	16.4	22.7
MARKET	36.2	23.7
HIERARCHY	31	26.8

Employment Status	Full-Time Civilian	
Posted to Army	No	
Work Location	Central North Island (2)	
Rank/Civ Grade	SGT-WO1, Gde 9-14	
Employment Group	Other Support Services	
Gender	Female	
Ethnic Group	NZ European	
Age	30-39	
Length of Service	5 to 9	
Academic Achievement	Under-Graduate Degree	

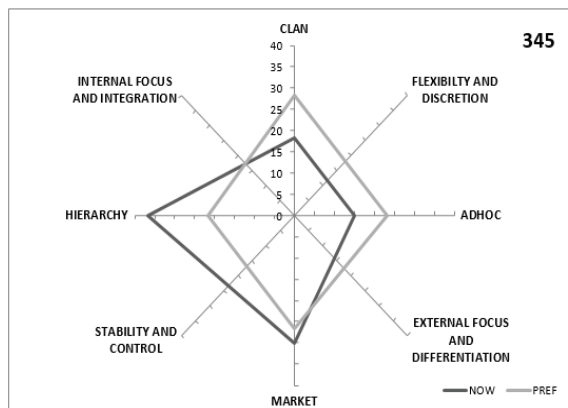
Dominant Culture Type	NOW	Market
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Internal Focus and Integration



339	NOW	PREF
CLAN	13.2	27.5
ADHOC	7.1	19.7
MARKET	29.9	29.5
HIERARCHY	49.7	23.3

Employment Status	Full-Time Military	
Posted to Army	Yes	
Work Location	Central North Island (2)	
Rank/Civ Grade	PTE-CPL, Gde 5-8	
Employment Group	Other Support Services	
Gender	Male	
Ethnic Group	NZ Maori	
Age	50-59	
Length of Service	15+	
Academic Achievement	NZ Certificate	

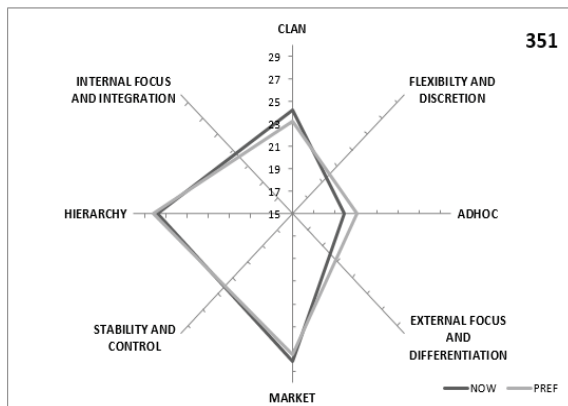
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



345	NOW	PREF
CLAN	18.3	28.3
ADHOC	15	23.3
MARKET	30	26.7
HIERARCHY	36.7	21.7

Employment Status	Full-Time Military	
Posted to Army	No	
Work Location	Central North Island (2)	
Rank/Civ Grade	SGT-WO1, Gde 9-14	
Employment Group	Corporate HQ	
Gender	Male	
Ethnic Group	NZ European	
Age	30-39	
Length of Service	5 to 9	
Academic Achievement	Under-Graduate Degree	

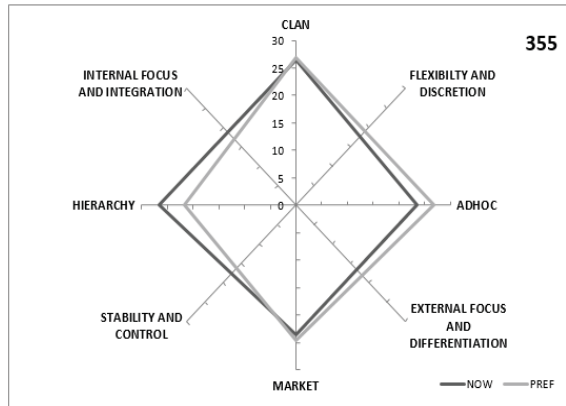
Dominant Culture Type	NOW	Hierarchy
	PREFERRED	Clan
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Flexibility and Discretion



351	NOW	PREF
CLAN	24.2	23.2
ADHOC	19.9	21.1
MARKET	28.1	27.5
HIERARCHY	27.8	28.2

Employment Status	Full-Time Military	
Posted to Army	Yes	
Work Location	Central North Island (2)	
Rank/Civ Grade	PTE-CPL, Gde 5-8	
Employment Group	Other Support Services	
Gender	Male	
Ethnic Group	NZ European	
Age	25-29	
Length of Service	1 to 2	
Academic Achievement	NCEA or equivalent	

