Faculty of Health Sciences

Profile of Champions in health promotion in a community setting: an exploratory study

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature: 

Date: .....

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Abstract

Chronic diseases such as cardiovascular diseases and diabetes can be prevented by acting on risk factors such as tobacco use, an unhealthy diet and lack of exercise. As behaviour is influenced at multiple levels, individual and environmental, the most effective intervention needs to explore these multiple levels.

The background of this study is a novel and successful approach: "the Waist Disposal Challenge" (WDC) which induced lifestyle behavioural changes. The WDC was a pilot health intervention designed to reduce weight and other risk factors for chronic diseases. The WDC was implemented during 2007-2008 in 23 Rotary clubs in the South West of Western Australia. Findings showed a significant to moderate weight loss amongst participants and other lifestyle changes. It is believed the natural helpers (called Champions), who promoted and facilitated the program in clubs, played a pivotal role in this program.

The purpose of this study was to examine the role, attitudes, motivating factors and common characteristics of these Champions (also referred to as lay health advisors in the literature) or in other terms to define the appropriate profile for such lay leaders in community based health promotion programs. As the focus in delivering health interventions is to rely more on peer educators or lay leaders to spread healthy messages and change peer behaviours, the attributes of who is appropriate for this role is important for the success of health programs that are led by the community.

An exploratory descriptive design using a mixed method approach was adopted for this study. From a purposive sample of 27 Champions, 20 completed a developed self-administered survey. Semi-structured interviews with Champions were then conducted to gather more in-depth data about their experience in this role. From a purposive sample of 40 Club Members who participated in all stages of the WDC, 21 completed a survey reflecting on their experience of this program

and on their perception on how the role played by the Champion affected their decision to participate and/or change certain behaviours.

Results indicated that most of the Champions had a leadership position on the Executive board of their own clubs. The main motivating factors to hold a Champion position were their interest in health, in the WDC program to help their peers and for some it was for personal need to lose weight. Generally Champions expressed confidence and enthusiasm and found new strategies to sustain the WDC. The support of club hierarchy and club members played an important part in the role of the Champions. Findings brought to light the crucial importance of the impact of the organisational interaction within the Rotary club on the Champion's role, which could not be defined without taking into account club members' synergy, club hierarchy, sense of community and knowledge of club's norms.

Findings revealed that all Club Members were male and most of them lost weight during the WDC. Less than half of the Club Members thought that their Champion played a crucial role in their decision to participate in the WDC. Almost half of the Club Members found that their Champions were a role model who they could identify with. Like the Champions, Club Members had a high sense of community.

The comparative analysis, which was speculative due to the small sample size, demonstrated that there could be important differences between Champions whose clubs lost weight and Champions whose clubs did not lose weight that had influenced the success of the WDC.

The results highlighted the pivotal role of these Champions in promoting and sustaining a health promotion program in community settings. However limitations due to the cross-sectional nature, purposive sample and sample size of the study meant that the results could not be generalized beyond the studied population and results from this explorative research needed to be interpreted with caution. Further research is needed with a larger sample size to determine the

extent of the influence these champions had on the success of the implementation and sustainability of the health intervention.

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1 INTRODUCTION

This chapter presents the background and the significance to the study, the reasons for undertaking this research, the objectives of the study, and an overview of the thesis.

1.1 BACKGROUND TO THE STUDY

In Australia, the burden of chronic disease is increasing while the burden of acute and communicable diseases is steadily decreasing (Australian Bureau of Statistics [ABS], 2008; World Health Organisation [WHO], 2005a). This reflects a worldwide trend that affects developed and underdeveloped countries. In 2005, 60% (35 million out of 58 million deaths) of all deaths in the world were due to chronic diseases. This number is projected to increase by 17% in ten years time unless urgent action is taken (World Health Organisation [WHO], 2005b)

The term "lifestyle-related" diseases is used to label some chronic diseases such as diabetes and heart disease that are influenced by an individual's behaviour (World Health Organisation [WHO], 2005b). These chronic diseases alongside stroke, cancer and chronic respiratory diseases, exhibited the highest mortality rates of individuals (World Health Organisation [WHO], 2005b), and represented the highest burden of chronic disease as well as the highest financial burden for society and the individual. For example in 2004-2005 in Australia, cardiovascular diseases were responsible for 34% of all deaths and total health expenditure represented 5.9 million dollars (Australian Bureau of Statistics [ABS], 2010).

The key preventable risk factors that can lead to chronic diseases are tobacco use, an unhealthy diet and a lack of exercise; with the latter two often resulting in obesity (Australian Bureau of Statistics [ABS], 2008; World Health Organisation [WHO], 2005a; Yach, Hawkes, Gould, & Hofman, 2004). In several Western countries, overweight and obesity have already overtaken smoking as the main risk factors for chronic diseases. In 2007, in the United of Kingdom (UK) obesity

became the primary risk factor, with seriously overweight conditions reducing life expectancy by 13 years versus 10 years for smoking (Butland et al., 2007). Similarly, in the United of States of America (USA), the total health burden of obesity surpassed smoking, which was considered to be the leading risk factor prior to 2008 (Jia & Lubetkin, 2010). In Australia, 8.7% of all diseases are attributable to obesity while smoking is responsible for 6.5% (Hoad, Someford, & Katzenellenbogen, 2010).

In 2006, the cost of obesity and its associated illnesses in Australia were estimated to be $1.2 billion and is steadily increasing (Australian Government Department of Health and Aging, 2006). Arguably by decreasing the risk factors associated with obesity, it is possible to reduce the number of people suffering from chronic diseases. For example, a reduction in weight of 5kg in a 5 month period or 10kg over a 10 month period would have a significant impact on society by decreasing obesity-related cardiovascular related hospital admissions over the next 20 years by 27% to 47% for women, and 27% to 50% for men (Stewart, Tikellis, Carrington, Walker, & O'Dea, 2008).

In 2000, the WHO recommended that preventive and therapeutic strategies to reduce chronic disease be implemented urgently. In 2005, the prevention of chronic diseases was declared a National Health Priority in Australia (National Health Priority Action Council [NHPAC], 2006). Despite these recommendations and the move towards prevention rather than intervention after onset of chronic disease, acute disease prevention models and traditional treatment models, such as General Practitioner consultations or interventions targeting individuals, have had limited effect on preventing the development of chronic diseases (Campbell, Engel, Timperio, Cooper, & Crawford, 2000). Hence, the Commonwealth Government is seeking to find alternative approaches to reduce the increasing burden of chronic disease (Australian Government Department of Health and Aging, 2008; Foster, Taylor, Eldridge, Ramsay, & Griffiths, 2007).

There is worldwide consensus about risk factors leading to chronic diseases. Due to the complexity of their causes, especially obesity and overweight, these risk

factors need to be targeted at multiple levels; from the individual level to the societal level (Bathum & Baumann, 2007; World Health Organisation [WHO], 2005b): such as, the health promotion campaigns "How do you measure up" campaign in Australia at the population level (Australian Better Health Initiative [ABHI], n.d.) and programs in community settings such as work places, schools and other community-based interventions (Australian Government Department of Health and Aging, 2008)

In Western Australia (WA), the Waist Disposal Challenge (WDC) is one recent example of a community project that engaged community members at risk of developing chronic diseases and encouraged them to find their own ways to develop and maintain a healthy lifestyle. The WDC is an innovative project created to meet the needs of members in service clubs, called Rotary Clubs, regarding weight reduction. Ninety percent of the membership in WA clubs is male and with an average age of 57 years (Aoun, Osseiran-Moisson, Collins, Newton, & Newton, 2009). Therefore, the WDC targeted a hard to reach population for health promotion - middle aged and older overweight or obese men at risk of developing chronic diseases. Current evidence suggests that men tend to care less for themselves than women, for example they seek help and use health services less frequently that women, or they fail to acknowledge they have health issues (Aoun & Johnson, 2002; Egger, 2000; Smith, Braunack-Mayer, & Wittert, 2006).

The WDC is aligned with the new approach to chronic illness prevention in that it promotes self care in individuals within the community setting with the main aim of weight reduction. The pilot study was hosted by 23 Rotary Clubs in Rotary District 9460 (currently changed to 9465), which is situated in the South West region of Western Australia, in 2007-2008. This program was promoted and facilitated by lay leaders called Champions in each Rotary Club. The researchers of this study concluded that use of Champions in the WDC played a pivotal role in this project and further research was needed to assess the characteristics and

motivations of Champions to facilitate the implementation of similar programs in community settings (Aoun, Osseiran-Moisson, et al., 2009).

1.2 SIGNIFICANCE OF THE STUDY

Lay persons called natural helpers and lay health advisors have been used to deliver health promotion programs in their community by acting as intermediaries between health services and hard to reach communities (Eng & Parker, 2002; Eng, Rhodes, & Parker, 2009; Israel, 1985). Their role is to provide information and advice to the members of their community due to their belonging and their deep understanding of the norms and functioning of their community (Eng & Parker, 2002; Israel, 1985). Natural helpers and lay health advisors could, by their action, improve their community health practice and competency as well as the coordination of health services for their community (Eng & Parker, 2002; Eng, et al., 2009). None of the studies have covered this concept for service clubs setting.

The results of the proposed study will make a significant contribution to ongoing work with hard to reach populations at risk of developing chronic diseases by demonstrating the potential role and influence of Champions in lifestyle programs. This study also responds directly to the Commonwealth Government and key health organisations' imperatives to find new approaches to the prevention of chronic diseases and self-management. In particular, the Australian Government (Australian Government Department of Health and Aging, 2006) is keen to educate consumers so they are able to self-manage their chronic diseases, and improve their sense of well-being and health outcomes. This will also decrease reliance on health professionals. Such reliance results in the health dollar being stretched. It is anticipated that the findings from this study will assist in the development of a profile of Champions who could advocate, promote and sustain a healthy lifestyle with their peers with the aim of improving their communities' health practices and competence.

1.3 OBJECTIVES OF THE STUDY

The overall aim of the proposed study will be to develop a profile of lay-leaders called Champions for the WDC. To reach, this final outcome, three main objectives were defined as follows:

1. Explore the attributes of the WDC Champions influencing health practices
2. Explore the benefit of the WDC Champions on their peers
3. Explore the benefit of the WDC Champions within the framework of community support and attachment

The natural helper intervention model (Eng & Parker, 2002; Eng, et al., 2009) provides a framework to analyse the impact of lay leaders on changing behaviour at the peer, community and health services organisation levels and the objectives are directly linked with this model.

1.4 OVERVIEW OF THE THESIS

This thesis is presented in six chapters. This first chapter introduces the background of the study, significance for health outcomes, and objectives of the study. Chapter two discusses the theoretical framework for this study and presents the available literature and background to the area studied. Chapter three describes the methodology used to conduct this study. Chapters four and five present the quantitative and qualitative results respectively. Chapter six discusses the findings as well as the limitations of this research, it gives recommendations emerging from the research and highlights future research opportunities. Finally the study conclusions are presented.

2 LITERATURE REVIEW

2.1 INTRODUCTION

This Chapter presents the literature and theoretical framework that underpin this research. Then, characteristics of individuals who influence or help others both in community and organisational settings, definition of the community and in particular the Rotary community are presented. Finally, the background of this study is described in the context of the Waist Disposal Challenge.

2.2 THEORETICAL FRAMEWORK: HEALTH PROMOTION ECOLOGICAL MODELS

Changing people's lifestyles and, more specifically, habits such as eating, drinking, smoking and physical exercise, is difficult (Ewart, 2009). As behaviour is influenced at multiple levels such as individual and environmental levels, the most effective interventions, aimed at ensuring people make the lifestyle changes, need to take these levels into account (Sallis & Glanz, 2009). The Ottawa Charter for Health Promotion (Canadian Public Health Association & World Health Organisation [WHO], 1986) suggests actions to be undertaken at government, community and individual levels to enable people to improve their health. One model that enables these multiple levels to be examined is the ecological model for health promotion.

The early health promotion ecological model

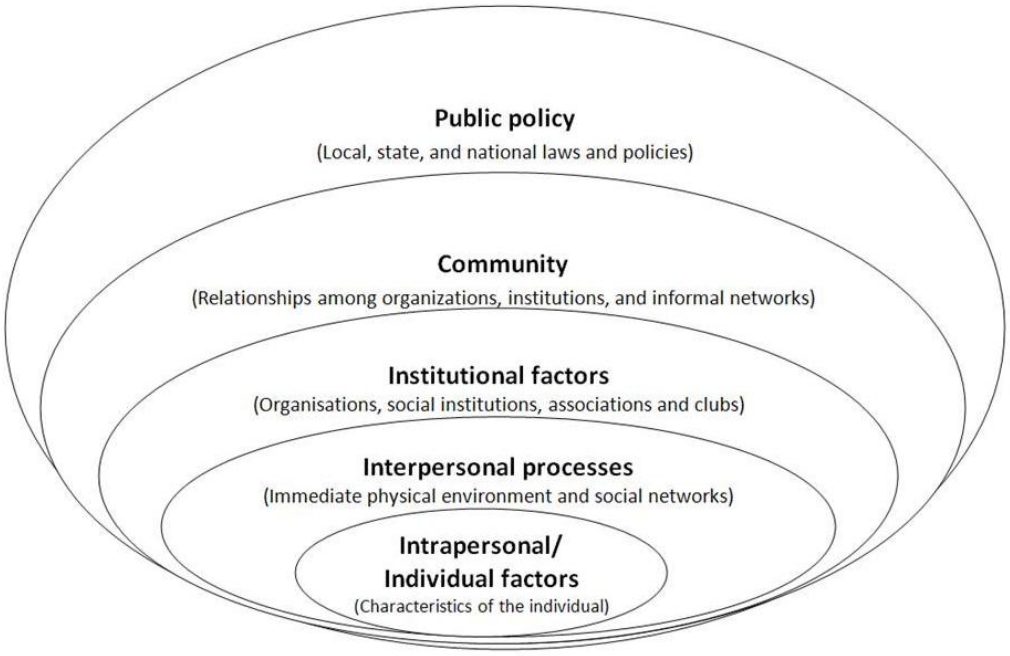
The health promotion ecological model has its roots in social human ecology (Lounsbury & Mitchell, 2009; McLeroy, Bibeau, Steckler, & Glanz, 1988). An early proponent was Bronfenbrenner (1994) who emphasized that a child's development and behaviour are embedded in a series of environmental systems that interact with one another and with the individual to influence development.

Within the area of health promotion more specific models are needed to identify the main health determinants and provide guidance and identification of suitable

interventions that influence individual behaviour (Bartholomew, Parcel, Kok, & Gottlieb, 2006; Nutbeam, 1998). Several ecological health promotion models have emerged, notably the social ecological model for health promotion which clearly identified which determinants influence individual behaviour (Green, Richard, & Potvin, 1996; Richard, Gauvin, & Raine, 2010). This model emphasises individual and environmental determinants of behaviour that interact amongst themselves and between each other (McLeroy, et al., 1988). The model is generally represented in nested circles (Green, et al., 1996). This model proposes five layers influencing individual behaviour; intrapersonal factors, interpersonal processes, institutional factors, community and finally public policy. These layers are presented in Figure 1.

Figure 1

Social ecological model for health promotion (McLeroy, et al., 1988)



This model was criticised by Richard, et al. (2010) because, despite depicting the influence of environment on individual behaviour, it focuses mainly on addressing behaviour change at each level without explaining the relationships between levels. Sallis et al., (2008) added that this model did not provide a guide on how to implement an intervention. However, this model has rapidly gained recognition

within the health promotion arena since it was recognised as ecological due to the fact that four of its levels relate directly to people's environment. It has also drawn the attention to the importance of the influence of environment on individual behaviour (Green, et al., 1996). This model opened new horizons in health promotion and was used as a guide for further research in health promotion ecological models looking at behavioural change (Richard, et al., 2010)

The health promotion ecological model nowadays

This early ecological model for health promotion proposed by McLeroy et al., (1988) has been adapted in different settings of health promotion. (Green, et al., 1996; Richard, et al., 2010; Sallis, et al., 2008). Also these ecological models became more tailored to specific types of intervention. Sallis et al., (2008) stated that ecological models are more powerful in guiding an intervention when they are tailored to a specific health behaviour. This implies that the identification of environmental variables for a specific behaviour may not be transferable to other behaviours. For example, promoting jogging may not be transferable to promoting walking.

To illustrate a tailored change of behaviour, Sallis et al., (2006) developed a specific ecological model with four layers for the creation of active living communities. The four layers of this ecological model are; 1) intrapersonal variables concerning characteristics of the individuals and their perception of their environment, 2) behaviour active living domains representing the four domains of living; recreation, transport, occupation and household, 3) behaviour access and characteristics concerning where physical activity may occur and 4) police environment, such as transportation regulations, urbanisation planning. Interactions are within and between each level. This model was created to demonstrate that the individual change of behaviour in practicing more physical activities depends not only on the individual choice but also on environmental factors such as accessibility to recreational areas, urbanisation plan or transport.

Another example of a study using the ecological approach to promoting walking in rural communities in Missouri Ozark region in the U.S.A (Brownson et al.,

2005). Multilevel interventions were undertaken at three levels: the individual, the interpersonal and the community. The authors concluded that to obtain individual change in physical activity in rural areas, actions should be taken at several levels. At the community level, walking groups should be created or maintained and at the infrastructure level, new walking tracks should be built.

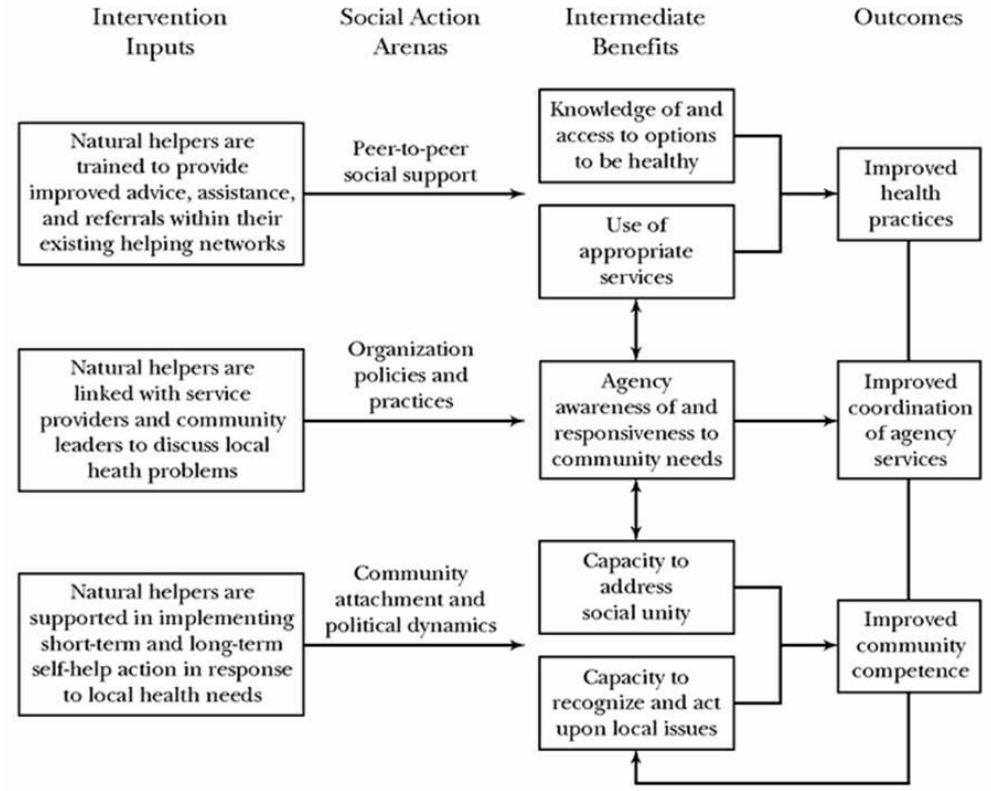
2.3 THE NATURAL HELPER INTERVENTION MODEL

The natural helper intervention model is an example of an ecological model specifically tailored for health promotion interventions. This model is part of community-based interventions where the main aim is achieving population change in risk behaviour by using the community itself (Merzel & D'Afflitti, 2003). The natural helper intervention model was developed to guide interventions using particular lay individuals from communities called, "natural helpers" or "lay health advisors", to bring about behavioural, organisational, community and social changes (Eng & Parker, 2002; Eng, et al., 2009). The concept of natural helpers and lay health advisors will be developed further later in this chapter.

According to Eng and Parker (2002) and Eng et al. (2009), the natural helper intervention model is a complementary community-based system care and social support to local health professionals and services (Figure 2). These authors describe their model as having three main arenas through which natural helpers and health professionals can collaborate. First, the intervention inputs or activities during the implementation can range from training natural helpers by health professionals to providing referrals within their existing helping networks; second, collaboration of natural helpers, health professionals and community leaders in discussion of local health problems; and finally, engaging natural helpers implementing short and long term action in response to local health needs.

