An evaluation of a facilitator-led ‘Run & Walk’ health promotion initiative targeting inactive adult males

(Supported by Men’s Health Trust New Zealand & Unitec Institute of Technology)

Michael McLeod

A research project submitted in partial fulfilment of the requirements for the degree of Master of Osteopathy, Unitec Institute of Technology, 2014
Abstract

Background: The field of men’s health in the past has typically focused on male-specific health problems including erectile dysfunction and prostate cancer. A growing body of evidence highlights a wider range of health conditions affecting the male population, including cardiovascular disease, diabetes, other cancers, and depressive disorders. Many of these health conditions are preventable with lifestyle changes, including regular physical activity. Health initiatives that have specifically targeted males and that have been comprehensively monitored are limited. This project is the first step in the development of a health initiative for inactive males that utilises a race series, the Unitec Run & Walk series and Adidas Auckland marathon, to improve health status and increase engagement in physical activity.

Objective: The objectives of this study were to evaluate the stages and processes involved in the delivery of the initiative, as well as explore the attitudes and experiences of the men who registered. Through evaluation, recommendations may be used to inform the development of a health initiative that incorporates physical activity as the main intervention.

Methods: This study used an evaluative research method, with data sets comprising facilitator reflections and field notes, emails, and semi-structured interviews with participants. The attitudes and experiences of six participants who took part in most aspects of the initiative were explored through the interview process. Data sets were analysed using interpretive description. Recommendations and specific themes were generated from these data sets.

Results: The findings from this study indicate some promise for a physical activity initiative incorporating a run and walk race series, especially for younger to middle-aged adult men. Advertising and promotion was identified as critical to engaging males, and using strategies such as text to register may be useful. Any health information provided should be straightforward and kept brief. Ongoing communication with participants, especially text message and email, that offers regular support, advice and links to reputable health websites is important. Weekly training sessions and events were motivating and helped facilitate adherence by having a meaningful end goal. A health service, such as Osteopathy, attached to the initiative was also considered valuable.

Three key themes emerged from the experiences of the men interviewed who took part in most aspects of the initiative, and these themes underpinned an overall sense of accountability towards the initiative: Simplicity, Goal setting, Support and Comradeship.
Conclusions: Overall, this type health promotion initiative appealed to previously inactive males by providing a structured, group approach to physical activity, including participation in a race series. Further development of this initiative is required through future action research cycles, especially in regards to advertising and promotion.
Acknowledgements

I would like to thank the following for their support and encouragement throughout this study:

Firstly, to the men who responded and enrolled in the advertised health initiative, took part in the weekly training sessions and the Unitec Run & Walk series, then stepped up to take part in the Auckland Marathon event, you are all an inspiration. To be a part of your journey, and to see first-hand the challenges you overcame and the remarkable progress you made, was a real privilege. Thank you for giving up your time to take part in the evaluation aspect of this study as well.

Secondly, I would like to thank the Unitec Institute of Technology’s Marketing Department, especially Paul Weeks, for their support, and the Men’s Health Trust New Zealand, again for their support and for all the good work they do in promoting men’s health.

Thirdly, thank you to my research supervisors Dr Elizabeth Niven and Jamie Mannion. I am extremely grateful for all your encouragement and support throughout this study. I have really appreciated all your knowledge, your patience, your dedication and support.

Finally to my family, and especially my wife, Bridget. I look forward to being able to repay the belief and support you have shown in me throughout the last four years. Bridget, you are a huge inspiration in your own right, and I am massively proud of you. I am excited about all the adventures and possibilities that the future holds.
# Table of Contents

Abstract .......................................................................................................................... ii
Acknowledgements ........................................................................................................ iv
List of Figures .................................................................................................................. viii
List of Tables ................................................................................................................... ix

Chapter One: Introduction ............................................................................................... 1
  Background and rationale for current study ................................................................. 1
  Aims and Objectives .................................................................................................. 3
  The health promotion initiative ................................................................................. 4
    Unitec Run & Walk series and Adidas Auckland Marathon .................................... 4

Chapter Two: Literature Review ..................................................................................... 6
  The status of men’s health ......................................................................................... 6
    Background ............................................................................................................. 6
  Men’s health in New Zealand .................................................................................... 7
  The importance of addressing men’s health issues ..................................................... 11

Physical activity and health ........................................................................................ 13
  Current physical activity recommendations for health ............................................. 13
  Health benefits of physical activity .......................................................................... 15
  Physical activity levels of New Zealand adults ......................................................... 16
  Factors influencing engagement with physical activity ............................................. 16

Physical activity initiatives and interventions .......................................................... 24
  Physical activity initiatives in New Zealand .............................................................. 24
  Health promoting interventions for men ................................................................. 27
  Physical activity interventions for men .................................................................... 28
  Summary .................................................................................................................... 29

Chapter Three: Research Methods ............................................................................. 30
  Methodology ............................................................................................................. 30
    Evaluation research ............................................................................................... 30
    Qualitative research .............................................................................................. 33
    Interpretive description ......................................................................................... 34
  Methods .................................................................................................................... 35
    Registering interest in the ‘Run & Walk’ initiative ................................................ 35
From applicants to active participants ................................................................. 36
The ‘Run & Walk’ initiative .................................................................................... 38
Ethical considerations ............................................................................................ 39
Purposive convenience sampling ......................................................................... 41
The Interview Process ........................................................................................... 41
Data collection ........................................................................................................ 42
Data analysis ........................................................................................................... 42
Maintaining Rigour ................................................................................................. 44
The Men - Sample Characteristics ....................................................................... 45
Chapter Four: Findings ......................................................................................... 49
Characteristics of applicants and participants of the initiative ............................ 50
The health initiative framework ............................................................................ 52
Advertising and Promotion .................................................................................... 52
Meet and Greet/Health Screen ............................................................................. 54
Weekly training sessions ....................................................................................... 56
Participant communication .................................................................................... 58
Complementary Osteopathic treatment ............................................................... 59
Unitec Run & Walk series events .......................................................................... 60
Adidas Auckland marathon event ......................................................................... 61
Introduction to Themes .......................................................................................... 63
Theme One – Simplicity ......................................................................................... 64
Theme Two – Goal setting ...................................................................................... 67
Theme Three – Support and Comradeship ........................................................... 69
Chapter Five: Discussion ....................................................................................... 71
The initiative framework ....................................................................................... 71
Advertising and promotion ................................................................................... 71
Health screening and measures ........................................................................... 74
Weekly training sessions ....................................................................................... 75
Participant communication .................................................................................... 76
Participation in an ‘event series’ ........................................................................... 77
Concluding the initiative - Where to next? ........................................................... 78
Key messages .......................................................................................................... 79
Chapter Six: Conclusions ...................................................................................... 80
Attributes, Limitations and Future Research ......................................................... 80
Implications ................................................................................................................................................................. 81
Concluding statement ....................................................................................................................................................... 81
References ......................................................................................................................................................................... 84
Appendices .......................................................................................................................................................................... 89
  Appendix A: Media Release for Run & Walk Health Promotion Initiative ................................................................. 90
  Appendix B: UREC Ethics Approval ................................................................................................................................. 92
  Appendix C: Invitational email for formal evaluation .................................................................................................... 94
  Appendix D: Information sheet for interview participants ............................................................................................. 96
  Appendix E: Consent form for interview participants .................................................................................................. 98
  Appendix F: Interview format (Interviewer Copy) ............................................................................................................ 100
  Appendix G: Interview Format (Participant Copy) .......................................................................................................... 103
List of Figures

Figure 1: Life expectancy at birth by ethnic group and sex, 1950-52 to 2005-07 p. 9

Figure 2: Identifying SPARC’s target group and segments derived from data analysis p. 20
(Sullivan, Oakden, Young, Butcher, & Lawson, 2003)

Figure 3: An overview of the ‘Run & Walk’ initiative targeting inactive adult males p. 37

Figure 4: Key components for creating behaviour change through participation in a ‘Run & Walk’ initiative targeting inactive adult males. p. 63
List of Tables

Table 1: Example of moderate intensity, vigorous intensity and muscle strengthening physical activities  p. 15

Table 2: Personal and environmental characteristics associated with physical activity participation (Sherwood & Jeffery, 2000)  p. 17

Table 3: Target group after being split into 6 different segments  p. 21
(Sullivan et al., 2003)

Table 4: The characteristics of the applicants for the Run & Walk health initiative, including attrition rates from application, to enrolment, to active participants  p. 50

Table 5: Health information of the men who attended the health screen event  p. 51
“I was doing no exercise. I had been to see my doctor and he had prescribed me all sorts of pills for my heart and cholesterol and the rest of it. But that didn’t seem to make a lot of impact on me. I just thought it was part of getting old”

(Participant 1 p. 1 Line 32 – 34)
Chapter One: Introduction

This chapter provides an introduction to the thesis topic and provides a rationale for the study. The specific aims and objectives of the study, as well as a description of the health promotion initiative, are also outlined in this section. Chapter two presents a synthesis of the literature in regards to issues in the field of men’s health, and particular priority is given to our national, New Zealand, situation. Recent literature investigating the attitudes and beliefs of men towards their health, healthcare service provision, and any health promotion initiatives for men highlight some important points especially relevant to this current study. The importance of regular physical activity for health, wellbeing and weight maintenance is discussed in detail, as well as physical activity interventions designed to increase participation and create behavioural change. Chapters three and four describe the methodology used in the evaluative process, with particular emphasis on the predominant method of qualitative analysis utilised, known as interpretive description. Chapter five presents the findings from the study, including specific themes derived from the analytic process and Chapter six presents and discusses these findings with reference made to the literature reviewed. Chapter seven concludes by evaluating the attributes and limitations of the study, including suggestions for future research possibilities, and discusses the implications of the findings in the potential development of a health promotion product specifically targeting inactive adult males.

Background and rationale for current study

The field of men’s health, an emerging area of research internationally over the past decade, deserves a greater level of recognition here in New Zealand. While the gender gap in life expectancy is closing, mainly in response to decreased rates of smoking and technological advancements in healthcare provision (Sandiford, 2009), New Zealand men have experienced poorer health and earlier death compared to women for decades. The disparities in life and health expectancy are even greater for Maori and Pacific men (McKinlay, 2005). One particular issue for men is the impact of chronic health conditions associated with lifestyle, including smoking, poor diet, excessive alcohol consumption and inactivity. Men are over-represented in national morbidity and mortality data for potentially preventable health conditions such as ischemic heart disease, diabetes, and certain cancers, as well as mental health conditions such as anxiety and depressive disorders.

The research evidence for the promotion of regular physical activity, and the benefits for health, wellbeing and weight management is overwhelming and extensive; therefore, those at risk of
developing health problems, and in many cases, those with established disease, should be encouraged to increase their physical activity levels and aim to meet recommended physical activity guidelines. Health promotion initiatives designed to support inactive adult men to engage or re-engage with physical activity, and assist them in meeting the guidelines and improving their health status are extremely limited. As a result, this current study is an important initial first step in the development of a health promotion initiative specifically for men that incorporates a ‘Run & Walk’ race series, as well as an iconic event such as the Auckland marathon. A limited amount of literature examining the attitudes, beliefs and experiences of men who participate in physical activity initiatives provides further support for the study.

The health promotion initiative that formed the body of this study utilised the Unitec Run & Walk series, as well as the Adidas Auckland Marathon event, as a means to engage and motivate a small group of inactive adult males in regular physical activity and exercise\(^1\) over a 16 week period. The men who applied to take part were offered an initial health screen, training support and advice, discounted entry to events and free osteopathic treatment for the duration of the initiative. The main purpose of this study was to evaluate the different stages and processes involved in the delivery of the initiative, as well as explore the attitudes and experiences of the male participants who took part in most aspects over a 16 week period. The findings of the study may be used to further develop the current initiative, or they may be used to inform the development of other health promotion initiatives that incorporate physical activity to improve health and wellbeing with inactive men. With future action research cycles, and continued development, a working product that attracts and appeals to inactive adult males could then be utilised by health organisations, agencies or workplaces to improve the health of the men in various communities.

\(^1\) The terms ‘physical activity’ and ‘exercise’ are defined differently in the literature. For the purposes of this thesis, physical activity will be used as a broad term that accounts for exercise, sports, and physical activities done as a part of daily living, occupation, leisure and active transportation. Exercise is defined as physical activity that is planned, structured and repetitive, and has a final or intermediate objective, the improvement or maintenance of physical fitness (Garber et al., 2011).
Aims and Objectives

The aim of this research project was to use an evaluative approach to assess a Run & Walk health promotion initiative targeting inactive adult males.

The objectives of this research were:

- To interview and analyse individual participant responses to the overall delivery of the Run & Walk health promotion initiative targeting inactive adult males. This included participants who were involved for the duration of the initiative.
- To interview and analyse individual participant responses for those who registered interest in taking part but did not attend at all, and those who initially attended but did not continue for the duration of the initiative.
- Monitor and evaluate the processes involved in the overall delivery of the initiative.

It was expected that these objectives would answer the following research questions:

- What were the experiences and attitudes of participants towards the initiative?
- In what ways did the initiative influence participant’s behaviours and attitudes towards physical activity?
- In what ways did the initiative encourage other health related behaviours?
- In what ways does an evaluation research approach inform the further development of a Run & Walk health promotion initiative targeting inactive adult males, and what further work is needed?
The health promotion initiative
Unitec Run & Walk series and Adidas Auckland Marathon

The initiative provided an opportunity for participants to use a race series, the Unitec-sponsored Run & Walk series, to build towards one of New Zealand’s most iconic events, the Adidas Auckland Marathon. The Unitec Run & Walk series offers five separate events at different locations around Auckland between July and October. The events provide a relaxed yet simulated race environment for runners and walkers of all abilities, and allow participants to build towards their chosen event at the Auckland marathon (full marathon, half marathon, 10km or 5km event). Each event was separated by periods of three to four weeks, allowing participants to train and develop their cardio-respiratory fitness for the next race of the series. The 16-week duration of the initiative, from the first race of the series to the Auckland marathon event, presented an ideal timeframe for the facilitator (principal researcher) to monitor and assess the overall delivery of the initiative, as well as the attitudes and experiences of the male participants.

In terms of recruiting participants, men who regarded themselves as inactive were initially sought, and responded to several media sources advertising the initiative. Participants were offered training support and advice, attended weekly training sessions between events, and received health information and advice through regular emails. The participants had the option of utilising free osteopathic treatment for the duration of the initiative for the assessment and treatment of any musculo-skeletal issues. This treatment was offered through Unitec’s post-graduate Osteopathic Clinic (Clinic 41). Participants were also offered discounted entry into the Unitec Run & Walk series courtesy of the Unitec marketing department to encourage participation, although participation in any or all the events was not a mandatory requirement of the initiative.

An evaluative approach was used to capture data at various stages of the initiative. Stage 1 data was collected from the registration process through to the conclusion of the initiative, the Auckland marathon event. Data collected during this stage comprised email communication, demographic data, health screening data, as well as field notes and reflections of the facilitator following training sessions and events. Stage 2 data was collected following the conclusion of the initiative, and comprised semi-structured interviews with participants who took part in most aspects of the initiative. Data from both stages were analysed using a methodology known as interpretive description that generated a thematic summary of the entire experience. A qualitative approach was appropriate for this study given the ‘real world’ context within which the initiative was carried out,
and given the paucity of literature for the evaluation of physical activity initiatives specifically including men.
Chapter Two: Literature Review

This purpose of this literature review is threefold. Firstly, it is to highlight the relevance of men’s health and associated issues. Past and current concerns in the field of men’s health are examined, and the importance of attending to men’s health status is discussed. An evaluation of the trends associated with men’s health in New Zealand over the past decade is presented, and specific areas that still require attention are discussed.

Secondly, it is to present the overwhelming evidence in favour of physical activity for improving health and wellbeing. The physical activity levels of New Zealanders are summarised, and trends are discussed. The significance of regular physical activity for the maintenance of health and wellbeing, and the potential benefits derived are reviewed, alongside the most current recommendations differentiated by intensity, time and mode of physical activity. Research findings regarding the determinants of exercise behaviour and the implications of this knowledge in regards to individual and public health recommendations and intervention strategies for promoting physical activity are also discussed in this section.

Finally, it is to evaluate a range of physical activity initiatives or interventions that have included men, and discuss their mechanisms and outcomes. These also include national health promotion initiatives such as Push Play and the Green Prescription programme alongside other more specific physical activity intervention studies. Interventions that include combined physical activity and nutrition are included in this discussion. The literature around men’s attitudes and beliefs towards physical activity and health is also reviewed in this section.

This literature review forms the needs analysis aspect of this study, detailing the relevance and importance of developing innovative health promotion initiatives that engage adult men. Initiatives that support, motivate, educate and create behavioural change are critical in reducing the impact of health conditions associated with physical inactivity and other lifestyle choices around nutrition, alcohol consumption, smoking and drug use/misuse.

The status of men’s health

Background

Men’s health is a specific field that historically has not received the attention or recognition it probably deserves (Neville, 2008). It has been only in very recent years that the term ‘men’s health’
was introduced by the United States National Library of Medicine’s controlled vocabulary of medical subject headings (MeSH); these are terms used for indexing articles on prominent medical databases including Medline and Pubmed. In contrast, the term, ‘women’s health’ has been included since 1991, and in 2008 yielded 18,249 references. A comparative search using the term ‘men’s health’ in the same year yielded only 442 references (Johnson, Huggard, & Goodyear-Smith, 2008). Research into men’s health issues in the past has typically been focused towards male-specific ‘physical’ conditions, especially relating to the impact of erectile dysfunction, prostate cancer and related conditions (Baker, 2001; McKinlay, 2005). It has been only in the past decade where there has been recognition of a broader range of health issues that impact negatively on men, and an emergence of research that reflects this concern (Wilkins & Savoye, 2009). What is encouraging is that there is now a growing recognition of the importance of sociological, as well as biological influences on the health of men.

The Men’s Health Forum, a charity established in England and Wales, has become the voice for male health issues in the UK. As part of its policy development document, ‘Getting It Sorted’ the following definition for men’s health was created and reflects current thinking:

A male health issue is one arising from physiological, psychological, social or environmental factors which have a specific impact on boys or men and/or where particular interventions are required for boys or men in order to achieve improvements in health and well-being at either the individual or the population level (White, 2006, p. 5)

The creation of this definition is important for several reasons. Firstly, it recognises that indeed there are specific health issues specifically relevant to men. Secondly, it recognises that the impact of men’s health issues go beyond a purely physical dimension. The consideration of one’s health and wellbeing should also encompass biological, socio-ecological, psychological and spiritual dimensions regardless of gender. Finally, it also recognises that specific interventions are needed to address the health needs of men that also reflect the diversity of this population group including generational difference, ethnicity, culture, sexuality, socio-economic status and geographic location.

**Men’s health in New Zealand**

The growing discussion around men’s health largely stems from health data that has indicated for years in many western societies, that men experience poorer health outcomes and earlier death when compared to women (White, 2006). The degree to which these poorer health outcomes are linked to biological differences is contentious, although it is certain that sociological influences
including socio-economic status, ethnicity, risk taking behaviours, socially defined roles for men and access to healthcare services all have an impact on the health of men (McKinlay, 2005). Men are often considered pillars of society holding important positions in business, politics, defence and security services and in professional sport, and have long been considered the ‘rock’, or foundation, families and communities are built upon. However, these societal roles and stereotypes of what a Kiwi bloke may have just provided a handsome cladding to an otherwise unstable, fragile structure.

Men in New Zealand, despite prevailing stereotypes and expectations, represent a distinctly heterogeneous population group (McKinlay, 2005). While it is apparent that New Zealand men do possess unique characteristics compared to men from other countries (largely attributable to cultural differences), it is not sufficient to say that all men share the same needs when considering their health. Men’s health needs vary considerably based on age, ethnicity, culture, sexuality, socio-economic status and geographical location (Wilkins & Savoye, 2009). As with many other developed nations, the health of men in New Zealand historically has not been a priority issue, except perhaps for male-specific conditions such as prostate cancer (Johnson, Feild, & Stevenson, 2006). However, growing concern around the ‘gap’ in life expectancy between men and women, along with morbidity and mortality data attributable to preventable causes, finally prompted action at government level in the late 1990s (National Health Committee, 2012).