Dominant Culture Type	NOW	Market
	PREFERRED	Hierarchy
Dominant Organisational Dimension(s)	NOW	Stability and Control
	PREFERRED	Stability and Control



355	NOW	PREF
CLAN	26.5	26.8
ADHOC	23.4	26.8
MARKET	23.6	24.7
HIERARCHY	26.5	21.6

Employment Status	Reserve
Posted to Army	Yes
Work Location	Central North Island (2)
Rank/Civ Grade	SGT-WO1, Gde 9-14
Employment Group	Combat
Gender	Male
Ethnic Group	NZ Maori
Age	60+
Length of Service	15+
Academic Achievement	NZ Certificate

Dominant Culture Type	NOW	Even between Hierarchy and Clan
	PREFERRED	Even between Clan and Adhoc
Dominant Organisational Dimension(s)	NOW	Internal Focus and Integration
	PREFERRED	Flexibility and Discretion

Appendix C

HINTS FOR INITIATING ORGANIZATIONAL CULTURE CHANGE IN EACH QUADRANT

The purpose of this appendix is to stimulate your thinking about activities or behaviors that can move the organization toward the desired future culture. It is intended only to provide some starting notions and to stimulate creative thought on your part. Often managers indicate they know where they want to go (for example, “to increase emphasis in the adhocracy quadrant”), but they don’t know where to begin—what actions to initiate or what to tackle first. These lists of actions have been derived from the suggestions of numerous managers who have initiated culture change, but because each organization may be different, many of them may not be relevant to your particular circumstances. Therefore, in considering what you want to accomplish in each quadrant, select the ideas most relevant to your circumstances. To these suggestions, add others that you generate in a brainstorming session. Choose the ideas from this list that will be most powerful in beginning the process of culture change. Remember not to try too many initiatives at once. Focus your efforts on a few powerful alternatives.

Clan Culture

- Establish a 360-degree evaluation system to assess the leadership practices of all senior managers. That is, get evaluative input from subordinates, peers, and superiors. See that every senior manager, including the CEO, is assisted in analyzing the data, hearing the painful messages, and planning for better performance.

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- Design a career development program that emphasizes interunit mobility and will contribute to cross-functional communication.
- Institute an effective employee survey program for systematically monitoring employee attitudes and ideas. Establish employee teams to work on making changes identified in the survey.
- Involve employees in all phases of strategic planning.
- Develop programs to increase the facilitation and team-building skills of the workforce.
- Identify the longest-standing intergroup conflicts. Analyze those conflicts, and design a systematic set of interventions for transcending them.
- Assess and improve the processes associated with employee diversity.
- Examine the expectation systems that drive the behaviors of middle managers. Alter the incentives so that middle managers behave in more empowered and innovative ways.
- As part of the empowerment process, move more decisions in such areas as pay raises and budgets to lower levels.
- Be sure an effective succession plan is in place.
- Develop a training program for middle managers that allows them to better understand the strategic pressures on the organization and conveys how their role must change for the company to be more effective.
- Energize the employee recognition system. Empower managers to use resources to reward extra effort.
- Implement a benefits program that allows each employee to select options. For example, within a set amount, allow the individual to choose the desired level of medical, dental, life, and disability insurance coverage.

- Create an internal university—an overall educational function that has a systematic training strategy for educational needs at every level of the unit.
- Make an assessment of the training needs in each unit, prioritize the needs, and develop programs to meet the needs. Have people inside the unit do the training.
- Increase attendance in training programs by requiring the supervisors of all participants who do not attend the program to report in writing the reason for the absence.
- Build cross-functional teamwork by holding a daily fifteen-minute meeting of all managers. The agenda is to identify all items requiring coordination among units. Problems are solved outside the meeting.
- Build cross-functional teamwork by establishing an operational planning group that provides a plan of the day and a three-day view into the future.
- Senior management holds a monthly “skip level” meeting with different cross-sectional groups of lower-level employees to identify problems and surface suggestions for better cross-functional coordination.
- Constantly monitor the problems of first-line supervisors, and see that they are cared for. Be sure that they are paid better than their subordinates.
- Empower first-line supervisors by eliminating the layer of supervision directly above them. Chart all responsibilities that need to be performed, provide the necessary training, and empower the first-line supervisors to make key decisions and react quickly to the needs at hand.
- Revolutionize the performance evaluation system by making subordinates’ assessments of a superior’s performance part of evaluations of supervisory and management personnel.
- Improve the relationships between support and line operations. Use a facilitator to help each support group identify

its strengths and weaknesses in providing support. Help the line groups identify their key support needs. Hold sessions for the groups to explore their relationship and develop a new set of expectations for working together.