Figure 2

Natural helper intervention model (Eng & Parker, 2002; Eng, et al., 2009)



Each type of collaboration between natural helpers and health professionals can impact both on intermediate and long term outcomes and benefits. The intermediate results of using natural helpers may increase knowledge of and access to appropriate health services, increase the responsiveness by health agencies to community needs, increase of community capacity to recognize their needs and sustain them. In the longer term, the use of natural helpers can bring about three main outcomes: (i) an improvement in health practices refers to a better understanding and knowledge of health issues by members of natural helpers' communities through information and referrals that are difficult for health professionals to provide directly; (ii) an improvement in coordination of agency services refers to a better understanding of community needs by health professionals which could imply more responsiveness by health services to the community needs of natural helpers. This improvement is the result of the collaboration between natural helpers and health professionals; and (iii) an

improvement in community competence relates to the collaboration between health services and natural helpers to mobilize the community's resources to implement self-help action such as creation of walking groups (Plescia, 2008). The community increases its own capacity to solve problems and increase its social unity.

A qualitative intervention study aiming to reduce cardiovascular disease and diabetes in hard to reach communities by health services in Charlotte, U.S.A, targeted African-American with a low socio-economic status (Debate & Plescia, 2004) which supports the theory of using lay health advisors or natural helper described above. In this study, lay health advisors were used to provide advice and information on these two conditions. The study was conducted in several communities, where some of these communities had lay health advisors and some others had none. Results from focus groups revealed that communities with lay health advisors improved their health practices, and participants and their families adopted a healthy lifestyle. Also, there was an improvement in community capacity with an increase of community commitment and collectiveness. However, no change was noticed in members of communities with no lay health advisors

The natural helper intervention model is in the line with the social ecological model of health promotion through its community assessment and contribution to health promotion (McLeroy, et al., 1988). The strength of the natural helper intervention model is that it builds on the local community infrastructure and support networks such as family and neighbourhood (Debate & Plescia, 2004; Eng, et al., 2009). However, the efficacy of the model is closely linked with the stability of the community and its ability to absorb change (Eng & Parker, 2002).

2.4 DIFFUSION OF INNOVATION

The Diffusion of Innovation theory was developed by Rogers in the late 1940s and has been revised several times since then (Rogers, 2003). The main focus of the diffusion of innovation theory is the implementation and adoption of innovation by individuals (Berwick, 2003; Dearing, 2008; Rogers, 2003; Weiner,

Lewis, & Linnan, 2009; Wiecha et al., 2004). Diffusion of innovation has been used extensively in health areas, most notably to implement structural changes in health services in order for them that they become more sustainable (Cain & Mittman, 2002; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). It is also used to look at how new technology is perceived by a specific population (Nielsen & Moldrup, 2007) and how to implement health promotion intervention in specific communities (Atkins et al., 2008; Ciliska et al., 2006; Layne et al., 2008; Sikkema, 2005).

Rogers (2002, 2003) explains that the diffusion of innovation is the process by which an innovation is communicated or diffused over time through specific channels among members of a social system. The members of a social network gain an awareness of, and make a decision about, their use of an innovation. Innovation may not necessarily be new to the whole population as long as the innovation is perceived as new or has recently become a personally relevant option to the individual. Diffusion of innovation also identifies the most effective ways of encouraging people to adopt innovations. There are four main factors that influence the successful adoption of a new idea or product: a) type of innovations, b) characteristics of people who adopt the innovation or fail to adopt it, b) rate of adoption or the rapidity by which an innovation is adopted, c) nature of the social system such as organisation or community and d) characteristic of individuals who make changes by influencing others.

Rogers (2002, 2003) stresses that an innovation is more likely to be adopted by members of a specific community if the innovation is advocated by a member of that community. These members who promote the innovation are depicted as influential and are separated into two groups: Those who influence their peers in community settings are called “opinion leaders” and those who have influence in organisational settings are named “champions”. Characteristics of opinion leaders and champions are discussed in the following section.

2.5 INDIVIDUALS WHO INFLUENCE AND/OR HELP OTHERS

Three main types of individuals have been described as being influential in changing behaviours of others in health promotion;

a) Influential individuals in community settings: opinion leaders, natural helpers and lay health advisors;

b) Influential individuals in organisations: champions and;

c) Volunteers.

The Social Learning Theory (Bandura, 1977), posits that influential individuals perceived as credible, likeable and trustworthy are likely to be effective agents of behavioural change. The concept of natural helpers and lay health advisors emerged in the 80s in North Carolina (USA) in social science (Bass, 1999; Eng, et al., 2009). They were recognised for engaging in a community's natural helping in health promotion. This concept has subsequently been intensely used in health promotion while opinion leaders and champions concepts were described in the diffusion of innovation theory (Rogers, 2003) as presented previously. Few authors provide an unambiguous definition of opinion leaders, natural helpers, lay health advisors, champions and their characteristics (Eng, et al., 2009; Israel, 1985; Thompson, Estabrooks, & Degner, 2006). First individuals who influence others in community settings will be discussed followed by champions within organisations and then volunteers.

2.5.1 INFLUENTIAL INDIVIDUALS IN COMMUNITY SETTINGS

2.5.1.1 OPINION LEADERS

Opinion leaders emerge from the community and are persuasive, influential, and charismatic members of their community (Rogers, 2003; Thompson, et al., 2006). They are also frequently asked for advice by other members. They are more open to the external world than other members, they also demonstrate a strong sense of the norms of their community, and they have an innate sense of what is acceptable or not for their community. Opinion leaders, by their behaviour and adoption of

new ideas, can act as role models in the community (Rogers, 2003; Valente & Davis, 1999). Two other key elements to the successful diffusion or dissemination of information by opinion leaders are the appropriate selection and training as opinion leaders are the key link between the innovation or intervention to be diffused and the community members (Rogers, 2003; Valente & Pumpuang, 2007).

The importance of opinion leaders in communities and the significant changes in behaviour induced by the use of opinion leaders have been highlighted in several studies such as use of local opinion leaders to promote self management programs (Doumit, Gattelari, Grimshaw, & O'Brien, 2007), to change practice in a clinical environment (Locock, Dopson, Chambers, & Gabbay, 2001) and to change behaviour within homosexual communities to prevent AIDS (Kelly, 2004; Kelly et al., 1991; Kelly et al., 1997). For example, these authors undertook several studies about the implementation of intervention for HIV reduction in small isolated U.S.A. towns and, in particular, in stable gay populations attending specific bars. These health promotion interventions for HIV risk reduction were delivered by selected and trained opinion leaders. After the interventions, there was a change in behaviour among the populations; more men had protected intercourse. It was assumed that the use of opinion leaders was the main contributor to this result. Sikkema (2005) conducted a similar study in 18 stable gay women communities with low-income, opinion leaders were identified and trained in nine communities (intervention group) while the other nine communities were used as control group. Women in the intervention group had significant reductions in frequency of any unprotected intercourse and an increase in percentage of condom-protected sexual intercourse.

2.5.1.2 NATURAL HELPERS

Natural helpers and opinion leaders share common characteristics. Natural helpers emerge informally in their communities, and are sought spontaneously and naturally by others for their advice, emotional support and aid (Eng, et al., 2009). They are depicted as being respected and trusted by their communities (Fleury,

Keller, Perez, & Lee, 2009; Israel, 1985; Leone, James, Allicock, & Campbell, 2010). As for opinion leaders, it is similarly important to accurately identify the natural helpers. The selection of natural helpers usually follows a specific process using community leaders such as priests to identify them on the basis on their reputation in the community (Eng, et al., 2009; Israel, 1985).

Natural helpers possess also a deep understanding of their community's social networks and health needs (Hawe, Webster, & Shiell, 2004). They also have a strong sense of their communities' norms. Natural helpers share the same culture and have a profound knowledge of what it is meaningful to the members of their communities and they communicate using the same language (Eng, et al., 2009; Israel, 1985).

Eng and Parker (2002) also describe natural helpers as providing an informal helping network. Natural helpers are the link between the community and health services which train them prior to undertaking the implementation of intervention in their communities. Natural helpers are used in health programs whose purpose is to enhance the wellbeing of their whole community. They are appropriate to implement health prevention programs in outreach or specific populations (Israel, 1985; Scott, 2009).

For example, natural helpers were used to increase awareness of community resources and provide the necessary tools to the African American men community to use health care services. Usually this community was reluctant to use community resources and health services for various reasons. Natural helpers played a crucial role due to their profound understanding of their community and their position within this community (Scott, 2009).

2.5.1.3 LAY HEALTH ADVISORS

Lay health advisors are also known as lay health educators, lay health advocates, peer advisors (Kim, Koniak-Griffin, Flaskerud, & Guarnero, 2004) and were used widely in health promotion to reach an undeserved population or a specific population (McQuiston & Flaskerud, 2003). For example, a study by Quinn

(2001) used lay health advisors to deliver a weight-loss intervention for an African American community in Chicago in several church-based communities. The results showed that participants had a significant loss of weight on average 8.3 pounds, at the end of the program.

Lay health advisors can come from three main populations: natural helpers, health professionals and organisational volunteers (Altpeter, Earp, Bishop, & Eng, 1999; Eng, et al., 2009). After their selection, lay health advisors receive training to carry out the health program needed to be diffused in communities (Campbell et al., 2002; Plescia, 2008). Natural helpers trained as lay health advisors are more efficient than health professionals trained as lay health advisors, due do their position in their communities (Altpeter, et al., 1999; Debate & Plescia, 2004; Eng, et al., 2009).

Several authors reported that lay health advisors gained personal benefit from their role. For example, a study where lay health advisors were used to promote a healthy lifestyle (diet and physical activities) to prevent cardiovascular disease in a Latinos population in Los Angeles County in the U.S.A. was undertaken (Debate & Plescia, 2004; Kim, et al., 2004). These lay health advisors improved their own lifestyle and that of their families and they were keen to continue providing advice to their community after the end of the intervention. It is worth mentioning that often lay health advisors receive financial compensation for their work (Campbell, et al., 2002; Plescia, 2008; Vissman et al., 2009), rather than being volunteers.

Only a few studies have been found where lay health leaders undertook their position in a structured community or an organisation. In a work place, women in small rural blue-collar worksites were trained as natural helpers to diffuse information and provide support for healthy behaviour changes in their co-workers (Campbell, et al., 2002; Tessaro et al., 2000); in a soccer sporting club, a club member was trained as a lay advisor to promote safe sex (Vissman, et al., 2009), in YMCA association, members was also train to promote the Diabetes Prevention Program (Ackermann & Marrero, 2007; Jackson, 2009). However, in

none of these studies, the lay leaders needed to sell the health implementation or to seek the approval from their hierarchy, as these were undertaken by the chief academic investigator of the health intervention.

2.5.1.4 CHAMPIONS

Champions play a similar role to opinion leaders, but their role is within *organisational* settings where there is structure and hierarchy (Rogers, 2003; Thompson, et al., 2006). The role has been extensively described in the business arena but less in the health domain (Locock, et al., 2001). The main difference between opinion leaders and champions resides in their setting, selection and training. Champions emerge informally at all levels of an organisational hierarchy and their colleagues and managers acknowledge and recognise them as champions (Rogers, 2003). Hence, there is no formal selection process.

Champions have been described as advocating not for personal interest but for the intrinsic value of the products or concepts or projects in their organisation and in this sense they are the counterparts of opinion leaders but in organisations (Markham & Aiman-Smith, 2001; Rogers, 2003). Schon (1963, p. 84) encapsulated the role of Champions in promoting a new idea or concept by stating that "the new idea either finds a Champion *or dies*". Champions have been described as visionary (Thompson, et al., 2006) as well as transformational leaders (Howell, Shea, & Higgins, 2005). Champions are charismatic and well connected with people and fully understand the resources of their organisation. These attributes make champions influential advocates (Markham & Aiman-Smith, 2001; Rogers, 2003).

Transformational leadership has been cited as one of the attributes of champions as it inspires and motivates followers. Bass (1999) defines transformational leadership in *four* main characteristics. The *idealisation* consists of the leader acting as a role model and promoting desirable behaviours, determination and confidence. *The inspirational leadership* describes that the leader shows a clear and attainable vision of the future and expects that followers would reach this vision. The *intellectual stimulation* expresses that the leader encourages and helps

followers to become more creative and innovator and finally *the individualised consideration* describes that the leader operates as a coach and provides personal attention to the development of followers.

No studies have discussed the role of lay champions in the health environment and some studies reported the role being undertaken by health professionals. For example, the purpose of one study was to determine how to implement a new treatment in a psychiatric clinic despite organisational barriers; in this case psychologists were used as champions (Corrigan, 1995). The author proposed that the use of psychologists as champions was vital to promote the new treatment because they were responsible for patients' therapies. However, these champions needed the support from their hierarchy to be successful in implementing new or innovative treatments and to ensure allocation of more resources to train future psychologists in the use of new treatments (Corrigan, 1995). Another study concerning alcohol prevention in university campuses in the USA used champions in university administration to promote and advocate a partnership between colleges and communities (alcohol stakeholders and community administrations). The authors concluded that champions played a vital role in this project by being the 'middle person' and facilitating communication between colleges and communities (Zakocs, Tiwari, Vehige, & DeJong, 2008).

2.5.1.5 VOLUNTEERS

As mentioned then in lay health advisor section, volunteers from organisations could become natural helper following training. However, it has been highlighted in the literature that these volunteers differ in three ways; volunteers are not necessarily recognised by the community, as someone with a reputation of caring for their community and being respected for it. The second difference relates to the volunteers not really belonging to the communities where they act as natural helpers. Finally, these volunteers do not necessarily have a deep understanding of the norms and the culture of these communities (Altpeter, et al., 1999; Eng, Parker, & Harlan, 1997).

In Australia in 2006, volunteers represented 34% of Australians aged 18 years and over (Australian Bureau of Statistics [ABS], 2007). Australians with good health and higher education and high income are more likely to volunteer than others. Also volunteering in the community and welfare organisations represented 16.3% of volunteering type of involvement as volunteers. People volunteered mainly for helping others (57%), for personal satisfaction (44%) and to do something worthwhile (36%).

All organisations functioning with volunteers are dependent on satisfactory recruitment and retention of their volunteers. Bussell and Forbes (2002) proposed that it is essential for organisations to understand the profile of volunteers and especially the key motivational forces that drive them. They concluded by stating that altruistic motives are not the only reasons why individuals choose to volunteer, and that volunteer motivations are complex. Clary and Snyder (1999) and Clary, Snyder, Ridge, et al. (1998) used a functionalist approach to articulate the structure of these motivations by defining six motives as part of the Volunteer Functions Inventory (VFI); *value* relates to volunteering for altruistic reasons or concerns for others, *understanding* refers to acquiring new learning experiences; *social* where social relations are strengthening, *career* for gaining experience for further employment, *protective* refers to reducing negative feelings like guilt and *enhancement* refers to increasing self-esteem. They reported that personal values were one of the major motivations.

For example, this approach was used in a study to understand why people in five Rotary clubs in the U.S.A. volunteer and to look at their intention to continue volunteering in their clubs (Favreau, 2005).The author of this study found that the majority of Rotary members were male white self-employed between the ages of fifty and sixty. The researcher investigated if three different hypotheses related with the motive to volunteer. The first was to identify if there was significant difference amongst the motive to volunteer, the second to determine if one of the six volunteering motives will be predictive of intent to continue volunteering and if one or more of the demographic variables will be predictive of intent to

continue volunteering. Results showed that the value motive was the strongest reason to volunteer and protective factor was the weakest reason with a significant difference. In other words, these Rotary members volunteered in this organisation to help others and not as a means of escaping negative feelings about themselves. Concerning the intent to continue volunteering, this study demonstrated that Rotary club members of these five USA clubs expressed their intention to volunteer in their club because they wanted to help others (value motive) and due to their desire to learn from their volunteering experiences (understanding motive) while the demographic variables had no impact on the intent to continue volunteering.

Esmond and Dunlop (2004) examined the reason why people do not volunteer and whether these described motives were applicable to volunteers in WA. However the main objective of this study was to reveal the motivation to volunteer in WA. These authors brought to light that the main reason given by WA people for not volunteering was lack of time. However, they will consider volunteering if they believed in the philosophy and mission of an organisation or if their volunteering activity will make a difference to people's lives. The results of this study suggested that the six motives defined in the Volunteer Functions Inventory (Clary & Snyder, 1999; Clary, et al., 1998) did not fully describe the reasons why WA people volunteered. An additional four motives were found: recognition by others of volunteer activity, social interaction where volunteers enjoy the social atmosphere of volunteering, reciprocity in the exchange, and reactivity, where volunteering is used as a way to heal past issues. The authors incorporated these ten motivations in the Volunteer Motivations Inventory (VMI). Like Clary (1998), these study's authors found that values defined by the organisation were one of the main motivations for volunteering in WA.

2.6 COMMUNITY

Community early work

In the literature, the concept of community has been approached from diverse perspectives such as psychological, geographical, sociological and political (St

John, 1998). Many attempts have been made to articulate what “community” means. Early work, studied the emotional connection of people to their place (Tuan, 1977, 2002) and highlighted the differences between gemeinschaft (individual bonds defined by kinship, tradition and affinity) and gesellschaft (broader society) and looked very generally at the value of community to individuals (Tonnies as cited in Wendel et al., 2009). These theories, however, found difficult to operationalize the concept of community, particularly for research into the meaning of community to individuals and its impact on these individuals, and to articulate what constituted a sense of community.

Sense of community

McMillan and Chavis (1986) came from a community psychology perspective. They presented a definition of what they termed Psychological Sense of Community. *"Sense of Community is a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together*" (McMillan & Chavis, 1986, p. 9). For these authors, sense of community is defined by four elements; a) membership which included acknowledgement of boundaries, feeling to be in an emotional safe environment, sense of belonging and identification in this community, personal investment and a common symbol or culture system, b) influence operating both ways, members need to feel that they have some influence in the group, and some influence by the group on its members is needed for group cohesion, c) integration and fulfilment, members feel rewarded in some way for their participation in the community and, d) sharing emotional connection which includes shared history and shared participation (or at least identification with the history), this element is described as the “definitive element for true community" by the authors. The stronger those elements are felt by members, the stronger the community’s members are bound together. These four main aspects of sense of community have remained robust and are still used in current research. For example, the validation of the brief sense of community scale recently confirmed the validity of these four elements (Peterson, Speer, & McMillan, 2008). Another study tested the construct of sense

of community amongst two communities with different races, Black and White residents in a midsized Southern city in the U.S.A. The authors of this study concluded that the construct of sense of community, defined by McMillan and Chavis (1986), was identical in both communities (Coffman & BeLue, 2009). These authors have subsequently refined these concepts and debated the most valid ways of measuring items related to each concept.

There is a wealth of empirical research and the Sense of Community Scale (SOC) has been used in studies with migrants, geographical communities (neighbourhoods or towns) and relational communities. In general, SOC has been linked with a greater sense of wellbeing. For example, Ross (2002) demonstrated the association between a high sense of community belonging and self perceived positive health status amongst people in the Canadian Community Health Survey. Another study conducted by Bathum and Baumann (2007) found that recent and more long-term immigrant Latinas in the U.S.A. attributed their loss of sense of community due to their migration and reported difficulties in developing a sense of community in their new living place, mainly due to the lack of emotional connection. This loss may also have had an impact on their health status. Sense of community could also imply a greater participation or involvement in community life. For example, Ohmer (2007) established that volunteers in the lower socio-economic neighbourhoods of metropolitan Pittsburgh (U.S.A) were more likely to be involved in everyday activities and decision making in their communities if they had a high sense of community.

Community and health promotion intervention

How members of a targeted population define or perceive their community has a direct impact on the acceptance of health promotion interventions. For example MacQueen et al. (2001) conducted a study to identify the most appropriate strategy to support community collaboration in HIV vaccine trial amongst four gay communities across the U.S.A. When researchers asked participants how they described their community, they found four main cores to define their community, which is similar to the sense of community by McMillan and Chavis (1986).

Trickett (2009) stressed that it is highly important to understand each community culture, and norms as they are closely linked to the locality where the community has been established. A health promotion intervention will be more credible if the process and activities linked to the intervention are connected and integrated into the culture and norms of the targeted communities.

2.7 THE ROTARY COMMUNITY

Rotary is a geographical and relational community with strong bonds between members. Rotary International is not-for-profit and a non-governmental organisation of service clubs known as Rotary Clubs (Rotary International). The organisation aims to bring together professional and business leaders to provide charitable service, foster high ethical standards and help develop peace and goodwill in the world (Dochterman, 2003; Rotary International).