A review of the literature on men’s health was commissioned by the National Health Committee, and was published in 2004. The review provided a synthesis of national and international publications including, ‘descriptive reports on the biological status of men’s health; comparative studies on men’s and women’s health; philosophical and sociological analyses of masculinity and the male role; health disparity analyses; impact of health professional’s action on men’s health, and original research on interventions to improve men’s health’. The review confirmed that in New Zealand, men experience poorer health outcomes compared with women and that health statistics were worse again for Maori men. The findings highlighted that male health inequality is not only related to gender but also complicated further by ethnicity and social factors. Over the past decade, health and life expectancy for men has improved (see Figure 1), however men are still more affected than women by chronic diseases such as ischemic heart disease, diabetes mellitus, certain cancers and chronic lower respiratory diseases (Ministry of Social Development, 2010). Improvements in life expectancy are believed to be linked to a decreased number of male smokers, advances in the treatment and management of ischemic heart disease, and lower numbers of accidents (Sandiford, 2009).
The New Zealand Burden of Diseases, Injury, and Risk Factors Study 2006 -2016, presents health losses sustained by all New Zealanders of all ages, both sexes, and most major ethnic groups. Health loss measures how much of healthy life is lost due to premature death, illness or impairment, where the main measure used is disability-adjusted life years. This is a composite measure of mortality and morbidity that measures how far short the population falls from ‘ideal’ health. The data presented includes estimates from 2006, and projections right up to 2016 for fatal and non-fatal health losses. The study highlighted, specifically after adjusting for age, that males experienced 55% more fatal health loss when compared to females (Ministry of Health, 2013a). This statistic perhaps reinforces the fact that males often present late to healthcare practitioners when illness or disease is well established (Jatrana & Crampton, 2009). The impact of psychological illness and suicide should not be underestimated in these figures also. Males on average in 2006 could expect to live to 78.1 years, with 8.9 years (11%) in poor health, whereas females could expect to live to 81.1 years, with 11.5 years (14%) in poor health. So while men did die earlier than females, they spent less time in poor health when compared to women. Health losses attributable to specific causes for the entire population in 2006 were ranked in the order of coronary heart disease, followed by anxiety and depressive disorders, stroke, chronic obstructive pulmonary disease, diabetes, lung cancer, back disorders, bowel cancer, traumatic brain injury and osteoarthritis. For men, the leading specific causes of health loss were coronary heart disease and depressive disorders, whereas this order was reversed for females. These leading causes of health loss were projected to stay the same through to 2016, assuming a continuation of recent demographic and epidemiological trends (Ministry of Health, 2013a).
Research has also indicated that men are less likely to visit general practitioners than women, and are known to be reactive rather than proactive with regards to engaging healthcare services (Jatrana & Crampton, 2009; McKinlay, 2005). Consequently, late presentation to healthcare practices by men who have developed certain illnesses or conditions has been identified as a risk factor influencing health outcomes (McKinlay, 2005). Men are also less likely to utilise preventative healthcare services including cancer screening and lifestyle modification programmes (Courtenay, 2002). It has been suggested that this disparity in general practitioner visits between men and women may well be due to investigations and screening related to gynaecological and obstetrical conditions with women. However, even after excluding gynaecological and obstetrical conditions, determinants of general practitioner consultation still differ between the sexes (Jatrana & Crampton, 2009). This finding was confirmed by Jatrana & Crampton (2009) who reported that:

Our results do not support the body of literature that suggests that women’s excess in service use can largely be attributed to gynaecological and obstetrical conditions or that the female excess in visits is focussed in the childbearing years (p 265).

McKinlay (2005) cites several reasons why men may not consult their general practitioner, including:

A lack of understanding about the process of making appointments including negotiation with female receptionists, inappropriate opening times, being unwilling to wait for appointments, feeling uncomfortable in a predominantly female environment, a general lack of trust in the health system including issues of confidentiality, a fear of being judged by healthcare staff and a lack of knowledge of the language to use about their bodies (p 24).

The socialisation of males, in particular a predominant ‘macho’ or masculine attitude is also a barrier to men taking adequate responsibility for their health (Neville, 2008). Stoicism, independence and a reluctance to admit difficulty all contribute to poor or non-attendance in primary healthcare and social services (Wilkins & Savoye, 2009). These attitudes are commonly associated with risk taking behaviour; behaviour that frequently has poor health outcomes (McKinlay, 2005). Masculinity is defined as a social construction dependent on a specific historical time, culture and locale, or it may be defined in relational terms as that which is not feminine (Evans, Frank, Oliffe, & Gregory, 2011). In addition, within any given society there can exist a hierarchy of masculinities with an idealised version of being masculine or dominant. In western culture, contemporary hegemonic masculinity is
associated with being white, heterosexual and middle class, and possessing stereotypical traits of assertiveness, dominance, control, physical strength and emotional restraint. Men that fall outside or do not measure up to the ‘ideal standard’ may experience subordination or marginalisation (Evans et al., 2011). This has significance in relation to men’s health practices particularly for boys and men who jeopardise their health striving to demonstrate or live up to this ideal; often this can lead to risk taking behaviours. Risk taking can be understood as resulting from employment, recreational and lifestyle choices that are hazardous to the individual. In New Zealand, targeted media campaigns have aimed to increase awareness and education for males in relation to specific risk taking behaviours that have accounted for injury, illness and death. These media campaigns have targeted specific behaviours including alcohol consumption, drink driving, speeding, do-it-yourself and workplace safety.

Wilkins & Savoye (2009) summarise our national situation, commenting:

As in many other countries, the development and maintenance of masculine identities in Aotearoa/New Zealand is strongly associated with problematic social environments that support unhealthy beliefs and behaviours. For example local ideologies and practices mean that achieving the ideals of conventional masculinity requires an unwillingness to admit weakness or to accept help and a propensity towards risk-taking behaviour. The process of male socialisation and the socio-cultural norms that underpin this process result in an adverse risk profile for men and subsequent poor health outcomes. (p. 47).

In the UK, Professor Alan White, one of the first chairs of the men’s health forum also comments in relation to the socialisation of males (Johnson, 2009):

Men’s health is not a medical issue, it is societal. Therefore a much broader approach needs to be taken. This leads us into research questions around men’s lifestyles and the social pressures on men to conduct their lives in certain ways; it makes us look at social structures including education, work and leisure (p. 258).

The importance of addressing men’s health issues

Johnson et al. (2006) state that, “a person’s health is a foundation that enables or constrains an individual’s lifestyle, social, education or employment choices. A decline in an individual’s health has
significant ramifications for their employment status and participation in the workforce” (p. 8). As New Zealand men represent approximately half of the total population and labour force, if greater health equality were to be achieved between the sexes, the impact on New Zealand’s economic and social wellbeing could be significant (Johnson et al., 2008). Men are represented across all industry sectors, and therefore contribute greatly to the nation’s productivity and overall gross domestic product.

Johnson et al. (2008), in citing the importance of men’s health issues comments:

Health is not simply a by-product of economic development, but is a substantial driver of economic development as well. The health of the population affects a country’s productivity, labour supply, education levels and capital formation. Healthy people learn better, live longer, and work, earn and save more. In this sense, the health of the population is an important contributor to the health of the nation. Yet the health status of men appears markedly poorer and their utilisation of health services is lower than that of women’s, which questions if men are achieving their potential contribution to the health of the nation (p. 69).

While the economic ramifications of poor health are apparent, what is less apparent is the short and long term impact of male mortality on family, friends and communities. Men play a significant role outside of the workforce as family members, role models, and volunteers, and when they die from preventable causes in early age, they may leave behind young families and their deaths can affect whole communities (Manchester, 2012). The impact of early male morbidity and mortality is an area that remains under-researched.

Another particularly concerning statistic for men across all age groups is the mortality data associated with suicide. As previously mentioned, the second leading cause of health loss in the male population was due to depressive disorders. Suicide may be used as an indicator of the mental health of a population, and while the causes of suicide are complex, depressive disorders are a leading risk factor. The topic of suicide is regarded as somewhat taboo especially in the media, and in a social context there is a certain stigma associated with mental illness including depressive disorders. In response, the Ministry of Health established has a Suicide Prevention Action Plan that combines the work of several different agencies to address this issue. Prominent ex-All Black Sir John Kirwan has become the ‘face’ for depression awareness and education, and established himself as a role model and example for men and women of all ages. The website www.depression.org.nz offers
a multitude of self-help resources and pathways, including suggestions for increasing physical activity, for those suffering from symptoms of depression. Regular physical activity is considered to be a key element in the management of depressive symptoms, and can have a significant influence on both men and women across all age groups and weight distributions (Conn, 2010). Interventions directed towards the management of depression that are delivered in a group setting are as effective as those focused on individuals, which is important for long-term cost-effectiveness as well (Conn, 2010).

Despite the New Zealand government investing in research and initiatives to address some of the issues associated with men’s health, there still appears to be a lack of co-ordinated effort and commitment at government level to establish a specific men’s health policy. The financial crisis that affected most nations across the world several years ago also impacted the New Zealand economy, and probably meant that any further funding or policy development for men’s health into the foreseeable future will be limited. The establishment of a men’s health policy in New Zealand should remain a priority, and whether the New Zealand government will follow the positive example of Australia, will remain to be seen.

Physical activity and health

Current physical activity recommendations for health

The World Health Organisation as part of its global strategy recommends that adults (18 – 65+) engage in regular physical activity, accumulating a minimum of 150 minutes per week of moderate intensity physical activity, or alternatively 75 minutes of vigorous intensity physical activity per week for health benefits and weight maintenance (World Health Organisation, 2014). This recommendation is echoed in many countries including New Zealand where the Push Play message of ‘30 minutes per day’ is a slogan most New Zealanders over the past decade or so would be familiar with. This broad health message encourages all New Zealanders to engage in 30 minutes of moderate intensity physical activity on most, if not all days of the week; this is a total of at least 150 minutes per week (Ministry of Health, 2013b; Sport & Recreation New Zealand, 2005). For extra health benefits, including weight loss, at least 300 minutes per week of moderate intensity physical activity is required, equalling at least 60 minutes per day (Donnelly et al., 2009; Sport & Recreation New Zealand, 2005). While these totals may seem intimidating for a currently sedentary individual, 30 minutes of physical activity per day may be accumulated in 10 minute bouts, and has been shown to offer similar benefits to single bouts of continuous exercise (Donnelly et al., 2009). Muscle strengthening exercises that target major muscles groups is also recommended on at least two days
of the week, and for those with mobility problems, physical activity should be incorporated that enhances balance and prevents falls (Donnelly et al., 2009). People with specific medical conditions that limit the amount and type of physical activity they can do should still engage in physical activity as much as their body allows. ‘Movement = Health’ is an evidence-based resource for New Zealand health professionals published by Sport New Zealand (formerly SPARC), that has recommendations and strategies for promoting physical activity. The New Zealand guidelines for physical activity can form a part of a healthy lifestyle programme incorporating physical activity, healthy eating and maintaining a healthy weight. Moreover, they are easily incorporated into most lifestyles at little to no cost.

Four key guidelines from this document underpin the recommended approach to physical activity for health. These guidelines are:

- View movement as an opportunity, not an inconvenience
- Be active every day in as many ways as possible
- Put together at least 30 minutes of moderate-intensity physical activity on most if not all days of the week
- If possible, add some vigorous exercise for extra health benefits and fitness (Sport & Recreation New Zealand, 2005)

Table 1 below provides examples of moderate and vigorous physical activity, as well as muscle strengthening physical activities.
Table 1: Example of moderate intensity, vigorous intensity and muscle strengthening physical activities

<table>
<thead>
<tr>
<th>Moderate-intensity physical activity</th>
<th>Vigorous physical activity</th>
<th>Muscle strengthening physical activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking briskly (4.8 km/h or faster, but not race walking)</td>
<td>Race walking</td>
<td>Resistance training (eg. weight training or strength training)</td>
</tr>
<tr>
<td>Water aerobics</td>
<td>Jogging</td>
<td></td>
</tr>
<tr>
<td>Bicycling (slower than 16 km/h)</td>
<td>Running</td>
<td>Using weights, resistance (elastic) bands or plastic tubes</td>
</tr>
<tr>
<td>Tennis (doubles)</td>
<td>Swimming laps</td>
<td>Circuit-training</td>
</tr>
<tr>
<td>Ballroom dancing</td>
<td>Waka ama</td>
<td>Callisthenics (using body weight as resistance, eg, doing press-ups or sit-ups)</td>
</tr>
<tr>
<td>Light gardening</td>
<td>Tennis (singles)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kapa haka</td>
<td>Carrying heavy loads</td>
</tr>
<tr>
<td></td>
<td>Bicycling (16 km/hour or faster)</td>
<td>Doing heavy gardening</td>
</tr>
<tr>
<td></td>
<td>Dancing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skipping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heavy gardening (continuous digging or hoeing, with heart rate increases)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hiking uphill or with a heavy backpack</td>
<td></td>
</tr>
</tbody>
</table>

Source: Taken from ‘Clinical Guidelines for Weight Management in Adults’ (Ministry of Health, 2009).

**Health benefits of physical activity**

Prominent public health researcher, Professor Steven Blair (2009), stated in an editorial piece that, “physical inactivity is one of the most important public health problems of the 21st century, and may even be the most important” (p. 1). Worldwide it is estimated that physical inactivity causes 6% of the burden of coronary heart disease, 7% of type 2 diabetes and 10% of colon cancer; ultimately inactivity causes 9% of premature mortality, or more than 5.3 million of the 58 million deaths that occurred worldwide in 2008 (Lee et al., 2012). Research by the Ministry of Health has found that physical inactivity is associated with 8% of all deaths in New Zealand, and is estimated to account for over 2600 deaths per year (Ministry of Health, 2013a). A physically active lifestyle therefore has many health benefits, including reduced risk of coronary heart disease, hypertension, obesity, type 2 diabetes, colorectal cancer and osteoporosis (American Heart Association, 2011; Bauman, 2004;
Physical activity levels of New Zealand adults

Physical activity levels of New Zealanders from the most recent Active New Zealand Survey indicated that only 48.2% of the population achieved 30 minutes of moderate intensity physical activity on at least 5 out of 7 days per week (Sport & Recreation New Zealand, 2008). Of this proportion of the population that did meet the physical activity recommendations, men were significantly more active than women (52.3% compared to 44.4%) in terms of meeting the recommended physical activity guidelines. The most popular forms of physical activity participated in over 12 months for New Zealand adults were walking (64.1%), gardening (43.2%) and swimming (34.8%). The top three activities were identical for men and women and did not differ in terms of order of popularity. Actually, six of the top ten activities were the same for men and women including walking, gardening, swimming, equipment-based exercise, cycling and jogging/running (Sport & Recreation New Zealand, 2008). For men, other uniquely popular physical activities included cricket, golf, fishing and football/soccer (Sport & Recreation New Zealand, 2008). Despite these statistics, there still remains a large proportion of the male population who are not meeting these recommendations, and could therefore benefit from lifestyle changes that incorporate regular physical activity.

Data collection for next Sport NZ survey will take place during 2013 – 2014, with publication of results not released until 2015.

Factors influencing engagement with physical activity

If the benefits of regular physical activity and exercise are so significant, why is it then that such a high proportion of the population remains sedentary, or relatively so? The advent of new
technologies and their progressive efficiencies means that often by default, humans now move much less than we once used to. Advancements in the technology of production, transportation and information management are examples where maximum efficiency can be achieved with minimal physical input. Urban environments have also been designed to make movement as easy and efficient as possible in order to cater for large numbers and diverse population groups. Screen technology is everywhere in the form of TVs, computers, mobile devices and gaming consoles, and now consumes large quantities of work and leisure time. Schofield (2003) uses New Zealand’s largest city, Auckland, as an example of a pathological environment where active commuting (eg cycling) remains difficult, and at times dangerous (para 3). In fact, commuting in general can be difficult and time consuming, potentially limiting time available for leisure and recreation.

Participation in regular physical activity is an extremely complex and dynamic process. Throughout an individual’s lifetime, physical activity participation moves through many phases that are determined by an extremely diverse range of factors (Sherwood & Jeffery, 2000). Determinants of physical activity participation may be placed into two broad categories; individual or personal characteristics and environmental characteristics (see Table 2.) Individual circumstances contribute to this dynamic state of physical activity participation, and may mean that several physical and environmental determinants may be implicated at any one time. Interplay between each of these variables may also occur, further complicating participation rates (Sherwood & Jeffery, 2000).

Table 2: Personal and environmental characteristics associated with physical activity participation (Sherwood & Jeffery, 2000)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>Environmental characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>Time</td>
</tr>
<tr>
<td>Motivation</td>
<td>Access</td>
</tr>
<tr>
<td>Stage of change</td>
<td>Social support</td>
</tr>
<tr>
<td>Exercise history</td>
<td>Injury</td>
</tr>
<tr>
<td>Body weight</td>
<td>Attributes of physical activity/exercise behaviour (type, intensity, duration, variety)</td>
</tr>
<tr>
<td>Health risk profiles</td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td></td>
</tr>
</tbody>
</table>

A review of the key determinants of physical activity by Sherwood & Jeffrey (2000) presents some important recommendations for physical activity promotion or interventions that incorporate physical activity. Highlights of this review include:
The importance of (a) understanding and assessing different motivations for physical activity, (b) self efficacy as a predictor of physical activity and a target for intervention, (c) assessing readiness for physical activity change, (d) addressing prominent barriers to physical activity including time and access, and (e) enhancing social support for physical activity (p. 32).

Some of the implications of these recommendations are discussed further below.

According to prevailing conceptualisations of physical activity behaviour, to become a regular physical activity participant, an individual has to adopt the belief that exercise confers enough benefits to outweigh its costs (Sherwood & Jeffery, 2000). Ultimately these beliefs are driven by the individual’s knowledge and understanding about physical activity, and whether or not the benefits derived are important enough to lead to behavioural change. Indeed, adopting the belief that physical activity is beneficial for health may be difficult for those who have been inactive for a long time, are suffering from chronic disease or disability, or for those who have had negative past experiences with physical activity. The trans-theoretical model as developed by Proschanka and colleagues is a model for behavioural change based on identification of readiness for specific behavioural change, and subsequent progression through a series of stages. Identifying an individual’s readiness for behaviour change in relation to physical activity is critical in tailoring health messages and programmes to individuals at the different stages of change (pre-contemplation, contemplation, preparation, action, maintenance). For individuals indentified in the ‘pre-contemplation’ stage, this suggests that they are not active and are not considering initiating a physical activity programme in the near future. Therefore, one approach to promoting physical activity with this group is to emphasise the wide range of benefits associated with a physically active lifestyle, and outline the costs of a sedentary lifestyle (Sherwood & Jeffery, 2000). Those in the ‘contemplation’ and ‘preparation’ stages (not currently active but intend to become active in the near future), more engaging approaches may be utilised. These groups should be a target for physical activity intervention, as well as those in the ‘action’ stage who have been active for less than six months. Those in the ‘maintenance’ stage may be less of a priority.