- Increase the effectiveness of the employee suggestion system. Benchmark the best systems in other organizations, and upgrade your current system.

Adhocracy Culture

- Analyze the organization's key values in terms of emphasis on adhocracy values. Encourage more focus on managing the future.
- Make a critical analysis of the current vision statement. Does it provide cognitive and emotional direction? Does it inspire creative initiative?
- Employ a planning process that operates on a five-year time horizon and involves both short- and long-term planning. See that the planning process stretches current assumptions.
- Move from a hierarchical to a flexible structure that emphasizes speed and agility.
- Identify the major emerging issues of concern in the company, and apply the "one voice" concept by making one champion responsible for each emerging issue.
- Forecast customer demand at all points of contact, and find ways to exceed those demands.
- Ask a task force of first-line people to conceptualize new strategies for expanding markets and developing new businesses.
- Read extensively on the concept of continuous improvement. Find out what is being done successfully in other places.
- Hold a meeting to review the differences between transformational and transitional leadership, and explore the implications of the two concepts for making change in your unit.

- Bring all disciplines and departments into the first stages of the design process for new services and products. Be sure that the customer is represented.
- Develop systems to encourage, measure, and reward innovative behavior at all levels of the system.
- Make a hard assessment of the overall behavior of the corporation as a citizen of the community. What problems does it cause? What contributions does it make? Review the possibilities for change. Get outside perspectives on these issues.
- Develop a reading program on the topic of creating and implementing change.
- Explore the possibility of organizing around externally driven tasks rather than current internal functions. Read up on process improvement and organizational reengineering.
- Assign someone to read the literature on the concept of organizational learning. Determine if your unit is an effective learning organization. Make changes to improve the capacity of your organization to learn more effectively.
- Put all employees through a training program that includes the practical applications of creative thinking, the strategic reasons for increased responsiveness, and the basic principles of organizational innovation.
- Have the CEO hold focus group interviews with middle managers to determine how well they understand the direction of the company. Gather their recommendations on how to make the direction more clear.
- Explore the use of new technology, especially information technology, to create new alternatives faster based on a wider variety of information sources.
- Make a conscious effort to move from an orientation of giving customers what they need to giving customers what they would like, to surprising and delighting customers with

- products and services that solve problems that they don't expect to be solved.
- Keep track of the amount of time leaders in your organization spend on positioning the organization for the future as opposed to coping with the present.
- Hold celebrations and internal organization "trade shows" that allow employees to show off their new, underdeveloped, experimental ideas. Celebrate trial-and-error learning.
- Develop visible rewards that recognize the creativity and innovation of employees, teams, and units. Recognize not only good ideas but also orchestrating and sponsoring activities that help new ideas get developed and adopted.

Market Culture

- Review the vision, values, goals, objectives, and measures being used at the corporate level. Develop your own version for your unit. Implement them the way you think the CEO should have implemented them at the corporate level.
- Reexamine or reinvent the processes associated with customer contacts and the flow of information from the customer through the organization.
- Consider the needs of special segments of the customer population. Find new ways to respond to them. For example, try aligning billing practices with the late-month income patterns of senior citizens.
- Examine your current time-to-market response time, and make comparisons with key competitors. Identify ways to be more competitive on response time.
- Constantly analyze the evolution of the market by holding exploratory focus group sessions with the people most closely associated with the market.
- Study the best-quality achievements of competitors, and share them with employees. Ask for suggestions on how to be more competitive.

- Establish a performance improvement program in which every employee is asked to suggest items that lead directly to increased profitability, productivity, quality, or responsiveness.
- Hold meetings to acquaint investors with your strategic plans and to meet your key management personnel.
- Assess the need for a more global perspective among the members of your unit, and provide opportunities to broaden and globalize their perspectives.
- Develop a rationalized corporate contributions program. Track the external organizations that approach your organization for contributions and support. Provide support to the external organizations that fit your strategic values system and create mutually advantageous partnerships.
- Employ an outside marketing firm to survey customer satisfaction. Assess the levels of courtesy, competence, and concern that your employees show.
- Implement the concept of customer alliances. Develop programs of partnership with your largest customers. Provide opportunities for their input into your decision-making processes just as a partner would participate in a joint financial deal.
- Hold a retreat with all managers. Combine hard-nosed reviews and improvement proposals with measurement and accountability sessions.
- Hold focus group interviews with customers to obtain their current expectations and levels of satisfaction with services and products.
- Increase the sense of integrity that customers see in your organization. Develop a customer education system to help customers make informed choices in services and products of the type you provide.
- Analyze your organization's competencies, and assess them against anticipated future demands. Develop a program of competency acquisition.