Rotary International is spread worldwide, with 1.2 million members in 33,000 clubs. Rotary Club members are volunteers who work locally, regionally, and internationally to prevent hunger, improve health and sanitation, provide education and job training, promote peace, and eradicate polio under the motto "Service Above Self". (Rotary International)

Rotary organisational structure

Rotary International and clubs have a strong organisational structure and hierarchy, which is written in the "Rotary codes of policies". Rotary is structured at the club, district and international levels. Rotarians are members of their clubs (Rotary International, 2010). The clubs are chartered by the global organisation, Rotary International. The clubs represent the base of Rotary activity and each club elects its own president and officers among its active members for a one year term. The governing body of the club is the board of directors, consisting of the club president, club secretary, club treasurer, and several club board directors. In the majority of clubs, the previous past president is also a member of the board. The president usually appoints the directors to serve as chairs of the major club committees, including those responsible for club service, vocational service, community service, youth service, and international service. The clubs have their

own autonomy within the framework of the standard constitution and the constitution and bylaws of Rotary International (Dochterman, 2003; Rotary International, 2010)

At the district level, the district governor is an officer of Rotary International and represents the Rotary International board in the Rotary clubs in his/her district. Each governor is nominated by the clubs of his/her district, and elected by a designated committee. The district governor appoints assistant governors among the Rotarians of the district to assist in the management of Rotary activity and multi-club projects in the district (Dochterman, 2003; Rotary International, 2010).

Rotarians' networks and bonds

Each club meets weekly, in a regular location, and according to bylaws of Rotary international, 60 percent of attendance of all meetings is requited, however 100 percent is expected. During meetings, current business and programs in which clubs are engaged are discussed, also guest speakers on various subjects are regularly invited. If Rotarians cannot attend his/her own club's weekly meetings, he/she is encouraged to attend other Rotary club's meetings.

Strong attendance in weekly clubs' meetings and in club's activities encourages good relationship amongst Rotarians, also the attendance at other clubs' meetings fosters communication and networking between clubs. This bond between Rotarians is also supported by social events held at the club, district and international levels. (Chao, 2008; Dochterman, 2003; Rotary International, 2010).

Rotary clubs in Western Australia

The Rotary clubs are very well established in Australia in general and in Western Australia (WA) in particular with a strong relationship with the community. For example, the Rotary District 9465 leads several community projects such as the Handicamp with the purpose of organising camps for young adults with moderate intellectual or physical disability; The Rotary Youth Leadership Awards (RYLA) camp to develop leadership amongst young people coming from schools and universities or young professionals. The Waist Disposal Challenge project about

lifestyle change to reduce obesity is another relevant example (Rotary District 9465).

2.8 BACKGROUND OF THIS STUDY: THE WAIST DISPOSAL CHALLENGE AND WDC CHAMPIONS

The Waist Disposal Challenge (WDC) aimed to engage community members at risk of developing chronic diseases to find their own ways to a healthy lifestyle. The WDC is an innovative project designed to meet the needs of the Rotarian community regarding weight reduction. In 2007, in WA, 90% of the membership is male, therefore the WDC targeted a hard to reach population for health promotion - middle aged and older overweight or obese men at risk of developing chronic diseases (Aoun, Osseiran-Moisson, Collins, & Newton, 2008). It also targeted men living in rural areas who are less likely to access such programs and with a poorer health status from their metropolitan counterparts. Current evidence suggests that men have worse standing on most indices of health (Aoun & Lyn. Johnson, 2002; Egger, 2000). They live an average of 7.7 years less than women, die prematurely, experience disproportionately higher morbidity rates, and have higher levels of disease risk and higher rates of chronic illnesses (Aoun & L. Johnson, 2002; Buckley & Lower, 2002; Egger, 2000; J.A. Smith, A. Braunack-Mayer, & G. Wittert, 2006).

The WDC is aligned with the new approach to chronic illness prevention in that it promotes self care in individuals within the community setting with the main aim of weight reduction. It was hosted by 23 Rotary Clubs in District 9460 (recently changed to 9465), which is situated in the South West region of WA. The WDC program took place in 2007-2008 and comprised three levels (Aoun, Osseiran-Moisson, et al., 2009):

- Level 1 (Education Sessions): educational presentations to raise awareness of risk factors for lifestyle chronic diseases and the benefits of healthy nutrition and physical activity which were delivered by health professionals,

- Level 2 (BMI Competition): a Body Mass Index challenge between clubs (monthly weigh–ins) undertaken by Champions, and,
- Level 3 (Lifestyle Coaching Program): an individual and personalized telephone lifestyle coaching with follow-ups at regular intervals provided by health professionals (dieticians).

Clubs who expressed interest were asked to nominate one or two Champions who would lead the project in their clubs and would be the point of contact with the project staff. Champions thus far have been mainly involved in Level 2 of the program, where their role included measuring the weight and height of Rotarians during routine monthly club meetings. Champions helped in organising speakers for Level 1 and recruiting club members for Level 3. Champions were required to maintain the motivation for this program in their club and encourage members to adopt a healthy lifestyle, including healthy diet and exercise.

Champions regularly received material to assist in this task, such as promotional brochures, recipes, or physical activity tips from the project team. This information was published in the weekly bulletin of each Rotary Club or circulated as a flyer during the weigh-in sessions. Also, regular teleconferences were organised between the Champions and the research team who provided support and answered questions.

The pilot study enrolled 750 participants in Level 1, 411 participants in Level 2 and 40 participants in Level 3. The results of Level 2 indicated a significant to moderate decrease in weight amongst the club members. For example, after 11 months the proportion of participants with severe obesity dropped from 8.36% to 3.68% ($p=.008$), and between the 5th and 11th month the proportion of participants who lost weight increased from 34% to 53% ($p<0.001$). The analysis of BMI reduction (Level 2) was undertaken using data from 15 clubs (representing 411 Rotarians) who submitted good quality data. Some clubs lost their Champions and were not able to continue the project (Aoun, Osseiran-Moisson, et al., 2009).

The researchers proposed that use of Champions in the WDC played a pivotal role in this project and further research was needed to assess the characteristics and motivations of Champions to facilitate the implementation of similar programs in community settings (Aoun, et al., 2008; Aoun, Osseiran-Moisson, et al., 2009).

2.9 SUMMARY AND APPRAISAL

This Chapter presented the theoretical framework of this study and the terminology attached to it. The definitions of the different people who influence others in the communities and in organisations according to the literature were also introduced. Volunteering, sense of community and the study background were also presented in this chapter.

Due to the nature of the population and of the research questions studied in this research, the ecological model and more precisely the natural helper intervention model (Eng & Parker, 2002; Eng, et al., 2009) was appropriate as the theoretical framework for this study. This model was suitable as the role of the Champions in Rotary clubs in 2007-2008 was held by a lay person belonging to the club who promoted a health intervention. The insight brought by the literature concerning the concept of Champion and their characteristics (Rogers, 2003; Thompson, et al., 2006) was crucial to understanding how new ideas could be implemented in highly structured organisations like the Rotary clubs (Dochterman, 2003; Rotary International). It was important to investigate the reasons why people volunteered as these reasons could have had an incidence on the role of the WDC Champions. Finally, the sense of community defined by McMillan and Chavis (1986) provided a frame of what is a community and what were the implications of the sense of community between individuals and their communities. It was suspected that in the Rotary clubs, the sense of community could have also had a direct impact on the role of the WDC Champions.

Despite an extensive research in these multiple disciplines of academia, no study was found studying this concept of lay leaders who promoted health interventions in a structured community such as the Rotary clubs. However, one study was found related with Rotary clubs (Favreau, 2005) but this study investigated only

the reasons why Rotarians volunteered in their clubs and if there were relationships between their reasons to volunteer and their intent to continue to volunteer which was not the subject of this research. However, these results will be valuable to this research.

Based on the literature related to Champion behaviour, volunteering and sense of community, the Champion Behaviour instrument (Howell, et al., 2005), the Volunteer Motivation Inventory (VMI) (Esmond & Patrick, 2004) and The Brief Sense of Community Scale (BSCS) (Peterson, et al., 2008) appear to be suitable to explore different facets of the characteristics of Champions.

The next chapter will present the methodology used in this study.

3 METHODOLOGY

This chapter describes the methodology used to conduct this research. The research design, sample, the development of instruments (self-administrated questionnaires and interview guide) used, the research methods and the pilot study are described. The study procedure is outlined and data analyses are explained. Ethical considerations for this study are addressed.

3.1 RESEARCH DESIGN

An exploratory descriptive design was chosen for this study. This design is appropriate when information on a new field of investigation is needed (Burns & Grove, 2005) and also suitable to investigate the full nature of the studied phenomenon (Polit & Beck, 2004). This is fitting for this study as, has been demonstrated in the literature—very little is known about champions' characteristics in community settings at the present time.

3.2 SAMPLE

3.2.1 PARTICIPANTS

A purposive sample was chosen as this study aims to bring a deeper understanding of the role and characteristics of Champions who participated in the pilot of the WDC undertaken in Rotary Clubs in 2008 (Aoun, Osseiran-Moisson, et al., 2009). The main restriction of using purposive sample takes place in the almost impossibility of generalising research findings since the purposive sample represents a specific population (Bryman, 2008; Polit & Beck, 2004). However, Polit & Beck (2004) claim that purposive sample is appropriate in case of an exploratory study, which is the case for this master research. In this case, findings could not be generalised as for any purposive sample but they could be a start for further research.

3.2.2 SAMPLE SELECTION AND SIZE

Purposive samples were drawn from two known populations; a) Champions who have facilitated WDC in their clubs and b) Club Members who have participated in this program. Champions and Club Members have been recruited from 23 Rotary Clubs in Rotary District 9460 (South West of WA) who previously participated in the pilot implementation of the WDC (Aoun, Osseiran-Moisson, et al., 2009):

a) Champions

Selection of purposive sample – 27 Rotarians who took up the role of Champions.

b) Club Members

Selection of purposive sample – All 40 Rotarians who participated in the pilot implementation of the WDC at all 3 levels were invited to participate, because of their ability to give a well informed feedback.

3.3 RESEARCH METHOD

The purpose of the research method is to show how data have been collected and how their analysis has been undertaken (Bryman, 2008). A mixed method approach using triangulation has been chosen for this study, using quantitative and qualitative data which provides the best understanding of research questions (Creswell, 2003).

3.3.1 CROSS SECTIONAL SURVEY

Postal self-administered constructed questionnaires were used in this study to collect quantitative data from two groups about Champions' experience and Club Members' experience of the role of the champion in their club.

With limited resources, time constraint and a large area to cover, a postal self-administered questionnaire was appropriate for this study. This mode of data collection is depicted as the most cost effective way of gathering data. It is also quicker to administer, with absence of interviewer bias, protection of respondents anonymity and respondents convenience (Bryman, 2008; Polit & Beck, 2004). In

social sciences, postal self-administered questionnaires are commonly used to gather data (Bryman, 2008; Polit & Beck, 2004).

3.3.2 SEMI-STRUCTURED INTERVIEW

Qualitative methodology was chosen to collect participants experience (only Champions) of their role as a Champion in their own wording. Telephone semi-structured interviews were chosen as a method to capture those experiences. As telephone semi-structured interviews are cost effective in terms of time and resources (Bryman, 2008; Polit & Beck, 2004). Semi-structured interviews are suitable for this study because they allow interviewees to provide rich detail about their experience (Polit & Beck, 2004) and it maximizes interviewees time (Patton, 1990). From a researcher's position, semi-structured interviews allow researchers to gather qualitative data from participants on a specific set of topics defined in an interview guide, also called topic guide, prepared in advance (Polit & Beck, 2004). The interview guide insured the researcher covered a list of questions but at the same time interviewees could express their views freely about their experiences on questions asked but also on other topics if desired (Polit & Beck, 2004).

3.4 INSTRUMENT DEVELOPMENT

3.4.1 SELF- ADMINISTERED QUESTIONNAIRE DEVELOPMENT

Two self-administered questionnaires have been developed for this research, one questionnaire entitled "What is it like to be a Champion for the Waist Disposal Challenge" for Champions (Appendix 1) and the other questionnaire entitled "Your experience as participant in the Waist Disposal Challenge" for Club Members (Appendix 2). Both questionnaires included developed questions informed by the literature and standardised instruments. In the developed items, a Likert scale type questions, open-ended questions, dichotomy (yes/no) or multiple-choice type of questions were used. Each section of the questionnaire (excluding the demographic section) included an open-ended question to allow participants to express themselves on the related topic or to add general comments

about their experience as Champions or Club Members at the end of questionnaire. These two questionnaires are discussed below.

3.4.1.1 CHAMPIONS' QUESTIONNAIRE

The Champions' questionnaire consisted of eight sections allowing to gather information on; 1) demographics, 2) Champion nomination for the role and knowledge of health issues prior to the WDC, 3) reasons for being a Champion, 4) Champion attitudes, 5) leadership qualities, 6) need for specific training, 7) motivation to be a volunteer and 8) sense of community.

1. *Demographic information* (questions 1 to 6 and 10)

   This section included Champions' gender, age, highest level of education completed, occupation, time since Champions joined the Rotary organisation and their own Rotary club, their participation in the WDC and the final question addressed their position in their club. Open-ended question or multiple-choice types of questions were used.

2. *Champion nomination for role, knowledge of health issues prior to the WDC and knowledge of club norms* (questions 9 and 11)

   Information sought in this section was guided by the literature, and related to how Champions were selected to take on this role (Valente & Pumpuang, 2007). Further questions related to Champion knowledge about weight related health issues prior to the WDC, how well they were accepted by their clubs to host the program which in turn related to their knowledge of the norms of their clubs (Rogers, 2003). Dichotomy type of question and open question were used in this section.

3. *Reasons to be a Champion* (question 12)

   This section gathered data about reasons to become a Champion: whether for personal reasons (loss of weight) or for helping other members of the club or out of interest in the WDC. This section was guided by the literature (Markham & Aiman-Smith, 2001; Rogers, 2003; Valente &

Pumpuang, 2007). Multiple-choice type of question was used in this section.

4. *Champions' attitude toward the WDC* (question 13)

This section was developed to bring knowledge on attitudes of Champions in the WDC in terms of enthusiasm and confidence about the success of the innovation, sustaining and getting the right people involved. A five point Likert scale was used to rate responses with five possible choices; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. Five was the most positive response and one the most negative response. To ensure that the higher score represents the more positive score, statement 10 that was worded negatively had its score reversed. This section was adapted from the Champion Behaviour instrument (Howell, et al., 2005).

5. *Leadership qualities* (question 14)

This section highlighted knowledge on leadership qualities for Champions in terms of role model, communication, knowledge of norm and creativity. A five point Likert scale was used to rate responses with five possible choices; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. Five was the most positive response and one the most negative response. This section was informed by the literature (Rogers, 2003).

6. *Training* (question 15)

This section brought knowledge on necessity for Champions to have a specific training on group motivation, communication and education on weight related issues. A five point Likert scale was used to rate responses with five possible choices; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. Five was the most positive response and one the most negative response. This section was driven by the literature where the Champion was depicted as somebody who did not need specific training (Rogers, 2003), while an opinion leader (Kelly, et

al., 1991), a natural helper (Scott, 2009) or a lay leader advisor (Plescia, 2008) needed to receive formal training to promote the health intervention in their community.

7. *Volunteer aspects* (question 16)

This part of the questionnaire measured different facets of the reasons why Champions volunteer. This section used a validated instrument the Volunteer Motivation Inventory (VMI) (Esmond & Patrick, 2004). The Cronbach's Alpha coefficient for reliability was not reported for this instrument. A five point Likert scale was used to rate responses with five possible choices; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. For each scale, the possible scores ranged from 5 to 1. Five was the highest score and one the lowest score. The VMI was developed for volunteers in Western Australia and contains ten scales: a) values, b) recognition, c) social interaction, d) reciprocity, e) reactivity, f) self-esteem, g) social, h) career development, i) understanding and j) protective. Interpretation of each scale is presented in Appendix 3.

8. *Sense of community* (question 17)

This section of the questionnaire measured different aspects of the Champions' sense of community. The Brief Sense of Community Scale (BSCS), a validated instrument, was used to measure four main interacting dimensions of sense of community (Peterson, et al., 2008): a) membership of the community, b) influence in both ways, members to group/community and group/community to members, c) integration and fulfilment of needs where members feel rewarded for their participation in the community, and d) sharing emotional connection. A five point Likert scale was used to rate responses with five possible choices; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. For each scale, the possible scores ranged from 5 to 1. Five was the highest score and one the lowest score. Each scale was the mean of the appropriate items defined by the author of the BSCS. Interpretation of each scale is

presented in Appendix 4. Reported Cronbach's Alpha reliability scores overall .92 and for scales ranged from .77 to .94 (for influence .77, for needs of fulfilment .86, for emotional connection .87 and for group membership .94).

3.4.1.2 CLUB MEMBERS' QUESTIONNAIRE

The questionnaire used in this study for Club Members consisted of four parts; 1) demographics, 2) Club Members' perceptions of the Champion's attributes, 3) Champion's influence on Club Members, 4) Sense of community.

1. *Demographic information* (question 1 to 8)

   This section included Club Members' gender, age, highest level of education completed, occupation, position in their club, and their weight loss during the WDC. Dichotomy (yes/no), open-ended questions or multiple-choice types of questions were used.

2. *Perception of Champion's attributes by Club Members* (question 9 to 10)

   This section brought knowledge on Club Members' perception of Champion's attributes in terms of trustworthiness, likeability and credibility for a desirable Champion and for their own club WDC Champion. This section was based on the literature (Rogers, 2003; Turner & Shepherd, 1999). Multiple-choice type of questions was used in this section.

3. *Champion's influence on Club Members* (question 11 to 13)

   This section addressed the influence of Champions on Club Members' decision to participate in the WDC, to improve Club Members' diet and exercise habits and if Club Members' saw their Champion as a role model. Multiple-choice type of questions was used in this section and those questions were based on the literature (Rogers, 2003; Turner & Shepherd, 1999).

4. *Club Members Sense of community* (question 14)

   As for Champions, Club Members' sense of community was measured using the Brief Sense of Community Scale (Peterson, et al., 2008) discussed in previous section.

3.4.2 SEMI-STRUCTURED INTERVIEW DEVELOPMENT

The content of the semi-structured interview guide for Champions was developed following a review of the literature and discussions with supervisors.

The final interview guide consisted of 12 questions (Appendix 5). These questions were ordered from the general to specific questions as suggested by Polit (2004).

The overall aim of the interviews was to gather information about three key topics. Firstly, how Champions perceived their role, what factors enabled or prevented them achieving their role. Finally, the influence of the sense of community in their club on their role as Champions was asked.

Probes such as "Is there anything else you think of, about your role of Champion?" or "Could you please tell me more about …?" were included in the interview guide to ease the interview where appropriate (Polit & Beck, 2004).

3.5 PILOT STUDY

A pilot study was undertaken to test the feasibility of this study, ensuring that survey questions, interview guide and the whole process such as data collection functioned correctly (Bryman, 2008; Polit & Beck, 2004). As well during the pilot study, the content validity of both self-administered questionnaires (Champions and Club Members questionnaires) was undertaken. Six Champions and six Club Members participated in the pilot study, and were also considered as experts on rating panels to assess the content validity of self-administered questionnaires (Imle & Atwood, 1988). Prior to sending the pilot study pack (Appendix 6 to Appendix 9) which included the appropriate self-administered questionnaires, Champions and Club Members were contacted by the researcher by phone. The aim of this telephone call was to explain the purpose of this study and of the pilot study. Champions' and Club Members' telephone number were obtained from the

Chief Investigator of the WDC. The process of sending the pilot study pack and receiving data from participants in the pilot study was smooth. The first five Champions and Club Members returned their feedback sheet where they assessed the clarity and the relevance of the questions. Lynn (1986) notes that when five out of five experts provide a positive answer, it is not necessary to go any further in recruiting a sixth expert. Champions mentioned spending on average twenty-two minutes to complete the questionnaire while Club Members reported spending twenty-seven minutes on average.

The pilot study also allowed testing the interview guide and more questions were added. The initial six questions of the interview guide (Appendix 10) were extended to twelve questions (Appendix 5). Change in qualitative design are quite common due the nature of qualitative research (Creswell, 2009). This modification has been done, after the first interviews in pilot study, where more themes emerged. After the researcher's reflection, and discussions with the supervisory team, it was decided to add those emergent themes to the interview guide to ensure their coverage during the main study. The researcher also gained more confidence in interviewing (Bryman, 2008). As there were no modifications to bring to the self-administrated questionnaire from the pilot study, responses from the pilot study were included in the main study.

3.6 PROCEDURE

This section describes how self-administered questionnaires and semi-structured interviews have been administered.