In New Zealand, following the successful implementation of the Push Play campaign (Bauman et al., 2003), it was found that there was a lot of information about physical activity levels, who is and who is not active, and about awareness of public health messages encouraging physical activity participation. What was missing was the why and why not behind physical activity behaviour. To address this missing information, research was carried out by Sport and Recreation New Zealand who identified a target group within the total population who might benefit from receiving more
specific physical activity information, support and associated resources. The initial target group consisted of those who were not already regularly active, but did have the intention of becoming regularly active in the next six months (’contemplation’ and ‘preparation’ stages), or they were active for two or more days of the week during the week prior to being surveyed (’action’ stage) (Sullivan et al., 2003). Those who were not active and had no intention of becoming regularly active in the next six months (’pre-contemplation stage), along with those who were already regularly active, and had been for six months or more (’maintenance’ stage), were not included in the research. Following data collection and analysis, six sub-groups or ‘segments’ of the target population were developed (see Figure 2). The key characteristics of each segment are further highlighted in Table 3.
Figure 2: Identifying SPARC’s target group and segments derived from data analysis (Sullivan et al., 2003)
Table 3: Target group after being split into 6 different segments (Sullivan et al., 2003)

<table>
<thead>
<tr>
<th>Segment 1: Others Orientated</th>
<th>Segment 2: OK for now</th>
<th>Segment 3: Other priorities</th>
<th>Segment 4: Busy and stressed</th>
<th>Segment 5: Support seekers</th>
<th>Segment 6: Almost there</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discouraged by others – 97% rate this an influence (3+ on a 7-point scale; no other segment has more than 13% discouraged by others)</td>
<td>Higher than average health (57% rate health very good/excellent), and they are less often overweight or smokers (17% smoke), male</td>
<td>Lowest belief in benefits, least motivation</td>
<td>Perceive a lack of time as a barrier to activity – 62% lack of time due to work, and 45% lack of time due to family</td>
<td>99% say they do not get enough encouragement (other segments 23%–44%)</td>
<td>Strongest intrinsic motivation (e.g. 50% strongly agree I enjoy physical activity, I care about keeping in shape)</td>
</tr>
<tr>
<td>Strongest extrinsic motivation (e.g. because my family wants me to, because I want others to approve of me)</td>
<td>Few worries, low stress, low time pressure</td>
<td>Lack commitment e.g. more would rather be doing something else with free time</td>
<td>Most stressed</td>
<td>Have more health problems, 27% obese, 22% depression or mood disorder, 11% anxiety disorder</td>
<td>Strongest believers that physical activity will deliver benefits, and rate the importance of these benefits highly</td>
</tr>
<tr>
<td>High in Asian and Pacific peoples</td>
<td>Few barriers</td>
<td>Moderate belief in benefits</td>
<td>Know that their inactivity is bad for their health, but becoming active is not a priority for many</td>
<td>Know that their inactivity is bad for their health, but becoming active is not a priority for many</td>
<td>Most confident that they can be physically active five days per week (average rating of 8.3 where 10 means extremely confident)</td>
</tr>
<tr>
<td>27% obese</td>
<td>But see few benefits from physical activity (don’t need to change – think they are OK as they are)</td>
<td>Youngest segment (27% aged 16–24 years)</td>
<td>26% obese</td>
<td>26% obese</td>
<td>Barriers generally less of a problem</td>
</tr>
</tbody>
</table>

(6% of adults, ≈170,000) | (10% of adults, ≈290,000) | (6% of adults, ≈170,000) | (9% of adults, ≈270,000) | (6% of adults, ≈180,000) | (9% of adults, ≈270,000) |
The outcomes of this research were specific health promotion campaigns targeting those segments deemed to be the most important; these were ‘Others Oriented’, ‘Support Seekers’ and ‘Busy and Stressed’. These were typically people aged 25 - 50 years, who were willing to be more active, but felt they lacked time and support. They were motivated by being active with others, tended to have children and were busy with work and family commitments. From this research, the primary audience for these specific health promotion campaigns were women of all ethnicities, with men being a secondary focus (Sport New Zealand, 2014). These segment-specific campaigns have not since been evaluated since their initiation. Understanding the different characteristics of the target population in this research has been extremely useful, and offers key information when designing health promotion interventions that utilise physical activity. The information from the Obstacles to Action study, combined with additional evidence-based strategies that help to enhance self efficacy, reduce the impact of prominent barriers such as time and access, and assist in the development of innovative and appropriate support structures hold the key to future physical activity intervention or programme design that is relevant to New Zealanders, including men.

Self-efficacy is one of the most consistently identified determinants of physical activity, and targeting efficacy beliefs is a recommended strategy for retention and adherence to physical activity programmes (Ashford, Edmunds, & French, 2010; McAuley, Jerome, Marquez, Elavsky, & Blissmer, 2003; Sherwood & Jeffery, 2000). Self-efficacy has been repeatedly shown to predict physical activity behaviour in healthy adults, and is predictive of the adoption and maintenance of physical activity (Ashford et al., 2010). Bandura (1997) has proposed that self-efficacy for any particular behaviour is the consequence of four sources of information; enactive mastery experience, vicarious experience, verbal persuasion, and physiological or affective states. Enactive mastery experience refers to successful performance of the target behaviour, which should enhance perception of efficacy, while failure to perform the behaviour undermines it. Vicarious experience, refers to seeing a ‘similar other’ successfully perform the behaviour and appraising one’s own performance against the performance of that similar other. Verbal persuasion, in which others express faith in the individual’s capabilities, is the third source of self-efficacy. It has often been argued that the effects of this are unlikely to be long lasting. Reducing negative emotional states and correcting misinterpretations of bodily states is the fourth way that self-efficacy perceptions may be enhanced (Bandura, 1997). In a recent meta-analysis of physical activity interventions that have attempted to increase physical activity self-efficacy, interventions that used vicarious experience, and feedback on past or others performance produced significantly higher levels of physical activity self efficacy than interventions where these techniques were not included. Additionally interventions that used persuasion, graded mastery and barrier identification techniques produced significantly lower levels of self efficacy than
interventions where these techniques were not included (Ashford et al., 2010). These are important revelations for those promoting physical activity and designing physical activity interventions as these techniques may be specifically employed to promote self efficacy in those with a history of sedentary behaviour, a typically challenging group in which to produce behavioural change. For men, these techniques may also be of value, especially given the often cited characteristics of competitiveness and pursuit of hierarchical dominance.

Time and access are the most often cited barriers to physical activity participation (Sherwood & Jeffery, 2000; Sullivan et al., 2003), therefore different strategies may be required to make physical activity more accessible, especially for those with a history of sedentary behaviour. Lack of time, physical restriction, cost and disinterest or boredom have also been cited as common barriers to physical activity among middle-aged men (Burton, Walsh, & Brown, 2008). The lifestyle approach to physical activity is one way of addressing both of these barriers, which includes promoting moderate intensity physical activities, such as walking, into a daily routine and including multiple bouts of activity (at least 10 minutes) to achieve daily goals. This may even be more appropriate for those who are overweight or have injuries, joint pain and other health complaints (Garber et al., 2011). This is in contrast to concentrating an entire day’s commitment to a single session of physical activity. These shorter bouts of physical activity can be integrated into occupational and incidental activity. This is a message that may not be well understood by the general public, and could be better promoted.

A study of adults attempting weight control had highlighted a belief among men that they should perform a considerable amount of vigorous intensity physical activity per week (Timperio, Cameron-Smith, Burns, Salmon, & Crawford, 2000). This statement highlights a possibility that some men may hold the view that physical activity must be vigorous to be beneficial, and that moderate intensity physical activity is possibly less beneficial (Timperio et al., 2000). For those who have been sedentary for a long time, especially in the male population, this perception of the required exercise intensity may prove too daunting to begin initiating exercise, and may act as a barrier itself. The further promotion of the benefits of moderate intensity activity and providing specific examples of the types of activities that fit into this intensity range, as well as those vigorous intensity activities, could be a target for future initiatives. Additionally, supervision of physical activity interventions or initiatives by an appropriately qualified exercise professional may not only help to facilitate adherence by providing additional motivation and support, but also act as an ‘intensity regulator’ during bouts of prescribed physical activity. For others initiating physical activity in the absence of supervision,
education in regards to simple intensity measures such as Borg’s ratings of perceived exertion or heart rate may also be useful (Garber et al., 2011).

The results of research have also clearly established that both reports of social support and objective indices of support such as exercising with a partner, predict greater physical activity levels (Sherwood & Jeffery, 2000). The implications of these findings are that people should be encouraged to perform physical activity with others, and that the social aspects of physical activity should be emphasised in physical activity programmes. Spouses, friends and work colleagues are all potential exercise partners, however, the optimal support partner is likely to vary for different individuals (Sherwood & Jeffery, 2000). A small Australian study highlighted that for men, the social aspect of physical activity participation is considered important and may help to facilitate adherence long term (Burton et al., 2008). The growth in recent years in New Zealand of group-based physical activity training programmes such as with Triathlon or Multisport groups, gym-based programmes such as Crossfit or Spin (cycling), and outdoor-based ‘Bootcamp’ military-style programmes have provided more challenging alternatives to regular physical activity programmes. For men, these are all potential avenues to facilitate long term behavioural change, especially through meaningful goal setting and event participation.

**Physical activity initiatives and interventions**

**Physical activity initiatives in New Zealand**

The New Zealand government invests around $70 million each year in conducting research, promoting physical activity and exercise, and developing initiatives that target certain groups of the New Zealand population (Sport & Recreation New Zealand, 2008). Sport New Zealand is the government organisation that is responsible for the promotion of sport and recreation at all levels, from community and club support through to supporting elite athletes in the high-performance programme (Sport & Recreation New Zealand, 2008). Sport New Zealand is also behind prominent national health promotion initiatives such as the Green Prescription programme and Push Play campaigns. The merits of these initiatives are discussed further, along with the more recent introduction of a web-based physical activity resource, ACC (Accident Compensation Corporation) ActiveSmart programme.
The Green Prescription programme is a public health intervention that was developed and launched in the late 1990s. In New Zealand, the Green Prescription (GRx) is a nationally funded program offered in primary care settings to improve physical activity amongst sedentary adults. It is based on the national physical activity guidelines of achieving 30 minutes of moderate intensity physical activity on five or more days of the week. Given that general practitioners have access to a large proportion of the sedentary population, and are a respected source of advice, these prescriptions are a means of introducing physical activity ideas, setting goals, and providing written advice with regards to how to increase physical activity (Elley, Kerse, Arroll, & Robinson, 2003).

A GRx intervention lasts for a 3-month period, during which time the individual receives a monthly phone call from a patient support counsellor (a trained physical activity specialist). Telephone counselling is based on the trans-theoretical model of behaviour change, and is aimed to provide the individual with on-going external support for physical activity. The patient support counsellor helps the individual set realistic goals for physical activity and helps identify solutions for participants regarding their primary barriers to physical activity. Motivational interview techniques are used to encourage behavioural change, and specific advice about exercise or community groups are provided if appropriate (Elley et al., 2003).

A randomised controlled trial demonstrated that the GRx is an efficacious intervention in relation to increasing physical activity and improving various aspects of health in previously low active and sedentary adults (Swinburn, Walter, Arroll, Tilyard, & Russell, 1998). Walking is the most popular activity prescribed by GPs, due to walking being viewed as an acceptable, accessible form of exercise, especially for relatively sedentary people. A more recent research example is the Healthy Steps trial which compared the effectiveness of two physical activity prescriptions delivered in primary care – the standard time-based (>150mins/wk) GRx and a pedometer step-based GRx (Kolt et al., 2012). It should be noted that the population group used for this study were low active older adults (>65 years), and therefore results may not be generalised to age groups less than 65 years. For both intervention groups, there were significant increases across all physical activity domains at 3 months, and these were largely maintained at 12 months follow-up. Interestingly, at 12 months, the pedometer step-based GRx group increased leisure walking by 49.6 mins/wk, compared with 28.1 min/wk for the standard GRx, suggesting that pedometers may result in a greater increase in total weekly energy expenditure in those over 65 years.
**Push Play**

Push Play was a media-driven health promotion campaign, initiated in response to recommendations from the national physical activity taskforce, established in 1998, to address the issue of increasing rates of physical inactivity. The campaign used a generic and culturally inclusive message that placed an emphasis on encouraging lifestyle physical activity, and promoting the message of 30 minutes of physical activity per day (Sport New Zealand, 2014).

An evaluation of the Push Play campaign found it was effective at getting health messages across to the public, especially the importance of accruing 30 minutes per day, and an increased intention of becoming active (Bauman et al., 2003). Schofield (2003) points out that there must be more to a media driven campaign than just social marketing, and that it is simply an umbrella under which a framework for creating behavioural change can sit. This author also states that while Push Play was successful at creating an increased awareness of the key messages, and an increased intention to do physical activity, a national campaign of this size should be backed up with appropriate policy, environmental and individual behaviour change infrastructure (Schofield, 2003).

The Push Play campaign has continued to evolve over recent years with a slightly different focus or message emphasised year to year. For example in 2007-08, parents of children were a focus, and resources were developed to educate and encourage adults to be active role models for their children, and assist them in becoming and keeping active. The resources also included information regarding the recommended physical activity guidelines for children and young people; children aged 5 -18 years need at least 60 minutes of moderate to vigorous physical activity each day. Other campaigns have included popular New Zealand celebrities promoting physical activity, and promotional material including wall planners, activity diaries, and information pamphlets. The Push Play campaign has since been disestablished.

**ACC Active Smart**

ACC Active Smart is a more recent initiative that is a web based resource for any individuals who want to increase their physical activity levels. Active Smart have partnered up with other well known organisations such as ACC, Ministry of Health, Sport New Zealand, Heart Foundation, Cancer Society and Fitness New Zealand. It is essentially a health promotion product that was designed by health professionals, especially those in the field of exercise prescription, to make it easy for individuals wanting to initiate physical activity. ACC Active Smart is a user friendly service that allows an individual to choose a particular activity that they are interested in such as walking, jogging, cycling,
swimming or even triathlon. It allows the individual to set goals, monitor training or exercise schedules and record progress and achievements. It is a relatively new resource, and it is likely that individuals and health professionals are still becoming aware of its utility (ACC ActiveSmart, 2014). Certainly, it is a product that is easy to access by all New Zealanders who have internet access, and could act as a motivational tool for males and females of all ages and abilities.

**Health promoting interventions for men**

The literature focused on health initiatives or interventions targeting men have identified some promising examples, however the evidence base for the benefits of these initiatives is still lacking (George et al., 2012; Johnson et al., 2006; McKinlay, 2005; Robertson, Douglas, Ludbrook, Reid, & van Teijlingen, 2008). The literature reviewed highlights a paucity of interventions that have been comprehensively monitored and evaluated, and have shown to have a clear, beneficial impact on men’s health (Johnson et al., 2006; McKinlay, 2005; Robertson et al., 2008). Initiatives and interventions to improve men’s health have been based in the workplace, in community settings and in traditional general practice settings addressing health issues in regards to smoking, diet, physical activity, alcohol consumption, cardiovascular disease, and prostate and testicular cancer (McKinlay, 2005; Robertson et al., 2008). In the UK, there have been several ‘Well Men’s’ health programmes introduced, however the effectiveness of these programmes is not known (Robertson et al., 2008). Community initiatives have generally arisen as a result of primary care initiatives not being successful in attracting or appealing to males, and have included settings such as pubs, betting agencies and sports clubs (McKinlay, 2005). The Men’s Health Forum has tapped into an innovative way of raising awareness of men’s health issues. The organisation has worked with Haynes, a company that publishes owners’ car maintenance manuals, to produce a series of manuals using the analogy of maintaining a car with a man maintaining his body. Over 100,000 copies of the original ‘Man Manual’ were sold through mainstream bookshops and other outlets. Other manuals focus on different aspects of health from a male perspective, including a ‘HGV’ (Heavy Goods Vehicle) manual for overweight men with tailored information on nutrition and physical activity for weight control (European Men’s Health Forum, 2005).

A prominent example that has been monitored and evaluated in New Zealand is the ‘One Heart, Many Lives’ campaign that targeted Maori and Pacific Island men through increasing access to cardiovascular medications for at-risk individuals, and promoting lifestyle changes, especially through the Green Prescription programme (Johnson et al., 2006). The success of this initiative was built around strong branding, and strategic social marketing that aimed to re-orientate health
services to the needs and desires of men (Manchester, 2012). This programme was effective in increasing knowledge and uptake of statins in at-risk men, increasing cardiovascular disease screening, smoking cessation, Green Prescription referral and importantly, created behavioural change (Johnson et al., 2006).

Overall, the key benefits of men’s health activities include raised awareness of health issues, connecting men with health or other support networks, however there is still limited evidence for creating behaviour change (Johnson et al., 2006).

Physical activity interventions for men

A review of the effectiveness of physical activity interventions that have specifically targeted men was conducted by George et al. (2012), and has highlighted a limited evidence base. However, there is some encouraging evidence that physical activity levels can be increased depending on the mode of delivery and certain elements unique to the intervention. A variety of face to face, group-based, internet-based, print-based, community-based or combination approaches have been used, although only a small number have targeted males specifically or presented results separately according to gender (George et al., 2012). Some interventions have also included a nutritional component, and have focused on anthropometrical measurements such as body weight and waist circumference as primary outcome measures, as well as assessing physical activity outcomes. Physical activity outcome measures have included self report questionnaires, physical activity logs or diaries, and pedometers. Several intervention studies used both objective and subjective tools to measure physical activity, and eight studies also measured aspects of physical fitness such as VO₂ max (George et al., 2012).

Interventions that were particularly effective in increasing physical activity and dietary changes were face to face and group-based interventions, especially those that were supervised by exercise professionals. This was attributed to a positive social interaction and an element of competitiveness that males enjoy, and these are considered important traits of interventions that are significantly more likely to see men reach physical activity goals (George et al., 2012). Encouraging ownership of health behaviour by allowing males to set unique goals or designing individualised programmes based on their personal preferences, and encouraging them to make physical activity a part of daily routine rather than viewing it as a prescription, are also considered important intervention characteristics (George et al., 2012). The inclusion of self monitoring tools and social interaction, especially through internet-based approaches that might incorporate social media, may further improve outcome measures by allowing participants to track their progress and find support in other
participants (Buis et al., 2009). Team spirit and social interaction are recognised as key factors that motivate men and reduce disinterest in physical activity, and were recommended as considerations for future interventions (George et al., 2012).

A physical activity intervention that did not particularly resonate with middle-aged men was the use of a pedometer to promote physical activity by achieving 10,000 steps per day (Burton et al., 2008). An evaluation of large community wide physical activity initiative in Australia, the ‘10,000 Steps Rockhampton programme’, indicated that men were less likely than women to use a pedometer. Men in this programme viewed pedometers useful for short term assessment of physical activity, but not in the long term and were less likely to use pedometers on an ongoing basis (Burton et al., 2008). Additionally, most men thought the specifics of 10,000 steps message was not well understood, may be less appealing than time-based recommendations, and may in fact be prohibitive as 10,000 steps was considered a potentially overwhelming number for a sedentary individual (Burton et al., 2008). The male participants in this study were generally aware of the levels of physical activity required to achieve health benefits (30 minutes per day), however there was a belief that physical activity needed to be vigorous in order to be beneficial, a belief that appears prominent in the male population (Burton et al., 2008).

**Summary**

The current research project is intended to evaluate a physical activity initiative involving a small group of inactive adult men. This population group was targeted given the current health status and physical activity levels of New Zealand men, and the aforementioned limited number of physical intervention studies that have targeted males specifically. The objectives of this study were to evaluate the processes involved in co-ordinating the initiative, understanding the attitudes and experiences of the participants involved, and developing a model for a health promotion initiative that appeals to men, and may incorporate a run or walk race series as a key interventional strategy. This health initiative may lend itself to being suitable for future action research cycles that may lead to the development of a health promotion product specifically targeting inactive men.
This chapter provides a theoretical description and justification for the methodological approach used in this study. In order for this study to achieve its intended outcomes, an applied research design known as evaluation research was utilised. Basic measures taken at the beginning of the initiative that included demographic and health information of applicants will be presented in the findings section, however the majority of data collected throughout and following conclusion of the initiative is qualitative in nature. These qualitative data were generated and collected in two distinct stages. Stage one data comprises recorded field notes and reflections documenting the process of initiating and co-ordinating the initiative, as well as the observed actions and responses of participants. Stage two data represent a formative evaluation of the initiative with participants who took part in most aspects, through semi-structured interviews after the conclusion of the ‘Run and Walk’ initiative. Qualitative data generated through both stages were transcribed and later analysed using a qualitative methodology known as interpretive description. This analytic approach was the most appropriate given the real world context of the initiative, and the potential for extraneous variables to impact on the processes, the participants, and the desired outcomes of the initiative.

Also, given the exploratory nature of this research, interpretive description allows for new ideas and potential themes to be generated in relation to the experiences of the men who were involved. Evaluation of this type offers a broad, formative analysis of the initiative overall. The findings from this research may then be used to inform aspects of delivery of future health promotion initiatives that incorporates physical activity and engages men specifically. This research project, like any other, relies on a well-defined theoretical foundation in order to meet its objectives, and be flexible enough to consider the applied setting within which it was carried out. This foundation ensures that the project is credible, produces valuable data, and provides opportunities for worthwhile discussion and recommendations.

**Methodology**

**Evaluation research**

Evaluation research has emerged in recent decades as an important means to assess aspects of healthcare design and delivery. Research examples involving an evaluation approach are wide ranging, including health education and promotion activities, delivering health programmes, and the formulation of new health policies (Clarke, 1999; Koch, 2003). Evaluation research is often presented
as a form of social research, the primary purpose of which is not to discover new knowledge, but to study the effectiveness with which existing knowledge is used to inform and guide practical action (Clarke, 1999; Koch, 2003). While the terms ‘evaluation research’ and ‘evaluation’ may be used interchangeably, Clarke (1999) outlines that some evaluation theorists make a point of distinguishing between the two. Evaluation may be referred to the goal of establishing the value or worth of an action or object; whereas evaluative research is said to take place when scientific methods are employed in the process of carrying out an evaluation (Clarke, 1999). The aims and objectives of each project dictate which evaluation strategy will be used, and therefore each research project will employ different methods based on its needs. As Koch (2003) states, “it is not useful entering the debates surrounding quantitative and qualitative evaluation research, but rather we should ask what is the most appropriate methodology to answer the questions posed?” (p. 233).