- Develop an assessment that evaluates the contributions to overall corporate competitiveness made by every unit. Based on the evaluations, establish systems whereby every unit can become a better contributor to overall competitiveness.
- Create a system whereby all customer requests and questions can be satisfied with just one telephone call at a single point of contact.
- Evaluate the contribution of your unit to the strategic part-nering efforts of the company.
- Use competitive benchmarking in your change efforts. Keep your people aware of the best practices going on elsewhere.
- Reinforce the concept of the profit center. Emphasize the profit responsibility of every unit, including staff units.
- Increase the standards used in evaluating performance. Aggressively remove all poor performers, and put poor per-formance units on notice.
- Form a team to assess the growth potential of core businesses and identify potential new high-growth areas.
- Apply for the Baldrige Award or ISO 9000, or engage in a similar action that will hold the internal processes respon-sible to some form of outside assessment and evaluation. This will force the entire organization to stretch.
- Implement a total quality management system.
- Conduct a study to determine how best to limit future retiree liabilities.
- Assign someone to read the current literature on competitor intelligence. Have that person assess the state of the unit's mechanisms of competitive intelligence and recommend appropriate changes.
- Identify "sharp-pointed prods"—outrageous goals and targets that require performance levels never before obtained.

Hierarchy Culture

- Examine the time it takes between customer requests for services and products and actual delivery. Redesign systems that will cut the time in half.
- Hold an annual audit to determine if all measurement and accounting systems are focused on the desired future organi-zation rather than on current practice.
- Develop evaluation systems wherein customer feedback can have an immediate impact on organizational practices.
- Reduce costs by 5 percent every year for the next five years.
- Evaluate every practice and process in each unit. Establish measurement criteria and methods for maintaining accountability.
- Consider using technology that will reduce paperwork and move the unit toward the concept of paperless organization.
- Consider the concept of "rightsizing" the organization. Don't look just to reduce the number of people in the organization; be prepared to increase the number of people where needed.
- Establish a "work-out" program. Although the size of the workforce may be reduced, the amount of work often stays the same or even increases. Take work out of the system.
- Increase the capacity for information to flow through the system, particularly in times of high tension or crisis.
- Select the most basic and widespread operational tasks, and consider technological possibilities for reducing costs through a decentralizing process.
- Examine possibilities for establishing more efficient inven-tory control by instituting just-in-time practices.
- Institute a health and safety audit. Develop a system to assess and improve health and safety, and hold an annual audit that closely examines all practices.

- Put a project manager in charge of building a common system that will allow all departments to access all information from anywhere in the system.
- Reduce cycle time by moving centralized functions that can be performed by individual units to the individual units. Consider desktop publishing, for example.
- Improve the preventive maintenance program.
- If high-level managers spend significant amounts of time approving expenditures they know little about or for low dollar amounts, modify the process so that lower-level people have final sign-off.
- Use process improvement audits. Compare the results to industry standards. Analyze the best practices used elsewhere.
- Do an assessment of the disruptions that affect your organization. Develop plans for crisis prevention and crisis response.
- Do an analysis of the physical location of all units, and compare it with an analysis of internal customer relationships. Review what changes might be possible to facilitate better coordination among internal customers.
- Develop a real-time audit team to work on each of the biggest projects in the organization. These teams will audit decisions while they are being made rather than long afterward.
- Determine the yearly operating cost for all information systems, and determine if each dollar is being spent appropriately.
- Place a one-year freeze on the purchase of new computers. Spend this time discovering how to allocate the dollars for computers more effectively.
- Assess the degree to which the budgeting process is linked with the resource planning process, and make appropriate changes.

- Contract with a single maintenance provider, at a reduced cost, to serve all computer maintenance needs in the organization.
- Review the impacts of every corporate policy and procedure now in place. Recommend appropriate reductions.
- Institute an internal communications program that more effectively informs people of events, activities, and programs. Use the latest technology for such a system.
- Remove all senior managers, no matter how successful, whose behavior does not reflect the values espoused by the company.
- Do a complete inventory of the company's equipment assets every five years. Each time this is done, improve the process by implementing the latest technological breakthroughs.
- Decentralize authority from central corporate bodies so that each unit or plant director has control of all budgets within the unit.