Prior to contacting participants of the study, a courtesy letter was sent to all relevant Rotary Clubs' Presidents explaining the purpose of this research (Appendix 11).

a) Champions – self-administered questionnaire

Potential Champions whose details were obtained from WDC study databases received a study pack by post containing a covering letter, a study information sheet (Appendix 12), two consent forms, one copy to be kept for participants' own

records and one copy to be returned to Curtin University (Appendix 13), the questionnaire (Appendix 1) and an addressed reply paid envelope. A reply paid envelope increases the chance to receive the questionnaires back (Edwards et al., 2002). Potential Champions were asked to return one signed consent form and the completed questionnaire in the reply paid envelope within two weeks of receiving them. If there was no response within three weeks of mailing the package, potential Champions were to be contacted by telephone by the researcher to ensure they received the study pack. If they did not receive the pack, their address was verified and a second study pack was sent. Contacting potential Champions by telephone has proved a successful non threatening strategy to improve the response rate of participation in a recent evaluation of the WDC (Aoun, Le, Osseiran-Moisson, & Packer, 2009). Also, as Edwards et al. (2002) note that having a telephone follow-up in case of no return of questionnaires increases the response rate. It is worth mentioning that contacts between Champions and the researcher were very friendly, and Champions had a really good will to participate and complete the questionnaire but they tended to forget to return their questionnaires due to other commitments. However after two follow-up phone calls spaced by 3 weeks, Champions returned their questionnaires and consent forms.

b) Champions – interviews

Upon receipt of completed questionnaires and consent forms, the researcher phoned Champions to arrange a day and a time for the semi-structured interviews, which were conducted by phone at a time that was convenient for participants. Interviews took place at various times ranging from 9 am to 8 pm during week days. The average interview time in this study was 16 minutes. The interviews were audio taped.

c) Club Members – self-administered questionnaire

Self-administrated questionnaires for potential Club Members followed the same procedure as for potential Champions and took place during the same time period.

Potential Club Members whose details were obtained from WDC study's databases received a study pack by post containing a covering letter, a study information sheet (Appendix 14), two consent forms, one copy to be kept for participants' own records and one copy to be returned to Curtin University (Appendix 15), the questionnaire (Appendix 2) and an addressed reply paid envelope. Potential Club Members were asked to return one signed consent form and the completed questionnaire in the reply paid envelope within two weeks of receiving them. If there was no response within three weeks of mailing the package, Potential Club Members were contacted by telephone by the researcher to ensure they received the study pack. If they did not receive the pack, their address was verified and a second study pack was sent. Club Members who agreed to participate in the study were very friendly, like Champions were, but they also tended to forget to return their questionnaires due to other commitments. However after two follow-up phone calls spaced by 3 weeks, Club Members returned their questionnaires and consent forms.

3.7 DATA ANALYSIS

3.7.1 TRIANGULATION

Triangulation, also called concurrent triangulation in the literature, interprets a combination of quantitative and qualitative data about a phenomenon in order to converge on an accurate representation of reality (Bryman, 2008; Creswell, 2009; Jick, 1979; Johnson & Onwuegbuzie, 2004 ; Polit & Beck, 2004). It was considered as the most appropriate research method for this study. Triangulation enhances the validity of the study by cross-validating qualitative and quantitative data (Creswell, 2009; Polit & Beck, 2004). The triangulation methodology is the most common of the mixed method strategies used in health sciences due to its comprehensiveness and its capacity to answer research questions that quantitative or qualitative methodologies alone cannot address (Bryman, 2008; Creswell, 2009; O'Cathain, Murphy, & Nicholl, 2007). This study has followed the three main characteristics of triangulation which are; timing, weight and mixing (Bryman, 2008; Creswell, 2009; Jick, 1979; Onwuegbuzie & Johnson, 2006).

- *Timing* - in this study, quantitative data have been collected prior to qualitative data within a short period of time. Ideally quantitative and qualitative data should be collected concurrently; however it is possible for these two data collection methods to differ slightly in time as time could be an issue with of people busy schedule (Creswell, 2009).
- *Weight* - in this study no privilege has been given to quantitative or qualitative data as defined in the triangulation research method (Bryman, 2008; Creswell, 2009). Neither questionnaires nor semi-structured interview guide development were built on one another. There were not developed sequentially but concurrently.
- *Mixing* - in this study, mixing between quantitative and qualitative data occurred when qualitative and quantitative findings have been compared to unveil if there was convergence, difference or association within results during the discussion. Mixing results of quantitative and qualitative data in triangulation research method allows the research to benefit of the strength of each methodology (Bryman, 2008; Creswell, 2009; Onwuegbuzie & Johnson, 2006)

3.7.2 RIGOUR

Trustworthiness ensures the rigour in qualitative research by four criteria: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Those four criteria were achieved in this study as follows:

Credibility - is an evaluation of whether or not the research findings represent a valid and truthful interpretation of the data drawn from the participants' original data. The assessment of credibility could be achieved through prolonged engagement and observation, triangulation or member checks (Lincoln & Guba, 1985; Polit & Beck, 2004). This research established credibility through triangulation (already discussed in previous section) and member checks. Member checks constitute a feedback from participants concerning the accuracy of data. Lincoln & Guba (1985) consider member checks as the most important way of establishing credibility. In this study, member checks were conducted by three

Champions who read their interview transcripts (Appendix 16) and confirmed the accuracy of the data.

Transferability – Transferability refers to the possibility of reproducing this study in other settings or groups. Through detailed description of the study, other researchers decide on the transferability of the study to other contexts (Lincoln & Guba, 1985). A comprehensive audit trial containing; raw data, data reduction, process notes and instrument development (Lincoln & Guba, 1985) was generated for this study. Furthermore this Methodology chapter provides a detailed description of how this study was conducted.

Dependability –implies an assessment of the quality of the integrated processes of data collection, data analysis, and theory generation (Lincoln & Guba, 1985). This assessment can be done by peers or by a competent and disinterested party (Lincoln & Guba, 1985). To establish dependability of this research, supervisors reviewed data throughout the data collection and analysis stages.

Confirmability –refers to the assessment of data objectivity and their analysis by the audit of two or more independent people (Lincoln & Guba, 1985; Polit & Beck, 2004). This confirmability can be done by bracketing, and developing an audit trail as in the transferability criterion (Lincoln & Guba, 1985; Polit & Beck, 2004). In this study, the confirmability was enhanced by constant discussions with supervisors. Also several times transcript proofreading was undertaken to increase this criterion assessment. As in transferability criterion, supervisors provided criticisms and judgement about the study process throughout the audit trail.

3.7.3 QUANTITATIVE DATA

The aim of the quantitative analysis from the self-administered questionnaires was to provide the profile and characteristics of Rotarians who took the role as Champions in the WDC and the perception of Club Members of their Champions.

All data from self-administrated questionnaires were coded and analysed using the Statistical Package for Social Science (SPSS-17) computer software by the researcher. Descriptive statistics on categorical data and central measurement on

continuous data were used to describe demographic data and the Champions' attitudes, motivations, volunteering and the perceptions of Rotarians who participated in the Waist Disposal Challenge toward Champions.

3.7.4 QUALITATIVE DATA

Prior to the analysis of semi-structured interviews, data from audio-taped interviews were transcribed verbatim in Microsoft word processing Word version 2007. The data were transcribed by the researcher with the help of an English native speaker. This person helped to transcribe colloquial expressions. Transcripts were checked randomly by supervisors. Personal identifiers were removed from transcripts and replaced with identification numbers of other appropriate denomination. For example when a Club Member was named, this name was replaced by "Club Member's name" in transcript.

Qualitative data from semi-structured interviews and open-ended questions from the questionnaires were analysed using inductive content analysis. The main aim of the qualitative data analysis in this study was to develop a comprehensive description of what motivates participants to be Champions and their experiences as Champions.

To achieve this analysis, the researcher firstly immersed herself in the data by reading interview transcripts several times to make sense of the data. After this immersion, the organising data process was initiated which consisted of the creation of open coding, creation of categories and finally abstraction and interpretation (Bryman, 2008; Elo & Kyngäs, 2008; Krippendorff, 2004). Prior to the creation of open coding, the researcher generated as much headings as needed in each interview transcript to describe all aspects of the content. Then for each heading an open coding was created. The following step was necessary to group each open coding by categories according to their similarity or dissimilarity. By creating categories and by their interpretation, the researcher was able to understand the Champions' motivations and experiences. The interview's coding was checked by continuous discussion with supervisors. The researcher used the

qualitative analysis computer software Nvivo version 8 to achieve the different stages of content analysis.

3.8 ETHICAL ISSUES

This study was approved on 27 July 2009 by the Human Research Ethics Committee at Curtin University of Technology.

3.8.1 CONSENT

Participants

Each participant completed a consent form (Appendix 13 & Appendix 15) at the beginning of the study which was returned in a reply paid envelope to Curtin University of Technology. Participants were informed that they could choose to participate or not in the study and they can withdraw at any time without any prejudice.

3.8.2 CONFIDENTIALITY

At all times, anonymity was maintained. Returned consent forms were kept separate from questionnaires. There was no name related data on questionnaires or transcribed data files as participants were allocated a study number code. Potentially identifiable details in the interview transcripts were removed during the transcription process. Hence, data files were unidentifiable and only aggregated group data were reported.

3.8.3 DATA STORAGE

Raw data were kept in a locked cupboard in the WA Centre for Cancer and Palliative Care at Curtin University, in keeping with University and National Health and Medical Research Council (NHMRC) policies. Digital recordings of interviews, interview transcripts and all other electronic files were password protected and accessible only by the researcher. Raw paper data will be shredded and electronic data erased five years following publication of study findings.

3.9 SUMMARY

This chapter has described the study design to capture motivations and characteristics of Champions in the community setting of Rotary clubs. Specifically, a mixed research method was employed to overcome the weakness of single method and to increase study credibility. The reason for using purposive sample was explained as well as the utilisation of self-administrated questionnaires and telephone semi-structured interviews and their development. The reliability of incorporated validated scales into developed self-administrated questionnaires was acknowledged. Study procedure and data analysis were detailed. Ethical considerations and approval to conduct this study were also discussed in this chapter. The next chapter will report on the results of the self-administered questionnaires.

4 QUANTITATIVE RESULTS

4.1 INTRODUCTION

This chapter presents the results of data collected from Champions and Club Members via self-administered questionnaires. The data gathered are presented in three main parts. The first part addresses Champions' data and is articulated around, the motivating factors of Champions to undertake this role and the common characteristics amongst Champions. These common characteristics covered the position of Champions in their clubs, their knowledge about lifestyle issues before being Champion, their attitude toward the WDC, their leadership qualities, their training needs, their reasons for volunteering as Rotarians and their sense of community. The second part addresses Club Members' data and is related to how Club Members perceived the role of Champions in terms of Champions' attributes, Champions' influence on their decisions to change their lifestyle and on their sense of community. The third part presents the main differences between Champions whose clubs lost weight during the BMI competition in 2007-08 and Champions whose clubs did not lose weight.

4.2 CHAMPIONS

4.2.1 RESPONSE RATE

Out of a total of 27 Champions who facilitated WDC in 2007-08, 20 Champions (74%) agreed to participate in this study. Those Champions represented 17 Rotary Clubs out of the 23 Rotary Clubs that hosted the pilot of the WDC. All Champions who participated in the study completed the self-administered questionnaire. The non-response was due to five Champions not being contactable and two Champions not willing to participate.

4.2.2 CHAMPIONS DEMOGRAPHIC CHARACTERISTICS

The Champions' demographic characteristics are reported in Table 1. Two thirds were male, with just over half living in a rural area, over a half are employed and over a half have a university degree.

Table 1

Frequencies, percents, median and range of Champions' Key Demographic

		N=20	
Characteristics	*Median (range)*	*f*	%
Male		13	65
Age in years	60 (41-69)		
Live in rural area		11	55
Had a university degree		11	55
Employed		11	55
Manager*		8	40
Professional*		6	30

*Australian New Zealand Standard Classification Occupation- Revision 1

4.2.3 CHAMPIONS' MOTIVATING FACTORS

Champions gave more than one reason for what motivated them. The majority of Champions (90%) reported holding the Champion position because of their interest in health, 80% for their interest in the WDC program, 70% for wanting to help other club members and 55% for their personal motivation to lose weight.

4.2.4 CHAMPIONS' COMMON CHARACTERISTICS

Results on Champions' common characteristics are presented below and these related to their position in their clubs, their knowledge about health before the WDC, their behaviour toward the health intervention of the WDC, their leadership qualities, their training needs, and finally the volunteering aspect of Champions and their sense of community.

4.2.4.1 CHAMPIONS IN THEIR CLUBS AND PREVIOUS KNOWLEDGE

Over a half of Champions held an executive position on their club board, the majority had self-selected for the Champion's role. Most Champions participated in the BMI competition and about a quarter in lifestyle coaching. Almost all Champions thought it was a good idea to host a health promotion program in their clubs (Table 2).

Table 2

Characteristics of Champions in Rotary Clubs

	N=20		
	Median (range)	*f*	%
Part of the executive board of their club		11	55
President of their club when Champion		5	25
Time as Members in Rotary organisation Median in years (range)	4.29 (0-32.25)		
Time as Members in their Club Median in years (range)	3.12 (0-16.75)		
Self-selection for role		18	90
Participation in the BMI competition		16	80
Participation in the Lifestyle Coaching Program		4	20
Having knowledge that lifestyle factors influenced health prior of the WDC program		17	85%
Good idea to host a health promotion program in their clubs		17	85%

4.2.4.2 CHAMPION'S ATTITUDES TOWARD THE WDC

Table 3 presents Champion's behaviour toward the WDC. Results showed strong agreement on enthusiasm, confidence in club members' participation, maintaining enthusiasm, never giving up, Club President's support and finding the right person to help. Results showed less agreement on being optimistic that WDC would be a success, reasons of the success, confidence that the WDC would work, finding new ideas to sustain the WDC and Club's members' support

Table 3

Frequencies, percents of the adapted instrument of the Champion's attitudes

	N=20			
	Strongly agree / agree		Strongly disagree/ disagree & Uncertain	
Multiple answers	*f*	%	*f*	%
Enthusiastic being Champion	16	80	4	20
Confident in club members participation	13	65	7	35
Club President support in their role as Champion	14	70	6	30
Maintained enthusiasm	13	65	7	35
Never gave up	13	65	7	35
Found right person to help Champion in their role	12	60	8	40
Club's members support in their role as Champion	11	55	9	45
Optimistic that WDC would be a success	9	45	11	55
Saw reasons why WDC would be a success	9	45	11	55
Confident that WDC would work in my club	7	35	13	65
Found new ideas to sustain the WDC	7	35	13	65

4.2.4.3 LEADERSHIP QUALITIES

Leadership qualities were measured by four indicators: role model and advice followed; communication skills; knowledge of club norms; and ability to develop own strategy to sustain the WDC program

Role Model and Advice Followed

The majority of Champions (80%) reported setting an example to their own Club Members by adopting a healthy lifestyle and 30% felt that Club Members followed their advice about adoption of a healthy lifestyle.

Communication skills

The majority of Champions (90%) were able to listen to Club Members, 65% of Champions were able to take into account their comments and 45% were able to provide information on a healthy diet and physical activity when Club Members required such information.

Knowledge of club norms

The majority of Champions (75%) reported that it was a good idea for their club to host the WDC and 45% of Champions indicated that their club was ready to host the WDC.

Ability to develop own strategy

Fifty-five percent of Champions developed their own strategy to sustain the WDC in their clubs.

4.2.4.4 CHAMPIONS' TRAINING NEEDS

Sixty five percent of Champions reported needs to have training on how to motivate peers, 55% about weight issues and 30% on how to communicate.

Two Champions expressed their concerns about how to motivate Club Members in their own clubs. The first Champion was concerned with how to find motivation's clues to sustain healthy lifestyle during his peers' holidays *"Members of my group kept disappearing to go fishing up north or Grey Nomads touring"*. The second Champion was concerned about the difficulty to affect change and was exacerbated by the lack of commitment of the members of his club to change their lifestyle *"I sometimes feel frustrated by the members of my club because many are very comfortable and being older can see little reason to change anything in their lives, including moving to a more healthy lifestyle"*

4.2.4.5 REASONS TO VOLUNTEER IN ROTARY CLUBS

The two highest scoring reasons Champions volunteered were for helping others ("Values" subscale *M* = 3.95, *SD* = 0.53), and for the prospect that their volunteering work would bring good outcomes later on ("Reciprocity" subscale *M* = 3.92, *SD* = *0*.67) (Table 4) whereas the two main reasons Champions did not volunteer were to use their volunteer work as a means of escaping negative feelings about themselves ("Protective" subscale, *M* = 2.06, *SD* = *0*.57) and for gaining experience through their volunteer work for future employment ("Career development" subscale, *M* = 2.35, *SD* = *0*.65).

Table 4

Means and standard deviations of Champions – Volunteer Motivation Inventory

	N=20 *M (SD)*
(1) Values	3.95 (.53)
(1) Reciprocity	3.92 (.67)
(1) Understanding	3.56 (.57)
(2) Recognition	3.46 (.51)
(2) Social Interaction	3.36 (.63)
(2) Self-Esteem	3.36 (.49)
(2) Social	2.80 (1.00)
(2) Reactivity	2.59 (.59)
(2) Career Development	2.35 (.65)
(2) Protective	2.06 (.57)

Scale 1 to 5

(1) The higher the score the better

(2) The lower the score the better

4.2.4.6 CHAMPIONS' SENSE OF COMMUNITY

Table 5

Means and standard deviations of Champions Sense of Community

	N=20 *M (SD)*
Emotional Connection	4.12 (.51)
Membership	4.00 (.51)
Influence	3.96 (.50)
Needs of Fulfilment	3.80 (.59)

Scale: 1 lowest sense of community - 5 highest sense of community

One Champion expressed the desire to add comments about his engagement in his Rotary club as *"I am a member of the club because I enjoy the fellowship whilst assisting people less fortunate than myself"*.

4.3 CLUB MEMBERS

4.3.1 RESPONSE AND ATTRITION RATES

Out of a total of 40 Club Members who participated in the lifestyle coaching component of the WDC (Level 3), 27 (67.5%) Club Members agreed to participate in this research study, although only 21 (52.5%) completed and returned the self-administered questionnaire. Those 21 Club Members represented 8 out of 11 Rotary Clubs that participated in Level 3 intervention – Lifestyle coaching of the WDC.

Reasons for non response were 6 Club Members were too sick to participate, 4 Club Members were not eligible because they were also Champions for their clubs, 2 Club Members declined to participate and 1 Club Member was not eligible due to language barrier, as he could not read and write in English.

Attrition was due to 6 Club Members not being contactable.

4.3.2 CLUB MEMBERS CHARACTERISTICS

Club Members characteristics are presented in Table 6. All participants were male, the majority living in a rural area and 62 % were employed and on third of them were part of the executive board in their own club.

Table 6

Frequencies, percents, median and range Club Members' key characteristics

		N=21	
Characteristics	*Median (range)*	*f*	%
Male		21	100
Age in years	66 (44-85)		
Live in rural area		18	86
Had a university degree		6	29
Employed		13	62
Manager*		9	50
Professional*		5	28
Part of the executive board of their club		7	33

*Australian New Zealand Standard Classification Occupation- Revision 1

4.3.3 CLUB MEMBERS' PERCEPTION OF THE WDC

Eleven Club Members commented on their perception of the WDC in the open-ended questions of the quantitative survey related to their experience as participant in this program. Those comments related to the WDC program in general and more precisely the Level 3 or the Lifestyle Coaching program and finally, peer encouragement.

Four Club Members stated that the WDC was a valuable program and it was fun to participate, for example *"Good motivation tool - Fun to Participate"* or *"The idea is good and should be encouraged by state and Federal Governments – Keep up the good work"*. One Club Member mentioned his difficulty to follow the

program *"I found the program challenging although I did not take advantage of the program".*

One Club Member stressed that peer encouragement was important *"Those involved need to meet as a working group to encourage one another - like a walking group activity".*

Five Club Members acknowledged that the Lifestyle Coaching program was really helpful to acquire a healthy lifestyle such as *"My contacts were by phone and the representative (dietician) made time to talk over things which definitely helped ie: would go over eating habits and give ideas on what to stop, against what to substitute with, which was very helpful"* or *"I found the coaching sessions to be effective, well structured and provided good information".*

It is noteworthy to mention that the majority of Club Members (81%) lost weight during the WDC program.

4.3.4 CLUB MEMBERS' PERCEPTION OF THE ROLE OF CHAMPION

4.3.4.1 CHAMPIONS' ATTRIBUTES

The majority of Club Members reported that the general attributes of a Champion should be credible (95%), trustworthy (91%) and likable (62%). Also the majority of Club Members found that their own club Champions were credible (90%), trustworthy (80%) and likable (80%)

4.3.4.2 CHAMPIONS' INFLUENCE ON CLUB MEMBERS

Club Members were asked to state to which extent Champions influenced their decision to participate in the WDC, to change their diet and physical exercise habits as well as if they perceived their Champion as a role model. Table 7 reports Club Members results.

Table 7

Frequencies and percents of Champions' influence on Club Members

	N=21			
	Yes		No / Unsure	
Multiple answers	*f*	%	*f*	%
Champion influenced Club Members to participate in the WDC	10	48	11	52
Champion was perceived as a role model by Club Members	9	43	12	57
Champion influenced changing Club Members exercise habits	8	38	13	62
Champion influenced changing Club Members' diet	7	33	14	67

Five Club Members commented on the crucial role played by their Champions in their decision to participate such as *"Aware that I needed to lose weight and this person was a catalyst to start"* or *"The Champion acted as though we all could be healthier and she was correct",* while four Club Members stressed that their decision to participate in the WDC was a personal decision *"Had made up my mind a number of months earlier that I was going to make a significant change to my lifestyle"* or *"Decision to participate was a personal choice irrespective of any influence by others"*. Two Club Members mentioned that their decision was motivated by the WDC by itself "*Champion challenged participants to lose weight, competition amongst members to who lost most weight" and "Club competition against other clubs".*

Four Club Members commented that their Champion was not a role model as "*He was slim, I was not" or "The Champion in my opinion did not have a weight problem and I believe if he had this may have altered his concerns and attitude, although he tried hard and did push the program".*

Concerning Champions' influence on diet and exercise behaviour change, four Club Members acknowledged that their Champions influenced their diet and exercise habit by providing information such as "*Talks to the club".*

4.3.5 CLUB MEMBERS SENSE OF COMMUNITY

Table 8 presents Club Members results.