Evaluation research has also been described as the systematic acquisition and assessment of information to provide useful feedback about some object (Trochim, 2006). While the term ‘object’ may sound ambiguous, the deliberate use of this term may refer to a programme, policy, person, need, or activity. Additionally, ‘systematic’ is another key feature of evaluation, where the particulars of data collection and analysis allow for judgements to be made about the validity of the data, and the inferences obtained from it. Parton and Stephen (1999) present four types of health programme evaluation that is performed sequentially as a programme is planned and implemented. These are:

- Needs assessment
- Process evaluation
- Impact and outcome evaluation
- Causal evaluation

Each of the stages of evaluation is discussed with reference to their applicability to the proposed study.

**Needs assessment**

The development of a new programme begins with a clear rationale and understanding for its relevance and usefulness in a real world context. Needs assessment therefore represents the planning phase of the project. That especially means understanding the health concerns of the target group, and how the programme will address the gap in current service provision (Parton &
Stephen, 1999). In this project it is providing a physical activity intervention or initiative for inactive adult men.

The Run & Walk health promotion initiative that formed the foundation of this study was not originally intended to be used for research purposes during the initial stages. The initial development of the initiative was in response to having been awarded an academic scholarship from the Men’s Health Trust New Zealand, and also having an interest in the field of men’s health and physical activity. The facilitator (now principal researcher) recognised a gap in service provision, specifically for targeting inactive adult men, and improving health and wellbeing through physical activity. Given the resources available at the time, in terms of carrying out a health promotion initiative targeting inactive adult men, a small scale project was initiated (see Appendix B). It soon became apparent during the early stages of facilitating the initiative, that there was potential for meaningful data to be generated, especially considering the number of applicants and those who enrolled in the initiative.

The literature review chapter of this thesis therefore provides the needs assessment aspect of this evaluation study. Of particular interest is the fact that there have been a limited number of physical activity initiatives specifically targeting men. The evaluation of this initiative became an important project, particularly as a first step in the development of a health promotion initiative that utilises a Run & Walk series. Comprehensive monitoring and evaluation of previous men’s health initiatives has also been identified as an issue, hence again the findings from this evaluation may provide some recommendations or suggestions for similar initiatives in the future or may be used to develop the current initiative further through future action research cycles.

**Process evaluation**

The next stage of evaluation begins after the inception of the initiative or after the initiative has been operating for a period of time. Process evaluation is therefore concerned with ensuring that the programme progresses in the manner originally intended (Parton & Stephen, 1999). On-going reflection throughout the initiative provides clarity and certainty that the initiative is following a desired path and meeting its intended goals. Throughout the course of the initiative, the facilitator–principal researcher maintained an accurate and thorough record of events, including reflective journal entries, important dialogue with participants, and all electronic correspondence with participants, mainly emails. The observational data recorded throughout the duration of the initiative contributed significantly to the pool of data used in the analysis stage. These data were analysed alongside the interview transcripts from participants following the conclusion of the
initiative, through interpretive description, to develop themes linked to the attitudes and experiences of the men who took part in most aspects of the initiative.

**Impact and outcome evaluation**

The conclusion of a health programme or initiative presents another opportunity to assess whether goals or objectives were met. This stage of evaluation is known as impact or outcome evaluation. Parton and Stephen (1999) suggest that impact evaluation is concerned with the short term results, while outcome evaluation examines the longer term results. Following the Auckland marathon event, which represents the culmination of the initiative; all participants who took part in the initiative were invited to contribute their views or thoughts through a face to face interview with the facilitator/principal researcher. Assessing the impact of the initiative through interview provides a lens into the experiences of participants that may help to adapt or modify aspects of the initiative in order to make the initiative more accessible, more informative, and more meaningful to those participants who took part. Participants for this aspect of the evaluation process represent those who applied to take part in the initiative and attended at least the initial meet and greet and health screen, or those who attended most of the training sessions or Unitec Run & Walk series events. Additionally, other applicants who responded to the newspaper article by registering their interest, but did not attend any sessions were also approached as a part of the evaluation. This group represented an important part of the data collection, and learning more about their perceptions and attitudes towards this type of initiative may provide valuable data, especially regarding potential barriers that influence their participation in regular physical activity.

**Causal evaluation**

The stage goes one step further from impact and outcome evaluation by measuring the degree to which the initiative is linked to desired changes in knowledge, attitudes, motivation, and ultimately behaviour and health of the group participants (Parton & Stephen, 1999). Given the exploratory nature of this project, causal evaluation is not plausible. Future action research cycles could provide opportunities for this to occur however.

**Qualitative research**

Qualitative research is a method of inquiry prominent in social science research that aims to gather an in-depth understanding of human behaviour and the reasons for such behaviours (Roberts & Priest, 2010; Thorne, 2008). This type of research gives those interested in a specific area or topic of
study some access to people’s experiences, views, opinions, beliefs, feelings and judgements by asking them either directly or indirectly, and them responding in spoken word or writing. The generation of this data, and the consequent analysis is the task of the researcher, where they aim to make meaning of these words and arrive at some conclusions (Roberts & Priest, 2010). Often smaller, more focused samples are used that allow for a more in depth understanding of the area of interest, with the goal of producing meaningful information or recommendations that can be tested in later research using more empirical methods. The type of data collection methods used depends on the methodology assigned to the research project; however interview is often the most common. Others also include condensing participants into focus groups, again using interview as the primary tool, as well as direct observation, reflective field notes, various texts, pictures and other related media (Roberts & Priest, 2010).

**Interpretive description**

As described by Thorne, Kirkham and O’Flynn-Magee (2004),

“interpretive description is the smaller scale qualitative investigation of a clinical phenomenon of interest to the discipline for the purpose of capturing themes and patterns within subjective perceptions and generating an interpretive description capable of informing clinical understanding” (p 6).

The design strategies in research that utilise interpretive description borrow strongly from other qualitative research approaches including grounded theory, naturalistic inquiry and ethnography, drawing on values associated with phenomenological approaches inherent in the methods of data collection (Thorne et al., 2004). The product of an interpretive description is a coherent conceptual description that develops thematic patterns and commonalities believed to characterise the phenomenon that is being studied and also accounts for the individual variations within them (Thorne et al., 2004).

Often, the intent of other qualitative methods is to generate an entirely original and coherent new truth or metaphor of the phenomenon under investigation, however this would extend beyond the scope of interpretive description. Despite this, metaphors and images may well be utilised as a device for articulating the descriptive and interpretive insights that have arisen through the course of the research. Essentially, the intended products of interpretive description would constitute not a new truth, but a sort of tentative truth claim about what is common in a clinical phenomenon (Thorne et al., 2004).
Methods

This section details the process of facilitating the initiative, as well as how the research theory was applied throughout the project, from gaining ethical approval, to the different types of data collection, and conducting the analysis of the variety of data sources obtained. A detailed account of the process involved in disseminating the data and developing themes and ideas is included, thereby providing evidence of academic rigor, and allowing for trustworthiness of the findings to be maintained.

Registering interest in the ‘Run & Walk’ initiative

Applicants were invited to register their interest in taking part in the initiative following publication of an article (Appendix B) released to several media sources (Unitec staff intranet ‘The Nest’, The Western Leader & Manukau Courier community newspapers), as well as a brief, free advertisement on Radio Sport. The New Zealand Men’s Health Trust was also an active supporter of the initiative given that the facilitator was a scholarship recipient and their ongoing relationship with Unitec.

Applicants responded by email to the facilitator, and many provided a brief description of their current state of physical activity and health, and their reasons for wanting to take part in the initiative. Others just requested more information, not stating any intentions or reasons for their wanting to take part. A generic response email was then sent to all applicants that outlined more information about the initiative. In this email, applicants were invited to attend a ‘Meet and Greet’ session at Unitec’s Clinic 41 that presented as an opportunity to meet the facilitator and other applicants, perform a basic health screen, and provide further information and resources that would confirm their commitment to the initiative. This session was scheduled on a Saturday morning (9am – 9.45am) approximately two weeks following publication of the article and one week prior to the Unitec Run & Walk series race #1.

All applicants were from the Auckland area, and had responded to one of the aforementioned media advertisements. These men had chosen to participate in the initiative at their own will and none of the applicants were known to the facilitator before the initiative commenced. It was intended that up to fifteen inactive men would be recruited for the purposes of the initiative, as this was deemed a manageable number given other study and work commitments for the facilitator at the time.
From applicants to active participants

The official ‘Meet and Greet’ session offered a platform for applicants to meet the other men, as well as the facilitator. Also, it was an opportunity to perform a basic health screen and formally commit to the initiative. Upon arrival, the men provided some basic information including their names, date of birth and contact details. They were invited to provide sizing details for either a T-shirt or singlet (whichever they preferred) that was to be a free incentive for taking part in the initiative. The men were also provided with information about the Unitec Run & Walk series, the Adidas Auckland marathon event, and were provided with a unique code that gave them a 30% discount for entry to the Unitec Run & Walk series. Other resources included a free 10 week training guide for the 5km walk, quarter marathon (10km) and half marathon (21km) races as part of the Adidas Auckland marathon event. There was also the offer of free Osteopathic treatment for participants throughout the initiative, and the men were given a pamphlet detailing information about Osteopathy in general, as well as the Unitec Osteopathic Clinic, Clinic 41.

The facilitator spoke with the men that attended for approximately 15 minutes, outlining the purpose and intentions of the initiative, and the link to improving men’s health through increased engagement with physical activity and exercise. Following this, a basic health screen was performed for all of the men, and this was performed by several postgraduate Osteopathy students. This health screen was important as the current health status of the applicants was not known, and this provided an opportunity to suggest GP referral if necessary before commencing any physical activity. The health screening tool that was utilised was the ‘Men’s Health Pit Stop checklist’, a resource used by health professionals alongside Men’s Health Week in New Zealand. This health screen form assesses health status using a ‘warrant of fitness’ type format, comparing body systems to parts of a vehicle, and providing an overall pass, restricted pass or failed result. This was used as Men’s Health Week had recently been promoted, and it offered a more light-hearted assessment of health status in a comfortable and relaxed setting. This brief interview took approximately 5 – 10 minutes, and the men were given some recommendations whether they were fit to start physical activity or whether they should consult with their GP. The entire session lasted approximately 45 minutes. Given that this session was on a Saturday morning, there were applicants who could not attend for various reasons; however, they were still invited and encouraged to attend the first training session the following week, and were provided with an earlier time allocation in order to complete the health screen as well. Again, if there were any concerns with regards to commencing any physical activity, the men were encouraged to visit their GP. The first group training session was scheduled for the following week, and the men were all emailed with details for this session.
Figure 3: An overview of the ‘Run & Walk’ initiative targeting inactive adult males

**PHASE 1 – INITIATIVE PROMOTION, RECRUITMENT, MEET & GREET, BASIC HEALTH SCREEN**

- Men’s Health Week 11th – 13th June 2012
- Unitec Run & Walk Initiative promotion through local media sources
- Participants register interest through email
- Participant meet and greet, information regarding initiative provided, basic health screen performed 30th June 2012

**PHASE 2 – INTERVENTION: WEEKLY TRAINING SESSIONS, WEEKLY GROUP EMAILS, OFFER OF FREE OSTEOPATHIC TREATMENT AT CLINIC 45, AND UNITEC RUN & WALK/AUCKLAND MARATHON (EVENT PARTICIPATION 16 WEEKS)**

- Unitec Run & Walk Race #1 – Unitec, Mt Albert 1st July 2012
- Unitec Run & Walk Race #2 – Ellerslie Racecourse, Ellerslie 29th July 2012
- Unitec Run & Walk Race #3 – Narrowneck Beach, Devonport 15th August 2012
- Unitec Run & Walk Race #4 – Trusts Stadium, Henderson 9th September 2012
- Unitec Run & Walk Race #5 – Berry Curtis Park, Botany 30th September 2012
- Auckland marathon and related events 26th October 2012

**PHASE 3 – FINAL GROUP MEETING AND CELEBRATION, INVITATION TO PARTICIPATE IN FORMAL EVALUATION**

- Post-event informal celebration of involvement in the initiative with family/friends
- Information and invitations issued to participants to take part in a formal evaluation of the initiative
- Formal evaluation time and location to be advised
The ‘Run & Walk’ initiative

The initiative followed a predetermined pathway (see Figure 4) that was approximately 16 weeks duration. Those who had formally enrolled and were now active participants were sent weekly emails that had several purposes:

- To keep regular and consistent contact with the men
- To provide support and encouragement
- To offer various suggestions for ways to become more physically active
- To provide recommendations in terms of frequency, duration, and intensity of physical activity, with an aim of regularly achieving at least 150 minutes of moderate intensity, or 75 minutes of vigorous intensity physical activity per week by the end of the initiative
- To provide information about upcoming training sessions, the Unitec Run & Walk series events, as well as the Auckland Marathon events
- To provide additional health information or links to health resources relevant to the men.

This weekly email was sent each Monday to the participants that set the goals and expectations for each week of the initiative. Some of the men would reply to the emails with further questions or suggestions, and it became an interactive way of communicating with all of the participants.

Weekly training sessions would take place every Saturday morning at 9am from the Unitec Sport Centre carpark (opposite Clinic 41). Each session lasted between 45 minutes – 1 hour, was pre-planned by the facilitator and followed a simple format. Participants would usually meet 5 -10 minutes early, and sessions would start at 9 am sharp. A warm-up of approximately 10 minutes was followed by the main workout where participants were encouraged to work in pairs or a small group to complete either a walk or run over a predetermined course. Alternative options were also available for those who were not able to complete the full distances. The main workout progressed from 10 -15 minutes to 30 - 40 minutes by the end of the initiative. Any men who finished early were encouraged to perform a warm-down where they would double back and pick up the last walkers or runners on the course at a very light intensity. The session would conclude with 5 – 10 minutes of stretching and group discussion. This was a great source of inspiration for the participants as many different ideas or suggestions would be bought up at this point regarding aspects of individual training, especially in terms of what was working well for certain participants.

The weekly training sessions were substituted with an event each weekend that a Unitec Run & Walk series race was scheduled. There were five events in total, so every three to four weeks the
participants would have the opportunity to take part in one of these events. These events were always on a Sunday morning, and the participants had the option of enrolling online before the event, or they could enrol on the day. The races took place in Mt Albert, Ellerslie, Narrowneck Beach, Henderson and Botany, all different parts of Auckland city. The races varied in distance from 2.5km - 10km at the first event, through to 8 - 32km by the final event. The participants who took part in these races met up prior to the events starting and everyone stayed until the event had finished.

The Auckland Marathon event provided the final event for the 16 week long initiative, with participants taking part in a particular event of their choice. Participation included the 5km walk and 10km run, as well as several participants completing the half marathon (21km) event. The initiative concluded a week after this event with participants meeting up for an informal breakfast to celebrate their achievements. This was also an opportunity for the facilitator to present information to the participants in regards to a formal evaluation of the initiative, and their potential involvement in the evaluative process. No formal recruitment for the purposes of research were used at this point, it was merely used as an opportunity to highlight their potential research involvement.

**Ethical considerations**

Ethical approval was obtained from the Unitec Research Ethics Committee on 13th December 2012 for the period between 13th December 2012 and 12th December 2013 (Appendix B). Specific ethical considerations for this project were necessary, and considered the privacy of information obtained during the initiative, anonymity in regards to participant identity, and participant withdrawal from the study. Ethical approval had different requirements based on the two stages of data collection. Stage one data approval was related to data collected during the initiative, with considerations around the Health Information Privacy Code 1994 (2008), while stage two data approval was concerned with conducting interviews, informed consent and withdrawal procedures.

The initiative was originally advertised as a health promotion activity, and was not initially intended for research purposes. However, from the beginning of the initiative, the facilitator kept an accurate and detailed record of the process for the intentions of later reviewing the initiative. Identification of the initiative as an opportunity to fulfill the requirements of a Master’s thesis, consequently meant any information collected became, under the Health Information Privacy Code (1994), subject to ethical approval before use. The stage one data outlined included facilitator reflections and field notes that referred and identified participants involved in the initiative, therefore could only be used in certain circumstances under the governance of the code. See below:
Rule 10: Limits on the use of health information

(1) A health agency that holds information obtained in connection with one purpose must not use the information for any other purposes unless the health agency believes, on reasonable grounds, that the information:

Section (e)

(i) is used in a form in which the individual concerned is not identified; or
(ii) is used for statistical purposes and will not be published in a form that could reasonably be expected to identify the individual concerned; or
(iii) is used for research purposes (for which approval by an ethics committee is required, has been given), and will not be published in a form that could reasonably be expected to identify the individual concerned. (p. 55)

A formal request was made to use this data obtained from the start of the initiative, and the data were made anonymous to protect participant identity. Stage one data were electronically transcribed and stored in a password protected file on the facilitator’s laptop. All information was also backed up to an external hard drive.

Confidentiality and anonymity of all participant information and data generated during the study were always protected. Participants were advised that any information collected from them during the initiative (stage one) and through interviews (stage two) were to be recorded in electronic or digital form, and stored securely in a password protected file on the facilitator’s laptop. It was outlined to participants that all data collected might be used for the purposes of the thesis; however participants would not be identified directly. Instead, participants were assigned a number that identifies them throughout the findings and discussion sections.

Prior to the commencement of interviews, participants were provided with an information sheet outlining the purpose of the research. This information sheet outlined the withdrawal process, and the interviewer (principal researcher) also reiterated this process verbally. Participants had up to two weeks after the interviews to exercise these withdrawal rights. Participants were also offered the opportunity to read through the interview transcripts and remove or amend any of the information. All of the participants declined this offer.
Purposive convenience sampling

Following the conclusion of the initiative, an email was sent out by a senior Osteopathy staff member on behalf of the facilitator inviting all applicants and participants who registered interest or were involved in the initiative to take part in a formal evaluation (Appendix C). All those contacted were encouraged to contact the principal researcher, expressing their interest in taking part in a formal evaluation, either through face to face interview, Skype or telephone interview. This email was sent on two occasions, approximately 2 weeks apart to all participants. The principal researcher received replies from six of the participants who took part in most aspects of the initiative, expressing their willingness to take part in the evaluation. Four of the participants were able to meet for a face to face interview, one participant was able to do a phone interview, and one other participant responded via email to a written questionnaire. Unfortunately, those that only registered interest in taking part in the initiative, or those that started as participants and dropped out did not reply to the invitation to take part in the evaluation, despite the offer to cover any expenses such as time and travel. Despite this, the small sample size was deemed adequate, based around the principles of qualitative research, where a small sample size allows for a deeper understanding of the social phenomenon under investigation. In this study, the social phenomenon is that of the attitudes and experiences of previously inactive adult men towards a health promotion initiative that incorporates physical activity.

The Interview Process

A practice semi-structured interview was carried out with a peer who was able to challenge the principal researcher, and assist in adapting the interview questions and develop the interview schedule (Appendix F). This practice interview and further refining of the questions ensured that there was greater opportunity for an open discussion to develop with participants. Additionally, questions that were deemed irrelevant or ambiguous were either removed or rephrased within the interview structure. The interview was repeated again in a practice format, in order to ensure quality, and the opportunity to exhaust all possible points of enquiry around each question. Overall, this process was extremely valuable, as it allowed for the development of an interview structure that was coherent, logical and relatively easy to facilitate.

The interviews for four of the participants were completed at the Unitec Post-graduate Centre in a quiet, private space away from any distractions. The participants read and signed a copy of the information sheet outlining the purposes of the research (Appendix D), and then signed the
participant consent form (Appendix E) before commencing with the interview. An audio recorder application on an iPad was used to record the interviews. The four interviews ranged between 33 minutes and 71 minutes duration. Another interview was completed using Skype that was 31 minutes duration, and recorded using the same application. The final interview was not able to be performed face-to-face or using Skype, so the participant responded in writing to several key questions taken from the interview document. Once all interviews had been completed, they were immediately uploaded to the principal researcher’s laptop, and stored in a password protected file. They were also backed up on a password protected external hard drive belonging to the principal researcher, as well as online, through Dropbox. The audio files were made available to Audio Transcription Services Ltd (Wanganui), where they accepted my invitation to share the files stored in Dropbox. These files were transcribed in 2-3 days, and loaded back into the Dropbox folder where I had immediate access to them in an electronic version. The accuracy of the transcripts was audited by the principal researcher, who listened through all of the audio files again, ensuring the transcripts read accurately.

Data collection

As noted above, evaluation of the initiative utilised data generated in two distinct stages:

- Stage one data comprised facilitator reflections and field notes that describe the processes involved in coordinating such an initiative. Other data generated throughout this stage included electronic communications with participants in the form of email.
- Stage two data comprised data generated post-initiative in the form of interviews with men who had varying levels of involvement in the initiative. Six men responded to the invitation to take part in the evaluation.

Data analysis

Interpretive description aims to answer questions of relevance to a certain discipline, and in doing so provides an understanding of elements of that discipline that are considered important (Thorne et al., 2004). In the case of this project, data analysis was focused towards understanding the attitudes and experiences of the men throughout their involvement in the initiative.

The earliest engagement in the data began during the initiative in the form of transcribed facilitator reflections, field notes and electronic communication with participants. Through this process the
facilitator was able to create a documentary of the process of coordinating the initiative, as well as note any changes in attitudes or behaviours observed within and between each of the participants. As recommended by Thorne (2008), it was through this process that the facilitator was also able to document any preconceived ideas or assumptions in regards to what might have influenced the attitudes and behaviours of the participants, and challenge them against similar or other ideas that developed over the course of the initiative, or in later data sets. The interview data obtained from participants at the conclusion of the initiative completed the data collection process. Following the interviews with participants, notes were also made reflecting on how the interview proceeded, or any interesting behaviour or body language observed from the participants. This again is an example of preliminary analysis that can be utilised later in the process for the purposes of challenging emerging themes or ideas. By utilising a combination of data sources as was the case with this project, helps to avoid what Sandelowski (2002, as cited in Thorne, Reimer, Kirkham & O’Flynn-Magee, 2004) refers to as, “a naive overemphasis on interview data alone, combined with a neglect of the material world that does not offer comprehensive and contextualised interpretations of its central phenomena of interest” (p. 6).

Within the body of qualitative methodological literature there exists a wide range of ‘recipes’ to guide the mechanics of the analytic process (Thorne et al., 2004). Despite this, Thorne et al. (2004) note that, “it is essential to recognise that the researcher, not the recipe is driving the interpretation” (p. 11). Following the transcription of the interview data, and given the data was transcribed externally, an audit was conducted to ensure accuracy. During this audit stage, for each participant, additional notes were made during the listening and reading process that helped create a participant profile that was recorded into the researcher’s notes. This profile also documented any demographic information, as well as clinical measures taken at the start of the initiative including height, weight, body mass index and blood pressure. Within this profile, three to five initial themes were constructed from the text and audio. These notes were put aside for further reflection and development of ideas during the data analysis process.

A coding system of some kind is necessary in order to sort the data into patterns, test those patterns for relationships, and conceptualise those relationships into meaningful findings (Roberts & Priest, 2010; Thorne, 2008). After reading the interview transcripts several times, the left hand margin of the transcripts was used to annotate any significant or interesting findings, while the right hand margin was used to note emerging theme titles. Concise phrases within the transcripts that captured the essential quality of each theme were highlighted with a specific colour, denoting its significance to a particular theme or idea. These are techniques that are said to be more consistent with the
evolving thought of interpretive description than the more formal coding systems used other qualitative methods (Thorne, 2008). As themes developed through regular engagement with the data, they were scrutinised even more closely, and potential connections between each of the themes were examined. Verbatim quotes from the transcripts were used to illustrate each theme, giving it contextual meaning.

**Maintaining Rigour**

Rigour was established by employing several methods to ensure the trustworthiness of the project. These methods included keeping a regular journal of reflection throughout the initiative, purposeful sampling, maintaining an audit trail representative of research adequacy, and the testing of themes.

By keeping a reflective journal throughout the initiative that maintained an accurate record of events following training sessions, races and other events, the principal researcher has the ability to reference this data set against the experiences of participants during the analysis stage. This ability to identify assumptions or misconceptions of the researcher is enhanced through this cross-examination, as well as affirm the establishment of prominent links between the data sets that help to highlight emerging themes.

Purposeful sampling ensured that the research participants who had engaged with most aspects of the initiative were recruited for the purposes of evaluation. While it was also the intention of the principal researcher to recruit those who may have only registered interest in the initiative or enrolled but dropped out in the early stages, the priority was to gather information from those who had taken part in most aspects. This way a more thorough evaluation of the experiences of these participants could inform the further development of future related initiatives. None of the research participants were known to the principal researcher before the initiative, and whilst a rapport did develop with participants that may have created potential for bias during the interview, it also allowed for a relaxed, comfortable discussion where interview participants were able to express freely their thoughts about the initiative overall. This type of environment may have influenced the men to disclose their views more openly, as opposed to being interviewed by another individual independent from the process with whom they were less comfortable.

A set of analytic notes were recorded throughout that assisted the process of interpretive description. These notes were recorded in a blank project workbook that included the recording of emerging patterns, the creation of thematic lists and the use of diagrams to visually represent evolving thought. This technique is advocated by Thorne (2008) who states that, “the blank
workbook permits experimentation with a range of representations that can make manifest your evolving thought and enquiry” (p. 153). A process such as this allows for the continued development and refinement of ideas with the benefit of disciplined critical reflection and continual interpretive challenge (Thorne, 2008).

Once key themes were developed, they were then tested by reporting the emerging findings with a peer who had an interest in the research project and was also studying at a Masters level. They were able to challenge the findings and make the researcher accountable for the conclusions reached through discussion and critical reflection. This process also allowed for a ‘stepping back’ from the data analysis to consider other alternatives before finalising the dominant themes and patterns. Additionally, the researcher met regularly with their research supervisors who helped to guide the analytic process and reviewed the findings as well. Their expert review reinforced the accountability of the researcher, in terms of justifying their findings at the end of the analytic journey.

**The Men - Sample Characteristics**

This information is based on data obtained from the registration emails and the initial health screen.

**Participant 1**

*Age:* 50 years

*Ethnicity:* New Zealand European

*Height:* 185cm

*Weight:* 108kg

*BMI:* 32.08 (obese)

*Blood pressure:* 128/91 (medicated)

Participant 1 first heard about the initiative on Radio Sport, and contacted Unitec to find out more about the initiative. He was keen to get involved in the initiative, and re-engage with physical activity as it had been a big part of his life when he was younger. With a sporting background in tennis and soccer to representative level, he was frustrated that he could not perform to the level he used to. Due to work and family commitments over the years, regular physical activity had become less of a priority, with irregular dog walking of 15 -20 minutes maximum being the main form of exercise. He had hypertension and high cholesterol, both of which were medicated. Having just turned 50 years old, and having worked in a sedentary job in the field of property development for a long time, he was keen to join an organised programme that he would have to be accountable for.
Participant 2
Age: 24 years

Ethnicity: New Zealand European

Height: 1.76cm
Weight: 92kg
BMI: 29.77 (overweight)
Blood pressure: 125/76

Participant 2 first identified the initiative from an article in the Western Leader. As a student of sport management at Unitec, he thought it was a good opportunity to train and race in the Unitec series, as well as compete in the Auckland marathon event for the first time. He was studying part-time as well as working part-time for an event management company who organised various endurance events. As a result he had become motivated by those he saw competing in races, and had set a goal of one day running a marathon. He saw the initiative as an opportunity to get motivational support, as well as training advice in a group environment. He considered himself inactive, and had been largely sedentary for several years. He also had a heart condition and wanted to improve his cardiovascular health through increasing his levels of physical activity through running.

Participant 3
Age: 64

Ethnicity: New Zealand European

Height: 156cm
Weight: 84.5kg
BMI: 34.76 (obese)
Blood pressure: 140/85

Participant 3 was an employee of Unitec, and saw the initiative advertised on the staff intranet site, ‘The Nest’. He had been highly active in the past, having been in a defence force, and had interests in archery, canoeing, and martial arts. In recent years he had developed arthritis that affected several joint sites in his body including the shoulders, hips, and ankles. This had significantly affected his quality of life and ability to perform physical activity due to pain and loss of mobility, and he was looking for support and advice to improve his condition. He had gained weight as a result of
decreased physical activity and also working in a largely sedentary occupation. He was also studying towards a Master of Business as well as working full-time.

**Participant 4**

*Age*: 60  

*Ethnicity*: UK European  

*Height*: 1.72m  

*Weight*: 69kg  

*BMI*: 23.57  

*Blood pressure*: 139/80  

Participant 4 responded to the initiative after seeing an article in the Manukau Courier. He was currently active with regular walking, and had an active background in sports, however he felt he need some extra motivation and support. He worked full-time with Fisher & Paykel, and his work was largely sedentary, involving computer work and occasional manual tasks. He often found it difficult to find the time for exercise, but was conscious of the need to be regularly active. He and his wife had completed the Round the Bays event earlier in the year, walking the distance in around 90 minutes. His goals were to improve his cardiovascular fitness to the point where he might be able to run 10km. He mentioned that he lived in South Auckland though, so regular attendance might be an issue.

**Participant 5**

*Age*: 57 years  

*Ethnicity*: New Zealand European  

*Height*: 176cm  

*Weight*: 87kg  

*BMI*: 28.15 (overweight)  

*Blood pressure*: 137/89  

Participant 5 heard about the initiative through his daughter who was studying Osteopathy at Unitec, and who was also training for the Auckland Half Marathon. He had always been motivated by his children to keep active, however, had not been regularly active for many years. His work hours had limited his time for physical activity where he worked as a manager at Placemakers. He had recently been to see his GP who had diagnosed him as ‘pre-diabetic’ and had encouraged him to make some lifestyle changes through diet and exercise. He saw the initiative as an opportunity to re-
engage with physical activity through walking and running, as well as improve his current state of health. He had decided to start with walking, with an intention of progressing to running. He liked the idea of the group training environment, and also the fact he could run on a regular basis in the Unitec race series.

**Participant 6**

*Age:* 36 years  
*Ethnicity:* New Zealand European  
*Height:* 185cm  
*Weight:* 98kg  
*BMI:* 28.65 (overweight)  
*Blood pressure:* 130/86

Participant 6 saw the initiative advertised in the Western Leader, and was motivated by the opportunity to train in a group towards the Auckland marathon event. He worked as a Police officer, and was doing some irregular physical activity in the form of strength training at the gym, however reported his cardiovascular fitness was limited. He had been inactive for several years following the disappointment of missing out on a work promotion that he had trained hard for. This had affected his confidence, and particularly his motivation to keep active on a regular basis. He mentioned he was getting married later in the year, and saw the initiative as a good opportunity to get into better physical condition for the occasion as well. He was also motivated by wanting to run a marathon in the future and saw the initiative as a good starting point.
Chapter Four: Findings

This chapter outlines the main findings from the data analysis stage, with data presented in separate sections. Firstly, basic quantitative measures are presented in a table format that highlights some of the characteristics of all the applicants and those who enrolled in the initiative. Attrition rates for the various stages of the initiative are also presented. Secondly, analysis of the interviews, emails, facilitator reflections and field notes provide information about the process of carrying out the initiative, as well as recommendations from the participants. This information will be utilised to inform the overall structure of the initiative, as well as key components within the initiative itself. Finally, utilising the aforementioned data sources, an exploration of the attitudes and experiences of the participants throughout the initiative resulted in the development of key themes and possible mechanisms that influenced physical activity engagement during and after the initiative.
Characteristics of applicants and participants of the initiative

As the initiative was not originally intended as a research project, only a limited amount of data was collected from applicants, and similarly, from those who officially enrolled by attending the meet and greet/health screen session. These data are presented below:

Table 4: The characteristics of the applicants for the Run & Walk health initiative, including attrition rates from application, to enrolment, to active participants

<table>
<thead>
<tr>
<th>Characteristics of applicants for the Run &amp; Walk health initiative</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants for initiative (responded by email)</td>
<td>33</td>
<td>100%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 24</td>
<td>4</td>
<td>12%</td>
</tr>
<tr>
<td>25 - 40</td>
<td>11</td>
<td>33%</td>
</tr>
<tr>
<td>41 - 50</td>
<td>7</td>
<td>22%</td>
</tr>
<tr>
<td>51 - 65</td>
<td>11</td>
<td>33%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NZ European</td>
<td>21</td>
<td>64%</td>
</tr>
<tr>
<td>UK European</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Maori</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>South African</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Pacific Island</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Indian</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Sri Lankan</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Enrolments for initiative (attended meet and greet/health screen session)</td>
<td>11</td>
<td>33%</td>
</tr>
<tr>
<td>Completed the initiative (most aspects including weekly trainings sessions and events)</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>Participated in the Auckland Marathon event and attended the post-Marathon breakfast</td>
<td>6</td>
<td>18%</td>
</tr>
</tbody>
</table>
This information summarises the health measures recorded during the health screen from those men who attended (n = 11).

Table 5: Health information of the men who attended the health screen event

<table>
<thead>
<tr>
<th>Health measures</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>41.4 (12.7)</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>174 (10.0)</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>90.9 (14.3)</td>
</tr>
<tr>
<td>Body Mass Index (BMI)</td>
<td>28.9 (5.3)</td>
</tr>
<tr>
<td>Blood pressure (mmHg)*</td>
<td></td>
</tr>
<tr>
<td>Systolic</td>
<td>132.8 (6.5)</td>
</tr>
<tr>
<td>Diastolic</td>
<td>84.8 (5.7)</td>
</tr>
</tbody>
</table>

*For some men hypertension had already been diagnosed, and they were taking specific anti-hypertensive medication, thereby influencing actual results.
The health initiative framework

Analysis of stage one and stage two data resulted in many recommendations that could assist in further development of the current initiative. It is likely that several cycles of this initiative would need to be repeated to allow for a more robust design, however these initial, broad exploratory findings may affirm findings from previous research, as well as generate new ideas. These findings are presented in reference to the overall framework of the initiative.

Advertising and Promotion

As the original intention was to recruit only a small number of participants, widespread advertising was not deemed necessary for the purposes of carrying out the initiative. It was anticipated that as a small group was established, other participants might register (family, friends, colleagues) as the initiative progressed. While this was not the case, there were occasions throughout the initiative where a male family member or friend attended a one-off training session or event with some of the male participants.

Several participants commented that it was by pure chance that they actually saw or heard the initiative advertised. However, the advertisement was appealing and appeared to resonate with the men.

“There wasn’t much said in the little newspaper thing. But basically just a running group to get men active, which was exactly what I needed” (Participant 6 p. 5 Line 159 – 160).

“What attracted me first to attend the introductory meeting was an article in my local paper (Manukau Courier) asking for inactive adult males. To a certain degree this applied to me even though I had been doing some exercise such as walking on an irregular basis” (Participant 4 p. 1 Lines 6 – 8).

Radio advertising was mentioned by several participants as a way of engaging inactive men, with one participant suggesting that a text campaign linked to the initiative may be effective in initially getting men to apply.

“I’m good at registering interest, that’s one of my fortes (laughs). The follow through can be difficult but I just thought I needed to do something so I heard about it on the radio and then so I got in touch with Unitec and found out what was going on” (Participant 1 p. 3 Line 73 – 75).
“I think the radio advertising is a good idea. Yeah, texts (pause) a text campaign would work really well incorporated in your radio advertising. So just text a number off and then have someone reply to it” (Participant 1 p. 4 Lines 118 – 121).

Another participant when asked about how the initiative could be promoted responded:

“I think gear up with some sort of radio station, definitely. Again, something like the emailing, perhaps if it’s done through texting, updates on texting. The way the Auckland marathon was run was just, I’ve never done it before and I thought it was fantastic. I mean the whole professionalism of that, but it’s money. That’s money oriented, that’s a business” (Participant 5 p. 7 Line 208 – 211).

Family influence was also mentioned as a factor in committing to the initiative. Again when Participant 5 was asked “What was your main motivational reason for taking part in the group?” he responded by saying,

“My daughter. Yep. And so she said, “Come on Dad you can do this dah, dah, dah”. So that was probably her initially that pushed me into it. I thought “Righto I’ll give it a go”. And also having a shot at the Auckland half marathon. The kids were saying, “There’s no way you can do that Dad”. I said, “I think I can”. So that sort of gave me a determination” (Participant 5 p. 3 Line 77 - 82).

The fact that the initiative involved a group training approach and the opportunity for socialisation alongside physical activity in an all-male environment was a factor that appealed to the men as well.

“I was looking for some support and some help to keep moving, so I though that’s when I’d give it a go. So the whole idea for me was hey, here’s something, maybe I’ll get some support to actually continue on.” (Participant 3 p. 2 Line 48 -51).

“So that’s why seeing the thing about the group was perfect. Because if there’s a group doing it then I know I have to turn up to do it sort of thing. So that was a huge factor that worked in my favour” (Participant 6 p. 5 Lines 153 -155).

There was a perception that this type of initiative might not appeal to younger participants, including University students, and that it was probably more suited to middle aged and older adult men.

“Cause most of them are young, they’re studying, their priorities in life are slightly different. Whereas the older ones who are out there working, their priorities are sort of yeah to get back into fitness ’cause they’ve already got everything else in life settled down” (Participant 6 p. 6 Line 198 – 201).
The fact that the initiative advertised an end goal of competing in a specific event at the Auckland marathon was also a strong motivation for some men. This was mentioned throughout the initiative by the men at the training sessions, and as their fitness and confidence developed, this event started to become more of a talking point on a weekly basis.

“I saw it in the Western Leader. My reason for registering interest was to be able to run the Marathon.” (Participant 2 p. 3 90 – 91).

Having a celebrity male role-model as an ambassador for the initiative was something the facilitator had reflected on that might appeal to inactive men. It was mentioned during some of the training sessions as well by participants, as the Auckland Blues rugby team’s training base was on the Unitec campus, and some of the players were involved in promoting the Unitec Run & Walk series events. Alternatively this role could include someone who has had previous health issues, and as a result of positive lifestyle changes that incorporated regular physical activity, was able to get their health back on track. This person could be utilised to promote the initial meet and greet and health screen as well.

**Meet and Greet/Health Screen**

This event took place at Clinic 41 (post-graduate Osteopathy clinic) on a Saturday morning at 9am. This was the first face to face opportunity for the applicants, and the first chance to formally commit to the initiative. As Table 1 indicates, of the 33 applicants only 11 men actually turned up to this event representing a large gap between physical activity intention and action. Participant 3 commented by saying:

“I think it reflects the willingness for people to want to participate, but then the struggle to get themselves to the start, you know even before the start line. It’s a real struggle for men, more than I suspect for women” (Participant 3 p. 4 Lines 123 -125).

The facilitator had reflected on the gap between registration and attendance, citing that more incentives may be needed in order to get men along. As mentioned, having a prominent male role model who was the face of the initiative, who could also speak to the group was a possibility. Additionally, incorporating other stakeholders and sponsors to support the initiative and this event, such as the Men’s Health Trust New Zealand, Heart Foundation, Cancer Society, Unitec Institute of Technology and possibly a footwear retailer (eg Shoe Science), might also be of benefit. The opportunity to win some spot prizes at this event that might also facilitate more interest in
participating in the initiative, such as free entries into Unitec Run & Walk series races or Auckland marathon event or a voucher for free a pair of running shoes.

As this was in the middle of winter on a Saturday morning, the facilitator had reflected on the possibility that men may have been involved with work or family commitments, possibly including children’s sport for parents. Illness around that time of year was also considered as an issue likely to affect participation, however it was felt that those who were not fully committed to taking part in the initiative might well use these barriers as an opportunity to drop out.

Creating an awareness of the positive impact of physical activity on health and wellbeing, and how it might be of specific benefit to men’s health was mentioned at weekly training sessions as a factor that might result in more men actively engaging in this type of initiative. The consensus from the group of men was that this message should be promoted right from the outset, alongside the opportunity to take part in the race series and marathon events. There was a belief that men in general did not prioritise physical activity and did not fully realise the potential health benefits.

Goal setting in the early stages of the initiative, possibly at the health screen, as well as throughout the initiative, was something that was mentioned that could have been incorporated and might have helped to facilitate adherence.

“...whilst there was a goal at the end, it would have been really interesting to make people more accountable in their goal setting earlier on. So, you know, what makes you think you’re going to be able to do that? How do you think you are going to get there? ‘Cause it think it reflects probably a lot on their personal lives as well” (Participant 1 p. 5 Line 141 – 144).

“Just sitting down having a chin-wag with everyone seeing where they are, what their comforts are, what they are not happy with” (Participant 6 p. 8 Line 254 -255).

Any physical measures taken should be simple and easy to understand. The opportunity to take away results (eg carbon copy) as something tangible from this event was also proposed by the facilitator, especially in a format that could be added to with follow up assessments later in the initiative.