Table 8

Means and standard deviations of Club Members' Sense of Community

	n=21
	M (SD)
Emotional Connection	4.21 (.43)
Membership	4.19 (.60)
Influence	3.92 (.55)
Needs of Fulfilment	3.81 (.49)

Scale: 1 lowest sense of community - 5 highest sense of community

Four Club Members commented on the importance of the role played by their Rotary club in the outside community:

"I am very pleased to be a member of my club. We on the whole are achievers and the club has completed many large projects in our community - Many of them being large challenges"

"Important (Rotary Club) as part of the local community"

"The club is a cog in the big wheel and it is that big wheel I am interested in"

One Club Member mentioned the friendships generated by working together

"Working together on project and at meetings creates togetherness bonds and friendships and supports the community"

4.4 COMPARISON BETWEEN THE TWO GROUPS OF CHAMPIONS

This section presents the difference between clubs that lost weight (decrease in BMI) and those who did not by Champions' characteristics. This distinction between clubs was based on BMI competition results amongst Rotary Clubs that hosted the WDC in 2007-08 (Aoun, et al., 2008). The analysis in this section is purely speculative because of the small sample size involved. However it was deemed worth performing to acquire an idea of the difference between the two groups on key variables for its value in future analyses with larger sample sizes, and the potential link between the personal characteristics of Champions and project performance.

Champions who participated in this study came from two of these club groups: 13 Champions (65%) from clubs that experienced a weight loss and 5 Champions (25%) from clubs that did not lose weight. Champions whose clubs joined the competition late (n=2, 10%), were excluded from this analysis as their clubs did not have enough data collected to analyse. Most of Champions (80%) whose clubs did not lose weight were in the metropolitan area compared with 38% of Champions whose clubs lost weight.

The following key factors will be investigated: the motivating reasons to become a Champion, Champions' behaviour toward the WDC, leadership qualities and training needs.

4.4.1 CHAMPIONS' MOTIVATION AND BEHAVIOUR

All Champions whose clubs lost weight were motivated to undertake the Champion's role due to their interest in health in general, compared to 60% of Champions whose clubs did not lose weight. Forty six percent of Champions in clubs who lost weight undertook the role for personal reason, that was to lose weight themselves, compared to 60% in the second group.

While both groups were equally confident of participation (60%) and optimistic of program success in their clubs (40%), nearly twice as many Champions whose

clubs lost weight saw reasons that the WDC would work in their clubs (38% vs 20%).

Champions whose clubs lost weight seemed to be able to maintain more enthusiasm (69% vs 40%) and be more persistent in the face of adversity (69% vs 40%) than Champions whose clubs did not lose weight. While both groups reported nearly equally that they had the support of the club president, Champions in clubs who lost weight were a lot more supported by club members, and three fold more than Champions from clubs who did not lose weight (62% vs 20%). Table 9 presents differences in Champions' attitudes between the two groups, with most difference being in persistence in the face of adversity (never give up).

Table 9

Frequencies, percents of results from the adapted instrument of the Champion's attitude in the two club groups

Multiple answers Strongly agree/agree are presented	Clubs with Weight Loss n=13		Clubs with no Weight Loss n=5	
	f	%	*f*	%
Enthusiastic being Champion	9	69	5	100
Confident in club members participation	8	61	3	60
Optimistic that WDC would be a success	5	38	2	40
Saw reasons why WDC would be a success	5	38	1	20
Confident that WDC would work in my club	4	31	3	60
Maintained enthusiasm	9	69	2	40
Never gave up	9	69	2	40
Found new ideas to sustain the WDC	4	31	1	20
Club President support in their role as Champion	9	69	3	60
Club's members support in their role as Champion	8	61	1	20
Found right person to help Champion in their role	7	54	3	60

Champions from clubs that did not lose weight mentioned that there was no strong bond between club members in their clubs and that had a direct impact on the lack

of success of the WDC implementation. Some Champions commented further on the reasons in their clubs as follows:

- *There were cliques in my club, and club members did not take seriously the WDC as this project was not a regular Rotary project*
- There were no common activities between club members to allow the creation of bonds between them, "*Our club is fortunate and unfortunate in that by having a [regular project]* that *raises quite a lot of money but it doesn't require the input of a group, it's a thing where two or three people come along every [day of the week]. We don't have these group projects that throw people together and generate this dynamic and I think that maybe part of the problem.*"
- *"There was turmoil in the club's hierarchy and club members were divided"*

In order to overcome the club members' lack of participation in the WDC, the Champion of another club, who was also the President, made the WDC compulsory but club members did not really take part in this project, *These members were reluctant mainly due to denial of their weight issues.*

4.4.2 LEADERSHIP QUALITIES

The majority of Champions whose clubs lost weight (85%) felt they were a role model by setting an example compared to those whose clubs did not lose weight (60%). More than one third of the first group (39%) thought that their advice was followed by their peers, compared to none in the second group. Also, more than two folds of Champions in clubs who lost weight were able to provide information about weight issues (54% vs 20%) and all of them were able to listen to their peers' comments compared to 60% in clubs with no weight loss. More than half (54%) of Champions in clubs with weight loss estimated that their clubs were ready to host the WDC compared to 0% in the other group.

1.1.3 Champions' Training needs

The need for training around several topics was more pronounced for Champions whose clubs did not lose weight compared to those from clubs who lost weight: training how to motivate a group (100% vs 54%); training about weight issues (80% vs 46%), training on how to communicate (60% vs 23%).

4.5 SUMMARY

This quantitative data provided information about Champions' demographics, motivating factors to be a Champion, common characteristics such as their position in their clubs, their behaviour toward the WDC, their leadership quality, their reasons to volunteer or their sense of community. These findings also highlighted how Club Members perceived the role of their Champions and finally their sense of community.

Briefly, the majority of Champions were male, had a median of 60 years and lived almost equally in rural and metropolitan areas. The majority of Champions had a managerial or professional position in the workplace and more than half of Champions were still employed. The Champion role had been undertaken for three main reasons: because of interest in health and in the WDC program by itself, to help peers, and for the personal motive to lose weight. In their clubs more than half of Champions had a leadership position. They had been members of the Rotary organisation for more than 4 years, and were members in their clubs where they had undertaken the position of Champion for 3 years, indicating there were fairly new comers to Rotary and their club. Almost all Champions were self-selected, and they participated in the WDC.

Before holding this Champion role, 85% of Champions had knowledge that lifestyle factors such as poor diet and lack of exercise influenced health and they thought it was a good idea to host a health promotion program in their clubs. During their role as Champions, they had an enthusiastic attitude and were confident in the success of the WDC in their club. Also they were persistent in the face of adversity and involved the right person to sustain the WDC.

In terms of leadership qualities, 80% of Champions felt it important to be a role model by setting an example to their peers. Champions had a fairly good knowledge of the norms of their own clubs in terms of acceptability for their club to host the WDC. Also, the large majority of Champions found they were able to listen to Club Members and, to a certain extent provide information on healthy diet and physical activity when Club Members needed advice. Champions expressed their needs for training sessions mainly on how to motivate and on weight issues. Champions volunteered in the Rotary club mainly to help others and for the good outcomes that their volunteer work would bring in the future. Finally Champions had a high sense of community.

All Club Members were male, with a median age of 66 years (older than Champions) and lived mainly in rural areas. The majority of Club Members had a managerial or professional position in the workplace and less than two thirds of Champions were currently employed. In their clubs, one third of Club Members had a leadership position. Club Members perceived the WDC as a valuable health intervention and they found a benefit from it by helping them to acquire a healthy lifestyle and most of them lost weight during the WDC. The majority of Club Members thought that a Champion should be highly credible, trustworthy and, to a certain extent, likable. They found their own Champion a little bit less credible and trustworthy than what they thought an ideal Champion should be, but they found their own Champion more likable. Less than half of Club Members thought that their own Champion played a crucial role in their decision to participate in the WDC while others considered that participation in the WDC was a personal choice that could not be influenced. Almost half of Club Members found that their Champions was a role model who they could identify with, however, one Champion stressed that a Champion for the WDC should have a weight problem to be a role model. Only one third of Club members stated that their Champions influenced their change in diet and exercise habits. Like Champions, Club Members had a high sense of community.

The comparative analysis suggested that there were important differences between Champions whose clubs lost weight and Champions whose clubs did not lose weight that had influenced the success of the WDC. These differences were notable at the personal level and at the club level. At the personal level, Champions whose clubs lost weight were essentially motivated to take on the Champion role because of their interest in health rather than for their personal motive to lose weight. They also seemed to have a better understanding of their clubs' ability to undertake the project and about what their peers could realistically achieve in terms of weight loss. They were more persistent in the face of adversity and were supported by their clubs' hierarchy and more so by their club members. These Champions had better leadership qualities in terms of being able to act as role models, communication skills and knowledge of the norms of their clubs. They also expressed less need for training in motivating and communicating with peers. At the club level, it appeared that a strong bond between club members impacted on the success of the project. The project seemed to be more successful in rural clubs, which are usually smaller clubs from tight knit rural communities, where the community spirit is stronger and hence this could be reflected in the bond between club members.

The next Chapter will present the results of data collected from semi-structured interviews from 19 Champions.

5 QUALITATIVE RESULTS

5.1 INTRODUCTION

This chapter presents the results of data collected from semi-structured interviews from 19 Champions. One Champion was lost to follow up despite several attempts to contact him. First, the motivating reasons to be a Champion which emerged from the interviews are presented followed by common characteristics amongst Champions. For the purpose of clarity, common characteristics amongst Champions are presented in two parts. The first part presents themes related to the individual or the micro level such as attitudes, the understanding of Champions about their role, the strategies used by Champions to sustain the WDC and the influence of gender on Champion's role. The second part relates to themes associated with the group (Rotary club) or the macro level such as perceptions of the WDC by club members, participation in the WDC, the importance of the approval from clubs' Executive boards and a sense of community. In this chapter, club members, mentioned by Champions, refer to all members in the club and not only club members who participated in this study.

5.2 MOTIVATING FACTORS TO BE CHAMPIONS

Rotarians who undertook the role of Champion for the WDC in 2007-2008 in their clubs were motivated mainly by four reasons: health issues in general, Rotarians' wellbeing, WDC considered a good project for their club and a personal interest in losing weight.

Champions were aware of the inter-relations between health and a healthy lifestyle. They desired to help and encourage other Rotarians in their clubs to improve their health by raising awareness of a healthy lifestyle and they were keen to encourage Rotarians in their club to lose weight as most of them had a weight issue. They were convinced that the WDC would be a good program for their clubs, as the WDC was designed with direct input from Rotarians. Finally,

several Champions also undertook this role for their personal goals i.e. for weight loss. These motivating factors are highlighted in the following comments:

"My role as a Champion in 2008, I heard about this program (WDC) ... and decided that it would be good for our club, our club is aging, has an aging population. ... I decided that by being a Champion I might be able to influence people to at least be aware of the relationship between diet and exercise yeah so that was my main motivation for going ahead with it." (Champion 11)

Champions recognised that most club members had a weight issue. Importantly, they also strongly believed that something could be done to improve this. They worked to achieve this vision and to inspire club members to reach their goals of weight loss. This reflected the inspirational aspect of the transformational leadership style.

"I always thought that we had do something about our weight the club needed (WDC program) absolutely" (*Champion 01*)

5.3 CHAMPIONS' COMMON CHARACTERISTICS

5.3.1 THE INDIVIDUAL LEVEL (MICRO LEVEL)

5.3.1.1 CHAMPIONS' ATTITUDES

Almost all Champions stated that they undertook their role with enthusiasm and pleasure and they were very keen to encourage and support Rotarians to participate in the WDC rather than to take a coercive approach. Champions added that it was very important that Rotarians owned the program and were responsible of their own health.

"Absolutely I was enthusiastic and we were very keen to encourage people to participate." (Champion 01)

"I think anything works better if you encourage people to be involved without them being coerced in to be involved..." (Champion 11)

One participant clearly mentioned that Champions needed to have compassion and empathy toward Rotarians who tried to lose weight by changing their life style.

"Absolutely I mean one has to have it (compassion)...yes you need that compassion for sure." (Champion 01)

Leadership emerged as a key concept from the interviews of several Champions, who raised the point that the Champion of the WDC needed to have natural leadership skills and be recognised and respected as a leader in order to get club members engaged and to be able to run the project.

"I think if one hasn't got the respect and the project management and leadership skills to take something through, it isn't going to work anyway." (Champion 01)

"...I was looked to as having some natural leadership capacity for a number of reasons and therefore there was a an easy and natural acknowledgement of my leader role in the club." (Champion 10)

5.3.1.2 CHAMPIONS' UNDERSTANDING OF THEIR ROLE

The Champions' interviews shed light on how these Champions perceived their role. These perceptions could be articulated into four main facets: tasks undertaken, time involved, being a role model, having a health professional background.

Most of the Champions saw their role as somebody who promoted the WDC and sustained it as well as undertaking the BMI weigh-in sessions.

"Ah the role was to promote the program to the members and make sure that they were serious about trying to improve their health and lose some weight." (Champion 16)

"The role was to organise for the club to have the three presentations given to the club so that time was booked with the person doing the programs and then once the program started ... doing the BMI each month... I think that... the other thing

as a champion although it was mainly to try and keep people motivated and trying to keep the momentum going." (Champion 18)

However, a few Champions thought that their role was only doing the monthly BMI weigh-in and recording. But these Champions saw the promoting aspect of the WDC to be the responsibility of the research investigator of the WDC.

"That was certainly part of my understanding of the job was to maintain the records of the project …I understood that I was to act as a liaison between the Waist Disposal project group and the club." (Champion 20)

Nearly all Champions agreed that their role required time and energy for doing the weigh-ins, finding relevant information and combining their other function in the club, such as being President.

"I think time and energy to put into I mean it could be a fulltime job for somebody." (Champion 18)

Being a role model also emerged from the Champions' interviews. This role model included setting an example in two ways. First, Champions felt they were role models because they lost weight while being in this role.

"I lost a few kilos myself not a lot but I didn't intend to lose as much as some of the others but I was sort of setting the example of what needed and a few of the Rotarians got involved with that." (Champion 03)

The second way of being a role model involved Champions who did not have weight issues but who had a healthy lifestyle. These Champions felt they could be an example with their behaviour regarding diet and exercise.

"I was fit I was the right weight for height I exercised I watched what I ate. They knew that but I would have a big splurge out but they knew that I would be sort of moderate in other things and I drank moderately and that they knew that I was just like them I had to look after myself." (Champion 02)

Few Champions thought that being role model was not relevant.

"Ah not really ah I'm tall and skinny so I wasn't overweight." (Champion 19)

As such, Champions were role models who promoted desirable behaviours and lifestyle changes, and encouraged club members to work towards goals. Being a role model and leading by example fits closely with the concept of idealism, which is a key aspect of a transformational leadership style.

There was a difference in opinion whether Champions needed to have a health professional background. Amongst the 19 Champions who have been interviewed, three Champions had a health professional background. All of these Champions mentioned that their professional background helped them in their role as Champions. However, one of those Champions stated that to be a health professional could have a down side effect as Rotarians could not identify themselves with such Champions. Two of these Champions with health professional backgrounds agreed that, with appropriate training, a lay person could be a Champion for the WDC.

"I think that being a health professional would probably help in a sense that you've got more information at your fingertips but I really don't think that needs to be exclusive, anyone should be capable of running that without regard to a particular expertise as long as they are prepared to do what you have to do in any project." (Champion 01)

One Champion, with no health professional background, agreed with the possible down side for the Champion to be a health professional.

"I think that if they were told I was a health professional and I was pushing that all the time I think I'd get a bit of a backlash." (Champion 11)

5.3.1.3 CHAMPIONS' STRATEGIES TO SUSTAIN THE WDC

Almost all Champions found their own strategies to ease their task and to respond to the demands from their clubs.

Some Champions organized the weigh-in prior to the Rotary meetings to prevent any disturbance.

"It was just a case of just being organized on the night and I weighed the Rotarians as they came in the door, before they had the chance starting the meeting so there was no interruption." (Champion 06)

Other Champions found that keeping private records of weight (as emphasized by project) prevented Rotarians from being embarrassed of the result of the weigh-in in front of other club members. This strategy reinforced the trust from club members toward this Champion,

"I would have liked to have shared... some of them were a bit embarrassed about their weight so I wouldn't ask anybody else to do it... I kept that private and I'd do them one at a time in a different area but meant that night we had the weigh-in was quite hard work for me… but the members trust me and I think that was very important The health problems that the club members have had that it's not public knowledge." (Champion 02)

It also emerged from some Champions that it was important for club members to think about their personal loss of weight and what they could benefit from it. This strategy reinforced that club members needed to own the WDC. Also it was important to make the WDC attractive and fun.

"Encourage the members of the club to continue to participate and to think about their objective and trying to make value out of the process and also to make it fun." (Champion 10)

Another strategy used by Champions used humour to speak about diseases relating to overweight or obesity.

"I think you have more effect by making it a bit light-hearted and getting people involved and talking to them or between the different people participating encouraging them and updating them regularly in the local newsletter." (Champion 11)

Other Champions created extra ways to encourage physical activities; such as walking group, this activity is still running in 2010.

"I initiated a program to walk/ride Sundays - This is still running." (Champion 04)

Other initiatives of this type in one rural area could not be sustained due to some members living a long distance away from where the meeting venue was.

"When I tried to organise any extra functions they were not keen to do them ... I think the reason for being in a country town a lot of the members do not live right in town and they were not able or not prepared to come in at another time." (Champion 09)

Using the written media such as local newspapers and internal club bulletins to publish testimonies was found to be very useful to encourage club members to lose weight and become healthier by setting an example to the general community.

-*"...and then setting an example for the community we invited the newspapers to write stories." (Champion 03)*

One Champion created a display chart to show at each meeting to encourage club members.

"I had a chart and every half kilo that somebody lost I put a red sticker on their chart and so we could physically see as everybody reduced their weight as they were successful ... And a bit of competition never hurt anyone.. You just know that people need encouragement and they need something that they can see. That they're succeeding. Nothing succeeds like success." (Champion 17)

One way to sustain the WDC was to involve the right person to help such as those Champions who invited regularly external guest speakers or got information from health professionals or to involve other club members.

"Well I was amazed with the Waist Disposal Challenge and I made sure we had guest speakers regularly on healthy lifestyle and exercise." (Champion 03)

Finally, several Champions thought that by inviting club participants' wives to attend the WDC weigh-in, the chance of success of this program would have been increased. Champions anticipated that if club members' wives participated in the WDC program, they could have changed their way of preparing meals and learned tips and strategies for managing lifestyle changes in the home environment.

"We involved the wives because invariably the wives are the ones that cook the meals ... there is a big relationship to the effect of the whole program. So that was the main reason we invited the wives along was for their benefit but also to encourage them to make smaller meals and healthy meals." (Champion 11)

While, this initiative was supported by partners/wives, it was not practical for partners to regularly attend the weigh-in sessions during club meeting times.

"I tried to get the partners interested and to get them to come along and do the weigh-in as well... but it was hard for her to come into the club on the weigh-in night... she was very supportive of the program." (Champion 09)

Champions developed a range of strategies that were appropriate for individual club members in order to encourage club members to lose weight. By responding to individuals' particular needs the Champions reflected individualism, which is a key component of transformational leadership. The Champions were also creative and innovative in the development of these strategies, and gave considerable consideration to introducing strategies that suited the lifestyle and culture of club members. This can be seen as in keeping with the intellectual stimulation component of transformational leadership.

5.3.1.4 CHAMPIONS' GENDER

When gender was discussed during the interviews, the majority of Champions thought it was irrelevant. However, several Champions from both genders found that gender had an influence on their role as Champion.

The majority of male Champions thought their gender had no influence on their role as Champion. They thought what was important was their actions as Champion and not their gender.

"I don't think that is a factor really certainly not in a situation in Rotary People respect you for what you've done and do within in the club." (Champion 01 - Male)

The majority of female Champions (four out six female Champions interviewed for this question) felt that their gender had an influence on their Champions role. They thought that club members in their Rotary club have seen Champion's role more dedicated for women, as women represent the traditional role of caring.

"I think traditionally women are seen as acceptable in a caring role... I think men like to feel that somebody cares about them. But I don't think that's any different in the whole community is it ... Some physical touching had to happen and it's okay for a woman to touch a man but it's harder for a man to touch another bloke." (Champion 02 - Female)

While men stated that to be a male Champion was easier to relate to and to understand other men.

"I think men reacted better you know to other men." (Champion 03 - Male)

One Champion in a club where all club members were male, argued that gender had an influence because men can understand men. If the Champion was a woman, men would have to change their social behaviour.

"Our club is all men so well yes what it allowed you to do because they were all men is basically you could be rude to them. I know men don't take too much offense you know about such things if there had been ladies you had to be a bit you know you would had to be more sensitive." (Champion 19 - Male)

5.3.2 THE CLUB LEVEL (MACRO LEVEL)

5.3.2.1 UNDERSTANDING OF WDC PROGRAM IN ROTARY CLUB

Most of the Champions acknowledged the importance of recognition from club members that the WDC program was designed especially for the Rotary club population with realistic goals to improve their lifestyle.

"I think this awareness of healthy lifestyle especially as in our age group and personally benefited our club and I think that's what maybe they all believed as well." (Champion 03)

However, a few Champions were not sure that Rotarians have fully perceived the potential of the WDC and its contribution to their wellbeing.

"I don't know whether they all realized the full benefits of it." (Champion 16)

A few Champions were visionary about the WDC in Rotary clubs. Those Champions thought that if Rotarians adopted a healthy lifestyle, it would be possible to spread this health message outside Rotary clubs in the general community or in other Rotary districts.

"If we can encourage good health in our Rotary club - We can then encourage good health in the general community." (Champion 17)

5.3.2.2 PARTICIPATION IN THE WDC

The extent of participation level in the WDC, emerging from interviews, was not comparable amongst clubs. Some clubs did not have participation issues, and all club members participated in the WDC and enjoyed it.

"We thoroughly enjoyed the program, the members and ladies and men members enjoyed being in it." (Champion 17)

Other clubs had some participation issues where all club members did not participate in the WDC.

"I think that there were quite a few members probably I would say 25% who were quite enthusiastic and really recognized that they need to lose weight. There are others, probably 25% who probably didn't have to lose as much as some and certainly took it seriously, 25% didn't participate and 25% I don't think got really into the swing of things in a sense." (Champion 01)

It is noteworthy that participation in the WDC in all clubs was on a voluntary basis. However one Champion had a different approach and made the WDC compulsory:

"People were I suppose initially reluctant but what we did we made everybody involved ... once we had everybody involved then the peer pressure made everybody join in…. Simple I made it compulsory! I didn't give them a choice they quite got in the spirit of it." (Champion 19)

Champions perceived that some club members who were unwilling to join the WDC were in denial about their weight or did not take the WDC seriously. Champions thought that club members were overweight but did not want to recognize the need to take action or were perhaps afraid to change their behaviour. One of the Champions summarised such reactions as follows:

"For some it was easy and people went along with it but there were a lot of people who were still in denial that something needs to be done so it was difficult dealing with ..." (Champion 18)

Champions also acknowledged that the lack of commitment or participation could be attributed to the lack of information or support provided to Champions.

"There was basically, fairly high percentage of the members weren't really motivated to participate in the program and I didn't realize that at the time maybe but I wasn't really given enough information I suppose to get people motivated to participate." (Champion 08)

Another reason for lack of participation was absenteeism at the weigh-ins sessions.

"... others a sort of well weren't present at one or more of the weigh-in sessions so it was a little bit difficult to get a nice consistent set of weights for everyone ." (Champion 08)

One Champion mentioned that the lack of commitment was due to internal club problems and was not related to the WDC or to the Champion.

"... I think it was because some of the members were in the state of flux about whether or not they're gonna remain in membership there was a bit of internal turmoil going on within the club itself." (Champion 07)

5.3.2.3 APPROVAL FROM EXECUTIVE BOARD AND CLUB MEMBERS

Approval from the Executive Board and club members emerged from interviews as an important factor affecting club members' participation in that it could secure the involvement of club members in any project and specifically the WDC.

"If you're going to run a project you've got to get the whole club board to be supportive otherwise ya gonna get people saying "Ah well I don't want to be involved" and then yet half the club wanna be and then half the club don't whereas we go to the board we say "Let's become involved"." (Champion 17)

"Definitely (support) from the Executive Board and from most of the members otherwise it could not be sustainable." (Champion 02)

It also appeared that Champions who combined that role with being an office bearer at the club could be an advantage to push club members to participate due to their position on the Executive board.

"Well I think being President also helped ... being the President I actually pushed for everyone to join the group." (Champion 03)

However for one Champion, the combined role was perceived as a disadvantage due to workload.

"Ah yes I think I was president Yep it made it very difficult I had far too much to do to be President and that had an impact on Champion role in my perception." (Champion 20)

5.3.2.4 SENSE OF COMMUNITY

Champions depicted the sense of community and peer pressure in their clubs as factors that need to be taken into account in their role as Champions.

Most of the Champions, especially those in rural areas, described a strong sense of community in their clubs, which went beyond membership in Rotary clubs where Rotarians knew each other for decades. These friendships favoured mutual support and prevented negative peer pressure amongst club members.

"Well all of the members know each other very well because it's a small country town and most of them have known each other for twenty years or more". (Champion 09)

"The social contact within my club is very high and people would probably list members in that club within closest group of friends." (Champion 01)

Also these bonds facilitated the role of Champions by supporting them in their role. In those clubs when a project had been approved by all club members, club members were committed to it.

"My particular club comes from a relatively small town and therefore the principles or the intrinsic nature of community support is one which is within the club and goes beyond the club so that the idea of community participation in any project is one which is almost a natural outcome of the club activity." (Champion 10)

In few clubs, club members did not see each other outside Rotary weekly meetings and Champions suspected that this lack of bonding outside Rotary club business had a negative effect on Rotarians' commitment to the WDC.

"There's cliques in Rotary and some people would band together and "no we are not part of this you know I'm okay" whereas others yes would be supportive and this is a good thing and you know let's do it, but I don't think they see each other enough outside of Rotary to be supportive to each other." (Champion 18)

Champions also reported that peer pressure was an element to take into account in their role as Champion. The majority of Champions stated that peer pressure motivated Rotarians to participate in the WDC and encouraged them to improve their lifestyle.

"Well I think peer pressure always helps as anyone gets involved.... There's you know the peer pressure for people to weigh-in and look at their weight and the members themselves compared their weight to each other. Cause I told them that nobody had to know what their weights are but the members asked each other how they were going and so then there's peer pressure did help with other people that were becoming aware they needed to do this." (Champion 03)

None of the Champions felt that peer pressure undermined the good will of club members who participated in the WDC.

There was one person particularly who probably needed to do it but would not and he was very vocal about that but it didn't stop anybody else." (Champion 09)

Several Champions felt there was no peer pressure in terms of participation. The decision of club members who did not want to participate in the WDC was respected.

"No peer pressure, if Rotarians did not want to participate their choice were respected." (Champion 09)

5.4 SUMMARY

This qualitative analysis brought to light Champions' motivations and Champions' characteristics. The principal motivating factors underpinning the role of Champion were: health concerns and improvement in club members'

wellbeing and recognition that in their clubs most of club members had weight issues. The WDC was perceived by Champions as a good project for their club and several Champions were motivated as well to undertake this role for personal interest to lose weight.

The Champions characteristics operated at two levels; the individual or the micro level and the group level (Rotary club) or the macro level.

At the micro level, four main themes emerged about Champions characteristics. First, Champions described their personal traits as being enthusiastic, not coercive but encouraging their peers to be responsible for their own health, having leadership skills and being respected. Second, Champions described how they perceived their role in several aspects; the tasks their role entitled (organisation of guest speakers to present the WDC and the weigh-ins), time and dedication (the position as Champion required time and dedication), being a role model (by setting an example either because they did not have a weight issue as they followed a healthy lifestyle or because they lost weight during their time as Champion), and a lay-Champion could be a better option than a Champion with a health background. Third, also at the individual level, Champions have found personal strategies to sustain the WDC, such as creation of extra physical activities or contacting the right person to help them. Finally, most of the Champions thought that their gender did not have an influence on their role. These themes demonstrate that the style of leadership adopted by Champions was transformational leadership. Champions acted as a role model and led by example; they were inspirational by showing confidence that goals could be achieved; they stimulated their peers by being creative in finding a range of strategies to motivate club members and to encourage their continued involvement; and they also personalised these strategies and their encouragement and advice.

At the macro level, four salient themes came out from these Champions' interviews. The first theme was related to the general positive perception of the WDC by club members. However, when some club members did not perceive the WDC as a regular Rotary club project designed to help the outside community, it

was not taken as seriously. While in this study these club members were a minority, we must be mindful of this perception of future work. The second theme concerned participation in the WDC, the participation level was not the same amongst clubs. It is important to mention that the participation in the WDC in all clubs was on a voluntary basis. Some clubs did not have a participation issue while other clubs had some difficulties with participation. Those difficulties were mainly related to a reluctance to join the WDC due to club members' denial about their weight and also absenteeism in the weigh-in sessions because they did not attend clubs meetings when these sessions were organised. The third theme was the need for approval from the club hierarchy and club members. This was a predominant factor in the success of the implementation for the WDC. The final theme, sense of community, highlighted that the stronger the sense of community the higher the participation was in the WDC in clubs.

The next Chapter will present the discussion of quantitative and qualitative findings and the limitations of the study.

6 DISCUSSION

This chapter discusses the key findings from this study in relation to existing literature. The natural helper intervention model (Figure 2) is used as an organising framework to present the results. The limitations of the study are highlighted, future research is proposed and a conclusion is presented.

6.1 DISCUSSION

The overall aim of this study was to develop a profile of lay-leaders called Champions in the community setting of service clubs. This profile could inform the selection and training of champions in other community health promotion programs. To achieve this aim, this study explored three main objectives. These objectives were to;

1. Explore the attributes of the WDC Champions influencing health practices
2. Explore the benefit of the WDC Champions on their peers
3. Explore the benefit of the WDC Champions within the framework of community support and attachment

This study used a mixed method approach. The quantitative and qualitative findings of the study are discussed in relation to the natural helper intervention model (Eng & Parker, 2002; Fleury, et al., 2009), which outlines three social arenas in which a natural helper can play a role; peer to peer social support; community attachment and political dynamics; and organisation policies and practices. This model is a useful vehicle for presenting the findings of this current study as the results were a good fit in the first two arenas. The third arena is concerned with the role played by the natural helpers as links between their communities and health services or departments to increase the responsiveness of health agencies to community needs. As it was only a pilot study in a short timeframe, the WDC Champions did not have relationships with health services or departments as yet. Hence, this arena is not pertinent to this study. The natural

helper intervention model is also appropriate for this study as the WDC Champions characteristics that emerged in this study were similar to those of natural helpers and lay health advisors in community settings and also shared some similarities with champions depicted in business organisations as these service clubs had a structured hierarchy.

6.1.1 CHAMPION'S ATTRIBUTES INFLUENCING HEALTH PRACTICES

The WDC Champions influenced the improvement of health practices by possessing key attributes such as trustworthiness, credibility and likability, optimism, enthusiasm and perseverance.

The findings revealed that almost all clubs members participating in this study found their Champions to be as trustworthy and credible as they desired. However, there was a noticeable difference between the likability of a desired Champion (62%) and their actual Champions (80%) in their clubs. Likability is often rated higher if the person does belong to the same group (Kreuter & McClure, 2004). This finding suggests that club members who participated in the WDC program could have rated likability higher for their WDC Champions because they knew him/her as their WDC Champions belonged to their Rotary clubs.

These findings were aligned also with previous studies where natural helpers and lay health advisors were depicted as trusted and credible people by members of their community who believed in their advice and found them credible (Fleury, et al., 2009; Israel, 1985; Leone, et al., 2010). It has been demonstrated in the literature that the more a source or a person is credible, trustworthy and likable, the more the message conveyed is likely to be persuasive and influential (Rogers, 2003; Turner & Shepherd, 1999). The Social learning theory (Bandura, 1977) emphasises this point and argues that these behaviours provide reinforcement and a supportive learning environment. The findings of this study suggest that for the WDC Champions to be successful, they needed to be credible, trustworthy and likable.

Almost all the WDC Champions (80%) considered themselves as role models by setting an example. Champions thought they were a role model because they had a weight issue while some other Champions thought they were an example for their club members because they were slim due to their healthy lifestyle. However one of the WDC Champions thought he was not a role model because he was slim. Being overweight was the most cited reason by club members for considering their WDC Champions as a role model. These findings suggested that having weight issues seemed important to qualify as a role model for most of the club members rather than the Champions.

WDC Champions recognised there was an issue concerning obesity in their clubs *"I recognize that in the club, there were certainly several members that did need to lose weight" or "I always thought that we had to do something about our weight, the club needed (WDC program) absolutely"* and they thought they could help their peers to lose weight. The WDC Champions encouraged their peers rather than coerced them. It was very important to the WDC Champions that club members owned the program and were responsible for their own health. For example one Champion illustrated this finding in his interview *"I think anything works better if you encourage people to be involved without them being coerced in to be involved...what I mean if they're involved for their own good and they can see that it is...most people lost a bit of weight so I think it shows that some of it rubbed off."* Champions listened closely to the club members' comments and they were able to integrate these comments and suggestions into advice. From the perspective of club members, the influence of their WDC Champions was perceived as crucial for half of them concerning their participation in the WDC.

Some of the WDC Champions used their position as leaders on the Executive Board of their club to push the WDC program. These findings are consistent with the literature in the business area where to combine the role of Champion and manager could help accelerate the process of diffusion of innovation (Rogers, 2003). The leadership qualities of the WDC Champions also fitted the four characteristics of a transformational leadership type outlined by Bass (1999). The

WDC Champions acted as role models (idealisation), they had a clear assessment of the situation in their clubs in terms of weight issues, and they thought their peers could lose weight (inspirational). For example, one of the WDC Champions expressed the inspirational aspect of the transformation leadership: *"If we can encourage good health in our Rotary club - We can then encourage good health in the general community".* They endeavoured to motivate their peers to own their own loss of weight (intellectual stimulation). Generally, the WDC Champions also encouraged their peers by providing personalised advice and support for example by making the weigh-ins private (individualised consideration). These findings suggest that for the WDC Champions to maximise their influence and help change the behaviour of their peers, they need to have a transformational leadership style that encourages and supports rather than applies coercion.

Most of the WDC Champions sustained the WDC program, their peers' motivation, facilitated their change in behaviour and sustained these changes. They were optimistic about the results that their club could achieve in terms of weight loss. They demonstrated persistence in sustaining the WDC program and they found their own strategies such as using humour to make the program attractive and keep club members motivated. They also found the "right" person to help them, for example, during the weigh-ins or they invited guest speakers.

These findings concur with the literature in the business area, where it is argued that an innovation is more likely to be accepted and adopted when the Champions are enthusiastic, optimistic, perseverant and able to find the right person to help them in their task (Howell, 2005; Howell, et al., 2005; Rogers, 2003). Using humour and making health promotion activities entertaining were good strategies to encourage men to engage in health intervention programs (Egger, 2000).

6.1.2 IMPROVEMENT IN HEALTH PRACTICES AT THE PEER LEVEL

According to the natural helper intervention model, at the peer to peer social support arena, trained natural helpers provide advice and assistance to their peers to increase their knowledge in order to improve their health practices.

One of the findings in this current study was that the WDC Champions, despite a lack of training, improved the health outcomes of their peers as 81% of participants lost weight during the intervention. This was attributed to the WDC Champions providing ongoing help and assistance about better nutrition and physical activity during the weigh-in sessions and/or publishing information in the Rotary club bulletins. For example a WDC Champion said ***"****I was aware from just general discussion around the club informally that a number of members also took it (the WDC program) seriously as a challenge to improve their health and wellbeing"*.

This finding was consistent with several studies using lay health advisors, where community members improved their health by following their lay health advisors' advice and assistance (Kim, et al., 2004; Kobetz, Vatalaro, Moore, & Earp, 2005; Vissman, et al., 2009). In a study on weight loss program in a hard to reach community of urban African-American women at risk for diabetes (McNabb, Quinn, Kerver, Cook, & Karrison, 1997; Quinn, 2001) lay health advisors provided individual advice and support concerning behaviour change goals related to eating behaviour and encouragement to do physical exercise at home. The study concluded that there was a significant difference ($p < .05$) in weight reduction between the intervention and control group and that the impact of the lay health advisors' support and encouragement facilitated this major improvement.

The natural helpers are usually trained to give advice and information to their community, prior to the intervention. In the case of the WDC Champions in the pilot study on which this study is based, the WDC Champions did not receive specific training (Aoun, Osseiran-Moisson, et al., 2009). The WDC Champions in this current study felt they needed training in two key areas: peer motivation and weight issues. They also felt to a certain extent that they needed to be trained on how to communicate. Some WDC Champions had difficulties keeping up the participants' motivation to achieve their weight loss or to motivate some club members to initially participate. Both Champions and club members who participated in this study emphasised that changing behaviour was challenging.

According to the Champions, club members who were not involved were 'in denial' about their weight issues. Only 30% of the WDC Champions expressed the need for communication training. This is most likely due to the long tradition in Rotary clubs' where members are required to be involved in public speaking during weekly meetings (Chao, 2008; Dochterman, 2003).

Training of natural helpers and lay health advisors usually included information on health issues targeted by the health intervention, health behaviour change theory, behavioural goal setting, communication theory and group problem solving (Ackermann & Marrero, 2007; M. K. Campbell, et al., 2002; Kim, et al., 2004; Plescia, 2008; Quinn, 2001).

6.1.3 IMPROVEMENT IN HEALTH PRACTICES AT THE COMMUNITY LEVEL

At the community level, the WDC Champions improved their community competence by their actions. However, before discussing the influence of the WDC Champions on community competence, it is necessary to present findings on sense of community and bonds, community commitment and reaching a hard to reach population group.

Sense of community and bonds

Findings of this study revealed that the WDC Champions and club members who participated in the WDC had a strong sense of community. Both groups scored high on the four dimensions of the Brief Sense of Community Scale; a) membership of the community, b) influence in both directions, members to group/community and group/community to members, c) integration and fulfilment of needs where members feel rewarded for their participation in the community, and d) sharing an emotional connection, which describes the true sense of community. These results indicate a very strong sense of community (Peterson, et al., 2008). Both the WDC Champions and club members emphasised their belonging to their organisation and sharing the same history ("Emotional connection" dimension for Champions $M = 4.12$, $SD = .51$, for club members $M = 4.21$, $SD = .43$). They mattered to one another and to their clubs. They valued

their membership in the Rotary club and also valued the Rotary clubs' aims. Alongside this, they felt rewarded for their participation in this community. A Champion summed up why he is a member of his club *"I am a member of the club because I enjoy the fellowship whilst assisting people less fortunate than myself"*.

Reasons why the WDC Champions and club members volunteered within the Rotary organisation seemed to be closely related with their sense of community. The WDC Champions as well as the club members joined the Rotary organisation for the same reasons i.e. to help others and in the hope that their volunteer work will have good outcomes for others. Helping others or altruism is one of the Rotary organisation's key pillars (Dochterman, 2003) and these findings certainly reinforced this principle. Few Champions mentioned in their interviews that club members were less keen to participate in the WDC as they did not recognise this project as a regular Rotary project and, it was not designed to help others but themselves.

WDC Champions did not volunteer to escape personal negative feelings (Protective of VMI score in mean 2.06, sd .57) or for career development (mean 2.35, sd .65). This fits the demographic profile as the median age of Champions, 60 years, was more towards the retirement stage than at the beginning of their working career. These findings about volunteering support the results of a study conducted in five Rotary clubs in the U.S.A where Favreau (2005) found that the value motive was the strongest reason for volunteering and the protective factor was the weakest and the difference was significant. In other words, these Rotary members volunteered to help others and not as a mean of escaping negative feelings about themselves.

The qualitative data provided further elaboration on these results. It emerged that the bonds between club members seemed to be stronger in rural areas where members see each other outside the club meetings and where strong friendships had developed over a long period of time. This finding was supported by the results from the speculative comparison in this study between two groups (clubs

that experienced a weight loss and clubs that did not lose weight) which revealed that 80% of the WDC Champions whose clubs did not lose weight were in the metropolitan area compared with 38% of the WDC Champions whose clubs lost weight. These bonds may have facilitated the role of the Champions in terms of encouraging participation, as club members supported and encouraged each other to participate in the WDC.

In clubs where club members knew each other for a long time and had social relationships outside Rotary, it seemed that the peer pressure was beneficial and club members helped each other in a friendly atmosphere to improve their lifestyle (diet and exercise habits). For those who chose not to participate, that decision was respected. A club member mentioned *"Those involved need to meet as a working group to encourage one another – like a walking group activity"* reinforcing that helping each other was important.

These findings concerning sense of community and bonds between club members were supported in the literature. Peterson et al. (2008) highlighted that the dimension of emotional connection was closely associated with community participation and empowerment. Barker and Gump (1964) in their seminal work looking at the differences between large settings and small settings, found that wellbeing was closely related to high levels of community participation and a greater number of roles in the community. A community tends to participate more in community activities and decision making if they have a high sense of community and strong bonds (Ohmer, 2007). These findings had a direct impact on the role of the WDC Champions, as a strong sense of community with strong bonds between club members facilitated the WDC Champions' role in terms of motivating club members to participate in the WDC.