In terms of physical fitness testing, initially there should be nothing too complex or too strenuous. The facilitator had reflected that a fitness test such as a timed run (eg 12 min run test) could be utilised to assess fitness progression, however it was felt that too much too soon might put

---

2 Physical fitness is operationalised as “a set of measurable health and skill related attributes that include cardiorespiratory fitness, muscular strength and endurance, body composition and flexibility, balance, agility, reaction time and power” (Garber et al., 2011)
individuals off. The main goal, especially in the initial weeks, was for participants to turn up to the training sessions and participate at a level they were comfortable with. Once participants had reached a certain point within the initiative, and had experienced success in terms of attendance, completion of training sessions with the group and individually, then some level of physical fitness testing could be incorporated. Participant 1 reinforced this notion.

“You can overdo it though. Going back to where we were at the beginning, which is if you do too much too early people just find it too overwhelming” (Participant 1 p. 6 Line 17 -172).

An emphasis on footwear was also mentioned as a possibility during this initial session, as men may not have had appropriate footwear for the initiative. Understanding individual footwear requirements and even completing a shoe fit could be useful. The facilitator had also reflected on the fact that some men in the initial training sessions had turned up in old shoes that might not serve them well for the duration of the initiative. It was thought that an investment in a pair of new shoes might also help facilitate adherence during the first few weeks.

“The biggest thing with running I have found is good shoes, the shoes have gotta match your feet basically. So maybe even a visit to somewhere like that to get everyone [pause], get them to suggest what sort of shoes to wear, how they walk, how they run, stuff like that. So they get an understanding of what’s happening down there basically” (Participant 6 p. 10 299 – 305).

**Weekly training sessions**

The weekly training sessions occurred each Saturday morning at 9am from Clinic 41. For the first 3 - 4 weeks, participation was relatively consistent, and a regular group of 8 – 10 participants turned up. The facilitator received either an email or text from those who could not make it, with illness or work cited as the main reasons for not being able to attend. By week 6, participant numbers had dropped to 6, and a core group had developed who appeared very committed to the initiative. Others who had participated up to that point, but had missed a few sessions dropped out of the initiative by week 6. Even after following up with email or text message, these men did not re-engage with the initiative.

This remaining core group was consistent in their attendance for the remainder of the initiative. Training sessions that started off with a cumulative total of 15 – 20 minutes of moderate intensity physical activity, progressed in duration/intensity as individual cardiovascular fitness developed. Some individuals who started as walkers developed to a point where they could run comfortably as well. Two of the men remained as walkers for the duration, where Participant 3 as a result of
extensive arthritis, was limited on occasions by pain. By the end of the initiative, training sessions
had progressed to 40 - 45 minutes of moderate to vigorous intensity physical activity. The facilitator
either ran or walked with one group, or rode a cycle and supported both groups. With a larger
group, more support would be required, and several facilitators may be needed. Participant 5
reinforced this where on occasions he was the only walker present.

“I think that for me, rather than maybe it could have not be just [facilitator] but maybe, and I’m just
saying maybe, there was someone that I could have worked with, and I think we talked about this
once before where instead of you having to do two groups then maybe there was somebody else that
could work with me with walking and therefore provide the support that I wanted and needed; and it
was needed rather than wanted – needed was the key thing” (Participant 5 p. 3 - 4 Line 99 – 104).

Weather throughout the duration of the initiative was mostly fine, however, poor weather that
included wind and rain did not deter the group from taking part in training sessions or events. There
was a sense of commitment and accountability between the men that was reinforced by pairing men
together of similar ability and exchanging mobile phone numbers. Men were responsible for each
other in terms of attendance with this arrangement, and there was a feeling of not wanting to let
the others down by not turning up.

Training sessions were based around a simple structure of warm-up, main session, cool-
down/stretch and discussion. The main session primarily involved a run or a walk over a
predetermined course, with the facilitator working with different groups on different weeks. Several
participants commented on these sessions:

“Yeah initially I found it quite hard physically. But yeah it was quite good like having the training
group as well just for the support and then as it went on it got a bit easier and then sort of
introduced Mt Albert and yeah that was a real challenge” (Participant 2 p. 6 171 – 173).

“Me personally, I felt it was good coming in on a Saturday morning and not knowing what we were
doing and leaving from here we had lots of options too, so it was really good.” (Participant 6 p. 13
Line 408 -409).

One participant commented about how challenging the sessions were, especially given his extensive
arthritis:

“I found them hard. I found them pretty uncomfortable at times. Some days I felt really good, other
times I had quite a bit of pain in my ankles. In fact, there were some days where we turned around
and just went back again... [break in paragraph]... Intensity was great. The intensity was just right,
Yeah absolutely it was just right. No problems with the intensity. It was just my ability to do it that was the problem [due to arthritis] (Participant 3 p. 6 Line 179 – 186).

It was also commented that perhaps more variety of exercise could have been included, especially as individual’s exercise tolerance improved:

“The other thing I would probably say is because I’m doing Crossfit now, is that there is a combination of, [pause] you know we did running and that has its benefits but now that I’ve done quite a lot of Crossfit, I see the benefit of light weights and doing other types of cross-training. The benefits are just huge” (Participant 1 p. 3 Line 91 – 94).

“Maybe even look at doing just one or two sessions of sprint training. I’ve tried to do that myself a couple of times [...] from what I understand it’s meant to be really good for you as well instead of just doing continuous long distances. But what we were doing was great ’cause it slowly built us up” (Participant 6 p. 13 Line 413 – 419).

**Participant communication**

Email and test message were the primary modes of communication between facilitator and participants. The content of the emails were based around support and encouragement, educating about time-based physical activity targets for health and wellbeing, providing a weekly training structure, and providing links to other health or fitness related websites. Information about the upcoming Unitec series races, and results of those who participated were also included following each event. Text messages between participants and the facilitator were also an informal way of keeping in contact during the week and passing on any information.

Participants had mixed views on the weekly emails, and some felt that text messaging might be a better format for men as it is quick and easy to access. The on-going communication was cited as something that was necessary though:

“They [emails] were useful because it continued to re-engage me in what I was doing and the training that needed to be done. There was also some technical bits and pieces that was integrated in them, so that was quite good. But I think it’s really important that you continue to communicate during that process” (Participant 1 p. 7 Line 214 -217).

“Yeah from the point of view of information, I mean for the other guys it must have been great, but for me it was stuff that I did know, so it was just a re-hash. It was good, I enjoyed it. I looked forward to those emails” (Participant 3 p. 7 Line 207 -209).
Other participants felt differently about the utility of the emails:

“Sometimes I thought it was a bit of information overload” (Participant 4 p.1 Line 13).

“See again it depends at what point did I read my email? Technology, people believe that you send an email and people read it straight away. Not necessarily, they might read it two days later. They might read it at night time when they are tired. So, “Oh yeah just another email” (Participant 5 p. 8 Line 250 - 254).

Alternatives for communication including a specific website and connections to social media websites such as Facebook and Twitter were mentioned as possibilities, although participants preferred the personal touch that came with email and text message.

“The best way is talking and that’s the way I was taught. But its technology again, like I said, probably yeah texting is probably a bit more direct, yeah” (Participant 5 p. 8 Line 258 – 259).

“...and I think doing a website is once again non-personalised and it loses the whole emphasis on, hey, what are you doing, what are you accountable for, that you get from being in a team, that you get from regular contacts like you were doing with the emails” (Participant 1 p. 8 Line 264 -267).

The physical activity recommendations were regularly cited in the weekly emails as a target of achieving 150 minutes per week of moderate intensity exercise or 75 minutes per week of vigorous intensity exercise. These recommendations were recalled by several participants:

“Motivating us to keep up the 150 minutes I think it was a week of exercise, so not just what we did on the Saturday but stuff in our own personal time as well. So you were reiterating that and how it’s important.” Participant 6 p. 15 Line 493 -495).

**Complementary Osteopathic treatment**

The opportunity to utilise free Osteopathic treatment throughout the initiative was considered as an added incentive for participants. Many of the men were unfamiliar with Osteopathy and initially were not sure of the benefits that it might offer. Some of the men utilised this service:

“Oh very useful, yeah I think so. I think being introduced to why things are the way they are is very useful. When I say things I’m talking about muscles” (Participant 1 p. 10 Line 328 -329).

“Oh shit yeah, especially if someone hasn’t done much physical activity before. They haven’t experienced aches and pains and stuff like that, so it’s gonna compliment them so they can maintain
it. Whereas if on the other hand they didn’t, they might hurt themselves and think “Oh well my body’s not capable of this”, and not do it.” (Participant 6 p. 23 Line 696 – 699).

All of the men interviewed felt that it was a good idea to have a health service, such as Osteopathy, alongside an initiative like this.

**Unitec Run & Walk series events**

Participation by the men in the Unitec series was minimal during the first two to three events, however, as a core group of six participants and a positive rapport between the men developed, participation almost became mandatory. There was an expectation that the men would turn up to these events, and it was only unless someone had other significant commitments that they did not take part. The men would talk about the upcoming events at the end of training sessions and discuss what event they would enter and encourage each other to participate.

The men often talked about their involvement in these races, and how they had gained some really positive experiences. The men appeared to gain a lot from seeing each other overcome their challenges, as well as other participants, and the facilitator had reflected on this camaraderie that had developed at the events. As these events were of a much smaller scale compared to the Auckland marathon event, it was also much easier for the group to meet up before and after the races.

“It was quite cool, it was like a common thing for people to come together. It was very cool. Like I say just need obviously a few more people to do it. But there are all shapes and sizes and people do it for different reasons. I’d definitively do it again” (Participant 5 p. 9 Line 272 – 275).

Definitely well run. Good locations for them. And they offered a little bit for everyone. So the range of distances was there. So no they were really great. And it sort of gives you the desire, I guess you could say, to want to do the other ones as well” (Participant 6 p. 21 Line 647 - 649).

In contrast to the Auckland marathon event, where quite a negative experience was reported, Participant 3 commented:

“No the guys were there and I crossed that finish line and the guys were there, and I didn’t have that same feeling. It was a tremendous camaraderie that built up on the day and I felt really good about that when I finished that. But that crossing the finish line on that marathon with all those people there, and I was on my bloody own. I felt terrible” (Participant 3 p. 8 Line 245 -249).
Adidas Auckland marathon event

The men enjoyed the build up to the marathon, especially taking part in discussions around nutrition, clothing choices, pacing and even the logistics involved in taking part in an event of this size. It was clear that this was a new experience for all participants, and all involved were open to taking on board any advice in terms of training and racing preparation from the facilitator and each other.

“It was great as people started to talk about what was working for them, and how their training was going each week. We got talking about different things and that helped settle the nerves. I mean, none of us had run that far before, so any tips were valuable” (Participant 4 p. 6 Line 182 – 184).

The main goal for this event was completion and all of the men finished their respective events. Four of the men completed the half marathon distance, one completed the 10km event, and one completed the 5km event. The sense of achievement was evident after the Auckland marathon event for the majority of those who took part. It was the first time that participants had ever experienced an event of this scale, and they were very impressed by the professionalism and organisation of the event.

“Like I say, just going to it, it blew me away the amount of people at the different events. Leading up to it, that blew me away” (Participant 5 p. 8 Line 265 - 270).

As mentioned in the previous section, Participant 3 was the only one to have a negative experience with this event, especially as he felt the shorter events were not well recognised.

“That’s the other thing [facilitator], you see for me, the Auckland marathon, the running was the official event. Now for some people, me included, that walk including the Unitec Run & Walk series was a challenge for me to get over. The fact it was not being recognised by the Auckland marathon as an official event I thought was bad because there would have been a lot of people doing my walk, who was just as much a challenge as what those people were that did the full marathon, half marathon and quarter marathon” (Participant 3 p. 8 Line 235 -241).

All of the men who took part in the event, turned up for the post-Marathon breakfast. There was a real sense of pride and achievement, and the men were eager to share their experiences, as well as hear the stories of others. At the post-Marathon breakfast, the men shared their stories from the event. While some of the men felt that they could have done more preparation for the half
marathon event, they were very pleased they entered, and felt that it was an achievable distance given the timeframe of the initiative.

One of the men turned up with a running event calendar to this breakfast, and was already targeting some further events over the summer, including another half marathon. There was an interest expressed by the group to continue the weekly training sessions by attending a weekly 5km ‘ParkRun’ event at Cornwall Park. This event was free to enter and was run at 8am each Saturday morning.

Overall there was a feeling that the initiative was useful in providing a starting point for inactive men, and the key ingredients were there for it to be developed further. The initiative was regarded as a good ‘on-ramp’ back into the fitness and health arena, and at the conclusion of the initiative, it may be useful to have a range of ‘where to next?’ pathways for participants. This might mean introducing alternative ways of keeping physically active, or providing information about different clubs or groups in the Auckland area.

Participant 3 commented by saying:

“I think the approach is right in that it’s a reintroduction and I think rather than have it be men’s fitness or anything like that, it’s more a reintroduction to men’s fitness. I mean there’s only so much you can drag people along to you know, you can’t hold their hand forever. So reintroducing them to the new technologies of physical activity now is the right place to be, but it’s so encompassing that people have to want to do it themselves outside that” (Participant 3 p. 7 Lines 222 – 227).
Introduction to Themes

The main themes that were developed through the data analysis process are described in further detail in the next section. Due to the broad nature of this evaluation, a deep, in-depth analysis was not possible, and as a result more superficial findings are presented. Despite this, three key themes were evident in relation to the development of a health promotion initiative that incorporates physical activity and specifically targets males. These themes are Simplicity, Goal Setting, Support and Comradeship. All of these components potentially combine to help drive behaviour change, especially by making individuals accountable for their actions throughout the process.

Figure 4: Key components for creating behaviour change through participation in a ‘Run & Walk’ initiative targeting inactive adult males.
Theme One – Simplicity

The majority of participants in this study were all inactive prior to taking part in this initiative – that is they were not meeting the recommended physical activity guidelines for the maintenance of health and wellbeing on a week to week basis. All participants had been active at various stages of their lives, however due to different circumstances were not active prior to starting, and had not been regularly active for some time. Most could recall a certain point in time where their physical activity levels had declined.

Participant 6 spoke about his disappointment at missing out on a job promotion in the past after working hard to improve his physical fitness in the Police force.

“So yeah I’d failed which meant I was on a plane back to Auckland that day, which was fine. That took a huge knock to...it wasn’t my ego. Yeah a huge knock to the spirits basically. So after that I lost focus, lost motivation, everything just gone out the window. So I didn’t do any training literally after that” (Participant 6 p. 3 Line 71 – 74).

Participant 1 also spoke strongly about how he used to be really active in his younger years to a competitive level in different sports, but due to work and family commitments had not prioritised physical activity.

“I guess it was something that because of growing up right into my young adulthood had been such an important part of my life. I knew it was important, but it was getting past the first, initial hurdle. Unless you’ve been there it’s really hard to understand how hard it is to get started when you’ve been very physical, then non-physical, and then you look in the mirror and you go, “Oh my God, who’s that guy?” (Participant 1 p 2 Line 50 - 54).

For various reasons, the men cited how difficult it was to become active again, with many having made several attempts in the past, but not sustaining their efforts. Becoming regularly physically active again was cited as a difficult and daunting prospect, and for this reason many of the participants suggested that keeping the initiative relaxed, informal and relatively simple was the best approach. It was easy to become overwhelmed with too much information or training sessions that were too complex. Especially in the early stages, if something was perceived as too difficult, then it was felt that men would be more likely to drop out:

“Just keep it as laid back as possible though, I guess in general males don’t like being told what to do, so just keep everyone involved but keep it nice and relaxed, informal. If people want to contribute,
cool, if they don’t then hopefully they will get something from listening” (Participant 6 p. 12 Line 374 -376).

“I know you started off with quite a few and a lot of people pulled out for various reasons but probably initially maybe a slight pattern change on how one talks to people first off to get them involved. And maybe they need a bit more; certain people need a bit more carrot at the end” (Participant 5 p. 11 Line 346 -348).

Living in a large urban environment, such as Auckland, also made it more difficult to commit to becoming regularly active, especially with time barriers as a result of work and family commitments.

“You know, that’s the thing, everyone’s got different schedules and different timelines, it might not necessarily work for other people. But it worked for me and that’s probably where you get the dropout from is because of their timelines. We’re in different environments as far as things are happening in our lives. Your wife might be sick, you might be sick yourself and it changed your whole thinking pattern of getting into the routine of fitness” (Participant 5 p. 4 Line 133 -137).

It was this perceived difficulty to re-engage with physical activity where the men felt that too much too soon could easily be too overwhelming. Simplicity, especially in the early stages in terms of communication, physical fitness and health measures, training sessions and information should be prioritised. Any additional health information provided needed to be concise, relevant and from a source of trusted information. Messages that were too long or too difficult to access were not deemed useful. Simple messages, especially those sent as a text message resonated well with the men.

“Yeah, just two or three, you know weight, blood pressure, maybe even that one where you have to blow in the bloody tube – volume. Yeah just simple ones that people can get really instant gratification and feedback from before you go to the measuring stage” (Participant 1 p. 6 Line 174 – 178).

“So simple messages - trusted and beneficial. Stuff like that would definitely be, I’d say appreciated. Saves people trying to find a good one through all the rubbish basically” (Participant 6 p. 16 Line 518 -520).

More variety in terms of training strategies could be incorporated that again are relatively simple and easy to replicate away from group training sessions. These could include simple body weight resistance exercises or alternative walk and run programmes that are not just a constant intensity level (eg interval type training). Many individuals were also not aware of new technologies that
could be utilised to record training session data, and could actually provide motivation and help facilitate adherence. Mobile phones and associated fitness and exercise applications that could be downloaded were increasingly used by participants, and became a talking point at training sessions. Participants were utilising a range of applications that recorded aspects such as actual distance, speed, time, and elevation. Again these were training tools that were regarded by the men as relatively simple to use and easy to access.
Theme Two – Goal setting

Especially in the initial stages of the initiative, goal setting was identified as something that should have a high priority, and was likely a critical element in helping facilitate adherence. The goal setting was deemed necessary as men needed to have a clear vision of why this was important to them and where they wanted to go with their health and fitness. It was clear from the participants that this goal setting should occur early on, with regular monitoring throughout the initiative. These goals should be re-visited throughout the initiative in order for men to see and review their progress and make them accountable in instances where there is a lack of progress. Participant 1 re-addressed the importance of goal setting on several occasions.

“I think by making them accountable by just saying, what do you want to achieve in a month’s time? Someone will say well I’ll run 5km and then you can set that up as a goal and say OK well this is how all of those who chose 5km as their first goal, this is how you’ve got to do it. And then when you talk to them next and they haven’t done their training you can say well I thought we were going to do 5km, we’re on track to do 3km? Is that what you want?” (Participant 1 p. 5 Line 147 -151).

“Yeah, I think early on goals. The first goal of the first week would be to turn up to the first training and that’ll get a breakthrough for you. And then the next goal, when you get them to the first day of training you go, “Now the goal today is we’re going to exercise continuously for ten minutes”, and that’s it and then you’re going to talk about how that felt. So for a lot of people you’ll mention the word physical activity and they go, “Holy shit that means running for an hour”, so they don’t want to do that. They don’t realise that if they can break it into little tiny wee chunks and then bite off more as they feel capable, then they make the most progress” (Participant 1 p. 8 Line 329 -246).

Others also mentioned goal setting as something they would have liked to have had the opportunity to do more of.

“Yeah, yeah I think it is. Particularly a questionnaire, just to assess where you are, where you’ve been and where you want to go” (Participant 2 p. 5 Line 145 -146).

Participant 6 also commented about goal setting, not only in relation to overall outcomes by being involved in the initiative, but also in regards to each individual and group training session and having strategies to help get you through difficult patches where motivation or energy levels may be low:

“So maybe even some mental tips as well for training, you know how to focus on; if this is your goal, make lots of little goals. Just things like that. [...] Otherwise if we’re just aiming to go for a run, then
yeah we’ll go for a run, but we’re not engaging the brain so we can run and push ourselves”


Through participating in the initiative, it was evident that with the majority of the men, as their exercise self-efficacy increased, this was beginning to influence other aspects of their lives. At some of the training sessions, men began to converse about some of the other positive spin-offs as a result of being more active. Individuals talked about their weight and their clothing and how others have commented that they had lost weight and were looking really good. Others talked about their increased productivity at work and home and generally having a more positive outlook on life. Some of the discussions became quite philosophical, and began to centre around other health-related behaviours including the importance of exercise, nutrition and sleep. There were discussions around setting other health-related goals such as reducing fast food intake, increasing water intake and getting to bed earlier before training days.

The events were a good way to measure progress and the men liked how the events were held at different locations and gradually increased in distance each time. Having an end goal such as the Auckland Marathon event was motivating, and as the end goal approached, there was an increasing sense of accountability for individual training sessions, as well as group training sessions.