Community commitment

The WDC Champions undertook the Champion's role mainly because they were committed to their community and desired to help. They were interested in health in general and in the WDC program in particular and wanted to use the program to help other members in their club as most of these members had weight issues.

One of the WDC Champions summarized these motivations in his interview ***"****I felt that it was in the interest of everyone that to live a healthy lifestyle and not be overweight... I think this awareness of healthy lifestyle especially as in our age group and personally benefited our club"*. However, about a half of the WDC Champions combined their desire to help their peers with a personal motive to lose weight. Helping others (Debate & Plescia, 2004; Eng, et al., 2009; Israel, 1985; Tessaro, et al., 2000), being interested in health (Fleury, et al., 2009) and achieving a personal benefit (Debate & Plescia, 2004; Kim, et al., 2004; Valente & Pumpuang, 2007) are outlined in the literature as the main reasons for undertaking the lay health advisor or natural helper roles. In this current study, findings suggested that success was associated with taking the role of Champion for altruistic reasons. It was speculated that this would be due to the fit with the values of the Rotary organisation in general.

Community structure

It was evident from the interviews that the WDC Champions were approached by club members and members of the Executive Board to undertake this role. The approval from the Executive Board and club members were major factors in the implementation of the WDC in the clubs as well as recognition of the WDC Champion status by club members.

Due to the nature of the Rotary organisation, a project cannot be implemented in Rotary clubs without the approval from the Executive Board and club members through a democratic process (Dochterman, 2003; Rotary International, 2010). It is noteworthy that one WDC Champion in his interview mentioned that the WDC was implemented without following this process and the implementation of the WDC was not a success in this club. In order to achieve success, the WDC Champions must adhere to rules and to the internal processes of the club to have the recognition of his/her position and to have the support of club members. One Champion summarised this as follows *"Definitely (support) from the Executive Board and from most of the members otherwise it could not be sustainable."*

This finding concurred with studies using Champions in health organisations, such as hospitals, where the approval of the hierarchy was necessary to support the action of Champions (Corrigan, 1995; Zakocs, Tiwari, Vehige, & DeJong, 2008). When natural helpers or lay health advisors operated in structured communities, they did not need to seek the approval from their hierarchy as this was usually undertaken by the instigator of the health intervention. (Campbell, et al., 2002; Quinn, 2001; Tessaro, et al., 2000; Vissman, et al., 2009). While the WDC Champions had to deal with the hierarchy of their clubs and club members' approval as well as following the rules of the organisation, the lay health advisors did not have to conform to these processes.

Reaching a Hard to reach population group

The WDC Champions belonged to the same community as the targeted Rotary group for the intervention. They were also demographically and socioeconomically similar to the Rotarian's population. In this current study, all club members were male and 86% of them lived in rural areas. The literature reported that men are a difficult population to reach by health services due to their reluctance to seek help in a timely fashion and particularly rural men (Aoun, Donovan, Johnson, & Egger, 2002; Smith, et al., 2006).

These findings are supported by the literature related to natural helpers and lay health advisors. Natural helpers and lay health advisors were mainly operating in hard to reach communities by health services due to diverse reasons such as being a migrant population with language barriers and cultural differences with the host country (Kim, et al., 2004; Vissman, et al., 2009), being in lower socio-economic status (McNabb, et al., 1997; Plescia, 2008; Quinn, 2001) or in rural areas (Campbell, et al., 2002; Kobetz, et al., 2005). These natural helpers and lay health advisors were used to promote and spread health promotion messages to change community members' behaviour. They were targeted due to their belonging to these communities and their knowledge of the norms and culture of their community (Campbell, et al., 2002; Kim, et al., 2004; Kobetz, et al., 2005; McNabb, et al., 1997; Plescia, 2008; Vissman, et al., 2009). Hence, in this study,

the use of the WDC Champions was appropriate as they fitted the criterion in terms of belonging to and operating in a hard to reach population group.

Community competence

The findings of this study brought to light that the WDC Champions improved their community competence by supporting and sustaining the WDC. At the end of the intervention, 81% of club participants had lost weight. The good understanding of their clubs' norms gave the WDC Champions an insight if their clubs were ready to host the WDC. The findings of this study also suggests that through the approval of the WDC program in their clubs and the approval of their role of the WDC Champions, the Rotarian's community had the capacity to recognize the needs in clubs in terms of weight issues and they had decided to act upon. This can be illustrated by a WDC Champion's comment *"Weight loss with lifestyle change is a difficult task. I hope for increased incentive to succeed with the assistance of others as a group challenge"*. The WDC Champions had hoped to increase the social unity of their clubs *"It was a program we could all do together to improve interaction in the club"*. The WDC Champions thought they had improved their community competence by increasing awareness of improving diet and physical activity. For example, the weekly, food menus in many clubs had changed and had become healthier, and regular walking activities were initiated and they are still in place in some clubs two years since the end of the pilot study intervention.

The literature concerning natural helpers and lay health advisors supports that the use of these individuals in health interventions increases community competence. For example, in a study with the goal of reducing cardiovascular disease in a Latinos community in the U.S.A., lay health advisors reported that by their actions (advice and information) they increased their community competency. These lay health advisors received feedback from members of their communities that they adopted a healthier diet, and they wanted to pass on this new knowledge to their children to prevent them from developing diabetes and cardiovascular diseases (Debate & Plescia, 2004). However, no studies reported if the changes in

behaviour noted at the end of the intervention were still in place after a period of time.

6.2 LIMITATIONS OF THE STUDY

The main limitations of the study were the generalisability of the findings due to the design of the study; the lack of power due to the small sample size; the type of sample; and the internal validity.

A cross-sectional study provides a picture at one point in time and allows the examination of relationships or differences between variables or groups. However the cause of these relationships and differences remains unclear. A true cause and effect relationship can only be demonstrated by the application of more controlled data collection methods, such as longitudinal studies or controlled studies (Bryman, 2008). The small sample size limited the quantitative analyses that could be conducted. For example only descriptive statistics using central measurement and proportions have been reported. Hence the quantitative analysis had limited scope (Bryman, 2008; Polit & Beck, 2004). Another limitation of this study resides in the type of sample, the purposive sample, where generalisation is not possible except in a similar population (Bryman, 2008; Polit & Beck, 2004).

However the qualitative analysis allowed a deeper insight of the WDC Champions' impacts on their peers, their communities, and their role and characteristics. Further research is needed with a larger sample size to overcome these limitations.

6.3 RECOMMENDATIONS FOR FUTURE RESEARCH AND IMPLICATIONS

It is recommended that further research is undertaken to confirm this Champion profile with a larger sample, which will allow a thorough statistical analysis to demonstrate differences amongst groups or to explore possible correlations between for example champions' attitudes and the success of the intervention in terms of club participants' weight loss. Also, a further study is needed to establish the extent of the Champions' influence on the success of the implementation and

sustainability of the health intervention. It is recommended that a specific measurement instrument be developed to measure the characteristics of these Champions to facilitate selection and training of Champions in other communities. The mixed method approach using triangulation between quantitative and qualitative data as research method is recommended for further research. This research method allowed in this study to have a deep understanding of the role of the Champions by crossing quantitative and qualitative data. It is also suggested to consider service clubs as health promotion settings for hard to reach population such as middle aged to older men.

One of the implications of this thesis is by choosing the right Champions, a health intervention such as the WDC with the aim of weight reduction by changing lifestyle, can have a direct impact on the reduction of the number of overweight and obese persons. Consequently, the number of deaths related to chronic disease associated with overweight and obesity could decrease as well as the financial burden for society linked to these chronic diseases. Also by choosing the right Champions health interventions could be spread and replicated in other communities.

A direct implication from this thesis was following the preliminary results and the evaluation of the WDC pilot intervention undertaken in 2009 (Aoun, Le, et al., 2009), training was designed to help Champions in their role in a larger study of the WDC program, which was implemented in 2009-2010 within three Rotary districts in WA. Training was achieved for 93 Champions from 52 Rotary clubs. This training included: problems associated with being overweight and obese, particularly the possible development of chronic diseases; how to acquire a healthy lifestyle (healthy diet and regular exercise); how to be Champions for their peers; and how to reduce barriers when trying to change behaviour (Aoun & Le, 2010).

6.4 CONCLUSIONS

The overall aim of this exploratory descriptive study was to define a profile of lay leaders called WDC Champions in the community setting of service clubs such as

Rotary Clubs. It was possible to achieve this overall aim by following the two objectives related to the exploration of the benefit of the WDC Champions on their peers and within the framework of community support and attachment.

This profile would be useful in similar health promotion programs where lay-leaders play a role in the community to improve their peers' health. To the best of the researcher's knowledge, this is the first time that this type of profile had been explored. From triangulation of the quantitative and qualitative findings and comparison with the literature, it was found that the WDC Champions combined characteristics of lay health advisors in community settings and champions in business settings. Despite the limitations of the current study, the research provided an insight into the impact of these Champions on their peers, their community and their organisation.

To be successful, Champions need to belong to the same community as the targeted population. They need to have a deep understanding of the norms of their community, in terms of what is acceptable to their community and what is not acceptable. They need to undertake this role for the sake of their community and not exclusively for personal reasons. Their position as Champion needs to be acknowledged by their peers as well by the hierarchy of their community. Champions are likely to be more successful in a stable community without any internal dysfunction, with a strong sense of community and close bonds between community members, which encourages participation. They need to be perceived as trustworthy and credible by their peers. These attributes will help them to influence their peers and change behaviours and achieve health goals.

They need to have leadership qualities such as being a role model to inspire their peers. They also need to have communication skills in order to provide information and also to listen to their peers and respond to their needs. They need to encourage, support and motivate their peers rather than to coerce them. These Champions need to be confident and optimistic in the success of the intervention, as well as to demonstrate persistence and creativity to develop their own strategies to maintain the intervention. Prior to the launch of the intervention, these

Champions need to receive training on the health issues they have to focus on and how to motivate and communicate with their peers in order to alleviate any possible barriers to change. Table 10 summarised this profile.

This study has explored the profile of lay leaders, called Champions, for a health promotion intervention in a community setting. This needs to be confirmed by further research with a larger sample prior to being adopted by other community settings. However, Champions appear to be a key component in introducing and sustaining such interventions.

Table 10

The WDC Champion's profile

Individual level	Community level
– Altruistic – Interested in health in general – Trustworthy – Credible – Likable – Role model – Good communicator – Good listener – Supportive – not coercive – Confident – Optimistic – Persistent – Creative	– Belongs to the same community as their peers – Has knowledge of community norms – Has approval from hierarchy – Has approval from peers – Operates in a stable community – Has a strong sense of community

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Appendix 1: Self-administered questionnaire – Champion

Curtin University of Technology

Club Name: **ID:**

What it is like to be a Champion for the Waist Disposal Challenge Survey

Please fill in or tick boxes where appropriate

1. **Today's date** ☐☐/☐☐/2009 (Day/Month/Year)
2. **Please state your gender** ☐Male ☐Female
3. **Please state your age** ☐☐ Years
4. **Please state the highest level of education that you have completed** (Tick one box only)

☐ Primary School
☐ Year 10 High School
☐ Year 12 High School
☐ TAFE or other diploma
☐ University degree
☐ Other

If other, please specify: _____

5. **When you were a Champion for the Waist Disposal Challenge, you were:** (Tick one box only):

☐ Employed – Job Title: _____|
☐ Unemployed – Previous Job Title: _____
☐ Retired – Job Title before Retirement: _____
☐ Other – Please specify: _____

6. **When did you join the Rotary as <u>an organisation</u>** ☐☐/☐☐☐☐ (Month/Year)
7. **When did you join <u>this Rotary Club</u>** ☐☐/☐☐☐☐ (Month/Year)
8. **When you were a Champion for the Waist Disposal Challenge, what was your position in your Rotary Club?**

Member ☐ Yes _ ☐ No
Member of the Executive Board ☐ Yes _ ☐ No
If yes, please specify your role: _____

9. **For your Champion role were you?**

Self-nominated ☐ Yes _ ☐ No
Nominated by the President or Executive Board ☐ Yes _ ☐ No
Solicited by other members of your club ☐ Yes _ ☐ No
Other ☐ Yes _ ☐ No
If yes, please specify: _____

10. **Have you participated in:**

The Weigh-in session (BMI competition)? ☐ Yes _ ☐ No
The Lifestyle Coaching Program? ☐ Yes _ ☐ No

11. **Before knowing about the Waist Disposal Challenge**

I was already concerned about how lifestyle and overweight could influence health. ☐ Yes __ ☐ No
I had heard about other projects concerning weight loss. ☐ Yes __ ☐ No
I thought that it would be a good idea to have a project concerning weight issues in my club ☐ Yes __ ☐ No

12. My reasons for being a Champion for the Waist Disposal Challenge

Please circle or tick one choice per statement	**Yes**	**No**	**Uncertain**
a. I decided to be a Champion because I wanted to lose weight.			
b. I decided to be a Champion because I wanted to help other members in my club to lose weight.			
c. I decided to be a Champion because I was interested in the Waist Disposal Challenge.			
d. I decided to be a Champion because I was interested in health?			

Please describe any other reasons you had?

_____
_____
_____
_____

13.My attitudes toward being a Champion throughout the Waist Disposal Challenge

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
1. At the beginning, I was enthusiastic about being a Champion.	5	4	3	2	1
2. At the beginning, I was confident that this program would work in my club.	5	4	3	2	1
3. At the beginning, I was worried that no one would participate.	5	4	3	2	1
4. At the beginning, I was optimistic about the success of this program in my club.	5	4	3	2	1
5. At the beginning, I saw many reasons why this program would be a success.	5	4	3	2	1
6. **Throughout** the program, I maintained my enthusiasm.	5	4	3	2	1
7. **Throughout** the program, I felt supported by the President of the club in my role as Champion.	5	4	3	2	1
8. **Throughout** the program, I felt supported by the other members in my club in my role as Champion.	5	4	3	2	1
9. I never thought about giving up my role as Champion.	5	4	3	2	1
10. When I felt that I needed help to maintain this program in my club I found the right people to help me.	5	4	3	2	1
11. When new ideas were needed to maintain this program, I found them.	5	4	3	2	1

Any other comments (Please write below)?

_____
_____
_____

14. My attitudes toward being a Champion throughout the Waist Disposal Challenge (Continuation)

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
a. The Rotarians who participated in the program followed my advice about adoption of a healthy lifestyle.	5	4	3	2	1
b. I set an example to other Rotarians who participated in the program by adopting a healthy lifestyle (diet and physical activity)	5	4	3	2	1
c. I was able to give more details on a healthy diet and physical activities when Rotarians were confused.	5	4	3	2	1
d. I listened to the comments of the Rotarians who participated into the program.	5	4	3	2	1
e. I took into account the comments of the Rotarians who participated into the program	5	4	3	2	1
f. My club was ready to host the Waist Disposal Challenge	5	4	3	2	1
g. It was a good idea for my club to host the Waist Disposal Challenge	5	4	3	2	1
h. I developed my own strategy(ies) to sustain the Waist Disposal Challenge.	5	4	3	2	1

Any other comments (Please write below)?

_____
_____
_____
_____

15. Training

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
a. To assume the role of Champion I needed more training about **how to motivate a group**	5	4	3	2	1
b. To assume the role of Champion I needed more training about **how to communicate**	5	4	3	2	1
c. To assume the role of Champion I needed more education about **weight issues**	5	4	3	2	1

Any other comments (Please write below)?

_____
_____
_____
_____

16. This section of the survey contains a list of statements that ask about your experiences as a volunteer. Please circle the appropriate number you actually believe is closest to your response to each statement using the scale below, with 1 being 'strongly disagree' through to 5 being 'strongly agree'. There are no right or wrong answers, but please fill in only one response for each statement and please respond to all of the statements. If you need to change an answer, make an "X" through the error and then circle your true response.

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
1. I volunteer because I am concerned about those less fortunate than myself.	5	4	3	2	1
2. Being appreciated by my volunteer agency is important to me.	5	4	3	2	1
3. I volunteer because I look forward to the social events that volunteering affords me.	5	4	3	2	1
4. I volunteer because I believe that you receive what you put out in the world.	5	4	3	2	1
5. I like to help people, because I have been in difficult positions myself.	5	4	3	2	1
6. I volunteer because I feel that volunteering is a feel-good experience.	5	4	3	2	1
7. I volunteer because my friends volunteer.	5	4	3	2	1
8. I volunteer because I feel that I make important work connections through volunteering.	5	4	3	2	1
9. I volunteer because I can learn more about the cause for which I am working.	5	4	3	2	1
10. I volunteer because doing volunteer work relieves me of some of the guilt for being more fortunate than others.	5	4	3	2	1
11. I volunteer because I am genuinely concerned about the particular group I am serving.	5	4	3	2	1
12. Being respected by staff and volunteers at the agency is not important to me.	5	4	3	2	1
13. The social opportunities provided by the agency are important to me.	5	4	3	2	1
14. Volunteering gives me a chance to try to ensure people do not have to go through what I went through.	5	4	3	2	1
15. I volunteer because volunteering makes me feel like a good person.	5	4	3	2	1
16. I volunteer because people I'm close to volunteer.	5	4	3	2	1
17. I have no plans to find employment through volunteering.	5	4	3	2	1
18. I volunteer because volunteering allows me to gain a new perspective on things.	5	4	3	2	1
19. I volunteer because volunteering helps me work through my own personal problems.	5	4	3	2	1

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
20. I volunteer because I feel compassion toward people in need.	5	4	3	2	1
21. I do not need feedback on my volunteer work.	5	4	3	2	1
22. I volunteer because I feel that volunteering is a way to build one's social networks.	5	4	3	2	1
23. I often relate my volunteering experience to my own personal life.	5	4	3	2	1
24. I volunteer because volunteering makes me feel important.	5	4	3	2	1
25. I volunteer because people I know share an interest in community service.	5	4	3	2	1
26. I volunteer because I feel that volunteering will help me to find out about employment opportunities.	5	4	3	2	1
27. I volunteer because volunteering lets me learn through direct hands-on experience.	5	4	3	2	1
28. I volunteer because volunteering is a good escape from my own troubles.	5	4	3	2	1
29. I volunteer because I feel it is important to help others.	5	4	3	2	1
30. I like to work with a volunteer agency, which treats their volunteers and staff alike.	5	4	3	2	1
31. I volunteer because volunteering provides a way for me to make new friends.	5	4	3	2	1
32. Volunteering helps me deal with some of my own problems.	5	4	3	2	1
33. I volunteer because volunteering makes me feel useful.	5	4	3	2	1
34. I volunteer because others with whom I am close place a high value on community service.	5	4	3	2	1
35. I volunteer because volunteering gives me an opportunity to build my work skills.	5	4	3	2	1
36. I volunteer because I can learn how to deal with a variety of people.	5	4	3	2	1
37. I volunteer because no matter how bad I am feeling, volunteering helps me forget about it.	5	4	3	2	1
38. I volunteer because I can do something for a cause that is important to me.	5	4	3	2	1
39. I feel that it is important to receive recognition for my volunteering work.	5	4	3	2	1
40. I volunteer because I believe that what goes around comes around.	5	4	3	2	1
41. I volunteer because volunteering keeps me busy	5	4	3	2	1
42. I volunteer because volunteering is an important activity to the people I know best.	5	4	3	2	1

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
43. I volunteer because I can explore my own strengths.	5	4	3	2	1
44. I volunteer because by volunteering I feel less lonely.	5	4	3	2	1

Do you wish to add any comments concerning your voluntarism?

_____
_____
_____
_____
_____
_____
_____

17.Sense of Community

Please circle or tick one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
1. I can get what I need in this club.	5	4	3	2	1
2. This club helps me fulfill my needs.	5	4	3	2	1
3. I feel I am a valued member of this club.	5	4	3	2	1
4. I belong in this club.	5	4	3	2	1
5. I have a say about what goes on in my club.	5	4	3	2	1
6. People in this club are good at influencing each another.	5	4	3	2	1
7. I feel connected to this club.	5	4	3	2	1
8. I have a good bond with others in this club.	5	4	3	2	1

Do you wish to add any comments concerning your feeling to be part of your club?

_____
_____
_____
_____
_____
_____
_____

Please return this questionnaire in the reply paid envelope as soon as you have completed it.