“If I keep setting a goal in front of me then I know I’m gonna do it. So when these Unitec ones start up again then they’ll be my carrot and I’ll start focusing on those again, and hopefully deciding on what my ultimate goal wants to be” (Participant 6 p. 24 Line 749 – 753).

There was a sense that as the initiative progressed, the participants were taking increasing ownership for their training, and a shift of balance was occurring, where the initiative was becoming more participant driven that facilitator driven. One of the participants mentioned the possibility of getting the men to plan and organise some of the training sessions so that they can take ownership of the session and create their own unique training route.

“So yeah get the group to start taking ownership for it as well. And that way if [facilitator] is not there it can carry on. So if [facilitator] is out of Auckland or something, which unfortunately happened once or twice, we could still turn up and we’d still run. So you’d know it was taking a life of its own sort of thing” (Participant 6 p. 17 Line 578 - 582).
Theme Three – Support and Comradeship

Right from the start of the initiative, it was clear that the men enjoyed socialising with each other as a function of the Meet and Greet, as well as training sessions and events. From the introductory session, men were invited to share some information about themselves and why they had chosen to register their interest in taking part in the initiative. This was cited as a really useful activity as it gave the men an opportunity to share something personal about themselves, and for others to understand why this was an important step for them.

“I think being a guinea-pig in a situation where you have to be accountable is quite a good way to approach it. I mean it was good to see all those other people and those guys talk about how unfit they’d been and how much exercise they don’t do. So because you can be a bit of an island and so you don’t...you see other people who are overweight and clearly don’t train, but you don’t know them and you don’t know their circumstances, so it’s quite interesting to do that” (Participant 5 Line 135 - 140).

The men were quite open during discussions, especially in regards to their struggles with physical activity. It was evident from these discussions that support was one of the main reasons they had registered interest, and a group environment that the initiative provided was a good place to start. There was a sense that the support was critical during the early stages of involvement, both from the facilitator and the other participants.

“I’ve got to be honest, running for me is the most boring thing on the planet, I hate running, it’s like watching paint dry, but I knew I had to do something to move me from where I was and so that was a good pathway to get started. And so that has been the most rewarding thing out of it” (Participant 1 p. 9 Line 302 -306).

There was also a sense that the men did not know where to start in regards to re-engaging with physical activity, and that because there was so much information and so many possible options, particularly on the internet, it was all too hard. Having an initiative that provided focused support, regardless of the fact that it may not have been their preferred activity type, was easier than having to start a new routine individually.

When asked what he had anticipated the initiative would provide, Participant 2 commented by saying:
“Yeah just quite a lot of support and a training programme supplied. Yeah. And the group as well. So at the end I wouldn’t rely on other people” (Participant 2 p. 4 Line 108 -109).

Other participants voiced similar opinions.

“I thought it would provide me with the support to actually get a little bit more active than what I was, and it was support more than anything else that I was looking for” (Participant 3 p. 3 Line 81 - 82).

“I think when you exercise by yourself, until you get to a reasonable level, the difficulty is that it is very easy to give up rather than complete anything” (Participant 1 p. 3 Line 80 - 82).

As the men became more comfortable with each other, and as a core group developed, they began to interact with each other more in the emails, with conversations being light-hearted and containing messages of support. The men began to text more regularly between each other and the facilitator, and genuine friendships developed.

The atmosphere at the training sessions and events was really positive, and it was evident that the men were there to not only work towards their own goals, but also help to assist others in reaching their goals. At the conclusion of each training session or event, the discussions were based around individual experiences, the highs and lows of participating, and new knowledge that had been gained. This new knowledge was freely exchanged, and it was like each participant had their own ‘war story’ that they wished to share.

For Participant 3, his physical limitations meant that he often was left working with the facilitator during training sessions, and this feeling of isolation from the rest of the group had a negative impact for him. His desire to participate and socialise with the other men was strong, however his physical limitations affected his ability to do so on most occasions.

“I don’t like working on my own, I’d much rather be with other people. But the problem was that when it actually came to doing it, everyone else was running. I couldn’t run, I could only walk, so for me that was another frustration” (Participant 3 p. 3 Line 87 – 89).
Chapter Five: Discussion

The following section discusses the findings of this project in reference to the literature, and makes recommendations for any future action research cycles for this current initiative or others that utilise physical activity and specifically target men.

It was clear that even with a small amount of media exposure, an initiative of this type still illuminated some interest from a potentially ‘inactive’ male population in the Auckland area. Several key aspects of the initiative were identified as important by the research participants, and these findings might have relevance in the shift from ‘contemplation’ to an ‘action’ stage of physical activity participation. While the factors that govern physical activity participation can be complex and dynamic in nature (Sherwood & Jeffery, 2000), by using certain marketing and promotion strategies, and providing an environment and structure that is deemed to be acceptable, legitimate and beneficial by men, then an initiative of this type may be successful in the future.

The initiative framework

Advertising and promotion

One of the key findings of the project was the importance of firstly capturing the interest of inactive men, especially those who were in the ‘contemplation’ stage of physical activity participation. Designing an initiative or intervention that is attractive to a wide male audience is critical, as is the delivery of promotion. Advertising or promoting the initiative through various types of media, especially radio, is necessary in order to attract appropriate numbers of men. Also, by minimising initial barriers to registration or sign-up, this may help more men to register for these types of health promotion initiatives. The men in this research project identified that this aspect was important, and that a text-to-register feature may easily allow men to make the initial step.

“I think the radio advertising is a good idea. Yeah, texts. A text campaign would work really well incorporated in your radio advertising. So just text a number off and have someone reply to it” (Participant 1 p. 4 Line 118 – 120).

Increasing accessibility to initial registration by utilising a fast yet simple method such as texting could be critical. Basic details such as name, age and email address could be could be texted to a number, that would be followed up with an email, welcoming the men to the initiative and that also captured further information via a short questionnaire. This could include demographic and health
information and importantly, information in regards to exercise self-efficacy. Including a self-efficacy questionnaire would mean that those identified with lower self efficacy scores could be identified and targeted during the early stages of the initiative, and specific strategies could be put in place to support these men. This email could also include information about an official launch that included relevant speakers, spot prizes and an opportunity to perform a basic health screen.

Self efficacy is regarded as one of the most important predictors of a number of health behaviours, especially physical activity behaviour in healthy adults (Ashford et al., 2010; Sherwood & Jeffery, 2000). Self efficacy is predictive of both the adoption and maintenance of physical activity and therefore should be a specific target for intervention studies or health promotion initiatives (Sherwood & Jeffery, 2000). In a recent meta-analysis of lifestyle or recreational physical activity interventions that specifically targeted self efficacy in order to change physical activity behaviour, some interesting findings were noted (George et al., 2012). In particular were those techniques or strategies that were utilised in intervention studies that were successful in creating behavioural change compared to those that were less successful. As mentioned previously in this thesis, vicarious experience and feedback or comparison on past or others performance produced significantly higher levels of physical activity self-efficacy than interventions where these techniques were not included. Conversely, interventions that used verbal persuasion, graded mastery and barrier identification techniques produced significantly lower levels of self efficacy. This is important as many of the latter techniques are often used, although their effectiveness is questionable. Goal setting and barrier identification is a popularly cited tool for promoting self-efficacy and especially for interventions including men (George et al., 2012). This was something that was mentioned by the men in this research project:

"Just sitting down and having a chin-wag with everyone seeing where they are, what their comforts are, what they’re happy with” (Participant 6 p. 8 Line 254 - 255)

It has been suggested that men do not find lectures on health and lifestyle choices to be beneficial, therefore encouraging the development of more individualised goal setting or programme structure in the early stages of the initiative would be beneficial (George et al., 2012). Goal setting was one of the main themes identified in this research, and this confirms that perhaps men more than women require this intervention strategy. Techniques such as barrier identification may not necessarily be ineffective either, it may just be how these techniques are delivered. For example, using a motivational interview approach that focuses on the reasons why physical activity or exercise in not possible, could be re-focused to address what is necessary to create behaviour change in the context of an individual’s overall lifestyle (Ashford et al., 2010).
Having a prominent male ambassador as a recognisable face of the initiative, that is someone who is deemed legitimate and popular within the male population may also be of benefit. It is important that this is a figure that inactive men could relate to, and who themselves may have had to overcome similar weight or health issues. An example would be someone like Wayne ‘Buck’ Shelford, ex-All Black captain and co-author of a book entitled ‘Buck Up: The Real Blokes Guide To Getting Healthy and Living Longer’. Having overcome a cancer diagnosis in 2005 and battled with weight issues that saw him grow to over 150kg, Wayne would be an ideal candidate as an ambassador for this type of initiative. As a proud Maori, and an ex All Black captain, he possesses many traits that would appeal to men across the country. Using a male figure who was popular but who had not had to overcome the same obstacles in regards to health and fitness may not have the same impact. In terms of targeting self efficacy in the initial stages, the concept of vicarious experience is immediately utilised, where seeing a similar other in terms of age, weight or health status might encourage participation. Participant 2 emphasised this point by commenting:

“Yeah maybe just having a guest speaker who has been through a similar thing. Yeah, sort of been where they’ve been at the start. Yeah no, that would be really cool” (Participant 2 p. 6 Line 160 – 162).

Sharing success stories of previous participants during the recruitment and initial stages of the initiative may also be beneficial. Again, utilising others prior experiences that have come from a similar background may be beneficial for those who have lower self efficacy scores at the start of the initiative. Several of the research participants felt they would like to do this, and considered it valuable. Participant 1 commented:

“You know what I’d like to do is come along and talk at the introductions, you know, just take ten minutes and talk. Because I have been there and I know what it’s like and how hard it is. That’s the scary bit for a lot of guys is that getting started. Turning up to the meeting is fine, that’s all easy but it’s actually carrying it out” (Participant 1 p. 12 Line 384 – 388).

Another key theme that was developed, simplicity, underpinned the need to reduce these initial barriers for men. It was clear that for the participants of this project, it was a struggle to re-engage with physical activity. Also, given the gap between those who registered via email to those who actually enrolled in the initiative, the need for a simple registration process and possibly a few more incentives were evident. The previously mentioned strategies could be employed in the design of the initiative, as well as mentioning the possibility of certain spot prizes such as shoe vouchers and clothing, or offering limited numbers of free or discounted entries to certain races, especially the
Adidas Auckland marathon event. This may also mean approaching businesses or organisations to sponsor the initiative, and having some corporate partners may also help with funding the initiative. A systematic review that examined initial participation in workplace health promotion participation found that participation was typically below 50%, and that females were more likely than males to enrol. However, the review showed that programmes that provide incentives, offer a multi component strategy, and focus on multiple behaviours rather than just physical activity alone, have a higher overall participation level in both men and women (Robroek, Van Lenthe, Van Empelen, & Burdorff, 2009).

**Health screening and measures**

The ‘Meet and Greet’ introductory session that also included a health screen was an important part of the initiative that allowed registrants to formally enrol to the initiative. It was the first face to face contact with the facilitator, as well as other participants. While this event was of a very small scale, there were certain aspects that appealed to the men who attended. It is possible that by incorporating some of the strategies mentioned in the previous section, attendance could be greater. Obviously, finding a time and location that suits everyone is difficult, however, a weekday evening or at the weekend are probably the best time. Having one or several speakers could be useful to share previous success stories, as well as promote the Unitec Run and Walk series and Adidas Auckland Marathon. Again, having several spot prizes and possibly a major spot prize as incentives could be a good strategy. Having something tangible to take way for all the men who attend could also help to facilitate adherence in the initial stages. For example, all participants could receive a free training T-shirt for attending as well as information for the events and results of their health screen.

The health screen and recording of physical measures is important from a safety point of view, as men who have been inactive for a long period of time or have known health conditions should be cleared by their GP before starting a new programme. It also provides some important information in regards to current health status, and offers opportunity for follow up measures to be done at a later date. The Ministry of Health (2009) offers recommendations for measures that are simple and easy to obtain, yet offer important information regarding the risk of developing certain conditions, especially cardiovascular disease and diabetes. Recommendations include recording the individual’s age, ethnicity, smoking status, and family history of cardiovascular disease, type 2 diabetes and genetic lipid disorder. Physical measures should include body mass index, waist circumference and the average of two seated blood pressure measures, as well as pulse rate (Ministry of Health, 2009).
These are all measures that are quick and non-invasive, and are measures that have previously been used in intervention studies involving men (George et al., 2012). A carbon copy of these measures could also be taken away by participants so they have a physical record of their results, as well as the facilitator.

“Yeah just two or three measures, you know, weight, blood pressure, maybe even that one where you’ve got to blow in that bloody tube – volume” (Participant 1 p. 6 Line 171 – 172)

Participants may also be invited to complete a brief goal setting questionnaire that begins to address some of the questions around how each individual will be able to implement regular physical activity into their lifestyle. These questionnaires could be collected by the facilitator, and a needs analysis in terms of goal setting for the group could be conducted. The goal setting aspect could be implemented into discussion at the training sessions and men could share strategies through an interactive manner as a collective, rather than individually with a facilitator. This information sharing that occurred during training sessions was cited by participants as important, and it allowed them to try new things they had picked up away from the group in their own time. A self evaluation could also be done verbally during these discussions that keep individuals accountable in regards to weekly physical activity and injury prevention or management. The majority of the problem solving occurred in a group setting, and doing the goal setting individually might lose its effectiveness. Letting the men problem solve through experiential learning, as opposed to being told specifically what to do could be a better strategy. Participant 6 emphasised this point:

“I guess in general males don’t like being told what to do, so just keep it nice and relaxed, informal. If people want to contribute, cool. If not then hopefully they will get something from listening”  
(Participant 6 p. 12 Line 374 - 376)

**Weekly training sessions**

The weekly training sessions were a critical component of the initiative, where they offered a group approach to training that also included social interaction and a sense of camaraderie. The final theme of support and comradeship epitomised these training sessions, as well as participation in the events. Team spirit and social interaction is cited in the literature as possible ways of overcoming disinterest and increasing motivation in those re-engaging with physical activity (George et al., 2012), and this was evident throughout the initiative. As a core group of participants developed, the social support and friendships that developed most certainly enhanced commitment and helped to facilitate adherence.
From the point of view of self efficacy, these training sessions also allowed participants to reference their own performances to previous exercise sessions, as well as to other individuals in the group. This was clearly evident as a motivating factor, as the men often engaged in discussions about how each other performed and how the exercise sessions were becoming easier as their cardiovascular fitness developed. These discussions also allowed men to set new exercise targets for the following week or upcoming events, and indirectly the men were setting new goals all the time.

While the training sessions comprised a simple structure of warm-up, main session and cool down/discussion, there is ample opportunity to incorporate more variety into the training sessions. Some of the men had mentioned about incorporating other types of exercise including resistance training (body weight or equipment-based) or interval/sprint training. While the goal was to build up to 150 minutes of moderate-vigorous intensity physical activity per week, there was certainly opportunity for more variety, including more vigorous physical activity to be included. It is important though that an initiative such as this follows a sensible progression in terms of duration, intensity and frequency of physical activity. Too much too soon can not only be too demanding for individuals, thereby having a negative impact on self efficacy, but also increase the risk of injury.

As participants became more comfortable with the exercise sessions and with each other, there is opportunity to further enhance self efficacy by getting individual participants to take ownership of group exercise sessions and plan/facilitate these sessions. While guidance may be needed, encouraging ownership of these sessions may help to develop confidence, leadership and to engage with some of the health and fitness resources provided during the initiative. Being able to plan a session enables participants to develop skills that they can then utilise during their training week. They may also find it useful to engage with some of the newer technologies available that can help with planning a training session such as www.mapmyrun.com.

**Participant communication**

On-going communication with participants throughout the initiative was deemed important although there was a sense that too much information could be overwhelming, and the men would be less likely to engage with it. Again, simple message from trusted and beneficial sources should be prioritised. Information regarding the benefits of physical activity and why it is important to meet the physical activity guidelines is cited in the literature as important (Garber et al., 2011; Sherwood & Jeffery, 2000) and may also help participants to understand the benefits of regular physical activity for their health and wellbeing. Other information that would have been useful included nutritional advice, motivational/mental training advice, breathing education, as well as other information about
training and upcoming events. The information appeared to help reengage participants week to week, and provided an additional avenue of support.

The main methods of communication were email and text messaging, and these were deemed acceptable by most participants. Social media sites such as Facebook and Twitter may appeal to younger adults, though was less likely to appeal to middle aged and older adult men. Again, as long as messages are kept brief and information is clear, concise and relevant, then these are certainly useful means of keeping in contact with participants. Establishing a website for the initiative may be a useful long term strategy, however, it was mentioned by participants that the personal touch may be lost if website was the main method of information sharing. Participant 1 commented by saying:

“I think there’s some other initiatives that could be bought in that are less but are more, and I think doing a website is once again non-personalised and it loses the whole emphasis on, hey what are you doing, what are you accountable for, that you get from being in a team, that you get from regular contacts like you were doing with the emails” (Participant 1 p. 8 Line 264 - 267).

Participation in an ‘event series’

The Unitec Run and Walk series comprised a unique element of the initiative, along with participation in the Adidas Auckland marathon event. It meant that every 3 – 4 weeks, the weekly training sessions would be substituted with an event, and they were able to challenge themselves in an unfamiliar environment. The series itself offered races where distances progressed towards a race distance selected at the Adidas Auckland marathon – either 5km, 10km, 21km or 42km. This strategy was chosen as it provided a chance for the male participants to see a wide range of other participants all working towards a similar common goal. The environment for this race series was relaxed yet competitive, and allowed participants to complete races in a lap format. For example, an event may have included races of 2.5km, 5km, 7.5km and 10km, with the shortest race being 1 lap only and the longest race 4 laps. The men were able to see their time each lap, and it was easy for the facilitator and others to support participants.

There are few other noted research examples that have utilised this intervention strategy, and this was one of the reasons for piloting this type of initiative. It is clear from the experiences of the men that these events were challenging, yet motivating, and provided another aspect to the overall experience of the initiative. Most of the men felt that this race series was something they would do again in the future, and that it had been a really enjoyable experience.
The Adidas Auckland marathon event was on a completely different scale to the Unitec Run and Walk series. It is possible that many of the men underestimated the scale of this event having never participated in something like this before, and more support and information may be required about (Conn, 2010) the logistics involved on the day. One participant had felt quite isolated at the completion of his race, and that contributed to a negative experience for him. Therefore more organisational support may be needed on the day, and following the completion of the event, a common meet up point established. Overall, again, this was something that had been viewed as a major achievement, especially for those participants who completed the 21km distance.

**Concluding the initiative – Where to next?**

It was evident from the attendance and conversations at the group breakfast following the conclusion of the initiative, that all of the men had experienced enormous personal success through their participation. Notably, the Adidas Auckland marathon event had been a highlight. Concluding with an event like this was a great way of acknowledging everyone’s efforts, and certainly with a bigger group, a private function that celebrates these efforts could be a great way to conclude the initiative. However, it was evident that the men were looking for something else to move to next, and one of the participants had bought along an event calendar for the summer months and was looking for others to join him. Others too had mentioned about continuing to meet up regularly and it was almost as if there was a sense they might not remain active without the group support.

In this regard, it is important for future initiatives to prepare participants for this, and begin to introduce some options of ‘Where to next?’ It was underestimated how daunting it may have been for participants who had had regular support for 16 weeks, to then be finished and without that same level of support. The final event could be a great opportunity to invite representatives from other sports clubs or associations to speak about what they might be able to offer the participants. One of the participants interviewed had shifted away from running after the initiative and had taken up Cross-fit and was regularly working out 6 days per week. This is an example of a relatively new type of exercise training that also offers a group dynamic as well as a potentially exciting and dynamic form of training. There are a number of other options as well. It is important to recognise that this type of initiative may be best described as a ‘re-introduction to physical activity and exercise’, and Participant 1 summarised succinctly by commenting:

“I think the approach is right in that it’s a reintroduction, and I think rather than have it been men’s fitness or anything like that, it’s more a reintroduction to men’s fitness. I mean there is only so much you can drag people along to, you know you can’t hold their hands forever. So reintroducing them to
the new technologies of physical activity now is the right place to be, but it’s so encompassing that people have to want to do it themselves outside of that” (Participant 1 p. 7 Line 222 – 227)

For an initiative like this to develop further, the cost associated with this development must be considered. The current project represented a small scale health promotion initiative that was easily facilitated due to the number of subjects involved. However, in order to increase its impact by attracting larger numbers and more diverse population groups including Maori and Pacific Island men, specific branding and advertising that appeals to inactive adult men from diverse cultures is necessary. It was evident that the majority of enrolments in this initiative where European males, therefore more research may be needed to ascertain what marketing strategies capture the interest of a wider cultural audience. This would require more significant investment, and may include applying for sponsorship or grants that would aid this development. Cost would be a major consideration in the next stage of development, and specific research in this area may need to be conducted to ascertain the viability of such an initiative, especially on a long term basis.

**Key messages**

- Have a smart and focused advertising and promotion campaign, including a potential branding strategy
- Utilise an easy registration process eg text-to-register
- Incorporate a prominent male role model as an ambassador for the initiative
- Include incentives such as guest speakers, prizes and giveaways where appropriate
- Keep any health measures or screening processes simple and easy to understand
- Any health, fitness or other information provided should be easy to understand, succinct, and from a trusted source.
- Training sessions should follow a safe progression strategy, as well as incorporate several different training strategies
- Ongoing participant communication is necessary and should include information of the health benefits of regular physical activity, as well as nutrition and training tips
- Other potential physical activity options should be presented to participants near or at the completion of the initiative so they can plan for ‘what’s next?’
Chapter Six: Conclusions

This chapter describes the attributes and limitations of this research project and presents options for future study. The implications of this research are also briefly discussed, before completing the chapter with a concluding statement.

Attributes, Limitations and Future Research

Given the vast benefits derived from regular physical activity, and the growing burden of potentially preventable health conditions as previously mentioned in this thesis, it is important that researchers and health professionals worldwide continue to pursue innovative ways of encouraging an active lifestyle. While the literature highlights large numbers of physical intervention studies, only a small number target males specifically, or present results separately by gender. Research also highlights that a significant proportion of adult New Zealand men do not meet the recommended physical activity guidelines on a daily or weekly basis. It is known that inactivity is an independent risk factor for the development of certain health conditions, and given the lack of research specifically targeting men, it is evident more could be done to support men towards initiating and maintaining a lifestyle that incorporates regular physical activity.

The findings from this project add to a growing body of knowledge that could be useful in designing health promotion initiatives or interventions that specifically target adult males and incorporate regular physical activity. By utilising a range of data sources, especially facilitator reflections, field notes and interviews with participants, a broad yet thorough evaluation of the ‘Run and Walk’ initiative was able to be completed. The insights and knowledge gained from these data sources may be used alongside existing research to help inform the development of initiatives that specifically target men. It is clear that men have different attitudes towards physical activity, and a ‘one size fits all’ approach to encouraging physical activity will not be sufficient to produce meaningful behavioural change. This project however offers an initial exploratory investigation into the attitudes and experiences of those who participated in the ‘Run and Walk’ initiative.

The evaluation process also provided an opportunity to look back at the design framework of the initiative and make recommendations that future action research cycles could build upon. It is likely that several further research cycles would be needed before a final health promotion product could be packaged together. This final product could essentially provide an operational blueprint, and provide all the necessary tools and resources for those willing to facilitate a ‘Run and Walk’ initiative.
This final product could be utilised all over New Zealand, or indeed the world, in areas where appropriate race series or events are held. There is also potential for the initiative to be facilitated alongside certain health services or centres, thereby providing the structure and support needed to become regularly active, as well as address any health concerns.

Whilst there are some positive attributes of this research, it is important to highlight the limitations of the project as well. Firstly, given the real world context of the initiative, and the exposure to a large number of variables that may have influenced participant thoughts, attitudes, experiences and behaviours, these factors should be kept in mind when considering the findings. Selection of participants for research purposes utilised a purposive sampling method and these participants were well known to the researcher at the time of interview. This rapport that had developed over the course of the initiative had potential to influence participant responses, thereby influencing the findings. As the facilitator also carried out the interviews, it is possible that the interview participants may have responded differently had an alternative interviewer conducted the interviews. It is also acknowledged that only a small sample of men (n = 6) were utilised. Those who only registered interest and those who dropped out of the initiative did not respond to the invitation to participate in the evaluation process. It is acknowledged that their thoughts and experiences would likely have produced a different or additional set of findings.

**Implications**

The implications of this health promotion initiative are a strong foundation for which future action research cycles can be built upon. Additionally, the themes generated through the interpretive description process have created a model (see Figure 4) for the consideration of health promotion initiatives that incorporates physical activity for adult males. The themes of Simplicity, Goal Setting, Support and Comradeship were clear throughout the data sets, and consideration of these ideas when designing health promotion initiatives for men may help to create an environment that is motivating and rewarding for men. Importantly, consideration of these themes may help facilitate meaningful behavioural change, that being the adoption of regular physical activity.

**Concluding statement**

This research project found that there is some potential for the development of a health promotion initiative that utilised a race series such as the Unitec Run & Walk series, and the Adidas Auckland Marathon. The initiative appealed to previously inactive adult males by providing a structured, group
approach to physical activity, and also promoted a sense of accountability that helped to facilitate adherence. Further development of this initiative is required through future action research cycles, especially in regards to advertising and promotion, and increasing the number of registrants to active participants. It is important that research continues to develop innovative ways of engaging or re-engaging inactive adults, including men, in regular physical activity in order to help reduce the burden of a growing number of health conditions.
“I now work out 6 days a week, probably anywhere from 40 minutes to an hour and ten, depending on what the exercise is for the day. Yeah. And I love it.”

(Participant 1 p. 12 Lines 352 – 354)
References


Appendices
Appendix A: Media Release for Run & Walk Health Promotion Initiative

Wanted: 15 men willing to run for their lives

Monday, 2 July 2012, 3:32 pm
Press Release: Unitec

Unitec student-led initiative aims to improve men’s health and fitness.

About 15 Auckland men who do little or no exercise will get the support this year to turn that around, thanks to the initiative of one Unitec student.

Michael McLeod, who is studying towards a Master of Osteopathy, has recruited a group of fellow osteopathy students who will become the support network for the men, helping them set fitness goals and achieve them, while monitoring their musculoskeletal health.

The group is looking for around 15 inactive Auckland men who are willing to take part. As well as aiming for the big goal of the Adidas Auckland Marathon, the students and their recruits will be building up their fitness by training for the Unitec Run & Walk Events Series. The series of five running and walking events goes from July to September, and is the official lead-up series to the marathon.

Michael, who also has a Bachelor of Applied Science from Unitec, as well as a teaching diploma and a degree in physical education, exercise and sport science, dreamed up the initiative as a way to help improve men’s health outcomes.

Having received a scholarship from the Men’s Health Trust New Zealand to help pay for his studies, Michael was keen to pay it forward by driving an initiative that would improve men’s health outcomes through increased physical activity.

“I had a goal this year that I wanted to run the Adidas Auckland Marathon and so decided to recruit other osteopathy students who were interested in running a marathon event as well, so we could train together.

“The course is full-on and it is nice to have an outlet, so it was my plan to help others who wanted to run the half or full to achieve that.”

So far his Unitec group has attracted about 15 students, who are each seeking to encourage one inactive man to become involved, either in the Unitec training group, or to be supported to reach a fitness goal on his own.

The men will be encouraged and monitored by the students, will receive a targeted training programme and a Men’s Heath Trust New Zealand running singlet, and will be able to attend informal supervised group training sessions at Unitec, with other training to be done independently or in smaller groups.

“While this is still a small-scale project,” says Michael, “I hope that next year we can build on the foundation laid and grow the group even more.”
Men who would like to boost their fitness – and improve their health – can contact Michael McLeod themcleods.mikeandbridget@gmail.com

Appendix B: UREC Ethics Approval

Micheal McLeod  
2/67a Alberton Ave  
Mt Albert  
Auckland  
13.12.12  

Dear Michele,

Your file number for this application: 2012-1092  
Title: An evaluation of a Run & Walk health promotion initiative targeting inactive adult males.

Your application for ethics approval has been reviewed by the Unitec Research Ethics Committee (UREC) and has been approved for the following period:

Start date: 13.12.12  
Finish date: 13.12.13  

Please note that:

1. The above dates must be referred to on the information AND consent forms given to all participants.

2. You must inform UREC, in advance, of any ethically-relevant deviation in the project. This may require additional approval.

3. Organisational consent/s must be cited and approved by your primary reader prior to any organisations or corporations participating in your research. You may only conduct research with organisations for which you have consent.

You may now commence your research according to the protocols approved by UREC. We wish you every success with your project.

Yours sincerely,

[Signature]

Gillian Whalley  
Deputy Chair, UREC

Cc: Cynthia Almeida  
Elizabeth Niven
Appendix C: Invitational email for formal evaluation

Men’s Health research – Free $20 petrol voucher for participating 18/12/12

Kiaora gentlemen!

Around mid-June of this year, you may have responded to an article seeking to find 15 inactive men who were willing to “run for their lives”. This article was based around an initiative that was facilitated by Michael McLeod, a graduate of the Bachelor of Applied Science (Human Biology), now halfway through the Master of Osteopathy programme here at Unitec. The aim of the initiative was to use the Unitec Run & Walk series as a means to improve the health and wellbeing of a group of inactive adult men. Additionally, training, support, motivational emails and the offer of free Osteopathic treatment for the duration of the 16 week initiative were all provided. With the support of Unitec, a limited number of complimentary event passes for the Unitec Run & Walk series and Adidas Auckland marathon event were made available for some participants in order to complete their challenges. The Adidas Auckland marathon event marked the culmination of the 16 week initiative on 28th October 2012.

This email is an invitation for you to take part in a formal evaluation of this initiative. I am sending this invitation on behalf of Michael McLeod, as I have also been involved in the Unitec Run & Walk series promoting the profession of Osteopathy, and providing post-event treatment services at these events. The evaluation of this Run & Walk health promotion initiative will become the subject for a Master’s research thesis carried out by Michael McLeod.

Regardless of your level of involvement, the student facilitator, now turned researcher, is interested in your feedback regarding various aspects of this initiative. From those of you that just responded to the article, to those that attended training sessions and participated in events, your thoughts and opinions would be greatly valued.

This would be in the form of an interview that could be performed face to face, through Skype or over telephone. The length of the interview would be dependent on your level of involvement. All you would need to do would be to reply to Michael McLeod regarding your interest, and he will arrange a time and location in the New Year that works best for you. For giving up your time and contributing towards this research project you will receive a free $20 petrol voucher.

Attached to this email are two other documents associated with this project. The first is a detailed information sheet outlining the purpose of the research and more specific details regarding the interview process itself.

The second is a consent form that will need to be read and signed prior to participating in the research project. These are for you to read in your own time, and will be reiterated again before the interview proceeds.

If this sounds like something you would consider being a part of, then that is great news! All you need to do is respond to Michael McLeod, and he will be in touch with you very soon.

The facilitator/researcher’s contact details are listed below:
Michael McLeod

Home: (09) 8455371

Mobile: 027 5042796

Email: themcleods.mikeandbridget@gmail.com

We would be delighted to hear from you!

Regards,

Graeme Saxby

Unitec lecturer – Department of Osteopathy
Appendix D: Information sheet for interview participants

Evaluation of a facilitator-led Run & Walk health initiative targeting inactive adult males

About this research

You are invited to take part in a research project evaluating a Run & Walk health initiative that you either registered interest in, or were directly involved in. This initiative used the Unitec Run & Walk series, along with weekly training sessions, emails, and the offer of free Osteopathic treatment as a means for engaging with physical activity. The Auckland Marathon event was the end point of the initiative with options to participate in events that ranged from 5km – 21km. The target population group for this initiative was inactive adult males, as statistics indicate that men in NZ have a shorter life expectancy and experience higher mortality rates than women, largely attributable to chronic diseases such as cardiovascular disease, diabetes, and cancer. It is well established in the research literature that regular physical activity can decrease the risk of developing these diseases, and thereby improve health outcomes.

As previously mentioned, you may have been involved in most, or just some aspects of the initiative, or you may simply have registered interest by email. Regardless, we are interested in getting your perspective on this type of initiative. The initiative itself was facilitated by a post-graduate Osteopathic student, Michael McLeod, over a period of 16 weeks, aimed at improving the health profiles of previously inactive adult males through engagement with physical activity.

What will happen in this research?

You are invited to take part in a face to face, Skype or telephone interview with the principal researcher that will take between 20 - 60 minutes depending on your level of involvement. The interview will take place at a time and location that suits you, and will comprise a set of questions relating to your attitudes and experiences towards this initiative. Topic areas will include:

- Motivation or appeal for registering interest in the initiative
- Initial group meeting and basic health screen
- Weekly Run & Walk training sessions from Clinic 41
- Weekly emails and other possibilities for communication
- Participation in the Unitec Run & Walk series events and the Auckland Marathon event
- Provision of free Osteopathic treatment from Clinic 41, and the perceived impact of this service on your health and wellbeing
- Attitudes and behavioural changes towards physical activity and health following involvement in the initiative.
Prior to the interview commencing, the researcher will explain the purpose of the research again and answer any questions you may have. You will then be asked to read and sign an informed consent form. It is intended that the interview will be recorded using a digital voice recorder, and original digital files will be uploaded immediately following the interview to the researcher’s personal laptop, and stored in a password protected file. The original file will then be deleted. The interviews will then be transcribed manually by the researcher. You will have an opportunity to see the interview transcript if you wish, and the principal research will contact you following the interview to make this opportunity available.

Information about withdrawing from the study

You may withdraw from this study at any point up until 2 weeks after the interview transcript has been received. As mentioned, you will have the opportunity to review the interview transcripts, and in doing so, you may withdraw any information from the research project if you wish.

Sources of information obtained throughout the initiative

From the beginning of this initiative, Michael McLeod, has maintained communication with participants via email. These emails will comprise an important part of the data analysis in terms of their content and type of language used. A basic health screen was performed at the beginning of the initiative, and some of these measures may also be used in the data analysis. Other information was recorded by the facilitator in the form of field notes and reflections. It is intended that all of this content will be utilised in the data analysis alongside the interview transcripts. All of this content will be anonymised to protect the privacy of participants.

We treat your personal information confidentially

Your name and information will be kept strictly confidential. All information will be stored on a password protected file on the researcher’s personal laptop. Michael McLeod and his supervisors will be the only ones to have access to this information in order to complete the analysis. A copy of the research findings can be sent to you at the conclusion of the study if you wish. Interview data used in this study will be kept anonymous, and may be made available for future related research.

Who can I contact with any further questions?

If you have any further questions about this research please feel free to contact one of us:

Principal Researcher:
Michael McLeod
Tel: 027 504 2796
Email: themcleods.mikeandbridget@gmail.com

Research Supervisor:
Dr Elizabeth Niven
Tel: 021 654 935 or 09 815 4321 ext 8320
Email: eniven@unitec.ac.nz

UREC REGISTRATION NUMBER:
This study has been approved by the UNITEC Research Ethics Committee from 29th November 2012 to 29th November 2013. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 7248). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix E: Consent form for interview participants

Participant Consent Form

Evaluation of a facilitator-led Run & Walk health initiative targeting
inactive adult men

Participant name:

I have seen the information sheet about this study. I have read and understand the information sheet given to me. I have had the opportunity to discuss any queries or concerns regarding this study with the principal researcher, Michael McLeod, and am satisfied with the explanations given.

I understand that taking part in this project is my own choice. I don't have to be part of this if I don't want to and I understand that I may withdraw from this study during the interview, and may withdraw interview data up to two weeks after the interview transcript has been received. I understand that I will have the opportunity to see a copy of the interview transcript if I wish, and the principal researcher will be in contact following the interview to make this opportunity available. I have been provided with the principal researcher’s details as well.

I understand that anything I say during this interview will be completely confidential, and that the only persons who will have access to my responses to the interview questions is the principal researcher (Michael McLeod) and his associated supervisors. I understand that other data sources such as physical measures from the health screen, emails and facilitator reflections will be anonymised and used for research purposes alongside the interview transcripts.

I understand that the recorded interviews will be stored securely on the principal researcher’s laptop, and copies of transcripts may be stored securely in a locked cabinet at Unitec for a period of 5 years, after which time they will be destroyed. Any information reported will not identify me in any way. I give permission for the data from this study to be retained and combined with other future studies, provided that my identity remains anonymous. I also give permission for anonymised data to be used in any future publications of this research project.

I understand that I can see the finished research document.
I have had time to consider everything and I give my consent to be a part of this project.

I know whom to contact if I have any questions or concerns about this project.

The principal researcher is:
Michael McLeod
themcleods.mikeandbridget@gmail.com
Tel: 027 5042796

Participant Name: ..........................

Participant Signature: ........................ Date: ............................

Project explained by: ..........................

Signature: ........................ Date: ............................

Thank you for participating in this research.

UREC REGISTRATION NUMBER:
This study has been approved by the UNITEC Research Ethics Committee from 29th November 2012 to 29th November 2013. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 7248). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
Appendix F: Interview format (Interviewer Copy)

An evaluation of a facilitator-led Run & Walk health initiative targeting inactive adult males

(Supported by Unitec & Men's Health Trust New Zealand)

Interviewer copy: Important points

- Thank participant for coming and taking part in the research
- Address willingness to participate and explain information sheet and consent form. Ask if any further questions. Sit quietly. Consent forms signed (one copy for participant/one copy for researcher)
- Ask for consent with regards to recording of the interview and mention that it is an important aspect of the data collection for the research. Start recording.
- Introduce the agenda for discussion and highlight the chronological order of the interview (pre, during and post Run & Walk health initiative). Emphasise that it is more of a discussion than an interview.

Broad question areas for participants who took part in most aspects of the initiative:

Pre-initiative

- I am interested to hear about your history of physical activity or exercise throughout your lifetime. Can you tell me about your levels of activity during childhood and through high school? Did this change as you entered adulthood? Were there any significant events that have influenced your activity levels?
- Think back to the beginning of July last year just before you heard about this Run & Walk initiative. How were you feeling at this point in time, and what were you doing? How active were you back then? What would a typical week look like for you, including any physical activity or exercise?
- What were your attitudes towards physical activity or exercise at this point of time?
- How did you hear about the initiative, and what was your motivation or reason for registering your interest?
- What did you anticipate the initiative would provide for you at this point?
- Follow up any further recommendations or suggestions for future initiatives in terms of attracting or appealing to inactive adult males.
During-initiative

• You attended/didn’t attend the initial information session. What influenced your decision to come along when you knew there would be no training and you didn’t know anyone?

• How did you find this session?
  Was it useful? Why or why not? Did it encourage you to commit to the initiative? Why or why not? Was the health screen informative?

• Do you have any other recommendations for future initiatives in order to make this group meeting/health screen more “male friendly”?

• You attended some/most/all of the training sessions from Clinic 41. Think back to these Saturday morning training sessions. Tell me how you found these sessions?

• Did you bond with other participants? Did this influence your continued involvement in the initiative?

• What are your thoughts about the weekly emails that were sent out? Were they useful? Were there any key messages that you recall from the emails? Were there topics or subject areas you would have liked more information on?

• What other possibilities would you recommend for communicating with participants in a future initiative?

• Now, you took part/didn’t take part in the Unitec Run & Walk series events and/or the Auckland Marathon event. How well did the initiative prepare you for these events? If you didn’t get to enter any events, were there any factors that influenced your participation?

• Were there other things that could have been included to support you? How has your experience of these events influenced your future participation? Your involvement influenced your likelihood of taking part in these types of events in the future?

• A part of the initiative was the offer of free Osteopathic treatment alongside the training support. Think back before you came into clinic, what was your perception of Osteopathy? How has this changed if at all? In what ways was it useful having this service alongside the initiative?
Post-initiative

- Now that we are nearly 4 months since the Auckland marathon event and the completion of the initiative, how would you describe your attitudes towards physical activity now? Are you currently physically active? Can you tell me what a typical week might entail now?

- In what ways has the initiative influenced other health or lifestyle habits?
- What are your future exercise or physical activity goals?

- After taking part in a 16 week initiative like this, would you consider taking part again?
- Is there anything else you would like to add?
Appendix G: Interview Format (Participant Copy)

An evaluation of a facilitator-led Run & Walk health initiative targeting inactive adult males

(Supported by Unitec & Men’s Health Trust New Zealand)

Agenda for discussion

- History of physical activity and exercise through childhood and adulthood.

- Levels of physical activity immediately prior to starting the Run & Walk programme.

- Initial group meeting and health screen at Clinic 41.

- Weekly group training sessions from Clinic 41.

- Weekly emails sent to participants.

- Unitec Run & Walk series events and Auckland marathon events.

- Osteopathic treatment at Clinic 41 alongside the Run & Walk programme.

- Current levels of physical activity and future exercise or physical activity plans.

- Final thoughts.

Thank you very much for your involvement in this health promotion initiative and taking time to participate in this research project!