Thank you very much for your time and cooperation

Appendix 2: Self-administered questionnaire – Club Member

Curtin University of Technology

Club Name: **ID:**

Your Experience as a Participant in the Waist Disposal Challenge Survey

Please fill in or tick boxes where appropriate

1. **Today's date** ☐☐/☐☐/2010 (day/month/year)
2. **Please state your gender** ☐ Male ☐ Female
3. **Please state your age** ☐☐ Years
4. **Please state the highest level of education that you have completed** (Tick one box only)

☐ Primary School
☐ Year 10 High School
☐ Year 12 High School
☐ TAFE or other diploma
☐ University degree

If other please specify: _____

5. **When you participated in the Waist Disposal Challenge, you were:** (Tick one box only):

☐ Employed – Job Title: _____|
☐ Unemployed – Previous Job Title: _____
☐ Retired – Job Title before Retirement: _____
☐ Other – Please specify: _____

6. **When you participated in the Waist Disposal Challenge, what was your position in your Rotary Club?**

Member ☐ Yes _ ☐ No
Member of the Executive Board ☐ Yes _ ☐ No
If yes, please specify your role: _____

7. **Did you participate in:**

The Weigh-in sessions (BMI competition)? ☐ Yes ☐ No
The Coaching Program? ☐ Yes ☐ No

8. **Did you lose weight during the Waist Disposal Challenge?** ☐ Yes ☐ No

9. **What do you think <u>should be the attributes</u> of the person who facilitates a health project like the Waist Disposal Challenge in your club, (for example the Champion)?**

Somebody that you could trust? ☐ Yes ___ ☐ No ☐ Unsure
Somebody that you liked? ☐ Yes ___ ☐ No ☐ Unsure
Somebody that you found credible? ☐ Yes ___ ☐ No ☐ Unsure

Any other comments (Please write below)?

_____
_____
_____
_____
_____

10. Do you think that the person who facilitated the Rotary Waist Disposal Challenge in your club, the Champion:

Was somebody that you could trust?	☐ Yes ___	☐ No	☐ Unsure
Was somebody that you liked?	☐ Yes ___	☐ No	☐ Unsure
Was somebody that you found credible?	☐ Yes ___	☐ No	☐ Unsure

Any other comments (Please write below)?

_____
_____
_____
_____
_____

11. Did the person responsible of the Waist Disposal Challenge in your club have an influence on your decision to participate in the Weigh-in Session (BMI Challenge) and/or Coaching Program?

☐ Yes ☐ No ☐ Unsure

Please specify why?

_____
_____
_____
_____
_____

12. Did you identify with the person responsible of the Rotary Waist Disposal Challenge in your club in relation to sharing the same weight concerns?

☐ Yes ☐ No ☐ Unsure

Please specify why?

_____
_____
_____
_____
_____

13. Did the person responsible for the Rotary Waist Disposal Challenge in your club persuade you to improve your:

Diet?	☐ Yes	☐ No	☐ Unsure
Exercise habits?	☐ Yes	☐ No	☐ Unsure

Please specify how?

_____
_____
_____
_____
_____

14. Sense of Community

Please circle or ticked one choice per statement	**Strongly Agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
12. I can get what I need in this club.	5	4	3	2	1
13. This club helps me fulfill my needs.	5	4	3	2	1
14. I feel I am a valued member of this club.	5	4	3	2	1
15. I belong in this club.	5	4	3	2	1
16. I have a say about what goes on in my club.	5	4	3	2	1
17. People in this club are good at influencing each another.	5	4	3	2	1
18. I feel connected to this club.	5	4	3	2	1
19. I have a good bond with others in this club.	5	4	3	2	1

Do you wish to add any comments concerning your feeling to be part of your club?

_____
_____
_____
_____

Do you wish to add any comments concerning your experience in participating in the Waist Disposal Challenge?

_____
_____
_____
_____
_____
_____
_____
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_____
_____
_____

Please return this questionnaire in the reply paid envelope as soon as you have completed it

Thank you very much for your time and cooperation

Appendix 3: Volunteer Motivation Inventory (VMI) scales interpretation

(Esmond & Patrick, 2004)

Values (Va) – Describes the situation where a volunteer is motivated by the prospect of being able to act on firmly held beliefs that it is important for one to help others. High scores on this scale suggest that a volunteer is motivated to help others just for the sake of helping. Low scores indicate that a volunteer is less interested in volunteering as a means of helping others (Clary, Snyder and Ridge, 1992).	***Self-Esteem*** (SE) – Describes a situation where a volunteer seeks to improve their own self esteem or feelings of self-worth through their volunteering. High scores on this scale indicate that a volunteer is motivated by the prospect of feeling better about themselves through volunteering. Low scores indicate that a volunteer does not regard volunteering as a means of improving their self-esteem.
Recognition (Rn) – Describes a situation where a volunteer enjoys the recognition that volunteering gives them. They enjoy their skills and contributions being recognised, and this is what motivates them to volunteer. High scores indicate a strong desire for formal recognition for their work, whereas low scores indicate a lesser level of interest in formal recognition for their volunteering work.	***Social*** (So) – Describes a situation where a volunteer seeks to conform to normative influences of significant others (e.g. friends or family). High scores on this scale indicate that the volunteer may be volunteering because they have many friends or family members who also volunteer, and they wish to 'follow suit'. Low scores may indicate that a volunteer has few friends or family members who already volunteer (Clary, Snyder and Ridge, 1992).
Social Interaction (SI) – Describes a situation where a volunteer particularly enjoys the social atmosphere of volunteering. They enjoy the opportunity to build social networks and interact with other people. High scores indicate a strong desire to meet new people and make friends through volunteering. Low scores indicate that the prospect of meeting people was not an important reason for them to volunteer.	***Career Development*** (CD) – Describes a situation where a volunteer is motivated to volunteer by the prospect of gaining experience and skills in the field that may eventually be beneficial in assisting them to find employment. High scores on this scale are indicative of a strong desire to gain experience valuable for future employment prospects and/or to make work connections. Low scores on this scale are indicative of a lesser interest in gaining experience for future employment or in making work connections.
Reciprocity (Rp) – Describes a situation where a volunteer enjoys volunteering and views it as a very equal exchange. The volunteer has a strong understanding of the 'higher good'. High scores on this scale indicate that the volunteer is motivated by the prospect that their volunteering work will bring about good things later on. Low scores indicate that the prospect of their volunteering work bringing about good things later on is not as important to them.	***Understanding*** (Un) – Describes a situation where a volunteer is particularly interested in improving their understanding of themselves, or the people they are assisting and/or the organisation for which they are a volunteer. High scores on this scale indicate a strong desire to learn from their volunteering experiences. Low scores on this scale indicate a lesser desire of a volunteer to improve his or her understanding from their volunteer experience (Clary, Snyder and Ridge, 1992).
Reactivity (Rc) – Describes a situation where a volunteer is volunteering out of a need to heal or address their own past issues. High scores on this scale may indicate that a need to 'right a wrong' in their lives is motivating them to do the volunteer work. Low scores indicate that there is little need for the volunteer to address his or her own past issues through volunteering.	***Protective*** (Pr) – Describes a situation where a volunteer is volunteering as a means of escaping negative feelings about themselves. High scores indicate that a volunteer may be volunteering to help escape from or forget about negative feelings about him/herself. Low scores indicate that the volunteer is not using volunteering as a means to avoid feeling negatively towards him/herself (Clary, Snyder and Ridge, 1992).

Appendix 4: Brief sense of community (BSCS) scales' interpretation

(Peterson, et al., 2008)

Emotional Connection: The "definitive element for true community", it includes shared history and shared participation (or at least identification with the history).

Influence: Influence works both ways: members need to feel that they have some influence in the group, and some influence by the group on its members is needed for group cohesion.

Membership: Boundaries, emotional safety, a sense of belonging and identification, personal investment and a common symbol system

Needs of Fulfilment: Members feel rewarded in some way for their participation in the community.

Appendix 5: Interview guide

Interview Guide Champion

(Estimated time 30 minutes)

The researcher will start the interview by stating her name and date of the interview. She will then present the purpose of the interview and its prerogatives (consent form, time allocated). Probes will be used to flow the interview. For example, when an interviewee needs some help to develop his/her thoughts the researcher can use this kind of probes "Is there anything else you think of about your role of Champion?" At the end of the interview the research will thank participants for their time and contribution to the study. All throughout the interview politeness and courteousness will be observed.

Interviews questions

1. How did you define your role as Champion?
2. What were your expectations of this role?
3. What factors prevented you from achieving your role as Champion?
4. What factors enabled or helped you to be a Champion?
5. Do you think that the sense of community in your Rotary club helped you in your position as Champion?
6. Do you think that your mode of nomination as Champion had an influence in your role as Champion?
7. Did club members see you as role model?
8. Do you think that your gender had an influence in your role as Champion?
9. If in the executive board:
   Did your position in the executive board had an influence in your role as Champion?
10. Do you think that Executive Board and club members need to approve/support this project to be successful?
11. As the Waist Disposal Challenge program was designed for Rotarians, did it affect your role as Champion?
12. Other points

Appendix 6: Pilot Study – Information Sheet - Champion

Information Sheet – Pilot Study (Champion)

Study Title: **Profile of Champions in health promotion in a community setting**

Dear,

Thank you agreeing to provide a feedback on the survey titled "What it is like to be a Champion for the Waist Disposal Challenge". This survey will be used in my study undertaken as part of my Masters of Philosophy in Health Science under the supervision of Professor Samar Aoun.

I am studying the role of the Champion in facilitating the Waist Disposal Challenge in Rotary clubs. The purpose of this study is to increase our understanding of the role played by such peer-leaders in a community-based organisation such as Rotary. It is anticipated that the findings from this study will assist in the development of the profile of Champions who could advocate, promote and sustain a healthy lifestyle within their peers and that would be inform other similar projects.

Your feedback regarding the role of the Champion in the Rotary Waist Disposal Challenge is important. I would like to invite you to complete: a) the questionnaire of 17 questions, the completion time is estimated to be 20 minutes, b) the Survey Feedback sheet, and c) the consent form.

After completion those documents, please return them in the addressed pre-paid envelope by *date mentioned*.

The information you provide will be kept separate from your personal details, and only myself and my supervisor will have access. The interview transcript will not be labelled withy our name or any other identifying information and in adherence to university policy, the interview tapes and transcribed information will be kept in locked cabinet for five years, before it is destroyed.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784.

Should you require further information or clarification, please contact me on 0431 295 559 or my supervisor Prof. Samar Aoun on 0419 911 940.

Kind Regards,

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University

Date:

Appendix 7: Pilot Study – Information Sheet – Club Member

Information Sheet – Pilot Study

Study Title: **Profile of Champions in health promotion in a community setting**

Dear,

Thank you agreeing to provide a feedback on the survey titled "What it is like to be a Champion for the Waist Disposal Challenge". This survey will be used in my study undertaken as part of my Masters of Philosophy in Health Science under the supervision of Professor Samar Aoun.

I am studying the role of the Champion in facilitating the Waist Disposal Challenge in Rotary clubs. The purpose of this study is to increase our understanding of the role played by such peer-leaders in a community-based organisation such as Rotary. It is anticipated that the findings from this study will assist in the development of the profile of Champions who could advocate, promote and sustain a healthy lifestyle within their peers and that would be inform other similar projects.

Your feedback regarding your participation in the Rotary Waist Disposal Challenge is important. I would like to invite you to complete: a) the questionnaire of 17 questions, the completion time is estimated to be 20 minutes, b) the Survey Feedback sheet, and c) the consent form.

After completion those documents, please return them in the addressed pre-paid envelope by *date mentioned*.

The information you provide will be kept separate from your personal details, and only myself and my supervisor will have access. The interview transcript will not be labelled withy our name or any other identifying information and in adherence to university policy, the interview tapes and transcribed information will be kept in locked cabinet for five years, before it is destroyed.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784.

Should you require further information or clarification, please contact me on 0431 295 559 or my supervisor Prof. Samar Aoun on 0419 911 940.

Kind Regards,

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University

Date:

Appendix 8: Pilot Study - Consent Form

CONSENT FORM

PILOT STUDY

Please return this Consent Form copy completed in the reply paid envelope to Curtin University

Study Title: Profile of Champions in health promotion in a community setting

Researcher: Rebecca Osseiran-Moisson

Masters student, Curtin University of Technology

Supervisor: Prof. Samar Aoun

Curtin University of Technology

- I have been given clear, written information about this research project.
- I understand and accept the nature of the study which has been explained to my satisfaction.
- I understand that the study itself may not benefit me.
- I know that my participation in this study is strictly voluntary. I know that I have the right to withdraw at any time
- If I have any questions about the study or about being a participant, I can call Rebecca Osseiran-Moisson on 0431 295 559 or Prof. Samar Aoun on 0419 911 940.
- I have been assured that my identity will not be revealed while the study is being conducted or when the study is published.
- I agree to participate in this study outline to me.

.....

Club Name

.....

Participant's Name Participant's Signature

Date: .....

Appendix 9: Pilot Study Survey - Feedback Sheet

Profile of Champions in health promotion in a community setting

SURVEY FEEDBACK SHEET

1. How long did it take you to complete the survey? _____ minutes

2. Did you find the survey easy to complete?

☐ Yes

☐ No

If no, why not?

_____
_____
_____

3. Were the questions easy to understand?

☐ Yes

☐ No

If no, which ones and why not?

_____
_____
_____
_____

4. Were any of the questions irrelevant?

☐ Yes

☐ No

If yes, which ones and why?

_____
_____
_____

5. Is there anything else that could be included in the survey?

☐ Yes

☐ No

If yes, please write here?

_____
_____
_____

Comments / Other Feedback

_____
_____
_____
_____

Thank you for taking the time to complete this questionnaire.

Your feedback and comments are important.

Appendix 10: Initial interview guide

Initial Interview Guide Champion

(Estimated time 30 minutes)

The researcher will start the interview by stating her name and date of the interview. She will then present the purpose of the interview and its prerogatives (consent form, time allocated). Probes will be used to flow the interview. For example, when an interviewee needs some help to develop his/her thoughts the researcher can use this kind of probes "Is there anything else you think of about your role of Champion?" At the end of the interview the research will thank participants for their time and contribution to the study. All throughout the interview politeness and courteousness will be observed.

Interviews questions

1. How did you define your role as Champion?
2. What were your expectations of this role?
3. What factors prevented you from achieving your role as Champion?
4. What factors enabled or helped you to be a Champion?
5. Other points

Appendix 11: Courtesy Letter - Rotary Club President

Courtesy Letter for Rotary Club President

Dear President Name,

Study Title: **Profile of Champions in health promotion in a community setting**

The purpose of this letter is to inform you of the study for my Master's degree that I would like to undertake in your clubs.

My name is Rebecca Osseiran-Moisson. You may have already heard of me during recent years as I worked on the Rotary Waist Disposal Challenge pilot project as a research assistant to Professor Samar Aoun.

I am currently undertaking a research project for my Masters of Philosophy in Health Science under the supervision of Professor Samar Aoun. I am studying the role of the Champion in facilitating the Waist Disposal Challenge in Rotary clubs. The purpose of this study is to increase our understanding of the role played by such peer-leaders in a community-based organisation such as Rotary. It is anticipated that the findings from this study will assist in the development of the profile of Champions who could advocate, promote and sustain a healthy lifestyle within their peers and that would be inform other similar projects.

The study will involve the recruitment of Champions and other participants of the Waist Disposal Challenge from your club who will be required to complete a questionnaire. Copies of these 2 questionnaires are attached only for your information.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784.

I hope that you will see no inconvenience to undertake this study in your club.

Should you require further information or clarification, please contact me on 0431 295 559 or my supervisor Prof. Samar Aoun on 0419 911 940.

Kind Regards,

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University

Date:

Appendix 12: Participant Information Sheet – Champion

Participant Information Sheet for Champion

Study Title: **Profile of Champions in health promotion in a community setting**

Dear Champion Name,

My name is Rebecca Osseiran-Moisson. You may have already heard of me during recent years as I worked on the Rotary Waist Disposal Challenge project as a research assistant to Professor Samar Aoun.

I am currently undertaking a research project for my Masters of Philosophy in Health Science under the supervision of Professor Samar Aoun. I am studying the role of the Champion in facilitating the Waist Disposal Challenge in Rotary clubs. The purpose of this study is to increase our understanding of the role played by such peer-leaders in a community-based organisation such as Rotary. It is anticipated that the findings from this study will assist in the development of the profile of Champions who could advocate, promote and sustain a healthy lifestyle within their peers and that would be inform other similar projects.

Your feedback regarding the role of the Champion in the Rotary Waist Disposal Challenge is important. I would like to invite you to participate in this study. If you agree, you will be asked to: a) complete a questionnaire of 16 questions, the completion time is estimated to be 20 minutes and b) participate in a telephone interview lasting about 30 minutes (after completion of the questionnaire and consent form). This interview will be done at a time it suits you.

If you are willing to participate, please complete the attached consent form and questionnaire and return them in the addressed pre-paid envelope within two weeks.

The information you provide will be kept separate from your personal details, and only myself and my supervisor will have access. The interview transcript will not be labelled withy our name or any other identifying information and in adherence to university policy, the interview tapes and transcribed information will be kept in locked cabinet for five years, before it is destroyed.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784.

Should you require further information or clarification, please contact me on 0431 295 559 or my supervisor Prof. Samar Aoun on 0419 911 940.

Kind Regards,

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University
Date

Appendix 13: Consent Form to be return to Curtin University – Champion

CONSENT FORM

Champion

Please return this Consent Form copy completed in the reply paid envelope to Curtin University

Study Title: Profile of Champions in health promotion in a community setting

Researcher: Rebecca Osseiran-Moisson

Masters student, Curtin University of Technology

Supervisor: Prof. Samar Aoun

Curtin University of Technology

- I have been given clear, written information about this research project.
- I understand and accept the nature of the study which has been explained to my satisfaction.
- I understand that the study itself may not benefit me.
- I know that my participation in this study is strictly voluntary. I know that I have the right to withdraw at any time
- If I have any questions about the study or about being a participant, I can call Rebecca Osseiran-Moisson on 0431 295 559 or Prof. Samar Aoun on 0419 911 940.
- I have been assured that my identity will not be revealed while the study is being conducted or when the study is published.
- I agree to participate in this study outline to me.

.....

Participant's Name Participant's Signature

.....

Witness's Name Participant's Signature

Date: .....

Appendix 14: Participant Information Sheet – Club Member

Participant Information Sheet for Club Members

Study Title: **Profile of Champions in health promotion in a community setting**

Dear Club Member's name,

My name is Rebecca Osseiran-Moisson. I am currently undertaking a research project for my Masters of Philosophy in Health Science under the supervision of Professor Samar Aoun. I am studying the role of the Champion in facilitating the Waist Disposal Challenge in Rotary clubs.

The purpose of this study is to increase our understanding of the role played by such peer-leaders in a community-based organisation such as Rotary. It is anticipated that the findings from this study will assist in the development of the profile of Champions who could advocate, promote and sustain a healthy lifestyle within their peers and that would be inform other similar projects.

Your feedback regarding your participation in the Rotary Waist Disposal Challenge is important. I would like to invite to participate in this study. If you agree, you will be asked to complete a questionnaire of 14 questions. The completion time is estimated to be 15 minutes.

If you are willing to participate, please complete the attached consent form and questionnaire and return them in the addressed pre-paid envelope within two weeks.

The information you provide will be kept separate from your personal details, and only myself and my supervisor will only have access to this. In adherence to university policy, the information provided will be kept in locked cabinet for five years, before it is destroyed.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784.

Should you require further information or clarification, please contact me on 0431 295 559 or my supervisor Prof. Samar Aoun on 0419 911 940.

Kind Regards,

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University

Date

Appendix 15: Consent Form to be return to Curtin University – Club Member

CONSENT FORM

Club Member

Please return this Consent Form copy completed in the reply paid envelope to Curtin University

Study Title: Profile of Champions in health promotion in a community setting

Researcher: Rebecca Osseiran-Moisson

Masters student, Curtin University of Technology

Supervisor: Prof. Samar Aoun

Curtin University of Technology

- I have been given clear, written information about this research project.
- I understand and accept the nature of the study which has been explained to my satisfaction.
- I understand that the study itself may not benefit me.
- I know that my participation in this study is strictly voluntary. I know that I have the right to withdraw at any time
- If I have any questions about the study or about being a participant, I can call Rebecca Osseiran-Moisson on 0431 295 559 or Prof. Samar Aoun on 0419 911 940.
- I have been assured that my identity will not be revealed while the study is being conducted or when the study is published.
- I agree to participate in this study outline to me.

.....

Participant's Name Participant's Signature

.....

Witness's Name Participant's Signature

Date: .....

Appendix 16: Members Check Letter

Study Title: **Profile of Champions in health promotion in a community setting**

Dear Champion Name,

Thank you for participating in an interview with me, discussing your experiences as a Champion. I really appreciate your support and kindness. I have now completed all the interviews and typed up the transcripts. I have enclosed a copy of the transcript from your interview with this letter.

Part of the research process involves sending the transcript to a selection of participants for their feedback, to ensure the research is reliable. It would therefore be appreciated if you could peruse the transcript enclosed and contact me if you have any problems with it, or points that you would like to discuss further. If I do not hear from you within 2 weeks (10 August 2010), I will assume that you have no concerns.

The next part of my research will be analyzing the interviews for themes. Thank you again for you participation, it is most appreciated.

Yours sincerely

Rebecca Osseiran-Moisson
Master Student Health Science
Curtin University
Mobile 0431 295 559
r.osseiran-moisson@curtin.edu.au

Date: