A Critical Analysis of Screening for Skin Cancer: Participation Among Older Males

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Abstract

Skin cancer represents a significant health concern within Australia, particularly for those who are at high risk of developing this disease, such as males over the age of 50 years. Although older males are at high risk of developing skin cancer they are the demographic group that is least likely to undergo skin cancer screening (for the purpose of this thesis skin cancer screening was defined as a clinically conducted full-body skin examination). However, screening for skin cancer is imperative as early detection and treatment allows for 95% of cancers to be successfully treated. To date, as per cervical cancer screening, researchers investigating skin cancer screening have tended to restrict the conceptualisation of ‘participation’ to compliance with a medical recommendation. This contrasts with research from related fields suggesting that different types of participation, including ‘patient participation’ (i.e. behaviours such as asking questions, expressing concerns, being involved in decision making and seeking information) and ‘perceived voice opportunity’ (i.e. the extent to which an individual perceives that they are consulted during the decision making process or have the opportunity to express their opinions or concerns), are important to investigate given that they are associated with positive health outcomes such as: increased patient satisfaction, heightened feelings of self-efficacy and more constructive dialogue between patients and health care practitioners. Against this background, this thesis argues that an exploration of types of participation, other than compliance with medical requests, by older men in skin cancer screening is warranted.

The current thesis extends existing skin cancer screening literature in several ways. First, it provides a critical discussion of existing skin cancer screening research. More specifically, it highlights how the definition of ‘skin cancer screening’ has
been ill-defined and argues that conceptualisation of what constitutes an ‘older man’ has varied across studies. Second, it broadens the conceptualisation of ‘participation’ in skin cancer screening by examining: (1) the applicability of alternative types of participation to decisions about skin cancer screening and (2) explores men’s subjective experience of participation in skin cancer screening. Third, this thesis investigates whether there are differences between men who reside in rural areas compared to those who reside in urban settings in their experience of patient participation and perceived voice opportunity in the context of skin cancer screening, and calls for additional research in this area. Fourth, the thesis represents the first attempt to explicitly identify the predictors of ‘patient participation’ and ‘perceived voice opportunity’ in skin cancer screening among older males (that is, among males older than 50 years of age).

Two studies are reported in the current thesis. The first study was qualitative and utilised thematic analysis to examine older men’s subjective experiences of skin cancer screening. More specifically, the first study investigated older men’s views regarding their participation in that process and their perceptions of skin cancer. The findings of this first study suggested that there were many ways, other than compliance with medical requests, by which men understood their participation in this health context. The findings of this first study also indicated that men were aware of processes, such as ‘power imbalances’ in their relationships with treating practitioners and a range of factors were revealed that appear to influence men’s willingness to undergo skin cancer screening, were highlighted. For example, encouragement from family and friends and perceptions of susceptibility were found to be important to increasing uptake of skin cancer screening while gender roles and gender stereotypes as well the perception that skin cancer screening was not a
priority were factors that appeared to decrease men’s willingness to undergo skin cancer screening.

The second study examined the relationship between men’s perceptions of two different types of participation: ‘patient participation’ and ‘voice opportunity’ with a range of variables, including some that exist in commonly utilised theoretical models, such as the Health Belief Model and the Theory of Planned Behaviour. Findings from this study indicated that: ‘perceived benefits’, ‘perceived costs’, ‘perceived behavioural control’, ‘subjective norm’ (i.e. perceptions of others’ opinion of skin cancer screening) and age predicted ‘patient participation’ and ‘voice opportunity’.

Overall, the current thesis serves to: extend the conceptualisation of participation in skin cancer screening for older men, highlight some of the variables that predict men’s participation in this health context, and suggests important implications for future researchers and health professionals working in this area.
CHAPTER ONE: WILLINGNESS TO UNDERTAKE SKIN CANCER SCREENING AMONG OLDER MALES

Skin cancer is the most prevalent of all cancers (Janda, et al., 2004) and the incidence of this disease in Australia is growing more rapidly than any other type of cancer (Aitken et al., 2006). Skin cancer occurs when skin cells are damaged, for example by exposure to ultraviolet (UV) radiation from the sun (Heckman et al., 2011). The major types of skin tumors are basal cell carcinomas, squamous cell carcinomas and melanomas (Nakayama, 2010). Melanomas rapidly multiply in comparison to other skin cancer cells and may develop from a pre-existing mole or can emerge as a new spot (Hanrahan, D’Este, Menzies, Plummer & Jersey, 2002). Generally, melanomas are characterized as a flat spot that then changes in shape, size or colour over several months (Victorian Melanoma Service, 2012). Melanomas are highly invasive and malignant (Nakayama, 2010) and are associated with poor patient prognosis (Geller, Koh, Miller, Mercer & Lew, 1992). Australia has one of the highest rates of skin cancer in the world with nearly four times the rates found in the United Kingdom, Canada and the United States (Youl et al. 2006). Indeed, currently, two in every three Australians will be diagnosed with skin cancer at some stage in their life (Janda et al., 2010). Moreover, in a single year over 1,830 Australians die from skin cancer and in Victoria alone, 401 people die from skin cancer per year (316 from melanoma and 85 from non-melanoma skin cancer) (Janda et al., 2004). In fact, the mortality associated with skin cancer is higher than Victoria's annual road toll (Victoria Melanoma Service, 2012).

However, compared with other forms of cancer, skin cancer can be detected
relatively easily as it occurs superficially in changes of the skin (Kasparian, McLoone & Meiser, 2009). More than 90% of melanomas that arise in the skin can be recognized by the naked eye (Hazen, 1989) and if found early, over 95% of skin cancers can be treated and cured successfully (Balch et al., 2001). Indeed, the five-year survival rate for melanoma is 91% when detected early (Goldsmith, 1987).

Screening for skin cancer is a cost-effective prevention strategy (Janda et al., 2004), which results in early detection of cancer and enhanced survival (Geller et al., 2002). Skin cancer screening is non-intrusive and easy to perform (Kiviniemi, Bennett, Zaiter & Marshall, 2010) and is most beneficial for those over 50 years given that skin cancer is diagnosed most often in older adults (Geller et al., 2002; Janda et al., 2010; Victorian Melanoma Service, 2012). The process of skin examination and screening increases the chances of detecting cancer at a stage when lesions are thinner and more curable (Aitken et al. 2006b) and represents an essential process in reducing skin cancer related mortality rates (Geller, Sober, Zhang et al., 2002). It is worth noting that the Cancer Council Australia and the Australasian College of Dermatologists do not endorse the practice of skin checks in public places as a screening method (The Cancer Council, 2015). Thus, to date population based screening programs do not exist in Australia and currently, the most effective means of early detection is by a total body visual inspection conducted by a health care professional such as a General Practitioner (GP) (Goldsmith, 1987). Nonetheless, participation in annual skin cancer screening in Australia is only 8 – 21% of the general population (Aitken et al., 2006b; Janda et al., 2004).

Research (Janda et al., 2010) has also revealed that men aged 50 years and
above are at a particularly ‘high risk’ of developing skin cancer and present with the
greatest proportion of thick tumors which usually represents advanced melanoma
(Christos et al., 2000; Hanrahan, Hersey & D’Este, 1998; Swetter, Geller & Kirkwood, 2004). Furthermore, the incidence of and mortality associated with skin
cancer is increasing in this age group (Janda et al., 2010; Jemal et al., 2009). In the
United States, the incidence of melanoma for those aged 50 years and older is at a rate
of 70 and 33 in 100,000 respectively, for men and women (National Cancer Institute,
2006). In Australia, the prevalence of skin cancer in this age group is approximately
three times higher than in the US, and males have a two-fold higher risk of melanoma
compared to women (incidence rates are 209 and 112 in 100,000 for men and women,
respectively) (Queensland Cancer Registry and Queensland Cancer Fund, 2005).
Indeed, 77% of all cancers are diagnosed in people 55 years or older (Klushsman,
2009) and half of all melanoma deaths in Australia occur in men over 50 years even
though they comprise only 12% of the population (Coates, 2001). Melanoma is also
diagnosed more often in men than in women and research undertaken in Australia has
revealed incidence rates in males aged between 65-69 years are more than double
those of females (Aitken et al., 2004) and melanoma is currently the second most
common cancer among males between the ages of 40-64 years (Jemal et al., 2009).

A range of factors have been suggested to explain this incidence rate. For
example, some skin cancers i.e. melanoma, can have a latency period of up to 50
years which means older individuals are only noticing the cumulative sun damage
later in life (Wright & Bramwell, 2001). Furthermore, the risks of sun exposure and
tanning were not well known when the current generation of older people were
younger and there were no health warnings to notify them of the dangers associated
with sun exposure (Wright & Bramwell, 2001). Additionally, older males are also less likely than other groups to identify the first change in melanomas (Hanrahan et al. 1998) and more frequently develop nodular melanoma (which are more difficult to detect). They are also more likely to develop melanoma at sites that are hard to self-screen, for instance the back (Hanrahan et al. 1998). Furthermore, even though men over the age of 50 are at the highest risk of developing skin cancer they are also the least likely to undergo skin cancer screening, even when they have noticed suspicious lesions or mole changes (Geller et al., 2002). Given these statistics, an understanding of the factors that influence older men’s (i.e. men over the age of 50 years) willingness to engage in skin cancer screening, particularly those at high risk, is essential if we are to increase uptake and in turn increase early detection of skin cancer among those aged 50 years and older (Ford et al., 2004).

There are numerous studies that have investigated the factors that impact on individuals’ skin cancer screening behaviours. This chapter will review these findings and the following arguments will be offered: (1) the current existing body of skin cancer screening literature is disjointed - while some research focuses on uptake of actual screening behaviour and the effectiveness of screening interventions, other studies examine intentions to undergo screening or individuals’ willingness to engage in skin cancer screening; (2) the use of the term ‘older males’ varies across studies and there is a need for far greater specification of the findings that apply to those aged 50 years and above; (3) within the skin cancer screening literature, conceptualisations of ‘screening’ tend to vary from study to study and are often left ill-defined; (4) there is a need to explore differences in willingness to undertake skin cancer screening among men based in rural and urban settings as little research has compared these
groups even though their exposure to sun is likely to be very different. Indeed, older men who reside in rural areas tend to have more occupational exposure to UV rays (e.g. farming) and in turn increased risk of skin cancer; (5) some existing research has relied on theoretical frameworks such as the Health Belief Model and the Theory of Planned Behaviour to ascertain barriers and facilitators of skin cancer screening, however, as noted by prior researchers these models have limitations and a critical review of the concepts and relationships within these models is needed; (6) to date little research has explored the subjective experience of skin cancer screening for older men however this represents a pertinent area for future research.

Major Research Findings Regarding Skin Cancer Screening

The existing body of skin cancer screening literature is vast and prior research has explored a range of different aspects of skin cancer screening. The majority of research has focused on identifying factors associated with uptake of skin cancer screening including: demographic details, risk perceptions, attitudes, motivating factors, beliefs and knowledge. Additional research has sought to identify factors associated with intentions to undergo screening while still other research has explored the utility of screening interventions and outcomes. The major findings of these prior studies are reviewed in detail below.

Prior research has identified that women (Bergenmar, Tornberg & Brandberg, 1997; Geller., 2002; Melia, Pendry, Eiser, Harland & Moss, 2000; Rodriguez, Fangchao, Federman, Rouhani, et al. 2007; Swetter, Geller & Kirkwood, 2004) and individuals under the age of 50 years (Carmel, Shani & Rosenberg, 1996;
Janda, et al., 2009; Swetter, Geller & Kirkwood, 2004) are more likely to undergo skin cancer screening. Additional factors associated with undertaking skin cancer screening include: knowledge of melanoma (Brandberg et al., 1996); a previous diagnosis of skin cancer (Call et al., 2004; Mullen et al. 1996; Schwartz et al. 2002); having fair skin (Rodriguez et al., 2007); educational level (Saraiya et al., 2004; Youl et al., 2006); prompting by radio and television advertisements (Call et al., 2004); having a greater number of objective risk factors for skin cancer (Koh et al. 1991; McGee et al. 1994); a family history of skin cancer (Call, 2004) and perceived risk of developing skin cancer (Bergenmar et al. 1997); encouragement from family and friends (Call et al., 2004) and a positive attitude toward skin cancer screening (Janda et al., 2004). Indeed, Kasparian, McLoone and Meiser (2009) found that individuals without a personal history of melanoma reported significantly lower levels of screening and Rodriguez and colleagues (2007) also found that individuals who have a previous history of skin cancer are more likely to undergo a full body skin examination for skin cancer.

Additional research has highlighted the important role of the physician in influencing individuals’ skin cancer screening behaviour. For example, a study undertaken by Aitken et al. (2004) found that lack of physician recommendation to engage in skin examinations was associated with men’s tendency to resist skin cancer screening. In this study, 105 of 380 men (27%) resisted skin self-examination and this was independently associated with not intending to self-examine and lower self-examining self-efficacy. Those who did not take up skin examination also had lower initial confidence in their ability to perform the behavior. In contrast, for men whose doctor had recommended skin examination in the 12 months prior to the study, 90 %
took up skin examination during the study period. A number of additional studies have also revealed that physician recommendation increases the likelihood of patients undertaking regular skin examinations (see; Gilbert & Kanarek, 2005; Kasparian, McLoone & Meiser, 2009; Robinson, Riegel & Amonette, 1998; Weinstock et al., 1999).

In addition to the influence of physician’s recommendation on willingness to undergo skin cancer screening, previous research has compared self-detection versus clinical detection of skin cancer and although 70% of melanomas were found by patients utilising self-examination, self-detection rates were lower in men, compared to women, and clinical detection by physicians occurred more frequently in older age groups (Koh et al., 1992). Moreover, thinner tumors, which are more easily treated than thicker tumours (Hanrahan et al., 1998; Swetter, Geller & Kirkwood, 2004), were also found to be associated with physician detection (compared to detection by the patient or significant other) (Brady, Oliveria & Christos, 2000; Epstein, Lange, Gruber, Mofid & Koch, 1999; Richard, Grob & Avril, 2000). In short, skin cancer screening undertaken by a physician is particularly beneficial for older men.

While the above findings suggest there is an important link between physicians and older men regarding skin cancer screening, particularly in regards to physicians encouraging skin cancer screening as well as higher detection rates by physicians for this demographic, little is known about additional variables specifically affecting older men’s willingness to undergo skin cancer screening. One study undertaken by Geller and colleagues (2002), did however, seek to identify factors associated with skin cancer screening for patients at high risk of melanoma (men over
the age of 50 years). A total of 3,337 people undergoing screening with a possible diagnosis of melanoma were contacted. While men aged 50 years and above comprised only 25% of the total of number of those undergoing screening, they accounted for almost half (44%) of those with a confirmed diagnosis of melanoma, further highlighting that men over 50 years of age are at a particularly high risk of developing skin cancer. In addition, many older males in this study reported they would not have seen a physician for a skin examination even though they had noticed changes in their moles (Geller et al., 2002) that is, when a pre-diagnostic indicator for melanoma occurred (Rhodes, Weinstock & Fitzpatrick, 1987). These findings underscore the need to explore older men’s perceptions of skin cancer screening to ascertain facilitators and barriers for their engagement in skin cancer screening.

The body of research that has examined individuals’ intentions to undergo skin cancer screening is relatively small. Janda et al., (2004) assessed participants' intention to have their skin checked for early signs of skin cancer and found those who were concerned about a specific mole and who believed it was likely they would develop skin cancer in the future were more likely to have the intention of having their skin checked by a physician within the next 12 months, than those who did not have a specific concern. Participants who had a positive attitude toward skin cancer screening and also those who had a skin lesion removed in the past, were more likely to have the intention of having a physician check their skin within the next 12 months (Janda, et al., 2004).

As highlighted in the findings above, the research in this field seems to concern different outcome variables, for example some research has focused on
individuals’ intentions to undergo skin cancer while other research has primarily focused on ascertaining factors affecting actual screening behavior.

The variables associated with willingness to undergo skin cancer screening include: physician recommendation (Aitken et al., 2004); being concerned about a specific spot or mole; belief that it was very likely one would develop skin cancer in the future (Janda et al., 2004); a prior history of skin lesion removal and a positive attitude towards skin cancer screening (Janda et al., 2004). Interestingly, it has also been found that many older men are not willing to undergo skin cancer screening even when they notice changes in their moles (Geller et al., 2002).

Additional research that has focused on actual screening behaviour and rates of skin cancer screening for older men has found that clinical detection of skin cancer by physicians occurs more frequently in older age groups (Koh et al., 1992). In addition, physicians are more likely to identify thinner tumors, (Brady, Oliveria & Christos, 2000; Epstein et al., 1999; Richard, Grob & Avril, 2000) than patients are via self-detection.

A Critical Appraisal of Existing Skin Cancer Screening Literature

While previous research has identified numerous variables associated with skin cancer screening, there are nonetheless several issues in this body of research. These include: lack of clear definitions, for example varying conceptualisations of skin cancer screening and varying definitions regarding what constitutes an ‘older man’, as well as a lack of consideration of potentially important variables, for
example, differences between men who reside in rural settings compared to those who reside in urban settings. In addition, there are a number of issues with commonly used theoretical models, such as the Health Belief Model and the Theory of Planned Behaviour, that have been implemented in previous studies. The next section will critically appraise this existing body of skin cancer screening literature in more detail.

**Definitions**

In previous literature concerning men’s health, the issue of age and the concept of an ‘older’ patient is often not clearly defined. Indeed, the inclusion criterion for ‘older’ male participants appears to vary from study to study and can refer to patients aged anywhere between 48 years to 80 years and above. For example, research undertaken by Galdas, Johnston, Percy and Ratner (2005) used 48 years old as the cut-off criteria for ‘older’ patients. On the other hand, research into patients preferences of involvement by Bastiaens, Royen, Rotar-Pavlic, Raposo & Baker (2007) referred to patients aged 70 years and above as ‘older’.

There has also been little focus on men aged 50 years and over specifically in skin cancer screening research. However, men over the age of 50 are at a particularly high risk of developing skin cancer (Cancer Council, 2015; Christos, Oliveria, Berwick & Guerry 2000; Hanrahan et al., 1998; Swetter, Geller & Kirkwood, 2004) and for men aged 50 years and over the risk of developing and dying from melanoma is higher than it is for women (Cancer Council, 2015). In fact, in NSW, men over the age of 50, compared to women of a similar age, are twice as likely to be diagnosed with melanoma and three times as likely to die from it (Cancer Council, 2015). Figure
1 below depicts age-specific incidence rates for melanoma skin cancer in 2015 (AIHW, 2015). Furthermore, given that the incidence of and mortality associated with skin cancer increases in this age group (Cancer Council, 2015; Janda et al., 2010; Jemal et al., 2009), it was deemed appropriate that the current thesis would focus on men aged 50 years and above.

Figure 1. Age-specific incidence rates of melanoma skin cancer.

While there is substantial research investigating the effects of screening interventions and outcomes (e.g. Williams, Fritschi, Reid, Beauchamp & Katris, 2006; Swetter, Waddell, Vazquez & Khosrasi, 2003; McCormack, Maguire & McLoone, 2002; Koh, Norton, Geller & Sun, 1996) studies also vary in the conceptualisation of screening and what the screening process actually entails. For
example, screening can take the form of full body clinical screening utilising computerised scanning technology that helps identify new moles and any changes in existing moles. Such screening is undertaken by organisations such as ‘MoleMap’ and ‘Molescreen’, whereby patients attend a clinic and undergo a screening process that utilises digital photography to help diagnose malignant skin lesions (Camberwell Skin Associates, 2010).

Additionally, the term ‘screening’ has been applied to the process whereby a physician undertakes a skin examination for the whole body (e.g. Waldman et al., 2012) and also focused areas (Nakayama, 2010). Screening may also refer to self-examinations whereby the individuals examine their own skin for suspicious lesions (e.g. Aitkin et al., 2004). One implication of having diverse definitions of skin cancer screening in previous studies is that skin cancer research is somewhat poorly integrated and it is often not clear how the results of studies apply to men’s willingness to undergo skin cancer screening. Ensuring a consistent definition of what the skin cancer screening process actually entails allows for more generalisable conclusions to be made. Given prior research has found physicians play an important role in skin cancer screening for older men, for example, they detect melanomas earlier (Koh et al., 1992) and their recommendations increase both intentions and actual screening behaviour (Kasparian, McLoone & Meiser, 2009; Robinson et al., 1998; Weinstock et al., 1999), for the purpose of this thesis, skin cancer screening will be defined as a clinically conducted full-body skin examination, that is; a visual inspection of the skin conducted by a physician. The definition does not refer to participation in population based screening programs.
Skin Cancer Screening Among Men in Rural Areas

Very little research (i.e. two studies) have been dedicated to examining skin cancer screening among men in rural areas or to explore differences between those who reside rurally and those who live in urban areas. Indeed, the majority of existing skin cancer screening has not made a distinction between these two groups¹.

A very small amount of literature however, has examined skin cancer screening among outdoor workers and the farming population. These studies found that those who work outdoors have a significantly higher risk of developing skin cancer, including melanoma, compared to those who work indoors (English, Armstrong, Kricker et al., 1998; Levy, Wegman, Baron & Sokas, 2006; Parisi, Meldrum, Kimlin et al., 2000; Walton, Janda, Youl et al., 2014) and this is attributed to the increased number of hours of UV exposure (Donham & Thelin, 2006; Salas, Mayer & Hoerster, 2005). Indeed, farming is considered a high-risk occupation for intense sun exposure (Gaetano, Hodge, Clark, Ackerman et al., 2009). Furthermore, research has found that outdoor workers are less likely than indoor workers to ever had a skin examination (Le Blanc et al., 2008) and have lower odds of reporting a clinical skin examination (Walton et al., 2014) and the rate of reporting skin cancer screening is lowest for high-risk occupations most likely to experience increased sun exposures, for example, farmers (LeBlanc et al., 2008).

The detection of skin cancer and subsequent treatment for the rural population

¹ To date, there is insufficient data relating to differences between Australian rural and urban men’s skin cancer rates to graphically depict the discrepancy.
may be complicated due to a range of perceived or real cultural and economic barriers. For example, a study undertaken by Gaetano and colleagues (2009) sought to identify self-reported risk factors, occurrence of diagnoses of skin cancer and compliance with health-related recommendations for a farming population in the US. Based on the researchers experience of providing preventive health services to this population, the authors assert that farmers tend to seek health care only when they experience acute illness or injury and will often prioritise the needs of their livestock ahead of their own health (Gaetano et al., 2009). Furthermore, these factors, combined with the fact that farmers tend to be older males (who are already at increased risk of developing skin cancer and not undergoing skin cancer screening) means the farming and rural population should be important targets for skin cancer screening research.

To date, however, no studies have examined differences in Australian rural and urban men’s perceptions of skin cancer and their skin cancer screening experience. Moreover, no research has specifically examined the screening behavior of older males in these groupings. In addition, there is also an opportunity to explore the subjective experiences of these groups, especially their perceptions of skin cancer and skin cancer screening. Understanding rural men’s perceptions of specific barriers and facilitators to engaging in skin cancer screening may have important implications for subsequent skin cancer screening efforts. For example, if a rural older male must travel extensive distances and does not perceive the screening process to be readily accessible to them, they are not likely to undergo skin cancer screening.

**Issues with Theoretical Models Used in Prior Skin Cancer Screening Literature**
In general, skin cancer screening researchers have tended to investigate a wide range of factors (for example, age, gender, perceptions, beliefs, intentions) that impact on skin cancer screening behaviours without explicitly relying on a theoretical framework to guide their choice of variables or to explain the mechanisms underlying associations between variables and uptake of skin cancer screening (see for example Aitken et al., 2004; Call et al., 2004; Geller et al., 1992). However, a small body of research has sought to investigate and understand the barriers to, and the facilitators of, skin cancer related behaviours such as screening, from within specific theoretical models such as the Health Belief Model and the Theory of Planned Behaviour (see for example, Auster et al., 2013; Carmel, Shani & Rosenberg, 1994).

In the next section, background regarding these two most commonly utilised theoretical models is provided. After providing an overview of these models, previous research implementing these models will be reviewed. It will then be argued that a number of limitations exist when these models are utilised for skin cancer screening research.

**The Health Belief Model**

The Health Belief Model is one of the oldest and most widely used models (Janz & Becker, 1984). This model was developed in the 1950’s, primarily to understand non-compliance with screening procedures (Rosenstock, 1974) and assumes that health-related beliefs are important contributors to health seeking behaviour (Brannon & Feist, 2007). The Health Belief Model has been used extensively to assess health-related beliefs regarding protective behaviours such as the uptake of screening procedures (Austin et al., 2002; Champion & Scott 1997). The
Health Belief Model has been used to examine a range of preventive health behaviours, including: vaccination behaviour (Aho, 1979; Rundall & Wheeler, 1979; Larson, Olsen & Cole, 1979); genetic screening for Tay-sachs disease (Becker Drachman & Cirscht., 1974); breast self-examinations (Hallal, 1982); sick role behaviours (Inui, Yourtee & Williamson, 1976); compliance with diet regimen for diabetes (Alogna, 1980; Harris, Skyler & Lynn, 1982); dialysis compliance for end-stage renal disease (Hartman & Becker, 1978); the conditions under which a patient will seek a physician visit (Berkanovic, Telesky & Reeder, 1981); breast and cervical cancer screening in Hispanic women (Austin et al., 2002); and engagement in skin cancer protective behaviours (Carmel, Shani & Rosenberg, 1994).

Indeed, the Health Belief Model is the most commonly used theory in health promotion and health education (Glanz, Rimer & Lewis, 2002) and entails the core assumption that health behaviours are determined by perceptions or personal beliefs about a disease (Hochbaum, 1958). The model proposes that behavior depends primarily upon two variables: firstly, the value that an individual places on a particular goal; and secondly, the individual’s estimate of the likelihood that a given action will achieve that goal (Janz & Becker, 1984). That is, perceptions of the disease and perceptions of the behavior concurrently influence the likelihood of taking a recommended preventive health action (Rosenstock, 1974). According to the original Health Belief Model, perceptions of the disease and perceptions of the behavior are measured via four main concepts: perceived susceptibility, perceived severity, perceived benefits and perceived costs (Champion, 1999; Hochbaum, 1958) and each of these perceptions, in combination or individually, can be used to explain health behaviour (Reynolds, Metz & Yunger, 2007). In addition, according to this
theory, perceptions of the disease may vary according to ‘modifying factors’ such as age, ethnicity and/or education (Champion, 1984).

Within this model, perceived susceptibility refers to an individual’s perception of the likelihood of experiencing a condition that would negatively impact upon their health (Rosenstock, 1974). Personal susceptibility is one of the most powerful perceptions in promoting people to adopt healthier behaviours and the greater the perceived risk, the greater the likelihood of engaging in behaviours to decrease the risk (Champtom 1999; Hochbaum, 1958; Rosenstock, 1974). For example, perceived susceptibility motivates people to be vaccinated for influenza (Chen, Fox, Cantrell, Stockdale & Kagwa-singer, 2007) and to floss their teeth to prevent gum disease (Turner, Hunt, DiBrezzo & Jones, 2004). In contrast, perceived severity refers to fears concerning the seriousness of contracting an illness (or of leaving it untreated) (Rosenstock, 1974). Perceptions of severity vary from person to person (Janz & Becker, 1984) and include appraisals of both medical consequences (for example, ill-health, pain, disability) and possible social consequences (for example, the effects of conditions on work, family life and social relations) (Janz & Becker, 1984). For example, a skin mole is generally a benign skin condition that would not warrant attention from most people. However, for an individual with a previous history or family history of melanoma, noticing a skin mole could indicate the development of a potentially fatal disease (Turner, Hunt, DiBrezzo & Jones, 2004). Perceived benefits refers to beliefs regarding the effectiveness of the various actions available to reduce the disease threat (Rosenstock, 1974). Indeed, a ‘threatened’ individual would not be expected to accept a recommended health action unless it was perceived as efficacious and worthwhile (Janz & Becker, 1984). When
referring to perceived benefits, a kind of cost-benefit analysis is assumed whereby the individual weighs the action’s effectiveness against perceptions of potential negative aspects of a particular health action (Janz & Becker, 1984). Perceived costs are characteristics of a treatment or preventive measure that may be seen as inconvenient, expensive, unpleasant, painful or upsetting (Champion, 1984). With the concept of perceived barriers, an additional cost-benefit analysis is assumed whereby the individual weighs the action’s effectiveness against perceptions of potential negative aspects of a particular health action (Janz & Becker, 1984).

The Health Belief Model allows for different combinations of these four variables to occur (i.e., perceived susceptibility, perceived severity, perceived benefits, and perceived barriers) (Janz & Becker, 1984). For example, perceived threats to disease are hypothesised to originate from a combination of perceived disease susceptibility and perceived disease severity (Rosenstock, 1974). Once a person perceives a health threat, for example, noticing a lesion that could signify skin cancer, they will tend to take preventive action, such as seeking medical advice. Additionally, a combination of perceived benefits and perceived barriers are used to predict preventive health behaviors. For example, if an individual perceives that the benefit of undertaking a preventative health behavior, such as skin cancer screening, outweighs the barriers, such as time or cost, they are more likely to have positive expectations of the outcome of the preventive health behavior (for example, early cancer detection) (Rosenstock, 1974).

Additional dimensions have also been added to the model, to create a modified model, in an attempt to increase it’s predictive utility (Carpenter, 2010). ‘Health motivation’ is another variable considered in a modified health belief model offered
by Reynolds, Metz and Unger (2007). Health motivation refers to a state of intent resulting in behaviour that improves or maintains health (Reynolds, Metz & Unger, 2007). ‘Cue to action’ was also a variable added to create a modified health belief model and this variable measures both internal (i.e. symptoms) and external (e.g. mass media) variables (Janz & Becker, 1984). ‘Salience’, was also added and measured the degree to which specific aspects of a health behavior ‘stand out’ or attract attention (see for example, Carmel, Shani & Rosenberg, 1994) and ‘health locus of control’ has been included as a means of measuring the extent to which an individual believes they have control over their health (Carmel, Shani & Rosenberg, 1994). Finally, ‘self-efficacy’ has been included in some versions of the health belief model (e.g. Garcia & Mann, 2003; Rosenstock, Stretcher & Becker, 1988). Both the original and modified versions of the Health Belief Model have been applied widely and in various forms. A systematic review of 46 Health Belief Model studies (24 of which examined preventive health behaviors), undertaken by Janz & Becker (1984), revealed substantial empirical evidence in support of the Health Belief Model’s core dimensions (that is perceived benefits, perceived costs, perceived susceptibility and perceived severity) as important contributors to the explanation and prediction of health behavior (Janz & Becker, 1984). More recently researchers have also explored the utility of the Health Belief Model in regards to specific outcomes, such as improving adherence (i.e. Jones, Smith & Llewellyn, 2014).

Major Findings Regarding Skin Cancer Screening and the Health Belief Model

A literature search for journal articles utilising Ebscohost database was undertaken. The following electronic journals were searched: Academic Search
Various versions of the Health Belief Model have been used in many studies to explore cancer-screening behavior (see for example, Champion, 1990). It has also been used to predict engagement in skin cancer protective behaviours (Carmel, Shani & Rosenberg, 1994). However, only a small number of studies have applied the Health Belief Model in relation to skin cancer screening and these studies have produced mixed results on the efficacy of the Health Belief Model for predicting skin cancer screening behaviours. For example, Carmel, Shani and Rosenberg (1994) measured the exploratory power of an extended model (based on two variables of the original Health Belief Model; perceived susceptibility and benefits combined with ‘salience’, ‘value of health’ and ‘health locus of control’) on skin cancer-related health behaviors in the general population. The findings of this study indicate that the predictive power of the Health Belief Model for skin cancer protective behaviours is statistically significant but relatively low. More specifically, perceived susceptibility had no significant effect on the behavior of early detection (i.e. skin cancer screening). Perceived benefits on the other hand predicted skin cancer screening but did not predict uptake of sun-exposure protective behaviours (Carmel, Shani & Rosenberg, 1994). Additional research undertaken by Ford et al. (2004) (with women
50 years and above) used the health belief model to predict participation in annual preventive clinical skin cancer screening. Ford et al. (2004) found that the measure of ‘perceived susceptibility’ was significantly positively associated with participation in annual skin cancer screening.

Within this body of research, variables found to be related to ‘compliance’ participation or intentions to undergo skin cancer screening included: greater perceived risk or susceptibility to developing skin cancer (Bergenmar, Tornberg & Brandberg, 1997; Douglass, McGee & Williams, 1998; Robinson et al., 1988), greater perceived benefits of early skin cancer detection (Girgis, Campbell, Redman, Sanson-Fisher, 1991) and higher levels of self efficacy (Aitken et al., 2004; Ford et al., 2004). While this research highlights that the Health Belief Model has important constructs relevant to skin cancer screening there are several important limitations inherent in this model that will be discussed below.

**The Theory of Planned Behaviour**

An additional theoretical framework that has been commonly used in the health promotion domain is the Theory of Planned Behaviour (Ajzen, 1989). The theory of planned behavior is an extension to the reasoned action (see Fishbein & Ajzen, 1975) and proposes that the most immediate and important predictor of whether people perform a behaviour are their behavioural intentions regarding that behaviour (for example, I intend to use sunscreen next time I am at the beach) (Ajzen, 1989, 1991; Bish, Sutton & Golombok, 2000). In turn, intentions are determined by three constructs: attitudes towards the behavior, subjective norms and perceived behavioural control (Ajzen, 1985, 1991; Bish, Sutton & Golombok, 2000). Attitude
towards the behavior refers to the person’s overall evaluations of the behavior, which may be positive or negative (Ajzen, 1985, 1991; Bish, Sutton & Golombok, 2000). The ‘subjective norm’ component refers to an individual’s perceived social pressure to perform the behaviour (Ajzen, 1985, 1991; Wolff et al., 2011). Finally, the ‘perceived behavioural control’ component refers to perceptions of having personal control over the behavior, as well as perceptions of ease or difficulty in performing the behavior (Ajzen, 1985, 1991; Bish, Sutton & Golombok, 2000). The greater one’s perceived behavioral control, the more likely it is that an individual will perform a given behavior (Sheeran, Conner & Norman, 2001).

As evident from the above descriptions of both the Health Belief Model and the Theory of Planned Behavior, there is some overlap in the components they include. For example, both have their theoretical basis in expectancy-value theory (that is, one’s perception of a health behaviour is informed by their direct experience of that behaviour (Fishbein & Ajzen, 1974) and are phrased in terms of the perceived consequences of action (see for comparison, Lajunen & Rasanen, 2004). Personal abilities to perform a behaviour are explicitly included in the theory of planned behaviour (i.e. perceived behavioural control) but this is lacking in the Health Belief Model. The major difference between the models are that intentions and social norms are not included in the Health Belief Model as predictors of behaviour and in contrast to the health belief model, the Theory of Planned Behaviour does not include a measure of perceived threat of disease.

*Research Evidence Regarding the Theory of Planned Behaviour*
To date, the Theory of Planned Behaviour has not been used to predict willingness to undertake skin cancer screening. Rather, it has been applied to the broader field of skin cancer as a predictor of sunscreen use (Myers & Horswill, 1985); investigating intentions for sunbathing (Hillhouse, Adler, Drinnon & Turrisi, 1997; Mermelstain & Reisenberg, 1992; Steen, Peay & Owen, 1998); and predicting salon tanning use among students (Hillhouse et al., 1997).

Prior research has provided mixed evidence regarding the effectiveness of this model as a potential predictor of cancer screening intentions and behaviours; such as cervical cancer screening (Bish et al., 2000; Burnett et al., 1995; Hennig & Knowles, 1990) and breast cancer screening (Burnett et al, 1995; Hill et al, 1985). For example, some research has suggested that attitudes, subjective norms and perceived behavioural control are predictive of intentions to be screened for cancer (Hill et al., 1985; Jennings-Dozier, 1999) while other research (Sheeran & Orbell, 2000) has found attitudes and perceived behavioural control are predictive of actual uptake of screening (Sheeran & Orbell, 2000). However, yet other studies indicate that the overall model is not a good predictor of either screening intentions (Hennig & Knowles, 1990; Jennings-Dozier, 1999) or of uptake of screening in the future (Bish et al., 2000), (see Ajzen, 1991; Armitage & Conner, 2001 for meta-analyses).

There is mixed evidence for the theory of Planned Behaviour and to date no research has utilised this theory to explore willingness to undergo skin cancer screening. However, some variables that predict skin cancer screening, for instance prompting by advertisement (Call et al., 2004), a positive attitude toward skin cancer screening (Janda et al., 2004) and encouragement from family and friends (Call et al.,
2004) are similar to variables within the theory of planned behavior (for example, ‘attitude’ and ‘subjective norm’) thus it is suggested that these variables may particularly relevant to explore in relation to people’s perceptions of skin cancer screening.

Limitations of the Health Belief Model and Theory of Planned Behaviour

Indeed, there are a number of limitations inherent in the health belief model and the theory of planned behaviour. In the following section it will be argued that these socio-cognitive models are: (1) based on a limited set of underlying assumptions regarding the importance of health and the desire of individuals to avoid negative health outcomes (Crossley, 2001; Weistein, 1993) and assume that health behaviours, such as uptake of skin cancer screening, are based on ‘rational’ decision making (Crossley, 2001) and (2) are limited in their ability to explain the mechanisms underlying potential relationships between the different variables of the models (Tribe & Webb, 2012). For example, in the case of the health belief model, there is no consideration of the manner in which one’s perceptions of the ‘costs’ of skin cancer screening may influence the perceptions of the ‘benefits’ of skin cancer screening. Rather, this model assumes that these variables influence one’s perceptions of skin cancer screening independently from one another.

Indeed, the Health Belief Model has been criticised by Carmel, Shani and Rosenberg (1994) for its underlying assumptions, namely the assumption that people believe that they have control over their health and are motivated to protect it. For example, predicting behavior using the Health Belief Model can be problematic when
some people take personal responsibility (for example, time spent in sun) for a health issue (such as, skin cancer) that other people may attribute to external or uncontrollable causes (for example, genetics) (Watt, Sharp & Atkins, 2002). The Health Belief Model also assumes that people engage in health behaviours on the basis of ‘rational’ cost-benefit calculations, establishing logical connections between personal perceptions and desired goals (Carmel, Shani & Rosenberg, 1994). The assumption is that if people are provided with appropriate information and the means to avoid a disease (or health issue), they will engage in preventative behaviours (Carmel, Shani & Rosenberg, 1996). However, this assumption may be problematic given individuals vary in the amount they value their health (Smith & Wallston, 1992) and represents an additional limitation of the Health Belief Model.

Similarly, the Theory of Planned Behaviour (Ajzen, 1991) has been criticised by Crossley (2001) for assuming that people are motivated to perform behaviours which will promote their health, and for making the assumption that that individual health-related behaviours are ‘morally neutral’ and the result of ‘rational choice’, with individuals rationally weighing up the pros and cons of performing a given health behaviour. This model has also been criticised for its failure to explain behaviour that may be under affective control given that it does not take into account emotional factors in decision making (Bish, Sutton & Golombok, 2000). For example, individuals may be motivated to attend for screening due to fear or to avoid feeling regret at not doing so (Bish, Sutton & Golombok, 2000).

Ajzen (2011) has responded to critics by stating that within the Theory of Planned Behaviour, there is no assumption that behavioural, control and normative
beliefs are formed in a rational or 'unbiased fashion' and acknowledges that beliefs are often inaccurate and incomplete. However, Ajzen further argues that regardless of how an individual arrives at their behavioural, normative and control beliefs, their attitudes towards the behaviour, their subjective norms and their perceptions of behavioural control will follow consistently from their beliefs and it is in this sense that their behaviour is said to be 'reasoned' or 'planned' (Ajzen, 2011).

In addition to the above criticisms both the Health Belief Model and the Theory of Planned Behaviour are problematic for assuming that an individual’s decision to undergo cancer screening is a positive norm (Hill et al., 1985). However, such assumptions have been criticised by researchers (for example, Engel, 1977) because they assume that medical knowledge is superior to other types of knowledge, such as lay knowledge, and also assume that patients should be passive recipients of medical interventions and recommendations (Tribe & Webb, 2012).

The Health Belief Model and the Theory of Planned Behaviour are also inadequate in their treatment of participation (Tribe & Webb, 2012). For example, both of these models are limited to types of participation that individuals ‘perform’, for example, a screening test. Thus the application of these theoretical frameworks is restricted to types of participation that are observable, such as ‘compliance participation’ without providing a conceptualisation of participation that incorporates feelings of involvement or subjective experiences of participation, such as ‘perceived voice opportunity’. However, it will be argued in the following section, that such conceptualisations of participation seem especially important to consider for older men in relation to skin cancer screening for a number of reasons. For example, older
men are generally less involved in their health care (Berg et al., 2005; Belcher, Fried Agostini & Tinetti, 2006; Dewar, 2005; Longtin et al., 2010) and are less likely to actively seek to manage their health (D’Zurilla et al., 1998). This suggests that older men experience low levels of patient participation. Moreover, men over 50 years are much less likely to participate in screening programs (Geller et al., 2002; Janda et al., 2010; Wright & Bramwell, 2001) and tend to resist seeing a physician for a skin examination even when they have noticed changes in their moles (Geller et al., 2002). Indeed, it appears, that there are a range of factors that may affect men’s willingness to undergo skin cancer screening and relying on theoretical models to examine observable behaviours, such as compliance participation, is too restricting. In the following section, other ways to investigate men’s experience of participation, such as exploring their subjective experiences, will be established.

The Subjective Experience of Skin Cancer Screening

To date, very little research has been undertaken regarding the subjective experiences of individuals engaging in, and being willing to undertake, skin cancer screening. However, there are previous research findings suggesting that participation within health care is particularly problematic for older males. For example, men over the age of 50 years have low levels of uptake of health promotion strategies, such as cancer screening (Buckley & O’Tuama, 2010), and are the demographic least likely to participate in screening programs and self-examination (Geller et al., 2004; Janda et al., 2010; Wright & Bramwell, 2001). In addition, older men are also the demographic least likely to actively seek to manage their health (D’Zurilla et al., 1998), for example, by not paying attention to potential symptoms or concerns. Given older
men’s low levels of engagement in health care and health promotion strategies, there is a need to undertake an explicit investigation of older men’s perceptions and subjective experience of skin cancer screening in order to identify reasons that this may be the case.

Prior research examining older men’s perceptions of health care and health-seeking behavior offers an additional reason as to why further research regarding men’s subjective experiences is warranted. For example, previous studies have found that men, in comparison to women, feel a sense of disconnection from health services (Buckley & O’Tuama, 2010) and that their needs and fears are often not considered by health professionals (Banks, 2001). For example, Buckley and O’Tuama, 2010) found that men over the age of 50 reported feeling ‘excluded’ and ‘ignored’ by clinicians who they believed did not ‘understand them’ (Buckley & O’Tuama, 2010). While this research utilised a small sample size (N=18), their findings are consistent with additional prior research that has found evidence to suggest that physicians tend to neglect to include older persons in decision-making about their care (Berg, Hedelin & Sarvima, 2005; Jacelon, 2002) and that older patients often feel as though their needs and fears are often not considered by health professionals (Banks, 2001). In contrast, other research has found that older men actually prefer less involvement (Longtin et al. 2010; Swenson, Buell, Zettler, White, Ruston & Lo, 2004). While still other research has found evidence to suggest that older men are unable to actively participate due to factors associated with ageing (Dewar, 2005), for example, mental and physical impairments (Kennelly & Bowling, 2001) and hearing difficulties (Penney & Wellard, 2007).
Given the mixed findings regarding men’s low level of participation in their health care, combined with the lack of research regarding older men’s subjective experiences, it is argued in this thesis that there is a need to explore: (1) older men’s perceptions of the skin cancer screening process which may help to explain low levels of participation and; (2) their subjective experience of the skin cancer screening consultation which will reveal the ways in which men may or may not participate in this context.

Indeed, the importance of exploring individuals’ subjective experiences has been highlighted by prior researchers. For example, Entwistle, Prior, Skea and Francis (2008) found that participants’ subjective ‘sense of involvement’ including, whether they felt listened to, understood, and supported, played an important role in their experiences. Furthermore, an examination of older men’s subjective experiences is consistent with recent calls to incorporate interpersonal and ‘affective’ components such as how patients and clinicians feel about the quality and nature of their relationship in regards to patient-involvement (Entwistle & Watt, 2006; Montori, Gafni, & Charles, 2006; Tribe & Webb, 2012). Furthermore, extending our knowledge of patients’ experience is consistent with literature in the area of health participation (for example, Campbell & Jovchelovitch, 2000; Dunst & Trivette, 1996); namely, that it is important to explore experiences of participation in health settings from multiple perspectives (Campbell & Jovchelovitch, 2000). Indeed, it is suggested that this will allow for a greater understanding of the factors that impact on older men’s perceptions of skin cancer and skin cancer screening, as well as their perceptions of being diagnosed and treated for skin cancer. This increased understanding may have important practical implications for men and aid in
enhancing their experiences as well as encourage greater incidence of skin cancer screening in the future. For example, this information could allow for the clinician to tailor consultations to suit older men’s preferences, for example, by altering the roles or relationships that doctors and patients have during the consultation (O’Connor et al., 2003).

**Summary**

This chapter provided a critical appraisal of existing skin cancer screening literature and a number of arguments have been made. Firstly, it has been argued that prior studies regarding skin cancer screening have varied in what they have investigated. For example, while some research has focused on willingness or intentions to undergo skin cancer screening, other research has focused on actual skin cancer screening behaviors. In light of the disparate research findings, there is a need for greater specification of outcome variables as well as integration of the skin cancer screening literature. This will allow for clearer comparisons to be made across studies.

Second, in the existing body of skin cancer screening literature, the concept of ‘older men’ and what constitutes an ‘older man’ varies across studies. For example, while some research utilises 45 years and above as the cut-off point, other research has specified that men over 70 are classified as ‘older. It has been argued that there is a need for a more consistent definition regarding research findings that apply to men over the age of 50 years within the skin cancer-screening domain. In addition, in prior research there are various conceptualisations of skin cancer ‘screening’ and what this process actually entails. Indeed, studies tend to vary regarding the manner in which
skin cancer screening is classified and often the term ‘screening’ is left ill-defined.

Third, the need to explore differences for men based in rural and urban settings regarding skin cancer screening was established. It was argued that these potential differences are particularly important for older men who reside in rural areas as occupational exposure (for instance, farming) to UV rays increases risk of skin cancer and previous research has highlighted that outdoor workers who are at high risk for the development of skin cancer are less likely than indoor workers to have ever undergone skin cancer screening (Le Blanc et al., 2008).

Fourth, it was argued that while some existing research has relied on theoretical frameworks, such as the Health Belief Model and the Theory of Planned Behaviour, to ascertain barriers and facilitators of skin cancer screening, there are a number of limitations associated with these models. Nevertheless, prior research has highlighted a number of variables within these models are worthy of further consideration in relation to skin cancer screening for older men.

Finally, it was argued that there is a need to explore the subjective experience of older mens’ skin cancer screening involvement (both in terms of initial engagement and ongoing engagement in screening) as this will allow for a greater understanding of the factors that may impact on older men’s perceptions of skin cancer and their willingness to undergo skin cancer screening.

Given the arguments regarding the importance of taking more than simply a ‘cost-benefit analysis’ regarding individuals’ willingness to undergo skin cancer
screening, combined with the need to consider subjective experiences, it is argued in this thesis that there is an opportunity to explore additional ways in which older men may participate in skin cancer screening. The next chapter of this thesis will review the conceptualisation of ‘participation’ and it will be argued that existing research has largely conceptualised ‘participation’ in skin cancer screening as complying with a medical request to be screened for skin cancer. Indeed this restricted conceptualisation of participation has also been a major emphasis of research using the theoretical frameworks of the Health Belief Model and the Theory of Planned Behaviour. It will be argued that additional forms of participation, such as ‘patient participation’ and ‘perceived voice opportunity’ exist. These forms of participation take into account feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision-making processes, all of which are important aspects of the subjective experience and are associated with positive health outcomes. It is argued that examining such concepts is particularly important in the context of older men given research has identified that this demographic is at high risk of developing skin cancer (Christos, Oliveria, Berwick & Guerry, 2000; Hanrahan, Hersey & D’Este, 1998; Swetter, Geller, Kirkwood & 2004) and is also the demographic least likely to undergo skin cancer screening (Geller et al., 2004; Janda et al., 2010; Wright & Bramwell, 2001).

**CHAPTER TWO: THE CONCEPTUALISATION OF ‘PARTICIPATION’ IN SKIN CANCER SCREENING RESEARCH**

In chapter one of this thesis, it was argued that it is important to acknowledge more than the factors that simply increase compliance to undertake skin cancer
screening. Indeed, it was argued in chapter one that there is a need to explore men’s subjective experiences of the skin cancer screening process, which may include their feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision making processes. In this chapter it will be further argued that despite the heavy focus on ‘compliance participation’ in existing skin cancer screening literature, ‘participation’ in skin cancer screening incorporates more than observable behaviours such as undertaking a test. Indeed, it is important to acknowledge these types of participation as they are associated with positive health outcomes, such as heightened self-efficacy, (Kroll et al., 2000) and increased satisfaction with the physician and the medical consultation (see for example, Campbell & Jovchelovitch, 2000; Fondacaro, Frogner & Moos, 2005; Sahlsten et al., 2007).

To date, the concept of participation has frequently been left ill-defined in skin cancer screening literature. For example, researchers often fail to explicitly define ‘participation’, and it can often only be inferred from the way in which ‘participation’ is operationalised (see Carmel, Shani & Rosenberg, 1996; Rodriguez et al., 2007). For example, the majority of researchers in this area have implicitly equated ‘participation’ in skin cancer screening with compliance with medical recommendations to be screened for skin cancer (for example, Call et al., 2004; Geller et al., 2002; Kasparian, McLoone & Meiser, 2009). Indeed, existing skin cancer screening studies have largely focussed on the factors associated with patients undertaking skin cancer screening (see for example, Auster et al., 2013; Bergenmar, Tornberg, & Brandberg, 1997; Carmel, Shani & Rosenberg, 1996; Hanrahan, Hersey & D’Este, 1998; Rodriguez et al., 2007) without considering the other ways in which
men may participate. This is consistent with a ‘biomedical model’ approach to health and ‘participation’, which is based on the assumption that scientific or medical knowledge is superior to other types of understanding such as ‘lay knowledge’ (Tribe & Webb, 2012). This approach also assumes that health professionals ‘provide’ care to patients who only play minimal and passive roles (Engel, 1977). Also consistent with such a biomedical approach, most skin cancer screening research has focused on identifying the factors associated with ‘compliance participation’, that is obeying or complying with medical recommendations, and the underlying aim of research has been to gain knowledge in order to increase skin cancer screening (see for example, Aitken et al., 2006; Auster et al., 2013; Bergenmar, Tornberg, & Brandberg, 1997; Carmel, Shani & Rosenberg, 1996; Hanrahan, Hersey & D’Este, 1998; Rodriguez et al., 2007).

This ‘biomedical’ approach to health has been noted in prior health research, (for example, Tribe & Webb, 2012) whereby researchers examining uptake of cervical cancer screening have largely restricted the conceptualization of participation to ‘compliance participation’. Indeed, in existing health research, there has been little explicit consideration of the best way to conceptualise participation or of the potential health implications associated with emphasising one type of participation more than another. However, in this chapter, and consistent with Tribe and Webb (2012) it is argued that exploring a concept of participation that encompasses feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision-making processes, may have important implications for older men in relation to skin cancer screening. This seems particularly important given prior research has revealed there may be a range of
different factors impacting on men’s reluctance to undergo skin cancer screening. More specifically, exploring forms of participation that take into account feelings of involvement allows for consideration of additional social processes that may be implicated for older men in skin cancer screening, such as the related concepts of ‘power’ and ‘empowerment’.

**Related Concepts: Power and Empowerment**

As suggested by the above discussion, ‘participation’ is a socially-constructed process that is intimately related to additional social processes such as ‘power’ and ‘empowerment’ (Campbell & Jovchelovitch, 2000; Dunst & Trivette, 1996; McGregor, 2006; Sahlsten et al., 2008; Tribe & Webb, 2012). The concepts of both ‘power’ and ‘empowerment’ however have been variously defined and conceptualised in prior research. For example, different approaches to ‘power’ are reflected by different researchers, such as, Arendt (1958), Lukes (2005) and Turner (2005). Indeed, the concept of ‘power’ has been explored from a range of theoretical frameworks and this has contributed to a selection of varying definitions (Ng, 1980).

Some researchers (see for example, Lukes, 2005; Ng, 1980) have noted that the term ‘power’ is often used interchangeably with terms such as ‘control’ and ‘influence’. Indeed, from a social psychological perspective, ‘power’ is defined as the capacity to influence others and is based on one’s control over resources that are valued or desired by others (see for example, French & Raven, 1959). An additional approach to power is that of Foucault. Foucault’s (1978) approach to power highlights the relationships between power, knowledge, social control, subjectivity and
participation. Foucault (1978) suggested that power was relational and that the concepts of participation and power are so highly interrelated that it is not possible to consider one without the other. Indeed, from this perspective, any action undertaken by an individual (e.g. participation in health screening) is therefore an example of ‘power’.

Participation in skin cancer screening is also related to the concept of ‘empowerment’. Similar to the concepts of ‘participation’ and ‘power’, ‘empowerment’ has also been variously and often poorly defined (Byrt & Dooher, 2002; Skelton, 1994) and the concept of empowerment has been conceptualised in various ways. For example, empowerment has been defined as a framework for understanding the process of applying control and influence over decisions that impact one’s life (Rappaport, 1984). This included perceptions of personal control as well as behaviors to gather control (Perkins & Zimmerman, 1995; Rappaport, 1984). It has also been suggested that, as a process, empowerment focuses on relationships with others and the transfer of power with the outcome of “liberation, emancipation, energy and sharing power” (Leyshon, 2002, p. 467). Furthermore, from a social psychological perspective, empowerment is associated with external social forces that act on the person and affect his or her sense of control (Shearer & Reed, 2004). Still another conceptualization within the medical domain, is the assertion that empowerment implies an emphasis on mutual participation, knowledge acquisition, equal partnership and mutual decision-making regarding health issues and goals (Ellis-Stoll & Popkess-Vawter, 1998).
In the current thesis, the association between these related concepts of power and empowerment to participation in skin cancer is acknowledged, particularly given prior research has indicated that increased feelings of ‘empowerment’ and ‘power’ are positively associated with participation in health care (Aujoulat, D’Hoore & Deccache, 2006; Cahill, 1996; Goodyear-Smith & Buetow, 2001; Itzhaky & York, 2000; McGregor, 2006; Zakus & Lysack, 1998) and that participation in health care is associated with positive outcomes such as increased patient satisfaction (Roberts, 2004; Street, Gordon, Ward, Krupat & Kravitz, 2005).

However, in light of the above discussions regarding the complexities surrounding the various definitions and theoretical approaches to, ‘power’ and ‘empowerment’, in this thesis it is suggested that focusing on types of participation, specifically those that take into account perceptions of involvement (Tribe & Webb, 2012) may represent a more specific and refined method of exploring the social processes (such as mutual decision making, gathering information and sharing concerns) that may be implicated during skin cancer screening consultations, including both initial consultations and ongoing engagement in skin cancer screening, for older men.

As has been highlighted above, there is a need to broaden the prevailing conceptualisation of participation in skin cancer screening to incorporate the subjective experience of men and to explore their sense of participation. This is especially important given individuals’ ‘subjective sense of involvement’ plays an important part in their experiences and gaining a greater understanding of older men’s
experiences of skin cancer screening may have important implications for their willingness to undergo skin cancer screening.

**Research in Related Areas: Conceptualisations of Participation that Include Subjective Experience**

Research in related settings, for example community psychology and health and nursing, have found types of participation, other than compliance participation, have important implications for health. This research has found that different forms of participation are related to heightened levels of patient satisfaction with both the physician and the medical consultation (Fondacaro et al., 2005; Street et al., 2005), heightened levels of self-efficacy or greater perceptions of control over one’s health care and ability to participate in health care in the future (Kroll et al., 2006) as well as increased constructive dialogue between patients and their physicians (Henderson, 2003; Street et al., 2005). More specifically, research undertaken by Tribe and Webb (2012) explored the notion of participation in cervical cancer screening and found two different forms of participation, ‘patient participation’ and ‘perceived voice opportunity’ represent conceptually distinct constructs that are both associated with positive health outcomes, (as outlined above).

It is suggested in the following section, that these forms of participation may have important implications for older men undergoing skin cancer screening, for example, they may be associated with older men’s willingness to undertake skin cancer screening.
Patient participation, in a broad sense, is defined as patients’ involvement and participation in their own health-care, together with a health provider who share their power (Beauchamp & Childress, 2009). The terms ‘partnership’, (Cahill, 1996; Sahlsten et al., 2008) ‘involvement’ (Thompson, 2007) and ‘participation in decision-making’ or ‘shared decision-making’ (Towle, Godolphin & Grams, 2006) have all been considered integral to the concept (Beauchamp & Childress, 2009). ‘Patient participation’ (Sahlsten et al., 2008; Street et al., 2005) encompasses behaviours such as asking questions, expressing concerns, being involved in decision making and seeking information (Sahlsten, Larsson, Sjostrom, Lindercrona & Plos, 2007; Tribe & Webb, 2012). Research undertaken by Grosset & Grosset (2005) found that patient participation is associated with increased personal health care, heightened patient satisfaction with health care and self-efficacy in various health care settings (Grosset & Grosset, 2005). Indeed, previous research has found that one’s sense of patient participation is positively associated with their perceptions of their physician, such as the physician’s ability to communicate and level of trust in the physician (Kraetschhmer et al., 2004; Paterson, 2001; Roberts, 2004; Street et al., 2005). Moreover, additional related research has found evidence that greater patient participation leads to higher-quality informed consent, greater satisfaction, and better adherence to care (Brody, 1980; Kaplan & Frosch, 2005).

To date, patient participation has not been explored in relation to skin cancer screening. However, given, the positive health outcomes associated with type of participation, as outlined above, it is suggested in the following chapters that there is
merit in investigating older men’s sense of patient participation as this may increase our understanding of the factors that influence men’s willingness to undergo skin cancer screening.

*Perceived Voice Opportunity*

Another form of participation is ‘perceived voice opportunity’ (Fondacaro Frogner & Moos, 2005). This refers to a type of participation that one ‘experiences’ or ‘feels’ (Fondacaro, Frogner & Moos, 2005) and is concerned with individuals’ perceptions of fairness (Tyler, 2000). Perceived voice opportunity is defined as the extent to which an individual perceives that they are consulted during the decision making process or have the opportunity to express their opinions or concerns (Brockner et al., 1998; Fondacaro, Frogner & Moos, 2005).

Perceived voice opportunity has typically been measured by asking individuals how much opportunity they feel they have to express their opinion in a specific decision-making situation (Brockner et al., 1998; Tribe & Webb, 2012; Tyler & Lind, 1992) and has been found to be important in a variety of decision-making contexts, such as personal health (Fondacaro, Frogner & Moos, 2005), hospital settings (Naumann & Miles, 2001) and consumer decision-making (Holbrook & Kulik, 2001).

To date, no research has examined perceptions of voice opportunity in skin cancer screening however, exploring perceptions of voice opportunity in skin cancer screening seems important to men’s health as this form of participation is associated
with perceptions of satisfaction in personal healthcare (Fondacaro, Frogner & Moos, 2005). Indeed, consideration of older men’s perception of ‘voice opportunity’ in skin cancer screening could improve health outcomes such as compliance with medical recommendations, given existing findings suggest positive relationships between ‘perceived voice opportunity’, ‘patient satisfaction’, compliance with medical recommendations and positive health status (Fondacaro, Frogner & Moos, 2005; Safran, 2003).

The importance of ‘perceived voice opportunity’ to undergoing skin cancer screening is also suggested by evidence that older patients (1) experience more difficulty in seeking and obtaining information during medical interviews (Breemhaar, Visser & Kleijnen, 1990; Rost & Frankel, 1993) and (2) are less involved in medical consultations than other patients (Kaplan, Gandek, Greenfield, Rogers & Ware, 1995), these findings could indicate that older men do not feel they have the opportunity to express their concerns or be involved in decision making. Moreover, prior research relating specifically to older men undergoing skin cancer screening, has found that older men are generally less involved in the decision making process and are less likely to discuss problems with their physician (Smith, Braunack-Mayer & Wittert, 2006). Indeed, examining their perceptions of voice opportunity may offer potential explanations for why this may be the case and may therefore be important, not only in understanding willingness to undertake skin cancer screening but also in exploring older men’s experience of the doctor-patient consultation.

As discussed in chapter one, the predominant conceptualisation of participation as compliance with a medical request, is likely too restrictive as it fails
to consider the subjective experience of individuals (Tribe & Webb, 2012). It is suggested that focusing on feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision making processes may be especially important for gaining a better understanding of why men over the age of 50 years tend not to undertake skin cancer screening (Geller et al., 2004; Janda et al., 2010; Wright & Bramwell, 2001). Indeed, the potential positive health outcomes, such as heightened levels of self-efficacy (Kroll et al., 2000), increased patient satisfaction (Fondacaro, Frogner & Moos, 2005; Sahlsten et al., 2007) and the ability to communicate with the physician (Kraetschhmer et al., 2004; Paterson, 2001; Roberts, 2004; Street et al., 2005) may be especially important for older men in relation to skin cancer screening given, men are the least likely to undergo skin cancer screening, even when they have noticed suspicious lesions or mole changes (Geller et al., 2002) and also tend to resist self skin examination (Aitken et al., 2004), suggesting that there may be a range of social factors at play for older men during skin cancer screening. To date, however, very little research has explored the importance of other types of participation that include feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision making processes among older men specifically in relation to skin cancer screening.

**Summary and Future Research Directions**

In previous research on skin cancer screening, the concept of participation has been left ill-defined. In this literature, ‘participation’ has been implicitly conceptualised as ‘compliance’ to undertake a test and is consistent with the
biomedical model of health which assumes scientific or medical knowledge is superior (Engel, 1977; Tribe & Webb, 2012). It has been argued in this chapter, consistent with Tribe and Webb (2012) that other forms of participation exist, such as patient participation and perceived voice opportunity. These concepts are closely linked to concepts such as ‘power’ and ‘empowerment’ and have important implications for health outcomes, particularly for older men and skin cancer screening. It is suggested that acknowledging participation as a multi-faceted concept and exploring men’s experience of participation in skin cancer screening, will lead to a greater understanding of the factors that impact on men’s willingness, or lack thereof, to undergo skin cancer screening.

Multiple directions for future research have been suggested. Specifically, it has been argued in this thesis that there is an opportunity to extend the current conceptualisation of participation in skin cancer screening (that is, compliance participation) by considering alternative, types of participation, namely ‘perceived voice opportunity’ and ‘patient participation’. This will be attempted in several ways. Firstly, in chapter three a qualitative study will examine: (1) older men’s subjective experiences of skin cancer screening; (2) their views regarding their participation in that process and; (3) their perceptions of skin cancer. It will be argued that there are many ways, other than compliance with medical requests, by which men understand their participation in this health context.

Following an exploration of older men’s subjective experiences of skin cancer, chapter four will examine: (1) the extent to which older males have a sense of patient participation and voice opportunity; (2) potential differences between rural and urban
males’ perceptions of participation; and (3) the relationship between men’s perceptions of ‘patient participation’ and ‘voice opportunity’ with variables that exist in the Health Belief Model and the Theory of Planned Behaviour.

CHAPTER 3: STUDY ONE - A QUALITATIVE STUDY EXPLORING MEN’S SUBJECTIVE EXPERIENCES OF PARTICIPATION IN SKIN CANCER SCREENING
Previous research has revealed that reluctance to engage in health care is particularly problematic for older men (Dewar, 2005; Foster, Dale & Jessop, 2001; Hajdarevic, Schmitt-Egenolf, Brulin, Sunbom & Hornstein, 2011). It was argued in chapter one of this thesis that for men aged 50 years and above, reluctance to engage in skin cancer screening represents a significant health concern due to several reasons. First, not only are older men at high risk of developing skin cancer (Janda et al., 2010; Jemal et al., 2009) but they are also the demographic least likely to undergo skin cancer screening even when they had noticed changes to moles on their skin. It is particularly important to explore factors that may impact on men’s lack of willingness to engage in skin cancer screening because early detection represents a greater chance of survival (Balch et al., 2001; Goldsmith, 1987).

Older men’s lower level of engagement and participation in their health care has been widely documented (see Belcher et al., 2006; Berg et al., 2005; Dewar, 2005; D’Zurilla et al., 1998; Geller et al., 2004; Janda et al., 2010; Wright & Bramwell, 2001). Within this body of research there are various definitions of what constitutes an ‘older man’ and varying definitions and conceptualisations of ‘participation’ and what this concept actually entails. Indeed, research dedicated to identifying reasons for older men’s low level of engagement in health care has produced a range of mixed, and at times contradictory, findings. In this chapter, a review of the major findings regarding men’s participation in skin cancer screening will be undertaken and it will be argued that there is a need to further explore men’s subjective experience of skin cancer screening.

Prior Research Findings Regarding Older Men’s Lack of Engagement in
Health Care

A small body of research (comprised of nine studies) has acknowledged the importance of considering processes, such as the patient doctor relationship, in order to explain men’s low level of engagement in health care. For instance, some researchers (Berg et al., 2005; Jacelon, 2002) have explored older individuals’ interaction with their clinician and found evidence to suggest that clinicians tend to neglect to include older people in decision-making about their care. Indeed, prior research has found that some older patients feel as though their needs and health-related fears are often not considered by clinicians (Banks, 2001) and as result some older individuals perceive a sense of ‘disconnection’ from health services; for example, they experience feelings of disrespect and loss of dignity (Buckley & O’Tuama, 2010). Researchers argue that this may be an important reason as to why older men do not seek medical advice (Buckley & O’Tuama, 2010) or are less involved in aspects of their health care than younger individuals (Berg et al., 2005; Jacelon, 2002).

An additional related reason regarding why some older individuals may be reluctant to attend a medical consultation is due to their wish to be ‘taken seriously’. For example, Walter (2010) and colleagues found that older individuals report concerns about ‘wasting’ their doctor’s time with what may be perceived as ‘trivial’ symptoms. Indeed, this wish to be taken seriously and concerns about the validity of their visit to the doctor appeared to influence the justification that older patients provided to see their doctor, particularly if the mole or skin lesion of concern was small (Walter et al., 2010). Indeed some participants in this study by Walter et al.
(2010) reported monitoring their lesion over time to ensure changes, while others waited for an additional reason to emerge (for instance, another unrelated health concern) before consulting their doctor. Furthermore, many participants in this study also advised of the need for a trigger or a catalyst to seek help, for example, encouragement from a friend or family member or for them to notice new changes in the lesion or a combination of symptoms (Walter et al., 2010). While not explicitly explored or discussed in such research, the findings within this body of research may underscore important processes such as perceptions of a power imbalance between the older patient and health professional. Given such previous research it appears particularly important to consider the potential influence of power relations between clinicians and the older patient (Werner & Malterud, 2005) and the manner in which these may influence patient involvement, particularly within doctor-patient consultations for skin cancer screening.

Other researchers (see for example, Longtin et al., 2010) have also found evidence to suggest that, in general, older patients actually prefer to leave decisions to the professionals and are often not interested in the decision-making process, irrespective of their health status (Longtin et al. 2010). This finding is consistent with other prior studies that have revealed that the preference for greater involvement, for instance, collaboration with the health professional, was lower among older patients (Swenson, et al., 2004). Such research has suggested this may be due to personal characteristics: for example, older individuals may avoid stating their opinion for fear of being regarded as impolite (Berg et al., 2005) or disrespectful (Johnson, 2011).

Still another body of research has found that older individuals have reduced
ability to be involved in their health care, especially decision-making processes, due to issues associated with ageing. (Dewar, 2005) Examples of ‘reduced capacity’ described are: mental and physical impairments (Kennelly & Bowling, 2001) lack of knowledge (Belcher et al., 2006; Wetzels et al., 2004) and hearing difficulties (Penney & Wellard, 2007). Presumably, though, such characteristics associated with ageing are less relevant or applicable to those, for example, aged in their 50’s compared to those aged in their 80’s.

An additional body of literature has focused on the influence of gender roles to explain men’s reluctance to engage in health care. Such research has found evidence to suggest that reluctance to seek care is related to gender stereotypes. For example, valued ‘male’ characteristics in Western society are toughness, controlled emotions, independence and decisiveness (Seem & Clark, 2006) and men’s health help-seeking behavior is complicated by a perceived mismatch between health care services and men’s traditional masculine roles which emphasise power, emotional control and self-reliance (Hajdarevic et al., 2011). The influence of gender stereotypes in reducing men’s willingness to be engaged in health services has been established in many studies (Courtenay, 2006; George & Fleming, 2004; Hajdarevic et al., 2011; Seem & Clark, 2006) and for those men that adopt such stereotypes the findings suggest there is a perception that caring for their health is as ‘feminine’ behaviour to be rejected by ‘manly’ men (Courtenay, 2006).

These prior studies have provided a range of conflicting findings to explain older men’s lack of involvement in their health care. However, there is a need to
systematically explore how such factors affect older men’s willingness, or lack thereof, to undergo skin cancer screening.

**Perceptions of Skin Cancer**

In addition to exploring older men’s perceptions and experiences of the skin cancer screening process, there also seems to be an opportunity to explore older men’s perceptions of skin cancer per se. For example, their beliefs regarding it’s severity as well as their perceptions of their susceptibility to develop skin cancer. Indeed, exploring men’s perceptions of skin cancer appears especially important given that prior research, (see for example, Wright & Bramwell, 2001) has found that older men, in general, lack awareness about skin cancer.

To date, only a very small body of literature (comprised of three studies) has emphasised the importance of understanding individuals’ attitudes towards, and perceptions of, skin cancer. Moreover, this research has tended to only focus on individual’s knowledge of the signs and symptoms of skin cancer. For example, Wright and Bramwell (2001) with reference to the age group of 58 – 87 years, explored men and women’s’ awareness of skin cancer. Their semi-structured interviews revealed that participants were generally unclear about what skin cancer is, the causes of the disease and it's appearance. For instance, a male participant in the Wright and Bramwell (2001) study reported having melanoma but stated that it was not skin cancer. The authors found evidence of a lack of motivation to monitor skin cancer, low salience and knowledge of how to carry out skin self-examination, as well as a low sense of personal susceptibility to developing skin cancer. Similarly a study
undertaken by Hajdarevic et al. (2011) sought to identify factors in the decision-making process associated with men seeking care for suspected skin cancer. The findings revealed that men in this study rarely, or never, acknowledged interest or attention to bodily changes, especially in relation to their skin, suggesting that men, on their own, are unlikely to notice changes in their moles. Moreover, Buckley and O’Tuama (2010), who ran focus groups of older men (over the age of 50 years), found that participants displayed limited knowledge of specific indicators and symptoms of risk especially in relation to skin cancer.

While the above studies are useful for highlighting skin cancer-related beliefs and attitudes and also indicate important factors that may influence men’s willingness to undergo skin cancer screening, other types of participation in health screening are neglected. For example, prior research has not explicitly explored how such knowledge or perceptions may impact on older men’s subjective sense of involvement. For instance, it has not considered their levels of patient participation (that is, being involved, such as asking questions, expressing concerns seeking information and participating in decision making) or their perceptions of voice opportunity (that is, the extent to which one perceives they have the opportunity to express their opinions or are consulted) in skin cancer screening.

**Summary and Directions for Future Research**

Several areas for future research are suggested. First, this body of research has highlighted additional factors, such as gender stereotypes, appear to influence men’s willingness to be involved in their health care. However, the extent to which such
stereotypes impact on men’s willingness to undergo skin cancer screening awaits empirical investigation.

Second, some of the existing research indicates complex relations within the doctor-patient relationship. For example, some research has found that the physician is partly to blame for older men’s lack of participation (Berg et al., 2005; Jacelon, 2002), while other research has found evidence to suggest that older men actually prefer less involvement during health care consultations (Longtin et al., 2010). As highlighted above, perceptions of power imbalances (which may be variously defined) between the doctor and patient as well as perceptions of empowerment have not explicitly been explored in relation to older men’s experience of skin cancer screening. Given the above findings, there appears to be merit in exploring possible power processes between health professionals and patients (Werner & Malterud, 2005) as well and the manner in which such processes may influence patient involvement within doctor-patient consultations for skin cancer screening. Consideration of older men’s (i.e. those aged 50 years and above) patient participation and perceived voice opportunity may assist in developing a better understanding of such processes.

Finally, in light of the above findings, there is a need to extend existing research by exploring older men’s subjective experiences of the skin cancer screening consultation. More specifically, the existing body of research suggests that older men’s sense of patient participation (that is, their involvement in their own health care such as seeking information, being assertive and taking part in decision making) and their perceptions of voice opportunity (that is, the extent to which they perceive they have the opportunity to express their concerns) is lacking. Understanding how these
factors may influence men’s experience of skin cancer screening may go some to improving men’s skin cancer screening experience, and in turn their willingness to undergo skin cancer screening.

Study One

Against this background, the aim of the first study was to examine older males’ (i.e. men aged 50 year and above) perceptions of skin cancer and their subjective experiences of skin cancer screening. Exploring such issues may go some way to improving men’s skin cancer screening experience and, in turn, their willingness to undergo skin cancer screening. For example, by exploring men’s sense of participation and the factors that affect different types of participation, such as compliance participation, patient participation and perceived voice opportunity, Study One aims to better understand why men over the age of 50 years in particular tend not to engage in skin cancer screening. Moreover, gaining a deeper understanding of these older men’s experiences of alternative types of participation, such as patient participation and perceived voice opportunity, could have important practical implications such as aiding to enhance their experiences of skin cancer screening.

Study One serves to extend the existing body of skin cancer literature in several ways. First, exploring older men’s subjective experiences ought to allow for an exploration of a broader conceptualisation of participation. For instance, by exploring the concept of participation that encompasses feelings of involvement, as well as behaviours such as expressing concerns, conveying opinions to others, asking questions and taking part in decision-making processes, we may be able to better understand the participatory experiences of older men as well as to identify some of
the potential predictors of such participation. Such research is consistent with researchers such as Entwistle (2008) who argue that participants’ subjective ‘sense of involvement’ including, whether they felt listened to, understood, and supported, plays an important part in their experiences. It also further highlights the need to incorporate relational and ‘affective’ components for older men during skin cancer screening, for example by determining how patients and clinicians feel about the nature of their relationship and the impact this may have (Tribe & Webb, 2012). Indeed, if physicians are aware of the potential influences of different forms of participation during the screening consultation, then they may be able to improve the experiences of patients by engaging in open dialogue about such processes and to tailor consultations to better suit older men’s preferences (Tribe & Webb, 2012).

Second, a greater understanding of processes, such as the doctor-patient relationship, may be especially useful for men aged 50 years and over given that this demographic is not only at high risk of developing skin cancer (Janda et al., 2010; Jemal, et al., 2009) but are also reluctant to seek medical assistance (D’Zurilla et al., 1998) and are less engaged during consultations with health professionals (Berg, 2005).

Third, among males with a previous history of skin cancer screening, this study provided an opportunity to explore factors associated with undertaking skin cancer screening. More specifically, it was expected that Study One would increase knowledge regarding why some men choose to undergo skin cancer screening and what influences this decision. For those older males who had not undertaken skin cancer screening, this study also allowed an exploration of their reasoning to not participate and the potential barriers that they may face, such as gender stereotypes.
Fourth, Study One enabled an exploration of men over the age of 50 years’ perceptions of skin cancer and the manner in which such beliefs or knowledge about skin cancer influences their willingness (or lack thereof) to undergo skin cancer screening.

In order to explore men’s subjective experiences and perceptions, it was decided that an exploratory qualitative research method utilising thematic analysis would be most appropriate. Qualitative research offers a range of benefits including rich insight into individuals’ perspectives and experiences, that are often complimentary to the knowledge obtained through quantitative methods (Braun & Clarke, 2014). Qualitative research is particularly useful for studies involving special populations, including those that are traditionally underrepresented in research (Curry, Nembhard & Bradley, 2009) such as older males undertaking skin cancer screening.

Method

Design

This qualitative study employed the method of thematic analysis. Thematic analysis is a flexible and increasingly popular method of qualitative data analysis (Braun & Clarke, 2012) and involves the process of systematically identifying, organising, and providing insight into patterns of meaning within qualitative data (Braun & Clarke, 2012). The current study utilised in-depth interviews with participants to undertake an exploration of individual experiences and perceptions in great detail (Britten, 1995; Dicicco-Bloom & Crabtree, 2006) and allowed the
researcher to be a part of the course of discussion and to play an active role in the process (Braun & Clarke, 2012).

Qualitative research methods continue to be increasingly accepted as a means of providing valid and valuable information to health researchers in a variety of health-related areas (Curry, Nembhard & Bradley, 2009; Minichiello, Sullivan, Greenwood & Axford, 2004). Proponents of qualitative research argue that these methods are useful for a variety of reasons. First, qualitative research allows for an understanding of people’s experiences of health care from their own perspective, which is crucial for enabling health care workers to work more accurately and effectively with their clients (Liamputtong & Ezzy, 2005). Second, this form of research allows the researcher to “…capture the lived experience of the social world and the meanings people give to these experiences from their own perspectives” (Corti & Thompson, 2004; p. 326). Third, it is especially beneficial when utilised in situations where the researchers have limited knowledge about the area of interest or when the social context of such experiences is important (Liamputtong & Ezzy, 2005). More specifically, thematic analysis provides a robust and methodical framework for coding qualitative data, and then identifying patterns across the dataset in accordance with the research question (Braun & Clarke, 2014).

On the basis of these arguments, a thematic analysis method, focussing on meaning and personal experience, was considered appropriate for research investigating men’s subjective experiences of skin cancer screening. Semi-structured interviews, including the use of an interview guide (refer to Appendix E), were used to allow for a greater degree of flexibility than a structured, closed format; offering
participants an opportunity to express their ideas and experiences in their own terms (Curry, Nembhard & Bradley, 2009; Minichiello et al., 2004).

Using methods recommended by Braun & Clarke (2006; 2012; 2014), the researcher: (1) achieved familiarity and immersion with the data by listening and re-listening to recordings, and by reading and re-reading transcripts; (2) noted initial observations about the data; (3) coded the data utilising a bottom-up process and classified the codes into themes based on the research question, recurrent issues identified from participants’ accounts and clusters of meaning within the data set. The relevant data were then (4) categorised under each theme; and (5) the data set was re-read to ensure that the themes shaped by the researcher accurately captured the participants’ experiences and views. The researcher used computer software package NVivo (version 10) to assist in the coding, organization, searching, and retrieval of the data.

Participants

A total of 20 men were interviewed in this study. A sample of this size resulted in theoretical saturation whereby no new concepts were emerging from a review of successive data from the sample (Patton, 2002). Men who self-classified as living in rural, urban and regional areas as well as men with prior experience of skin cancer and men without a history of skin cancer, were invited to take part in the interview. The men were aged between 50 and 81 years old with a mean age of 65 years old. A total of nine participants lived in an urban setting, seven in a regional town and four rurally. A total of 18 participants stated they had been screened for skin cancer in the past and two men reported they had not. Ten of the participants also
reported a previous diagnosis of skin cancer. See Table 1 for an overview of participant characteristics.

Table 1

<table>
<thead>
<tr>
<th>Name*</th>
<th>Age (year)</th>
<th>Location</th>
<th>Perceived Risk Factors</th>
<th>Prior History of Skin Cancer</th>
<th>Attend Skin Cancer Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike</td>
<td>65</td>
<td>Rural</td>
<td>Sun exposure</td>
<td>Yes – BCC and SCC</td>
<td>6 monthly</td>
</tr>
<tr>
<td>Robert</td>
<td>61</td>
<td>Rural</td>
<td>Mole removed</td>
<td>Yes – type unknown</td>
<td>Regularly</td>
</tr>
<tr>
<td>William</td>
<td>57</td>
<td>Urban</td>
<td>‘Sun spot’</td>
<td>No</td>
<td>Annually</td>
</tr>
<tr>
<td>Ken</td>
<td>67</td>
<td>Urban</td>
<td>Sun exposure</td>
<td>No</td>
<td>Never</td>
</tr>
<tr>
<td>Charles</td>
<td>65</td>
<td>Urban</td>
<td>Not reported</td>
<td>Yes – numerous BCC</td>
<td>Regularly</td>
</tr>
<tr>
<td>Donald</td>
<td>65</td>
<td>Urban</td>
<td>Sun exposure</td>
<td>Yes – ‘small type’</td>
<td>Regularly</td>
</tr>
<tr>
<td>Brian</td>
<td>67</td>
<td>Urban</td>
<td>Work outdoors</td>
<td>No</td>
<td>Every 2 year</td>
</tr>
<tr>
<td>Terry</td>
<td>65</td>
<td>Urban</td>
<td>Not reported</td>
<td>No</td>
<td>Once</td>
</tr>
<tr>
<td>Frank</td>
<td>65</td>
<td>Urban</td>
<td>Sun exposure</td>
<td>Yes – numerous BCC</td>
<td>6 monthly</td>
</tr>
<tr>
<td>Bruce</td>
<td>60</td>
<td>Regional</td>
<td>Fam. hist. SC</td>
<td>No</td>
<td>Infrequently</td>
</tr>
<tr>
<td>Alan</td>
<td>55</td>
<td>Rural</td>
<td>Not reported</td>
<td>No</td>
<td>Never</td>
</tr>
<tr>
<td>Joseph</td>
<td>58</td>
<td>Rural</td>
<td>Not reported</td>
<td>Yes – numerous BCC</td>
<td>Regularly</td>
</tr>
<tr>
<td>Douglas</td>
<td>81</td>
<td>Regional</td>
<td>Fam. hist SC</td>
<td>No</td>
<td>Self checks</td>
</tr>
<tr>
<td>Russell</td>
<td>83</td>
<td>Regional</td>
<td>Not reported</td>
<td>Yes – type unknown</td>
<td>Infrequent</td>
</tr>
<tr>
<td>Rodney</td>
<td>50</td>
<td>Urban</td>
<td>Fam. hist. SC</td>
<td>No</td>
<td>Once</td>
</tr>
<tr>
<td>Harold</td>
<td>70</td>
<td>Regional</td>
<td>Not reported</td>
<td>Yes – BCC</td>
<td>Regularly</td>
</tr>
<tr>
<td>Vincent</td>
<td>78</td>
<td>Regional</td>
<td>Sun exposure</td>
<td>Yes – type unknown</td>
<td>Infrequently</td>
</tr>
<tr>
<td>Henry</td>
<td>76</td>
<td>Regional</td>
<td>Not reported</td>
<td>No</td>
<td>Once</td>
</tr>
<tr>
<td>Walter</td>
<td>68</td>
<td>Regional</td>
<td>Not reported</td>
<td>Yes – type unknown</td>
<td>Infrequently</td>
</tr>
<tr>
<td>Martin</td>
<td>52</td>
<td>Urban</td>
<td>Severe sunburn</td>
<td>No</td>
<td>Annually</td>
</tr>
</tbody>
</table>

* Names are pseudonyms
Procedure

Recruitment

After obtaining ethics approval from the university ethics committee (see Appendix A), the 20 men over the age of 50 years were recruited. Firstly, advertisements (refer to Appendix B) were distributed in four separate locations including two community notice boards in an urban location and two Victorian urban bowling clubs. Second, an online questionnaire that was utilised for an another study, conducted at the same time (see following chapter) also provided an overview of the current study and invited men to participate. Third, a ‘snowballing technique’ was used, whereby participants were invited to pass on the advertisement (Appendix B) to friends or family members who may have also been interested in participating. Men who wished to take part in the interview then contacted the researcher via telephone or email (contact details were provided in the advertisement) and a time and place for the interview was negotiated. As an incentive to participate, and in accordance with ethics approval, all participants were eligible to enter a draw to win a $100 Coles Myer gift voucher.

Interviews

Prior to the commencement of their interview, each participant was asked to read a plain language statement (refer to Appendix C) and to complete an informed consent form (refer to Appendix D). The open-ended interviews focussed on men’s subjective experiences of skin cancer screening, including their experiences of participation and sense of empowerment during skin cancer screening consultations, as well as their perceptions of the relationship they shared with the clinician who performed their skin cancer screening. The definition of skin cancer screening utilised
in this study (that is, any time a health professional undertakes a clinical examination of the skin, either patient or physician initiated), was provided to participants at the beginning of the interview. If the participant had not previously undertaken skin cancer screening, the interview focused on their perceptions of skin cancer and screening behaviours in general. The interview guide (refer to Appendix E) was used for all interviews. Participants were asked to respond to several open-ended questions such as “Tell me about your experience of skin cancer screening” as well as some demographic questions about such matters as age and where the participants live. As suggested by Minicheillo et al. (2004), the semi-structured interview method used in the current study included additional probing questions to explore issues identified by the researcher. These are included and detailed in the responses below. The duration of interviews was between fifteen minutes to half an hour. All interviews were audiotaped and then transcribed verbatim by the researcher with the participant’s consent and notes were retained for reflection during analysis, as recommended by Braun and Clarke (2006; 2012; 2014).

In the following sections themes relating to perceptions of skin cancer and skin cancer screening as well as subjective experiences of the screening process that developed during the interviews will be presented and discussed. As recommended by Braun and Clarke (2006; 2012), the presentation of these themes and related concepts will be a combination of the researcher’s analytic narrative and verbal extracts from the men themselves. The names of the men interviewed have been changed to protect their identity.
Interpretation and Analysis

Four key themes developed during the interviews: (1) compliance participation; (2) level of patient participation and voice opportunity; (3) skin cancer screening not being a priority; and (4) gender roles and gender stereotypes. These themes are separated into two broad categories, and are discussed accordingly. First, themes relating to men’s prior experience of skin cancer screening including experiences of compliance participation will be discussed. Related issues such as ‘power imbalances’, ‘perceptions of susceptibility’ and ‘influence of family and friends’ in relation to compliance participation will also be highlighted. This will be followed by a discussion of some men’s sense of patient participation and voice opportunity and related issues such as men’s perceptions of communication and trust in the clinician’s competencies. Second, an overview of themes that developed in conversations with men who lacked experience of skin cancer screening will also be provided in order to highlight specific attitudes that some men have towards skin cancer and skin cancer screening.

Definition of ‘Skin Cancer Screening’

At the outset of the interviews the researcher informed participants that for the purpose of the study, skin cancer screening would be defined as a clinically conducted skin examination, that is, a visual inspection of the skin conducted by a physician. Regardless of the specific conceptualisation being provided, for many men there was confusion regarding what constitutes ‘skin cancer screening’. For example, during the
interviews some men stated that they had not previously undertaken skin cancer screening, however, they reported that their GP ‘looks over [their] skin’ or ‘keeps an eye on things’. Thus, there appeared to be a perception that skin cancer screening specifically involves attending a specialist appointment with a dermatologist or attending an appointment at a skin cancer screening clinic, rather than simply undertaking a skin examination with a health professional, such as a GP. This highlights that there are various conceptualisations of what skin cancer screening actually entails and also suggests that there was some confusion regarding the definition of skin cancer screening among participants. This will be discussed in more detail further below. In the following section, an overview of men’s experiences and perceptions of participation during a consultation with the physician will be undertaken.

Men with Prior Experience of Skin Cancer Screening

Compliance Participation

Among those men who had previously undertaken skin cancer screening, compliance participation (that is, obeying a request or complying with a recommendation to be screened for skin cancer) was evident. This type of participation was frequently related to men’s feelings of ‘letting the clinician do what he had to do’, and thus appeared to be related to a sense of powerlessness or of relinquishing control to the clinician. Some men explicitly described feeling as though they played a relatively ‘passive’ role in their skin cancer screening in comparison to their doctor, whose role they described as being more directive and influential.
“...[the specialist was] sort of quite authoritarian in what they said needed to be done and I don’t have expertise in that area so...”

(Charles, 65 years,
- Transcript 5)

“...He tells us what the problem is, what he’s going to do and the larger ones, the one on my ear and down my nose, he let me know what was going to happen...”

(Mike, 65 years,
- Transcript 1)

“...yeah....I thought he was very thorough, very professional. And uh....what’s the word? He was very forceful with his opinions.....Telling you what to do and what not to do...He didn’t really hold back with that...”

(Rodney, 50 years,
- Transcript 15)
For some men, there also appeared to be a sense of disengagement from the skin cancer screening process. For example, they did not seem interested in what was happening nor did they acknowledge that there was an opportunity to actively participate or feel empowered when in consultation with the clinician. In response to being asked how ‘empowered’ they felt during the consultation with the clinician, the men responded with the following:

“…I tend to just keep it in check and just rely on them to tell me if there’s anything that needs to be done…”

(Henry, 76 years, Transcript 18)

“…there wasn’t really opportunity [to be empowered]. Really, I was just there and he looked me over and sent me home…”

(Robert, 50 years, -Transcript 2)

“…Um, well the fact that my GP had recommended him was sufficient for me to think, oh well, this person knows what he’s doing…”
Even when men did not explicitly acknowledge power relations, there was frequently an implicit sense that there was a significant power imbalance, whereby men felt not only unimportant in the process of skin cancer screening, but also felt obliged to comply with their clinician’s requests. These relationships are illustrated by the following quotes:

“...well I guess I know that he’s in charge…”

(Frank, 65 years
- Transcript 9)

“...I was sort of grumpy because [the specialist] was late, and you know, with specialists there’s never that ‘look sorry I held you up’ kind of apology or anything like that…”

(Terry, 65 years,
- Transcript 8)

“...Well I, ah, yeah, ah, well I feel like, well he’s obviously in control of what he looks at….But I
don’t feel unempowered, put it that way I mean I
don’t feel….I just feel totally neutral. Like I would
with any specialist…”

(Brian, 67 years,
- Transcript 7)

Similarly, the indifference that some men felt towards skin cancer and skin
cancer screening was reflected in their apparent sense of ‘not needing to know’ or
‘not wishing to learn’ about the type of skin cancer that had been identified or
diagnosed or specifics about the course of treatment for their skin cancer. For
example, the majority of participants in this study had been diagnosed with at least
one form of skin cancer and, when asked, many were unaware of the type of skin
cancer they had. That is, there appeared to be an implicit trust in the doctor whereby
the men did not feel they needed to know what was happening and would prefer to
simply let the doctor ‘do their job’. This is reflected in the following quotes:

“…I don’t really ask those questions [about type of
skin cancer] I just let them go right ahead and do
their job…”

(Vincent, 78 years,
- Transcript 17)
“…Gee I don’t know, I wouldn’t know [the type of skin cancer]. They gave some long name…. They’ve had two goes at it really. First time they took a little bit off and they didn’t get it ….So then they chopped the rest off, yeah..I don’t know what it was, sorry…”

(Russell, 83 years, - Transcript 14)

“...I forget what the doctor said, he just said that’s got to come off……I had a…um, sun spot or whatever you call it, burnt off my hand about four years…”

(Bruce, 60 years, - Transcript 10)

“…The doctor named them [the skin cancers] when I saw him and he just said, ‘yeah I think that should… you know I should treat that…”

(Walter, 68 years, - Transcript 19)

“… I tend to think, ‘Ok, that’s uh…. I don’t need to know anymore about that, um, I’m satisfied with the
answer’. I look at things, on my legs, sometimes a
couple of years later and I think, ‘what did he tell me
last time about that?’ and I tend to just sort of think,
‘well...I need to know what I need to know…”

(William, 57 years,
-Transcript 3)

For those men with prior experience of skin cancer screening, there was an
opportunity to explore the factors that contributed to them complying with
recommendations to be screened for skin cancer. Almost half of the men referred to a
form of advice or encouragement from a family member or a friend to undergo skin
cancer screening. Indeed, some men’s knowledge about skin cancer was especially
influenced by the experience of significant others, such as family members and
friends. Many men identified that knowledge of the skin cancer experience of family
or friends served as encouragement to undertake skin cancer screening and heightened
their awareness of changes in their own skin. This is reflected in the quotes below:

“...I’m aware...I’m very much aware that skin cancers can
develop into melanomas. When I was young, fifteen years
ago, a friend of mine had a mole on his neck, he didn’t do
anything about it and eventually his wife said, “you better
see someone about that” and they took a lump out of his
back, the size of a tennis ball…”
“...Um I guess in the early days I might have been encouraged by friends and I’ve said, “oh...I’ve got this dry spot” and they’ve said, “you should get that checked out”...In fact, I think that was the case the first time....”

(Charles, 65 years
- Transcript 5)

“...So yeah, [mum has] always pushed us to have a check up every year...which I haven’t always done...”

(Rodney, 50 years,
- Transcript 15)

In addition to being aware of friends’ prior experience and receiving encouragement to undergo skin cancer screening by friends and family members, many men in the current study advised it was their wife or partner that first noticed the changes in their skin. This was captured in the quotes below:

“...Um my wife has noticed a couple of marks um, that have appeared on my skin that she asked me to go and get checked,
um, with the doctor, um…she claimed that they were moles
that were changing…”

(Robert, 50 years,
- Transcript 2)

“…I think [my wife] might have sort of prompted me to
go visit to make sure that everything is OK. I can’t
remember if there was any mole change or anything
like that…”

(Rodney, 50 years,
- Transcript 15)

“…I’d been in a new relationship for a fairly short period
of time and she asked me ‘oh is that a mole or something?’,
which is quite normal and I thought, oh yeah – I’ve had it
forever but then I thought, well actually I don’t know
whether I have or not or whether it looks different to what
it did two years ago. I haven’t got a clue really….”

(Ken, 67 years
- Transcript 4)

“…I guess she [my wife] is a stronger motivator for me
than….than myself…”
(Robert, 50 years, - Transcript 2)

“…I had an experience that I only found out because [my wife] insists I have annual check ups…”

(Martin, 52 years, - Transcript 20)

One’s perceptions of their susceptibility to developing skin cancer also appeared to influence their decision to undergo skin cancer screening. This is reflected in the quotes below:

“…Well it’s the sort of thing that as you get older you sort of get a few lumps and your skin changes and you get a few more wrinkles and as you get older you start think, well….you feel more vulnerable, you feel more things could happen, and they do happen. So, if it happens to other people, it may happen to me…”

(Ken, 67 years, - Transcript 4)

For some men, knowledge of a family history of skin cancer was the impetus for engaging in skin cancer screening and was generally related to beliefs about the
causes of skin cancer and preventative behaviour. For these men, there was an awareness that they are susceptible to developing skin cancer:

“…[Skin cancer screening] is important, yeah…‘cause mum had a malignant melanoma removed about 25 years ago…”

(Rodney, 50 years, Transcript 15)

“…My brother had a skin cancer on his back, I think it was melanoma…I’m not sure about that but I think it was, and he had it cured and he was fine - had it cut out and he was fine….But I know that cancer does run in the family…”

(Brian, 67 years, Transcript 7)

An additional factor that increased compliance participation was men’s perceived susceptibility to developing skin cancer due to extensive sun exposure. For example, several men reported feeling susceptible to developing skin cancer due to spending extending periods of time outdoors as a child or having sun-sensitive skin types:
“…I know I’m exposed to the sun quite a lot through my profession and that Australians are prone to it more than anybody else, yes, yes I’m just aware…And in summer we do go to the beach a lot so I know I get exposed probably….I don’t think more than any other males you know my age, but ah, because I know that skin cancer can take years to develop, I know that I’ve been exposed in the past and I’m covering myself up these days you know, but that’s no guarantee that I’m not going to get it…”

(Brian, 67 years, - Transcript 7)

“…As I was growing up I spent a lot of time at the beach and playing tennis pretty much all the time and even as an early adult I used to run a lot and ski a lot so there was a lot of time spent outdoors. So I thought, well it’s a possibility….”

(Ken, 67 years, - Transcript 4)

“…I’m aware that Australia has the highest rate of melanoma in the world. Um….we do have a lot of sun. Um…especially in the summer time I do spend more
time outside……I’m of that generation that, um, well I shouldn’t blame my generation…I still like getting a bit of colour…”

(Terry, 65 years,
- Transcript 8)

Perceptions of Voice Opportunity and Patient Participation

In contrast to the apparent compliance participation that was evident in many men’s responses, three men (when asked how empowered they felt when in consultation with the doctor, see appendix E for interview guide) reported that they did feel a sense of ‘empowerment’ and equated this sense of ‘empowerment’ with opportunities to ask questions and engage in open dialogue; that is, their reported perceptions were consistent with patient participation and perceived voice opportunity. This is highlighted in the quotes below:

“…I’m comfortable talking to the doctors about it [skin cancer screening] ‘cause I want to make sure that they don’t miss anything, you know…”

(Joseph, 58 years,
- Transcript 12)
“…I probably tend to be a bit more curious than other people, because of the scientific background, and I tend to ask more pertinent questions and uh, it doesn’t matter if it’s medication or treatment programs or prognosis, um, and I’m always looking at the data when I’m sent off for diagnostic testing…”

(Robert, 50 years,
- Transcript 2)

“….I’m not afraid to say what I want – for instance, the skin guy said “I’ll see you in 12 months time for your annual check-up” and I said “actually I’d prefer to see you in 6 months”…..”

(Donald, 65 years,
- Transcript 6)

When asked to discuss how ‘empowered’ he felt when in consultation with the physician, one man explicitly referred to similarities between himself and the physician that appeared to influence his perceptions of the relationship during the screening consultation:

“…Ah, very approachable, very…he [the physician] uh, I guess, I guess he’s a similar age to I am so, so that’s why, that’s one of the reasons I feel comfortable, I sort of feel comfortable with him, yep, and he’s got sort of, sort of a similar ethnic and cultural
background to what I have so ah, he understands, he
understands ah some of the idiosyncrasies that my upbringing
has had and uh, so yeah, absolutely comfortable with this
person and um certainly the specialists we went to see uh, he’s
pretty leading edge, uh, and um when he said, look I’m not
happy about that or we’ll have to cut it out straight away, I had
no qualms about submitting to his uh [pause] to his prognosis
straight away…”

(Robert, 50 years,
-Transcript 2)

Another man explicitly referred to communication with the clinician as a
factor that directly influenced his feeling of being ‘empowered’. For example this
man advised he felt the clinician was not forthcoming in providing information and
would only do so when prompted or asked:

“...Look [the consultation] was OK, but I sort of felt like
the communication wasn’t as thorough as I’d had in the
past, mainly because of the personality of the person doing
it I think, mainly because I had to ask all the questions to
get answers… I could imagine another person not asking
questions and going away not really understanding what
was going on…”

(Charles, 65 years,
-Transcript 5)
Men Without Prior Experience/Infrequent Experience of Skin Cancer Screening

‘Not a Priority’

Among those participants who had not previously undertaken skin cancer screening, or who rarely undertook, skin cancer screening, there was also an opportunity to explore their perceptions of skin cancer and skin cancer screening per se. In response to being asked how important they perceived skin cancer screening to be, many men reported that skin cancer screening was not a priority for them and appeared to lack interest in undergoing screening. For example, men reported ‘apathy’, ‘being slack’ and ‘not having time’ as reasons for not engaging in skin cancer screening. This sense of skin cancer screening not being a priority is captured by the quotes below:

“….I’ve probably been a little bit slack up to now and not had a thorough body inspection or whatever you call it…”

(Walter, 68 years - Transcript 19)

“…no barriers [to attend screening] apart from my own, you know, apathy…. Yeah lifestyle and apathy… prioritising is definitely an issue…”
“…Oh well…I haven’t sort of [been screened]… because it hasn’t concerned me, I haven’t taken too much notice of that but I, I think I’d identify it if it was present…”

(Douglas, 81 years
- Transcript 13)

For one man, living in rural area meant that attending skin cancer screening would require travel time and this acted as barrier to not undergoing skin cancer screening:

“…Ah, ‘cause I haven’t got around to it [skin cancer screening]. I haven’t found the time to get around to it (pause)…Ah probably placing it in importance.”

(Alan, 55 years
- Transcript 11)
A possible explanation for some men not prioritising skin cancer may be that they do not view skin cancer as an issue or concern. In support of this, a limited number of men did not seem to view skin cancer as serious as other forms of cancer and this may have indirectly impacted on their willingness to undergo skin cancer screening. This is reflected in the quotes below:

“…Um, well, I’ve already had cancer so…I’ve already had prostate cancer, so skin cancer for some reason doesn’t have quite the same importance in one sense…but it makes me more aware of it as well…”

(Ken, 67 years - Transcript 4)

“…I’ve had, really, in a way I’ve had skin cancers because I’ve had…well I’ve had these lesions taken off so you would put me in that category…but I haven’t been the serious type…Um, I had a lesion on my nose and it was a very small type of skin cancer…”

(Charles, 65 years - Transcript 5)

Similarly, when asked if there was anything else he would like to add or wished to discuss, one man reported that there is not enough awareness in general
about the risk of skin cancer or encouragement to undergo skin cancer screening. This appeared to translate to holding the belief that skin cancer is therefore not a health issue of concern:

“It’s not something that men’s health usually talk about, it’s something that, in men’s health they always talk about prostate issues and, ah, managing your drinking, your smoking and your weight…. …I probably think there could be a bit of encouragement, some stronger encouragement for men generally…”

(Robert, 50 years - Transcript 2)

Gender Roles and Gender Stereotypes

Another important theme that emerged from the interviews was the influence of gender roles and gender stereotypes as a reason for men to not prioritise their health. For example, several men acknowledged that not seeking medical advice is a ‘problem with this age group and males’ and report that when ‘it comes to anything medical (they will) put it off for another time….’ Some men appeared to view themselves as fitting into the stereotype of men ‘being masculine’ and therefore being less likely to ‘seek help’. Similarly, men showed awareness that the tendency to ‘ignore’ issues or to choose not to undergo skin cancer screening was common amongst men and some participants thus appeared to utilise this awareness as a
justification for their own lack of engagement in skin cancer screening:

“...I just think it’s the, the problem with this age group and males, it’s just the normal problem that you know, males of my age have with anything medical and they think they’ll put it off for another time...any health condition and it would be the same...”

(Martin, 52 years, - Transcript 20)

“...like most males, I do tend to think, oh well. It doesn’t seem to be bad so I don’t urgently go off to see the doctor. Mmm, so uh, it’s usually her reminding me that there’s something she’s concerned about...”

(Robert, 50 years, - Transcript 2)

“...I think yeah we [older males] are aware...but that doesn’t mean that we do all the right things...I make
sure the kids are all covered in sun block but then I don’t
do it to myself…”

(Martin, 52 years
- Transcript 20)
Discussion

In this study, there was an opportunity to explore: (1) men’s subjective experience of the skin cancer screening; (2) reasons why older men tend not to engage in skin cancer screening; and (3) older men’s attitudes, perceptions and knowledge regarding skin cancer and the manner in which this impacts on their participation in skin cancer screening. Numerous contributions to our understanding of older men’s perceptions of skin cancer screening and the skin cancer screening process arose from this study.

Major Findings in Study One

First, for those men with a prior history of skin cancer screening, there was an opportunity to explore their perceptions of participation. Perceptions of compliance participation and related issues such as power imbalances between the patient and clinician, as well as a tendency for some men to ‘disengage’ during the consultation, were evident in the interviews. Reasons for men ‘complying’ with recommendations to be screened for skin cancer included encouragement from family and friends and perceptions of susceptibility to developing skin cancer, for instance, prior history of extensive sun exposure and knowledge of family history of skin cancer.

In contrast to compliance participation, some men appeared to experience a sense of patient participation and perceived voice opportunity when in consultation with the clinician. Factors that appeared to influence these perceptions of participation were clinician characteristics, such as perceived similarities to the participant, and
their perceptions of being able to communicate with the clinician. In addition, some men’s perceptions of the severity of skin cancer as well as their perceived benefits of screening appeared to influence their willingness to be more actively engaged during the consultation, for example, ‘speaking up’ to ensure the clinician ‘didn’t miss anything’ (for instance a potentially fatal lesion).

For those men who had not previously been screened for skin cancer, or who rarely underwent screening, the current study also allowed for an exploration of factors that influenced their lack of engagement. Men reported ‘apathy’ or lack of concern about skin cancer, as well as a lack of time (particularly in the case of one rural man) as barriers that prevented them from undergoing skin cancer screening. In addition, the influence of gender roles and stereotypes in reducing men’s willingness to undergo skin cancer screening was also evident in many of the responses. These major findings are discussed in further detail below.

**Men’s Experience of the Skin Cancer Screening Consultation**

*Compliance Participation*

In this study, compliance participation, that is complying with or obeying medical recommendations to be screened for skin cancer, was evident in some men’s responses. This type of participation was frequently related to men’s feelings of ‘letting the clinician do what he had to do’, and appeared to be related to a sense of ‘powerlessness’ or of relinquishing control to the clinician. Some men described their clinician using phrases such as ‘authoritarian’ and ‘forceful’ which appeared to result
in a tendency for these men to be compliant or passive during the consultation. Consistent with adopting a passive role during the consultation, many men in the current study failed to acknowledge that there was even an opportunity to actively participate. For example, they reported that their role was simply to ‘be there’ so the doctor could do what he ‘needed to do’.

In addition, consistent with ‘compliance participation’ many men also appeared to lack interest in what occurred during their medical consultations. For example, even men with a prior history of skin cancer often seemed indifferent to learning about the type of cancer that they had been diagnosed with or the forms of treatment available to them. This was reflected in many men’s lack of knowledge of the type of skin cancer they had previously been diagnosed with, when explicitly asked by the researcher.

This lack of interest or concern regarding the form of skin cancer may indicate a perception that skin cancer is benign or easily treatable (Wright & Bramwell, 2001). For instance, in this study, one man reported he had noticed a mark on his hand but didn’t think ‘something that small could be serious’. Such perceptions are consistent with prior research. For example, in their study, Walter et al. (2010), found that while some men recognised possible symptoms of skin cancer, most did not fear a ‘serious’ diagnosis. These findings are also consistent with previous research by Wright and Bramwell (20001) who found that, in general, older people lacked motivation to find out about skin cancer or to take an interest in health education, as they believe it applies mostly to young people. Similarly, Bergenmar et al. (1997) also found evidence to suggest that older men do not consider clinical skin examination as
personally relevant or important which may reflect the perception that skin cancer screening is not as serious as other forms of cancer.

Indeed, in the current study, men’s sense of compliance participation, that is their tendency to simply do what the doctor orders without being actively engaged, for example by asking questions or discussing concerns, is consistent with the majority of the existing skin cancer screening research. For example, as has been argued throughout this thesis, the majority of existing skin cancer screening research, much like screening for cervical cancer (Tribe & Webb, 2012), has been restricted to investigating compliance participation and factors associated with obeying medical recommendations. This ‘biomedical’ approach to health assumes that health professionals ‘provide’ care to patients who play minimal and passive roles (Engel, 1977).

While some prior research (for example, Berg et al. 2005; Jacelon, 2002) has found evidence to suggest that physicians tend to neglect to include older persons in decision-making about their care, the findings from the current study indicate that while some men did not actively participate during the consultation, for example, did not ask questions or involve themselves in decision-making, this lack of involvement appeared to be their own preference, for example they were content to ‘let the doctor do what he had to do’, and this lack of involvement did not occur as a result of treatment bestowed on them by their clinician. Indeed, this preference to have low involvement is consistent with other researchers who have argued that older patients may actually prefer to leave decisions to the ‘professionals’ (Longtin et al. 2010; Swenson et al., 2004). It is suggested however that this warrants further investigation.
Factors Influencing Compliance to be Screened for Skin Cancer

Almost half of the men in this study reported that they had received encouragement or advice from a family member or friend to undergo skin cancer screening and that influenced their willingness to comply with recommendations to be screened for skin cancer. Often the men reported that it was their wife or partner that had first noticed a new mole or changes in their skin and who then urged them to undergo screening. Indeed, some men advised that their wife or partner’s influence was the only reason they underwent screening, for example, one man stated that his ‘wife (was) a stronger motivator’ (than he was for himself) and another man reported that his skin cancer was only detected because his wife ‘insisted’ he have annual skin checks.

This influential role of family and friends in increasing uptake of skin cancer screening has been emphasised in many previous studies. For example, Carriere et al., (2007) found that men who lived alone reported lower levels of cancer screening than those who reside with a partner. In a related study, Walter et al. (2010) found that half of the interviewees in their study had a lesion on an area of their body which was not easily visible to them, thus making it difficult to detect change. These men reported that their mole had first been noticed by another person, usually their partner or close family relative (Walter et al., 2010). Indeed, such partner influence has also been reported by additional researchers such as Taylor (2004) and Seymour-Smith et al., 2010) who found that men relied on their wives’ knowledge and information and were more likely to follow their advice. These findings may indicate that older men without
a partner, for example, who may be single or widowed, could be at a higher risk of failing to notice potential hazardous changes to their skin.

An additional factor that contributed to some men being willing to undergo skin cancer screening was their perception of being susceptible to developing skin cancer. For example, many men referred to knowledge of a family history of skin cancer as a factor that increased their perceptions of risk of developing skin cancer and, in turn, prompted them to undergo screening. This finding is consistent with prior research that has found a correlation between family history of skin cancer and uptake of skin cancer screening (see Ermertcan et al., 2005; Geller et al., 2002; Tamir et al., 2002). Moreover, men’s awareness of the increased risk of developing skin cancer due to a genetic predisposition is consistent with prior research that has revealed those with a family history of skin cancer increases one's perception of developing cancer and subsequently motivates an individual to participate in screening (Kasparian, Butow, Meiser & Mann, 2008; Myers et al., 1998). This is also consistent with the findings of Walter et al. (2010) who reported that people who are aware of other’s experience of skin cancer feel much more vulnerable to developing skin cancer themselves and indicates that perceived susceptibility to developing skin cancer is likely to encourage individuals to seek medical advice in the interest of early intervention. It is unknown however whether men’s perceptions of the severity or treatability of family members’ prior diagnoses influences their own willingness to undergo skin cancer screening. This question also awaits further empirical investigation.
Perceptions of Voice Opportunity and Patient Participation

While compliance participation (that is, obeying or complying with medical recommendations to be screened for skin cancer) was the most prevalent form of participation referred to in the current study, when asked specifically about their perceptions of communication with the physician, some men reported feeling ‘very comfortable’ asking questions and referred to themselves as ‘speaking up’ to ensure their doctor performed a thorough examination. This reflects that for at least some men there was a high sense of ‘patient participation’.

Indeed, the findings from this study indicated that some men were comfortable raising concerns and asking questions, particularly if it ensured that their doctor would do a thorough job and ‘not miss anything’ (for example, a potentially dangerous lesion). This willingness to ‘speak up’ and raise concerns appeared to be related to their perceptions of the severity of skin cancer, and the potential risks of having skin cancer go unnoticed.

When specifically asked about their sense of ‘empowerment’ some men reported that they felt comfortable asking questions and being engaged in the skin cancer screening consultation, such feelings reflect a sense of patient participation. Furthermore, some men discussed the extent to which they felt ‘comfortable’ asking questions and raising their concerns (that is, their perceptions of voice opportunity) and this was associated with their relationship with the clinician. For example, some men explicitly referred to similarities or shared characteristics between themselves and their clinician that influenced their feelings of being ‘comfortable’. This finding
was consistent with prior research that has indicated individuals who have a well-established relationship with their health care provider report feeling at ease when being involved in decision-making regarding their healthcare (Smith et al., 2009). It is acknowledged in the current study that this finding could be a reflection of the sample of participants, that is, a large number of participants reported a prior history of skin cancer, thus it is expected they would have had the opportunity to develop such relationships with their treating practitioners.

Furthermore, such perceptions of voice opportunity outlined by men in the current study is consistent with related cervical cancer-screening literature, which suggests that communication between patients and their physician’s is related to enhanced feelings of trust and respect (van Til et al., 2003). This is particularly pertinent to consider in relation to older men given prior research has found older patients often feel as though their needs and fears are not considered by health professionals (Banks, 2001).

**Men Without Prior Experience/Infrequent Experience of Skin Cancer Screening**

*‘Not a Priority’*

For those men that did not regularly undergo, or who had never undergone skin cancer screening, there was an opportunity to explore underlying reasons for that. In this study some men reported that skin cancer screening was simply not a priority for them and this was reflected in their reports of feeling apathetic, ‘being slack’ and ‘not having time’ to undergo skin cancer screening.
The finding that time was a barrier was particularly important for one man who resided on a rural property. Indeed, needing to travel further distances in order to be able to undergo skin cancer represents an additional barrier that rural men may especially face. The extent to which this may influence their level of participation during the consultation, however, awaits further investigation.

The finding that for some men, skin cancer is simply not a priority, is consistent with prior research that reports that men’s health issues or concerns are often ‘not thought about’ (Weinstock et al., 1999). Wright and Bramwell (2001) also discussed this in their study of older men when they found evidence for a lack of motivation to monitor skin cancer as well as a lack of knowledge regarding how to carry out skin self-examination. The authors argued that often skin cancer is something that is ‘just not considered’ and is therefore not a salient issue for older men. The results from this study extend existing literature by highlighting the need to increase awareness of the seriousness of skin cancer among older men and to encourage them to prioritise screening. Indeed, ensuring adequate awareness of the risk factors, symptoms and severity of skin cancer for older men is particularly important given knowledge and awareness of skin cancer is associated with increased engagement in skin cancer screening (Oliveria et al., 1999). Given this research relates to Australian men who have been exposed to substantial skin cancer prevention messages, it is likely that the perception of skin cancer as being relatively benign or skin cancer screening not being a priority may be even more of a factor outside of Australia in places where skin cancer prevention has a relatively lower profile, for example in Europe or the United States.
Gender Roles and Gender Stereotypes

An additional factor found in this study that appeared to influence men’s lack of engagement in skin cancer screening was their awareness of gender roles and gender stereotypes. For example, several men reported that their tendency to ‘not pay attention’ to their skin or to prioritise skin cancer screening was typical male behaviour and not something with which they needed to concern themselves.

Indeed, some men appeared to use the gender stereotype as a justification as to why they did not undergo skin cancer screening. For example, one male stated “I’m like most males, I tend to think ‘oh well’...” (see for example, page 93).

The influence of gender stereotypes has been well established in existing research relating to men’s lack of involvement in their health care. For example, Huggins et al. (1996) assert that men are less likely to visit general practitioners due to ‘macho social conditioning’, which positions health help-seeking as a sign of weakness. A negative impact of this conditioning is that men with skin cancer symptoms tend to delay visiting their doctors until problems are more severe, and less easily treated (Buckley & O’Tuama, 2010).

Summary

The findings of Study One extend research into the factors that impact on older men’s willingness and helps to further identify reasons for why men resist skin
cancer screening as well as identifying reasons for why men resist skin cancer screening. The findings of this study also add further support to the argument established throughout this thesis that there is a need to consider the role of alternative forms of participation (for example, patient participation and voice opportunity) and variables that affect it’s impact on undertaking skin cancer screening.

**Directions for Future Research**

This study of men’s subjective experiences of their participation in skin cancer screening and their perceptions of skin cancer, suggests many directions for future research.

First, this study indicated that the concept of men’s ‘participation’ in skin cancer screening can be conceptualised as more than merely compliance participation. Specifically, as outlined above, men reported that being able to ask questions, discuss concerns and feel ‘comfortable’ with the clinician were important to their experience of the skin cancer screening consultation. The findings suggest that there is merit in investigating ways to increase older men’s patient participation and perceived voice opportunity, particularly given that some older men (that is, those over the age of 50 years) appear disinterested in being actively engage during doctor-patient consultations. Indeed, the findings of this study also suggest some potential interventions for enhancing men’s experiences and increasing the frequency of skin cancer screening. For example, clinicians may be able to foster open communication with their older male patients by asking patients whether they have questions or concerns during their skin cancer screening consultations and offering additional
information about diagnoses and treatment, where appropriate. Moreover, this research indicates that clinicians should also be especially aware that there appears to be variations regarding the level of involvement that older men prefer.

Second, this research highlighted that for many men there was a lack of knowledge and awareness regarding skin cancer. For example, many men were not able to name the type of skin cancer they had been diagnosed with and were often unaware of the treatment options available to them. These findings are consistent with many other studies that have found, in general, older men lack awareness of skin cancer, have low motivation to monitor skin cancer (Wright & Bramwell, 2001) and have limited knowledge of specific indicators and symptoms of risk especially in relation to skin cancer (Buckley & O’Tuama, 2010). Such knowledge may have important implications regarding health promotion strategies designed to enhance skin cancer screening for this particular demographic. For example, targeted interventions aimed at increasing older men’s awareness of risk factors for skin cancer, signs and symptoms of skin cancer as well as the benefits associated with early detection may be useful in increasing older men’s knowledge and awareness and in turn enhance their willingness to undergo regular skin cancer screening. Such knowledge and awareness may also have implications for men’s level of involvement when in consultation with the clinician, for example, they may be better able to engage in decision making about treatment options.

Third, the findings from this study suggest that certain barriers, such as time, impact on rural men’s willingness to undergo skin cancer screening. For example, ‘time’ to travel to undergo skin cancer screening was a barrier impacting on a rural
man’s willingness to undergo screening. While this was only reported by one man in the current study, prior related research (for example, prostate screening) has highlighted a range of different factors affect rural men’s ability and willingness to participate in cancer screening, for example the doctor-patient relationship (Oliver et al., 2004). In addition, to date, no research has explored potential differences between rural and urban men regarding their perceptions of participation, however there appears to an opportunity to systematically explore the impact of living in a rural area may have on perceptions of voice opportunity and patient participation. Based on the barriers of time, rural residence and travel, one possible intervention worthy of future consideration is the applicability of mobile clinics. This possibility awaits empirical investigation.

Future research would also benefit from greater consideration of sample characteristics that may be relevant to health behaviours. For example, it may be worthy to explore sexual orientation or ethnicity as characteristics that could potentially influence older men’s willingness to engage in skin cancer screening. For example, Aboriginal males are likely to perceive a lower level of susceptibility to developing skin cancer.

Lastly, the findings from this study highlight that some variables from the Health Belief Model (i.e. perceived benefits, perceived susceptibility and perceived severity) and the Theory of Planned Behavior (i.e. attitude and subjective norm) may be particularly relevant, to explore in relation to various conceptualisations of participation. For example, subjective norms, that is men’s perceptions of others’ view of skin cancer screening, appeared a particularly important factor that increased
men’s willingness to comply with recommendations to be screened for skin cancer. Similarly, perceptions of susceptibility to developing skin cancer, for example due to a family history of prior extensive sun exposure, was also associated with men complying with recommendations to be screened for skin cancer. The findings from this study also suggest that some variables within the Health Belief Model and the Theory of Planned Behavior may be important to predicting patient participation and perceived voice opportunity. More specifically, in this study, men’s perceptions of the benefits of skin cancer screening, for example, believing that skin cancer screening would allow potential lesions to be discovered, appeared to influence their willingness to being actively involved during consultations, for instance, by asking questions and speaking up about skin changes or moles of concerns. Similarly, men’s perceptions of the severity of skin cancer also appeared to be related to their sense of involvement during consultations, for instance, some men advised they were willing and comfortable to ask questions and discuss concerns to ensure that the doctor ‘didn’t miss anything’, that is they wanted to ensure the skin cancer screening was effective in order to prevent a potentially serious diagnosis.

To date however, the relationships between these various dimensions to additional types of participation such as patient participation and voice opportunity, awaits empirical investigation. The following chapter represents the first in the field to systematically explore such variables with patient participation and perceived voice opportunity.
CHAPTER 4: STUDY TWO - A QUANTITATIVE STUDY OF POTENTIAL PREDICTORS OF PATIENT PARTICIPATION AND PERCEIVED VOICE OPPORTUNITY

In chapter one of this thesis, it was argued that the majority of existing skin cancer screening literature has focused on compliance participation. That is, prior research has too often limited the conceptualisation of ‘participation’ to compliance with medical requests to the obeying of orders or recommendations from a health professional (Tribe & Webb, 2012). The factors associated with greater compliance participation in skin cancer screening include: gender, that is, being female (Bergenmaret al. 1997; Geller et al., 2002; Melia et al., 2000; Rodriguez et al., 2007; Swetter, Geller & Kirkwood, 2011); age, for instance, those under 50 years (Carmel, Shani & Rosenberg, 1996; Janda et al., 2009; Swetter, Geller & Kirkwood, 2011); having high knowledge of melanomas (Brandberg et al., 1996); having a previous diagnosis of skin cancer (Call et al., 2004; Mullen et al. 1996; Schwartz et al. 2002); having fair skin (Rodriguez et al ., 2007); and having a high education level (Saraiya et al., 2004; Youl et al., 2006);

Other factors include: prompting by radio and television advertisements (Call et al., 2004); having a high number of objective risk factors for skin cancer (Koh et al., 1991; McGee et al., 1994); having a family history of skin cancer (Call et al., 2004) and a perceived risk of skin cancer (Bergenmar et al., 1997); encouragement from family and friends to undergo skin cancer screening (Call et al., 2004); and a positive attitude toward skin cancer screening (Janda et al., 2004).
In such research, however, the term ‘participation’ is often not explicitly defined and, as observed by Tribe and Webb (2012) who explored participation in cervical cancer screening, participation is usually conceptualised and used interchangeably with terms such as ‘compliance’ and ‘adherence’ to a medical recommendation to undergo screening. Again, as per cervical cancer screening research (Tribe & Webb, 2012), there has also been little explicit consideration of the best way to conceptualise participation or of the potential health implications associated with emphasising one type of participation more than another.

Recent research, however, has highlighted that positive health outcomes are associated with alternative conceptualisations of participation, such as patient participation and perceived voice opportunity. Patient participation (Sahlsten et al., 2008; Street et al., 2005) encompasses behaviours such as asking questions, expressing concerns, being involved in decision making and seeking information (Sahlsten et al., 2007; Tribe & Webb, 2012). Positive health outcomes associated with patient participation include: increased personal health care, heightened patient satisfaction with health care and self-efficacy (Grosset & Grosset, 2005) and is positively associated with perceptions of the physician, such as the physician’s ability to communicate and level of trust in the physician (Kraetschhmer et al., 2004; Paterson, 2001; Roberts, 2004; Street et al., 2005). Moreover, additional related research has found evidence that greater patient participation leads to higher-quality informed consent, greater satisfaction, and better adherence to care (Brody, 1980; Kaplan & Frosch, 2005).
Perceived voice opportunity refers to the extent to which an individual perceives that they are consulted during the decision-making process or have the opportunity to express their opinions or concerns (Brockner et al., 1998; Fondacaro, Frogner & Moos, 2005). Perceived voice opportunity has also been found to be important in a variety of decision-making contexts, such as personal health (Fondacaro, Frogner & Moos, 2005), hospital settings (Naumann & Miles, 2001) and consumer decision-making (Holbrook & Kulik, 2001). In the context of cervical cancer screening, perceived voice opportunity has also been found to be highly related to women’s reported levels of satisfaction with their physician, the consultation and the decision to be screened for cervical cancer (Tribe & Webb, 2012).

Both patient participation and voice opportunity are associated with one another. For example, Tribe and Webb (2012), in the context of cervical cancer screening, found that a woman’s experiences of patient participation was influenced in various ways by perceptions of her treatment by her physician. For example, it was found that a woman’s willingness to ask questions, to express her opinions or concerns and to be involved in decision-making processes (i.e. her ‘patient participation’) was related to her perceptions of the ‘voice opportunity’ provided by her physician. Tribe and Webb (2012) also found that patient participation and perceived voice opportunity represent distinct constructs that are moderately associated.

Given, the positive health outcomes associated with patient participation and perceived voice opportunity, it has been argued throughout this thesis that there is a need to explore how these types of participation are involved in older men’s
experience of skin cancer screening and the variables that affect perceptions of patient participation and voice opportunity.

**Rural and Urban Men’s Experience of Skin Cancer Screening**

To date, no research has explored these forms of participation in relation to skin cancer screening. Moreover, the extent to which there are differences between rural and urban males, over the age of 50 years, awaits further investigation. Indeed, to date, there has been very little research that has examined rural men’s experience of skin cancer screening at all.

Certainly, prior related research has found that outdoor workers are less likely than indoor workers to have ever had a skin examination (Le Blanc et al., 2008; Walton et al., 2014) and the rate of reporting skin cancer screening is lowest for occupations most likely to experience increased sun exposure, for example, farmers (LeBlanc et al., 2008). It has also been found that men who work outdoors, such as farmers in rural areas, have a significantly higher risk of developing skin cancer compared to those who work indoors (English, Armstrong, Kricker et al., 1998; Levy, Wegman, Baron & Sokas, 2006; Parisi, Meldrum, Kimlin et al., 2000). Related research, in the area of prostate cancer screening for rural men, has also identified that the doctor-patient relationship has considerable influence over rural men’s decision to undertake cancer screening (Oliver, Grindel, DeCoster, Ford & Martin, 2011). This suggests that certain social processes, such as perceptions of the clinician, may have important implications, particularly for men who reside in rural areas, in regards to their decision to undergo skin cancer screening. Moreover, the findings from Chapter
Three also suggest that there are important differences between rural and urban men. For example, living in a rural setting meant that ‘lack of time’ was a major consideration when making the decision to undertake skin cancer screening. As discussed in chapter three men who live in rural areas are more likely to be required to travel a considerable distance in order to see a clinician and this may impact on the frequency of their consultations and the manner in which they experience such consultations. This may result in various possibilities: First, when rural men are able to see their clinician (which may be less often than urban men) they may be more inclined to be involved in the consultation, for example by asking questions, expressing concerns or participating in decision making given they are not afforded this opportunity regularly and may therefore wish to be involved as possible. Alternatively, rural men who do not regularly visit a clinician and who are less accustomed to being in consultation, than for example urban men, may feel less comfortable ‘speaking up’ and being engaged in the consultation. These two possibilities await further empirical investigation.

**Other Predictors of Participation in Skin Cancer Screening**

An additional area that awaits further investigation is the relationship of variables in commonly utilised theoretical models (such as the health belief model and the theory of planned behavior), to patient participation and perceived voice opportunity.

To date, the focus of prior research has only been on the relationship of these variables to ‘compliance participation’ (that is, obeying or complying with a medical
request). For example in the case of the Health Belief Model, perceived benefits has been found to predict compliance participation in skin cancer screening (Carmel, Shani & Rosenberg, 1994; Girgis et al., 1991); as has greater perceived susceptibility to developing skin cancer (Bergenmar et al. 1997; Douglass et al., 1998; Ford et al., 2004; Robinson et al., 1988).

While the Theory of Planned Behaviour has not been used to predict skin cancer screening, it is argued in this thesis that some of the dimensions within this model may be particularly important to consider. For example, consistent with the concept of ‘attitude’, prompting by advertisement (Call et al., 2004) and a positive attitude toward skin cancer screening (Janda et al., 2004) have been found to increase people’s willingness to undergo skin cancer screening (Call et al., 2004; Janda et al., 2004). Additionally, variables related to the concept of ‘subjective norms’ such as, encouragement from family and friends (Call et al., 2004) as well as physician recommendation (Robinson et al., 1998; Kasparian, McLoone & Meiser, 2009; Weinstock et al. 1999) have also been identified as a factors that increase uptake of skin cancer screening.

To date, no research has, however, explored how such variables might impact on other forms of participation, such as patient participation and perceived voice opportunity. It is suggested that there are a number of reasons why it is important to investigate the relationship of variables in the Health Belief Model and the Theory of Planned Behavior. First, the findings from Study One provide support for the proposal that Health Belief Model and Theory of Planned Behaviour variables may have important implications for patient participation and voice opportunity. More
specifically, as detailed in Chapter Three, perceived benefits of skin cancer screening appeared to influence men’s willingness to become actively involved in the consultation. For example, men who perceived benefits to screening (such as early detection) were willing to ‘speak up’ during the consultation in order to ensure the doctor ‘didn’t miss anything’. In addition, men’s perceptions of severity also appeared to influence men’s willingness to be actively involved during skin cancer screening consultations. That is, the older men interviewed expressed that they especially experienced higher levels of patient participation, when they felt not doing so could have negative consequences; for example, having a lesion go undetected and untreated. Likewise, some men in the Study One (Chapter Three) advised that the process of being engaged via open communication with the doctor (i.e. greater patient participation) increased their awareness of the dangers of skin cancer and their perceptions of the severity of the disease. In contrast, many men with a previous history of skin cancer did not perceive themselves to be actively engaged in the management of their skin cancer (that is, they had a low sense of patient participation). For example, they reported that they tended not to ask questions nor seek information about their skin cancer diagnosis, such as type of cancer or prognosis of disease when in consultation with their clinician.

In short, the results from Study One suggest the need to more explicitly examine the relationship of variables such as perceived benefits and perceived severity to perceptions of patient participation and voice opportunity among older males (over 50 years) in the skin cancer screening and treatment process.

While no research has explicitly explored how other variables, such as
subjective norms may influence one’s sense of patient participation and voice opportunity, prior research has highlighted that social support is associated with increased health care autonomy (DiMatteo, 2004; van Dulmen et al., 2007). It seems possible that subjective norms, associated with the influence of family and friends may, in turn, be associated with perceptions of patient participation and voice opportunity. There is also an opportunity to explore seemingly related concepts, such as self-efficacy, with patient participation and perceived voice opportunity.

In short, the exact nature of the relationship between variables in the Health Belief Model and the Theory of Planned Behaviour with other forms of participation, such as patient participation and voice opportunity, is unknown and consideration of the extent to which measures are conceptually distinct is necessary and potentially beneficial to participants faced with the prospect of skin cancer screening.

Indeed, exploring the relationships between variables of models and patient participation and voice opportunity may go some way to identifying necessary modifications to the Health Belief Model or the Theory of Planned Behaviour; particularly when utilised for specific demographics, such as older men over the age of 50 years, in the context of skin cancer screening.

**Aims of Study Two**

Against this background, the aims of Study Two were to: (1) measure the extent to which older males (50 years and above) have a sense of patient participation and voice opportunity in the process of skin cancer screening; (2) examine whether
there are differences between rural and urban older males on these variables; and (3) examine the relationship between other variables, as specified in the Health Belief model and Theory of Planned Behaviour, and patient participation and perceived voice opportunity among older males with specific reference to skin cancer screening.

Study Two represents the first in this field to systematically explore the relationship between existing dimensions of these commonly used theoretical models and the concepts of patient participation and perceived voice opportunity.

Method

Participants

A total of 167 males between the ages of 50 years and 83 years, participated in this study. The mean age of participants was 62 years (SD = 7.82). These men were recruited via several different methods: either as employees of an agricultural organisation ‘Graincorp’; via a Facebook advertisement; or from an Australian metropolitan bowls club. See table two for descriptive data for all participants.
Table 2  
*Descriptive Data of Participants*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>% of sample</th>
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<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 59</td>
<td>78</td>
<td>46.7%</td>
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<tr>
<td>60 - 69</td>
<td>55</td>
<td>32.9%</td>
</tr>
<tr>
<td>70 - 79</td>
<td>28</td>
<td>16.8%</td>
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<tr>
<td>80 +</td>
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<td>3.6%</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
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<td></td>
</tr>
<tr>
<td>Single</td>
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<td>4.2%</td>
</tr>
<tr>
<td>Married</td>
<td>137</td>
<td>82%</td>
</tr>
<tr>
<td>In a relationship</td>
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<tr>
<td>Separated</td>
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<td>0.6%</td>
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<tr>
<td>Divorced</td>
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</tr>
<tr>
<td>Widowed</td>
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<td>2.4%</td>
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<tr>
<td><strong>Employment</strong></td>
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</tr>
<tr>
<td>Full-time</td>
<td>92</td>
<td>55.1%</td>
</tr>
<tr>
<td>Part-time</td>
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<tr>
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<td>1.8%</td>
</tr>
<tr>
<td>Not in labour force</td>
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<td>34.7%</td>
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<td><strong>Family history of SC</strong></td>
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<td></td>
</tr>
<tr>
<td>With family history</td>
<td>59</td>
<td>35.3%</td>
</tr>
<tr>
<td>Without family history</td>
<td>108</td>
<td>64.7%</td>
</tr>
<tr>
<td><strong>History of SC screening</strong></td>
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<td></td>
</tr>
<tr>
<td>Screened</td>
<td>94</td>
<td>56.3%</td>
</tr>
<tr>
<td>Not screened</td>
<td>73</td>
<td>43.7%</td>
</tr>
<tr>
<td><strong>Location</strong></td>
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<tr>
<td>Rural</td>
<td>53</td>
<td>31.7%</td>
</tr>
<tr>
<td>Urban</td>
<td>114</td>
<td>68.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>167</td>
<td>100%</td>
</tr>
</tbody>
</table>
Materials

A ten-page questionnaire (see Appendix J) was used to obtain demographic information (participant’s age, marital status; whether or not they were employed, how many times per year they saw a GP; whether or not they had been screened for skin cancer in the past; if there was a family history of skin cancer, a rating from 1 (poor) to 7 (excellent) of their overall health status, whether or not they lived in a rural area and approximately how far (in kilometres) they needed to travel to get to the doctor). Four items (items 10-13) measured participants’ level of knowledge of skin cancer and skin cancer screening (Lee, Weinstock & Risica, 2008). Several of the items also included measures related to the Health Belief Model, the Theory of Planned Behaviour, perceptions of perceived voice opportunity, patient participation and self-efficacy. These are detailed in the following sections. The questionnaire was completed in hard copy form for some participants (n = 60) and online for others (n =107).²

Hypothetical Scenario

A hypothetical scenario (commonly referred to as a vignette), upon which participants based their answers to the questionnaire, was employed. Vignettes provide a valuable technique for exploring people’s perceptions, beliefs and meanings about specific situations (Barter & Reynold, 1999). In this study, the hypothetical scenario was used to elicit cultural norms derived from older men’s attitudes and beliefs about a specific situation (Barter & Reynold, 1999). More specifically, the

²An independent-samples t-test was conducted to check mean differences between online data and hardcopy data on the dependent variables. There was no significant difference in scores for patient participation for men who completed the questionnaire online (M= 8.50, SD=1.55) compared to those who completed it via hardcopy (M=8.25, SD=1.70), t (165)=.97, p = .543; or on scores for perceived voice opportunity for men who completed the questionnaire online (M=7.69, SD=1.96) compared to those who completed it via hardcopy (M=7.61, SD=1.62), t (165)=.28, p = .179.)
vignette provided a typical scenario that older men face in relation to undergoing skin cancer screening. Participants were asked to read the scenario and to imagine that it applied to them before responding to the questionnaire items. The hypothetical scenario read as follows:

“One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.”

Health Belief Model Variables

Items related to the Health Belief Model were adapted from Champion (1984) (see Bish, Sutton & Golombok, 2000) and measured four separate variables. The perceived benefits scale consisted of eight items, for example, “I have a lot to gain by having regular skin cancer screening” (see items 14-21 in Appendix J), and in this study had an internal reliability score of Cronbach’s $\alpha = 0.70$. Items 14, 17, 18 and 21 were reversed scored. The perceived costs scale consisted of ten items, for example, “Getting screened for skin cancer is too inconvenient for me” (see items 22-31 in Appendix J) and in this study had an internal reliability score of Cronbach’s $\alpha = 0.77$. Items 25, 27 and 28 were reverse scored. The perceived susceptibility scale consisted of six items, for example, “I believe that my chances of getting skin cancer are high” (see items 49-54 in Appendix J) and in this study had an internal reliability score of Cronbach’s $\alpha = 0.79$. Item 51 was reverse scored. The perceived severity scale
consisted of five items, for example, “If I got skin cancer my whole life would change” (see 55-59 in Appendix J) and in this study had an internal reliability score of Cronbach’s $\alpha = 0.71$. Items 58 and 59 were reverse scored. Scoring for the Health Belief Model scales were the same as for Champion’s (1984) original scale; that is, a 10 point likert-type scale was utilised with responses ranging from 1 = strongly disagree to 10 = strongly agree, and participants rated their level of agreement with each of the items.

**Theory of Planned Behaviour Variables**

Items measuring: attitude (previously Cronbach’s $\alpha = 0.85$; Cronbach’s $\alpha = 0.90$ in current study) (see item 32 in Appendix J); perceived behavioural control (see item 37) which read, “How much control do you feel you have over whether or not you attend for skin cancer screening in the next three months if given the chance?” and subjective norm, for example, “Most people who are important to me would think I should attend for skin cancer screening in the next three months if I am given the chance” (two items, see 33-34 in Appendix J) (previously Cronbach’s $\alpha = 0.87$; Cronbach’s $\alpha = 0.82$ in current study), were adapted from Bish, Sutton and Golombok (2000).

**Self-Efficacy Variables**

To measure self-efficacy, two items (see items 35-36 in Appendix J) from Bish, Sutton and Golombok (2000) study were utilised (Cronbach’s $\alpha = 0.66$ and Cronbach’s $\alpha = 0.40$ in current study). Item 35 was reverse-scored. Given the poor internal reliability of this scale, the measure of self-efficacy was excluded from all analyses.
Perceived Voice Opportunity Variables

A five-item Voice Opportunity scale of the Health Care Justice Inventory developed by Fondacaro et al. (2005) was used in the current study. The items were adapted so that they began with “If I was were to visit a GP for screening….” These items were measured using a 10-point likert scale (1= strongly disagree; 10 = strongly agree) (see items 44-48 in Appendix J). Fondacaro et al. (2005) provided evidence for the internal reliability of this scale (Cronbach’s α = 0.91). The internal reliability in the current study was Cronbach’s α = 0.79.

Patient Participation Variables

To assess perceptions of patient participation, six items (see items 38 – 43) were used. These items were adapted from an existing measure of patient participation (Tribe & Webb, 2012) so that they read, for example ‘If I were to visit a GP for screening, I would be able to discuss my concerns about skin cancer screening’. These items were measured using 10-point likert scales (1= strongly disagree; 10 = strongly agree). Tribe and Webb (2012) found the internal reliability of this scale to be acceptable (Cronbach’s α = .86). Consistent with existing measures of patient participation (Tribe & Webb, 2012), the items pertained to the discussion of concerns with the clinician, asking the clinician questions and the role of the participant in hypothetical decision-making. An additional item (see item 43 of Appendix J), relating to the sharing of opinions with the GP if they were to attend an appointment was also included to assess ‘patient participation’ (1=strongly disagree;

3Sixty hardcopy responses for the patient participation scale and the perceived voice opportunity scale were converted from 7-point likert scales to 10-point likert scales in order to achieve consistency with data collated online and for ease of analysis. The conversion occurred as follows: 1=1, 2=2, 3=4, 4=5, 5=7, 6=9, 7=10.
10 = strongly agree), given that past research suggests that sharing opinions is an important aspect of ‘patient participation’ (see Kim, Kols, Bonnin, Richardson & Rotter, 2001; Martin, DeMatteo & Lepper, 2001). The internal reliability of the scale in this study was Cronbach’s $\alpha = 0.85$.

Procedure

After obtaining ethics approval from the university ethics committee (see Appendix A), the male participants, all over 50 years of age, were recruited to complete the anonymous questionnaire. First, advertisements were placed on community notice boards and the notices provided the link to the online questionnaire (Appendix F). Second, advertisements and approximately 30 - 40 hard copy questionnaires were distributed to (four) different metropolitan bowls clubs. Third, after obtaining organisational consent (Appendix I) the online link was emailed to approximately 50 – 100 ‘Graincorp’ employees by the researcher and included in a newsletter of the ‘University of the Third Age’. Fourth, a ‘snowballing technique’ was used, whereby potential participants were invited to forward the email link of the questionnaire (Appendix G) to other interested acquaintances.

Via plain language statements (Appendix H) all participants were informed that they were invited to participate in a study about men’s experiences of participation in skin cancer screening; that participation was entirely voluntary; that if they did choose to participate, they would be required to complete a questionnaire that would take approximately 20 minutes to complete and that it would involve questions relating to their experiences of skin cancer screening; and that they would be free to withdraw from participation at any time prior to the completion of the questionnaire.
All participants completed the anonymous questionnaire (Appendix F) by first providing some demographic information (age; marital status; employment status; how many times per year they visit their GP; whether or not they had been screened for skin cancer; their family history of skin cancer; overall rating of health and distance of travel in kilometres to see GP). Second, participants read the hypothetical scenario describing a skin cancer screening experience and participants were asked to indicate their perceptions of their level of patient participation and voice opportunity and to answer questions measuring the variables of patient participation, perceived voice opportunity, perceived benefits, perceived costs, perceived susceptibility, perceived severity, subjective norm, attitude, perceived behavioural control and self-efficacy. Participants were then informed that they could contact the principal researcher to receive a brief, written or verbal, summary of grouped or averaged results at the conclusion of the study. Participants were also provided with the number for the Cancer Council Help Line for additional support if they felt it was needed at any stage of the research project.

Results

Data Screening

All data screening was performed using SPSS (version 22.0) software. The assumptions of univariate and multivariate analyses, were addressed as recommended by Tabachnick & Fidell (2007). Consistent with recommendations of Hutcheson and Sofroniou (1999) the sample size (N=167) was considered satisfactory for factor analysis. In addition, as recommended by Hair, Anderson, Tatham and Black (1995) the sample size was also regarded to be adequate for path analysis at a ratio of 20:1
(20 subjects per single variable). Details of all data screening and adjustments are provided in Appendix (K).

**Descriptive Statistics**

Cronbach’s α for each of the scales were calculated (as reported in the method section) and existing relationships among scales were examined via bivariate correlations. The means, standard deviation scores, scale range and correlations between the major variables are reported in table three. The means and standard deviation scores are also reported separately for men aged 50 – 59 years (see Table 4). Men aged 50 – 59 years were separated from those aged 60 years and above to create two near-equal sized groups in the data. Separating the data into two separate aged groups also allowed for comparisons across ages.
### Table 3

**Means, Standard Deviations and Bi-variate Correlations of all Variables in the Study**

(N = 167)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>P.B</th>
<th>P.C</th>
<th>P. Sus</th>
<th>P. Sev</th>
<th>Pat. P</th>
<th>V.O</th>
<th>S.E</th>
<th>S.N</th>
<th>Att.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.B</td>
<td>8.32</td>
<td>1.30</td>
<td>1-10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.C</td>
<td>2.69</td>
<td>1.29</td>
<td>1-10</td>
<td></td>
<td></td>
<td>-.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Sus</td>
<td>5.53</td>
<td>1.48</td>
<td>1-10</td>
<td>.11</td>
<td>-.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Sev</td>
<td>5.35</td>
<td>1.89</td>
<td>1-10</td>
<td>-.05</td>
<td>.22**</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pat. P</td>
<td>8.41</td>
<td>1.61</td>
<td>1-10</td>
<td>.30**</td>
<td>-.32**</td>
<td>.16*</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V.O</td>
<td>7.66</td>
<td>1.84</td>
<td>1-10</td>
<td>.31**</td>
<td>-.27**</td>
<td>.02</td>
<td>-.03</td>
<td>.39**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E</td>
<td>2.34</td>
<td>1.70</td>
<td>1-10</td>
<td>-.51**</td>
<td>.60**</td>
<td>-.13</td>
<td>.19*</td>
<td>-.40**</td>
<td>-.29**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.N</td>
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<td>1-10</td>
<td>.45**</td>
<td>-.41**</td>
<td>.24**</td>
<td>-.10</td>
<td>.44**</td>
<td>.22**</td>
<td>-.35**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.</td>
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<td>1-7</td>
<td>.36**</td>
<td>-.48**</td>
<td>.18*</td>
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<td>.16*</td>
<td>-.34**</td>
<td>.48**</td>
<td></td>
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<tr>
<td>B.C</td>
<td>8.71</td>
<td>1.87</td>
<td>1-10</td>
<td>.20**</td>
<td>-.29**</td>
<td>.20*</td>
<td>.01</td>
<td>.35**</td>
<td>.23**</td>
<td>-.43**</td>
<td>.38**</td>
<td>.33**</td>
</tr>
</tbody>
</table>

Note. P.B = perceived benefits scale; P.C = perceived costs scale; P.Sus = perceived susceptibility scale; P.Sev = perceived severity scale; Pat.P = patient participation scale; V.O = perceived voice opportunity scale; S.E = self-efficacy scale; S.N = subjective norm scale; Att = attitude scale.

** p .01.
* p .05.

### Table 4

**Means and Standard Deviations of all Variables in the Study for Men Aged 50 – 59 Years (N = 78) and 60 Years and Over (N = 89)**

<table>
<thead>
<tr>
<th>Scale</th>
<th>50 – 59 years</th>
<th>60 years and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>P.B</td>
<td>8.13</td>
<td>1.30</td>
</tr>
<tr>
<td>P.C</td>
<td>2.30</td>
<td>1.26</td>
</tr>
<tr>
<td>P. Sus</td>
<td>6.22</td>
<td>1.77</td>
</tr>
<tr>
<td>P. Sev</td>
<td>5.76</td>
<td>1.95</td>
</tr>
<tr>
<td>Pat. P</td>
<td>8.15</td>
<td>1.63</td>
</tr>
<tr>
<td>V.O</td>
<td>7.19</td>
<td>1.98</td>
</tr>
<tr>
<td>S.E</td>
<td>2.75</td>
<td>1.70</td>
</tr>
<tr>
<td>S.N</td>
<td>8.78</td>
<td>1.47</td>
</tr>
<tr>
<td>Att.</td>
<td>5.77</td>
<td>1.33</td>
</tr>
<tr>
<td>B.C</td>
<td>8.44</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Note. P.B = perceived benefits scale; P.C = perceived costs scale; P.Sus = perceived susceptibility scale; P.Sev = perceived severity scale; Pat.P = patient participation scale; V.O = perceived voice opportunity scale; S.E = self-efficacy scale; S.N = subjective norm scale; Att = attitude scale; B.C = perceived behavioural control scale.
Main Analyses

ANOVA Results

A two-way ANOVA (age: 50 – 59 years; 60 years and above) x (urban vs. rural) was conducted on the dependent variable of patient participation. A significant difference was obtained for age. Men aged 50 – 59 years scored significantly lower levels of patient participation (M = 8.15 SD = 1.63) than men aged 60 years and above (M = 8.63, SD = 1.56) (F (1, 163) = 4.85, p = 0.029 partial $\eta^2 = 0.29$. There was no significant difference between rural men’s level of patient participation (M = 8.50, SD = 1.72) and urban men’s level of patient participation (M = 8.36, SD = 1.56) (F (1, 163) = 0.52, p = 0.471 partial $\eta^2 = .003$). The interaction of age group and location was also not significant for the dependent variable of patient participation (F (1, 163) = 0.90, p = 0.345).

A second, two-way ANOVA (age: 50 – 59 years; 60 years and above) x (urban vs. rural) was conducted on the dependent variable of perceived voice opportunity. A significant difference was once again obtained among age groups. Men aged 50-59 years perceived a significantly lower level of voice opportunity ((M = 7.19, SD = 1.98) than men aged 60 years and above (M = 8.08, SD = 1.61), (F (1, 163) = 39.20, p = 0.001 partial $\eta^2 = 0.71$). There was no significant difference between rural men’s level of perceived voice opportunity (M = 7.33, SD = 2.19) in comparison to urban men’s level of perceived voice opportunity (M = 7.82, SD = 1.64) (F (1, 163) = 1.67, p = 0.198). The interaction of age group and location was also not significant for the dependent variable of perceived voice opportunity (F (1, 163) = 3.61, p = 0.500)).
Confirmatory Factor Analysis

A confirmatory factor analysis (using the maximum likelihood estimation method) was conducted to establish the validity of latent variables underlying the main variables of perceived patient participation and perceived voice opportunity. As recommended by Hu and Bentler (1999), the fit of the predicted model was evaluated using $\chi^2$ statistics, the root mean square error of approximation (RMSEA), the Tucker-Lewis coefficient (TLI) and the standardised root mean square residual (SRMR). Hu and Bentler (1999) suggest that TLI and CFI values greater than 0.90 (ideally greater than 0.95), SRMR values less than 0.06 and RMSEA values less than 0.08 indicate a good fitting model.

The confirmatory factor analysis included the six-item patient participation scale and the five-item perceived voice opportunity scale in a two-factor model to check whether these forms of participation represent distinct concepts. The model showed relatively poor fit of the data $\chi^2 = 2.68 \ p= .00$; RMSEA = .10; SRMR = .37; CFI = .91; TLI = .88. Post hoc modifications were performed in an attempt to develop a better fitting model. On the basis on the Langrane multiplier test (Tabachnick & Fidell, 2007) and theoretical relevance, a residual covariance was estimated between perceived voice opportunity items 1 and 3.

The improved model showed reasonable fit of the data $\chi^2 = 2.29; \ p= < .05$; RMSEA = .08; SRMR = .33; CFI = .93; TLI = .91. All of the coefficients were significant and in the predicted direction. The patient participation factor loaded onto relevant items with loadings ranging from .51 to .84 and the perceived voice
opportunity factor loaded onto relevant items with loadings ranging from .43 to .87. The variables of patient participation and perceived voice opportunity were positively correlated (r = .49).

Figure 2. Confirmatory factor analysis of participation: two-factor model.
Path Analyses

Two path analyses using AMOS 22.0 software (and 2,000 bootstrap samples and a bias-corrected 95% confidence interval to assess significance, as recommended by Hu & Bentler, 1999) were conducted. Two separate models were run due to the theoretical reasoning of this study. That is, the variables derived from the Health Belief Model were examined separately to the variables derived from the Theory of Planned Behaviour. Two separate models were also conducted because including all variables in one model would have substantially reduced the power of the model given that the sample size of the current study was 167.

The first model (depicted in figure 2) investigated the relationships between the Health Belief Model predictor variables of perceived costs, perceived benefits, perceived severity, perceived susceptibility and age with the endogenous variables of patient participation and perceived voice opportunity. Age was included to investigate potential relationships between patient participation and voice opportunity for different age groups of older men. The fit indices for this path analysis suggested that the model was a reasonable fit of the data ($\chi^2 = 9.90; p > .05; \text{RMSEA} = .05; \text{SRMR} = .41; \text{CFI} = .97; \text{TLI} = .92$). Given ‘perceived susceptibility’ did not contribute to the model and was not correlated with the other independent variables, it was deemed appropriate to remove this model and to re-run the analysis.

The improved model showed good fit of the data ($\chi^2 = 3.67; p = .30; \text{RMSEA} = .04; \text{SRMR} = .44; \text{CFI} = .99; \text{TLI} = .97$). Perceived benefits was significantly positively related to patient participation ($\beta = .19, p < .05$) and perceived voice opportunity ($\beta = .24, p < .05$). Perceived costs was significantly negatively related to
patient participation ($\beta =-.22, p < .05$) but not perceived voice opportunity. Perceived severity was not significantly related to either patient participation nor perceived voice opportunity and age was significantly positively related to perceived voice opportunity ($\beta = .18, p < .05$) but not patient participation. The model explained only 15% of the variance in patient participation and 14% of the variance in perceived voice opportunity. Refer to Figure 2 for a depiction of the relationships between variables.

Figure 3. Path analysis model showing the relationship of age and variables specified in the Health Belief Model to perceptions of patient participation and perceived voice opportunity among males aged 50 years and over.
A second path analysis investigated the relationships between the Theory of Planned Behaviour predictor variables of attitude, subjective norm and perceived behavioural control as well as the predictor variable of age to the endogenous variables of patient participation and perceived voice opportunity. Again, age was included to investigate potential relationships between patient participation and voice opportunity for different age groups of older men. The fit indices for this path analysis suggested that the model was a good fit of the data ($\chi^2 = 4.42; p > .05$; RMSEA = .05; SRMR = .56; CFI = .95; TLI = .99). Attitude was neither significantly related to either patient participation ($\beta = .06, p > .05$) or perceived voice opportunity ($\beta = .02, p > .05$). Subjective norm was significantly positively related to patient participation ($\beta = .33, p < .05$) but not perceived voice opportunity ($\beta = .14, p > .05$). Perceived behavioural control was also significantly positively related to patient participation ($\beta = .20, p < .05$) but not perceived voice opportunity ($\beta = .14, p > .05$) and age was significantly related to perceived voice opportunity ($\beta = .19, p < .05$) but not patient participation ($\beta = .12, p < .05$). The model explained 24% of the variance in patient participation and but only 10% of the variance in perceived voice opportunity.

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4 It is possible the measure of attitude incorporated in Study Two was limited in obtaining a broad overview of respondents’ attitude (given it was single-item). For example, in general, skin cancer screening is considered simple and comfortable, unlike for instance, cervical cancer screening which may be considered painful, embarrassing and invasive. Thus the limited scope of attitude measurement may not have adequately assessed one’s ‘attitude’.
Figure 4. Path analysis model showing relationship of age and variables specified in the theory of planned behaviour to perceptions of patient participation and perceived voice opportunity among males aged 50 years and above.
Discussion

Aims of Study Two

The aims of Study Two were to: (1) measure the extent to which older males have a sense of patient participation and voice opportunity in the process of skin cancer screening; (2) examine whether there are differences between rural and urban males in their perceptions of these different types of participation; and (3) examine the relationship between variables in theoretical models used to investigate skin cancer screening (i.e. as specified in the Health Belief model and Theory of Planned Behaviour) and perceptions of patient participation and voice opportunity. In the absence of prior research, the study thereby investigated the possible predictors of patient participation and voice opportunity.

Different Types of Participation in Skin Cancer Screening

Consistent with research undertaken by Tribe and Webb (2012), results from a confirmatory factor analysis indicated that ‘perceived voice opportunity’ and ‘patient participation’ represented empirically distinct concepts in skin cancer screening. Prior to the current study, no research had specifically investigated the discriminant validity of ‘perceived voice opportunity’ and ‘patient participation’ in the context of skin cancer screening. Empirical investigation of the distinctiveness of such constructs is important if a more rigorous approach to understanding participation in skin cancer screening is to be undertaken. This study also represents the first exploration of the relationship between these types of participation in skin cancer screening.
This study found a positive correlation between patient participation (a form of participation that encompasses behaviours such as asking questions, discussing concern, seeking information and being involved in decision making, Sahlsten et al., 2007; Tribe & Webb, 2012), and perceived voice opportunity (the extent to which an individual perceives that they are consulted, or have the opportunity to express their opinions or concerns, Brockner et al., 1998; Fondacaro, Frogner & Moos, 2005), in skin cancer screening. The correlation found between these two types of participation was low to moderate. This positive relationship between patient participation and perceived voice opportunity in skin cancer screening is consistent with research in alternative health settings, that has found a positive relationship between patient participation and perceived voice opportunity. Indeed, this research suggests that patients are more likely to engage in patient participation when they perceive the clinician as being open to their point of view and more likely to engage in patient participation in response to physician behaviours such as partnership building (e.g. requesting the patient’s opinion) (Paterson, 2001; Street et al., 2005; Tribe & Webb, 2012).

The level of patient participation and perceived voice opportunity was found to be moderate – high among the participants in the current study. Moreover men aged 50 – 59 years were found to have a significantly lower level of both perceived voice opportunity and patient participation than men aged 60 years and above.

The first path analysis that included Health Belief Model variables found that age was a significant predictor of perceived voice opportunity, however it was only a weak positive relationship. Similarly, in the second path analysis (that included
theory of planned behaviour variables), age was also a significant yet weak predictor of perceived voice opportunity.

The moderate – high level of patient participation and perceived voice opportunity found in the current study are inconsistent with what would be expected based on previous research that suggests older men are less likely to make use of the medical system, especially for preventive reasons, and have fewer physician visits, compared to older women (Evans, Brotherstone, Miles, & Wardle, 2005). Moreover, they are surprising given that the challenges older people face in relation to accessing health care increases with age. For instance, it has been found that older individuals are reluctant to seek help for their complaints (Foster, Dale & Jessop, 2001), and are less involved in their consultations than other patients (Kaplan et al., 1995). Likewise, the moderate – high level of perceived voice opportunity is also surprising given that previous research suggests that older people experience more difficulty in seeking and obtaining information during medical consultations than younger people (Breemhaar, Visser & Kleijnen, 1990; Rost & Frankel, 1993) and feel as though professionals are neglecting to include them in decision-making relating to their health care (Berg et al. 2005; Jacelon 2002).

One possible explanation for such high levels of both patient participation and perceived voice opportunity may be due to the recent emphasis on patient involvement within a medical context (see Wilkes et al., 2013). It is also possible that current clinicians may foster involvement and understanding for the older male patient more, believing males may otherwise have difficulty engaging in the consultation due to issues associated with aging such as cognitive decline, memory
loss (Kennelly & Bowling, 2001) poor sight or hearing (Penny & Wellard, 2007). Indeed, previous research has highlighted the role of the health professional and their interaction with an older person is particularly influential in engaging older people in their health care (see for example Bentley, 2003; Berg et al. 2005; Doherty & Doherty, 2005).

It is unclear why those aged 60 years and above had higher levels of participation than those aged 50 – 59 years. As discussed further below, this may be a function of the credibility of the hypothetical scenario, although this is not clear.

Also surprising and contrary to what was expected, there was no difference between rural men and urban men’s perceptions of patient participation or voice opportunity in relation to skin cancer screening. In the current study the definition of what constitutes ‘rural’ was not explicitly defined, rather the participants defined this themselves, which may have potentially affected the results. Future research could clearly delineate between the various categories of ‘living rural’, which may help to identify particular barriers or challenges experienced by those living in rural areas.

Study two represents the first study to explicitly explore predictors of patient participation and voice opportunity in relation to commonly utilised theoretical models within the health field. The first path analysis showed good model fit, however the overall variance explained in this model was relatively low, explaining only 15% of variance for patient participation and 14 % of the variance for perceived voice opportunity. Positive relationships were found between the variables of perceived benefits and patient participation and perceived voice opportunity. This
suggests that those who perceived skin cancer screening to be a worthwhile and favourable practise were more inclined to be involved in and participate in the process, for example by asking questions or stating their concerns. Although significant, these relationships were only weak. Similarly, a significant relationship was also found between perceived costs and patient participation. This was a negative relationship suggesting that if an individual believes there are difficulties or barriers associated with skin cancer screening they are less likely to be actively involved in the skin cancer screening process when in consultation with their clinician.

In this study, perceptions of the severity of skin cancer did not significantly predict perceptions of patient participation or voice opportunity. Similarly, perceptions of one’s susceptibility to developing skin cancer also did not significantly contribute to the model and was removed from the analysis. In addition, consistent with the results of the ANOVA, there was a significant positive relationship found between age and perceived voice opportunity.

Given the overall variance in this model was relatively low (15% explained variance for patient participation and 14% variance for perceived voice opportunity), there is clearly a need for further research to identify additional factors that may predict perceptions of patient participation and voice opportunity for males over the age of years. It is also worthy to note that the differences reported as statistically significant are also relatively small and while these may be classified as clinically significant, conceptually these results should be interpreted with caution.
The second path analysis that included the variables of attitude, subjective norm, perceived behavioural control and age, showed good model fit, however the overall variance explained in this model again was relatively low with only 24% of variance explained for patient participation and only 10% of the variance explained for perceived voice opportunity.

Subjective norm and perceived behavioural control were both significantly correlated with patient participation. This finding suggests that men who share the norm of perceiving skin cancer screening to be important and valuable are more likely to feel a greater sense of control over whether or not they attend for skin cancer screening as well as feel more involved during the consultation, for example asking questions and expressing his opinions.

Attitude was not a significant predictor of patient participation or perceived voice opportunity. Consistent with the results of the ANOVA, there was a significant positive relationship found between age and perceived voice opportunity.

Study Two represents the first attempt to explicitly explore ‘patient participation’ and ‘perceived voice opportunity’ among older men in relation to skin cancer screening and their relationships to predictor variables of age and variables derived from the Health Belief Model and Theory of Planned Behaviour. However, there are some limitations inherent in this study. Firstly, this study utilised a hypothetical scenario whereby participants were required to imagine a specific set of circumstances applied to them and to bear this in mind when responding to the questionnaire items relating to their perceptions of skin cancer and skin cancer.
screening. It is acknowledged that it would have been preferable for men to rely on their own unique situations and circumstances, for example, their own perceived personal level of risk of skin cancer (rather than relying on a hypothetical scenario) to inform their responses to questionnaire items. In addition, the hypothetical scenario referred to men ‘being busy working’, as it was expected there would be a greater number of younger participants (e.g. those closer to 50 years) who would presumably still be in the workforce, however, only approximately one third of the men in the study were in the labour force. Regardless, in the current study it was deemed necessary to utilise a hypothetical scenario in order to ensure control over the type of situation considered by the participants. In order to improve the reliability of using a hypothetical scenario, a credibility check, to ensure the participants viewed this scenario as plausible might be undertaken.

In addition, Study Two was correlational in nature. As a result of this, it is not possible to establish the direction of the relationships found between variables assessed in this study. For instance, while a moderate positive correlation was found between ‘perceived voice opportunity’ and ‘patient participation’, it is unclear what is the exact nature of the relationship between these variables.

Furthermore, in order to be consistent with prior research (see for example, Carpenter, 2010), some of the variables utilised in this study were measured via a single item or two-item scale, for instance ‘perceived behavioural control’ and ‘self efficacy’. While this is not an uncommon occurrence, for example previous research (Carpenter, 2010) has highlighted the tendency for some dimensions, particularly within the Health Belief Model, to be measured by single items, better measures need
to be developed and psychometrically tested. Future research should endeavor to
utilise multi-item scales where possible and undertake systematic factor analyses on
scales to ensure construct validity (Carpenter, 2010).

The sample of men in this study may have been overly representative of males
who engage in help seeking behaviour or who have a history of skin cancer, and who
may therefore be more interested in participating in skin cancer research. Similarly, it
is also possible that the high level of patient participation and perceived voice
opportunity observed may be specific to this sample of older Australian males.

**Directions for Future Research**

The findings of Study Two highlight the importance of different types of
participation in men’s experiences of skin cancer screening; further research into
different types of participation in skin cancer screening is therefore warranted.

Additional research is needed to explore the relationship between the various
conceptualisations of participation and intentions to undergo skin cancer screening.
For example, if research reveals heightened perceptions of patient participation and
perceived voice opportunity increase one’s intention to undergo skin cancer
screening, these measures of participation could help to predict skin cancer screening
behaviours for older men. This seems especially relevant given the theory of planned
behavior proposes that attitude, subjective norm and perceived behavioural control are

Furthermore, the correlation between behavioural intentions and health behavior has
been well established. For example, Godin and Kok (1996) reported that, on average, the Theory of Planned Behavior accounted for 41% of the variance in health-related behavioural intentions and 34% of the variance in health behaviour. Therefore, a model that incorporates perceived benefits, perceived costs, subjective norm, behavioral control, patient participation, perceived voice opportunity and behavioural intentions may be warranted in future research. However, it is important to acknowledge the lack of temporal separation of potential predictor variables and outcomes in the Study Two. Future research would benefit from utilising a longitudinal design to determine whether or not perceived voice opportunity, for example, is related to willingness to engage and on-going participation in skin cancer screening.

In addition, the consideration of more comprehensive models, for example, the utilisation of unadjusted and adjusted multivariable analyses with odds ratios and 95% confidence intervals may be warranted in future research.

The results of the Study Two may also be extended to other priority health concerns for older men, such as colorectal and prostate screening. Future research could therefore seek to replicate the current study in other health screening settings to test the applicability of these types of participation and associated relationships in alternative health contexts.

While Study Two provides no evidence of a difference between rural men and urban men’s perceptions of patient participation and perceived voice opportunity, future research could seek to explore potential differences in actual screening
behaviour for men who reside in rural areas compared to those who live in urban areas and to ascertain barriers that may impact on their ability and willingness to undergo skin cancer screening.

Further research is also needed to explore the findings from Study Two which suggest that perceptions of voice opportunity, and under some circumstances, patient participation, increase as men age. It would be interesting to ascertain the impact of participatory experiences on overall satisfaction of the consultation and whether or not this influences men’s decision to undergo skin cancer screening in the future.

Conclusion

The findings of Study Two indicate that alternative conceptualisations of participation are important to consider when investigating the experience of older men undergoing skin cancer screening. This research has revealed a high level of patient participation and perceived voice opportunity among older males (ages 50 years and above). It has also highlighted the conditions under which men are more likely to engage in or experience alternative types of participation. For example, the findings of this study reveal that two variables of the Health Belief Model, ‘perceived benefits’ and ‘perceived costs’, influence older males’ sense of participation when applied in the field of skin cancer screening. Perceived benefits of skin cancer screening appear to play an important role in increasing older men’s patient participation and perceived voice opportunity, while perceived costs of screening appear to influence men’s patient participation.
In addition, the variables ‘subjective norm’ and ‘perceived behavioural control’ from the Theory of Planned Behaviour also appear to be important predictors of level of patient participation. This suggests that in order to increase older male’s perceptions of being in control, taking part and feeling involved in consultation with the clinician it may be helpful to highlight the benefits of screening, address perceived costs of screening and to also be aware of the social influence of family and friends on an older man’s decision to undergo skin cancer screening. For example, in order to increase participation in skin cancer screening, awareness campaigns that highlight the benefits of screening and address potential barriers, such as time and cost associated with screening, may be particularly important for encouraging older men to feel more involved in the process. In addition, advertising that encourages discussions with family and friends about skin cancer and screening may also be helpful in highlighting subjective norms which are in turn associated with greater perceptions of participation.

Second, a major argument established throughout this thesis is that there are serious limitations inherent in the Health Belief Model and the Theory of Planned Behaviour. More specifically, it has been argued that these models are inadequate in their treatment of participation and are limited to the analysis of types of participation that are easily observable, such as ‘compliance participation’ without sufficient consideration of participation that incorporates feelings of involvement or subjective experiences of participation such as ‘patient participation’ and ‘perceived voice opportunity’. It seems possible that a model incorporating a measure of these alternative forms of participation may aid in increasing predictive utility of these models.
The results of this study also suggest that an older man’s willingness to express his concerns or opinions, ask questions and to be involved in decision-making processes (i.e. his ‘patient participation’) is related to his perceptions of the ‘voice opportunity’ provided by the clinician. These results imply that clinicians may be able to improve the experiences of men in this health context by enhancing their perceptions of ‘voice opportunity’ through the delivery of more opportunities for participation during skin cancer screening consultations. For example, by asking men if they have any questions or concerns at the outset of the consultation and reminding them they that they plan an important role in their treatment outcomes.

Furthermore, given that previous research has revealed older men are the least likely to undergo skin cancer screening (Buckley & O’Tuama, 2010), even when they have noticed suspicious lesions or mole changes (Geller et al., 2002), it is important to recognise and build upon factors that increase their willingness to engage in screening. Prior research has revealed physician recommendation (Aitken et al., 2004; Robinson et al., 1998; Kasparian, McLoone & Meiser, 2009; Weinstock et al. 1999) and higher levels of doctor patient communication (Kasparian, McLoone & Meiser, 2009) are associated with uptake of skin cancer screening. Therefore, clinicians who provide men the opportunity to participate in the screening process, for example, by asking men how they are feeling or whether they have any questions, may encourage communication between the clinician and patient and further enhance the clinician’s recommendations regarding skin cancer screening.
CHAPTER 5: OVERALL CONTRIBUTIONS, APPLICATIONS AND FUTURE RESEARCH DIRECTIONS

Contributions of the Current Thesis

The major aims of this thesis were to: (1) measure the extent to which older males, defined as those aged 50 years and above, have a sense of patient participation and perceived voice opportunity in the process of skin cancer screening; (2) examine differences between rural and urban males on these variables; (3) investigate predictors of patient participation and voice opportunity; and (4) explore older males’ perceptions of skin cancer and their subjective experiences of skin cancer screening. The participants in this thesis were males over 50 years of age from both rural and non-rural areas, many of which had past experience of skin cancer. This group of men are traditionally under-represented in health related research.

This thesis extends existing skin cancer screening literature in several ways. First, the current thesis provides a critical appraisal of skin cancer screening research to date. A number of limitations were identified, including: (1) the fragmented nature of existing skin cancer screening literature; (2) variations in the use of the term ‘older males’ across studies; (3) the ill-definition of the conceptualisation of ‘skin cancer screening’ in a lot of existing research; (4) a lack of examination of differences between rural and urban older men in willingness to undertake skin cancer screening; (5) limitations inherent in theoretical frameworks such as the Health Belief Model and the Theory of Planned Behaviour that have been utilised in previous studies; and (6) a lack of consideration of patients’ subjective experiences of skin cancer screening.
Second, this thesis explicitly examined older males’ (50 years and above) sense of participation in the context of skin cancer screening. Specifically, older men’s ‘participation’ in skin cancer screening was examined by: (1) measuring the extent to which older men were found to have a high sense of patient participation and perceived voice opportunity in the process of skin cancer screening and (2) exploring older men’s subjective experiences of skin cancer screening. Third, the current thesis represents the first attempt to examine the extent to which men from rural and urban areas differ from one another in their perceptions of patient participation and perceived voice opportunity in the process of skin cancer screening. Fourth, this thesis also represents the first attempt in skin cancer screening to explore predictors of patient participation and perceive voice opportunity and to contrast their similarities and differences to predictors of compliance participation in skin cancer screening. Each of these contributions is discussed in further detail below.

**Older Men’s Sense of ‘Participation’ in Skin Cancer Screening**

In this thesis, older males’ (50 years and above) perceptions of different forms of participation were examined. Following the critical discussion in Chapter Two of various interdisciplinary types of participation, and building on the work of Tribe and Webb (2012), ‘perceived voice opportunity’ and ‘patient participation’ were identified as forms of participation that seem particularly relevant to older men’s experiences of skin cancer screening. Consistent with Tribe and Webb (2012), it was argued that investigating these types of participation is important, given interdisciplinary research suggesting positive associations between these alternative types of participation and health-relevant outcomes such as heightened patient
satisfaction, self-efficacy, and enhanced feelings of control over one’s health
(Fondacaro et al., 2005; Kroll et al., 2000; Street et al., 2005, Tribe & Webb, 2012).

Both of the studies in the current thesis suggest the importance of extending
the existing definition of ‘empowerment’ and ‘participation’ in skin cancer screening
to incorporate ‘patient participation’ and ‘perceived voice opportunity’. The findings
from Study One (Chapter Three) suggested multiple ways of conceptualising
‘participation’, in addition to compliance participation, that were found to be
fundamental to older men’s (i.e. 50 years and above) experiences of skin cancer
screening. For example, the findings of Study One not only indicated that men’s
participation in skin cancer screening included compliance with medical
recommendations to be screened and requests made by others such as family and
friends to participate in screening but also the ability to be able to communicate with
the clinician (that is, perceived voice opportunity) and perceptions of engagement
with the process of skin cancer screening and/or their clinician (that is, patient
participation).

The findings of Study One and Two (respectively reported in Chapters Three
and Four) also extend existing research by highlighting conditions under which older
men may be more inclined to experience patient participation and perceived voice
opportunity. More specifically, Study One identified the importance of men’s
perceptions of skin cancer and the influence of feeling ‘comfortable’ with the
clinician, while Study Two extended our understanding of patient participation and
voice opportunity in skin cancer screening by identifying predictors of these forms of
participation.
By attending to the subjective experiences of older men in skin cancer screening, this thesis especially serves to advance existing research. As argued in Chapter Two, explicit consideration of alternative types of participation, such as patient participation, from the older man’s perspective is especially important in light of existing research and theory which suggests that participation in health care need not be restricted to observable actions such as taking a test or asking questions, but may also include subjective experiences or ‘feelings of involvement’ (e.g. Dunst & Trivette, 1996; Fondacaro, Frogner & Moos, 2005; Tribe & Webb). The qualitative study (Study One, reported in Chapter Three) suggested a range of factors that impact upon men’s willingness to undergo skin cancer screening as well as their actual uptake of skin cancer screening.

In addition, the results from Study Two also indicated that, in general, older men experienced relatively high levels of both patient participation and perceived voice opportunity. Interestingly, higher levels of perceived voice opportunity was positively associated with age, and men aged 60 years and over experienced significantly higher levels of voice opportunity than men aged 50 – 59 years. The apparent differences in preference for patient participation and voice opportunity, as well as the varying levels of participation found for different aged men, indicates a need for further research to systematically explore such differences. For example, given the research findings of the current study, it is possible that there would be differences among the various older age categories (such as men 50-59 years; men 60 years and over) regarding their response to efforts from the clinician to increase their
patient participation and perceived voice opportunity. The extent to which this may be the case awaits empirical investigation.

In Study One, some older men reported that communication with the clinician, feeling comfortable, and being able to ask questions, were factors that were important to their experience of the skin cancer screening consultation. However, other older men appeared disinterested in being actively engaged during the doctor-patient consultations, but nonetheless often advised that they could ask questions, or be actively involved during the consultation, if they so desired. These findings suggest that there may be considerable variability among men regarding their level of involvement and the extent to which they desire involvement during consultations with their treating practitioners. Such findings indicate that there is merit in further investigating men’s preferences for their level of patient participation during the skin cancer screening process and the factors that may influence this.

Furthermore, Study One highlighted older men’s general lack of knowledge and awareness regarding skin cancer – that is, different forms of skin cancer and treatment options. Whether this lack of knowledge is due to men not wishing to learn more (i.e. preferring a passive role) or due to other factors (e.g. clinician characteristics) awaits further investigation.

By exploring older men’s subjective experience, it was also highlighted that some men perceive power imbalances between themselves and their doctor. For example, there appeared to be a tendency for some men to relinquish control during the consultation, that is, they adopted a passive role and described their doctor as
being ‘authoritarian’. Furthermore, some older men’s sense of ‘patient participation’ or being ‘comfortable’ with actively participating during skin cancer screening consultation was associated with perceived similarities with the clinician, for example, possessing similar characteristics such as ethnic background and age.

The findings of Study One that focused on older men’s subjective experiences of skin cancer screening raised numerous interesting findings. These are discussed in the sections that follow.

**Differences Between Rural and Urban Men’s Patient Participation and Voice Opportunity**

This thesis further extends existing literature relating to older men’s experience of skin cancer screening by being the first study to systematically explore potential differences between rural men and urban men’s experience of skin cancer screening. More specifically, Study Two represents the first attempt to ever examine variations in the level of patient participation and perceived voice opportunity felt by older men who reside in rural areas compared to those who reside in urban areas.

It was argued in Chapter One that the majority of existing skin cancer screening literature has not made a distinction between men who reside rurally compared to those who reside in urban areas regarding their skin cancer screening behaviour. However, the few studies dedicated to examining outdoor workers and the farming population have found that those who work outdoors have a significantly higher risk of developing skin cancer compared to those who work indoors (Levy,
Wegman, Baron & Sokas, 2006). Moreover, such outdoor workers are less likely than indoor workers to have ever had a skin examination (Le Blanc et al., 2008). Indeed, the rate of reporting skin cancer screening is lowest among those who experience increased sun exposures, such as, farmers (LeBlanc et al., 2008). Therefore, it is extremely important to better understand their experience and perceptions of skin cancer screening.

It was further argued in Chapter One that the detection of skin cancer and subsequent treatment for the rural population may be complicated due to several real or perceived cultural and economic barriers, such as reluctance to leave the farm, or cost of travel to attend a medical consultation (LeBlanc et al., 2008). Furthermore, these factors, combined with the fact that farmers tend to be older males (who are already at increased risk of developing skin cancer and not undergoing skin cancer screening) suggests that the farming and rural population should be important targets for skin cancer screening research.

While Study Two did not reveal a significant difference between rural men and urban men’s perceptions of patient participation or voice opportunity in relation to their experience of skin cancer screening, Study One suggested that there may be some differences in their experience that warrants further investigation. For example, in Study One a man who lived in a rural town, reported ‘lack of time’ as a specific barrier for him not undergoing skin cancer screening. The extent to which such barriers are evident in the experience of rural and urban men’s skin cancer screening experience awaits further empirical investigation.
Other Variables that Predict Patient Participation and Perceived Voice Opportunity

The findings from both of the studies reported in this thesis highlight the manner in which other types of participation are not only fundamental to men’s experiences of skin cancer screening, but are also positively associated with a range of variables, some of which are featured in commonly utilised theoretical models.

Indeed, the findings from Study One add support to the suggestion that some dimensions from both the Health Belief Model and the Theory of Planned Behavior might be positively associated with ‘patient participation’ and ‘perceived voice opportunity’. For instance, in Study One, some of the other men in this study (study one) reported that they were ‘very comfortable’ asking their treating practitioner questions and were willing to ‘speak up’ and raise their concerns about the potential signs or symptoms of skin cancer to ensure that the doctor ‘didn’t miss anything’. This suggested that older men’s perceptions of susceptibility to developing skin cancer influenced their experience of ‘patient participation’; for example, they were more willing to be actively engaged in the consultation. Furthermore, those older men that had a positive attitude towards skin cancer screening and who recognised the benefits (i.e. perceived benefits) associated with screening were also more actively involved in their consultations with the treating practitioner (i.e. they displayed heightened levels of patient participation) in what they perceived to be an important or worthy process. These findings of this first study indicated that variables, such as perceived benefits and perceived susceptibility would affect men’s experience of participation during the skin cancer screening consultation.
While the path models outlined in Study Two did not explain a lot of variance, several variables were nonetheless identified as predictors of patient participation and voice opportunity. The findings of Study Two revealed that variables featured in the Health Belief Model were related to men’s sense of participation when applied in the context of skin cancer screening. For example, perceived benefits of skin cancer screening was positively associated with perceptions of ‘voice opportunity’ and ‘patient participation’, while the perceived costs of skin cancer screening was negatively associated with older men’s sense of ‘patient participation’.

In addition, the variables ‘subjective norm’, that is older men’s perceptions of how others view skin cancer screening, as well as their perceived level of ‘perceived behavioural control’ from the Theory of Planned Behaviour were also found to predict men’s level of ‘patient participation’. This finding suggests that those who share the norm of perceiving skin cancer screening to be important and valuable, and those who feel a greater sense of control over whether or not they attend for skin cancer screening, are more inclined to be actively engaged with their treating practitioner during skin cancer screening consultations; for example, by asking questions and expressing their opinions.

These findings suggest that not only do men participate in a variety of ways, other than simply ‘complying’ with medical recommendations, but also that there are a range of factors that influence their willingness and perceived ability to participate in these various ways. This thesis represents the first attempt to explicitly explore alternate conceptualisations of participation (i.e. ‘perceived voice
opportunity’ and ‘patient participation’) in skin cancer screening. These studies also represent the first investigation of predictors of patient participation and perceived voice opportunity in relation to older men’s experience of skin cancer screening.

**Other Directions for Future Research**

The theoretical and empirical contributions of the current thesis suggest several other directions for future research. First, given that they were found to be related in the current research, there is now an opportunity to explore the relationship between the various conceptualisations of participation and intentions to undergo skin cancer screening. For example, if research reveals heightened perceptions of ‘patient participation’ and ‘voice opportunity’ increase one’s willingness to undergo skin cancer screening, these measures of participation could help to predict skin cancer screening behaviours for older men. Particularly if older men’s lack of engagement in medical consultations is related to factors such as perceived power imbalances between themselves and the clinician. Indeed, if such issues are addressed, for example by improving older men’s sense of voice opportunity and patient participation, this may be an important way of increasing intentions to regularly undergo skin cancer screening.

Further research is also needed to explore the findings from Study Two which suggest that perceptions of voice opportunity, and under some circumstances, patient participation, are positively associated with age. There is also an opportunity to explore the impact of participatory experiences on overall satisfaction of the initial consultation and whether or not this influences men’s decision to undergo skin cancer
screening in the future (i.e. ongoing engagement in skin cancer screening).

The findings from Study One also highlighted that for many men there was a lack of knowledge and awareness regarding skin cancer. For example, many men were not able to name the type of skin cancer they had been diagnosed with and were often unaware of the treatment options available to them. These findings are consistent with many other studies that have found, in general, older men lack awareness of skin cancer, have low motivation to monitor skin cancer (Wright & Bramwell, 2001) and have limited knowledge of specific indicators and symptoms of risk especially in relation to skin cancer (Buckley & O’Tuama, 2010). Study One was helpful in clarifying such age-related health beliefs and knowledge regarding skin cancer and may have important implications regarding health promotion strategies designed to enhance skin cancer screening for this particular demographic. For example, targeted interventions aimed at increasing older men’s awareness of risk factors for skin cancer, signs and symptoms of skin cancer as well as the benefits associated with early detection may be useful for increasing older men’s knowledge and awareness and in turn enhance their willingness to undergo regular skin cancer screening. Such knowledge and awareness may also have implications for men’s level of involvement when in consultation with the clinician, for example, they may be better able to engage in decision-making about treatment options.

This thesis has also emphasised the role of friends and family, particularly partners and wives, not only in identifying suspicious moles or skin changes but also encouraging men to undergo regular skin cancer screening. Further research is needed to explore women’s perceptions of skin cancer gender related beliefs, and the role that
women appear to have influencing the uptake of skin cancer screening by men. The influential role of wives and partners in increasing uptake of skin cancer screening found in the current research suggests that further research into the skin cancer screening experience of older males who live alone is especially important.

The thesis also indicates potential interventions for enhancing men’s experiences and increasing the frequency of skin cancer screening. For example, clinicians may be able to foster open communication with their older male patients by asking patients whether they have questions or concerns during their skin cancer screening consultations and offering additional information about diagnoses and treatment, where appropriate.

The findings from both studies also suggest that by highlighting the benefits of screening, addressing perceived costs of screening and being aware of the influence of family and friends on older men’s decision to undergo skin cancer screening may increase older men’s perceptions of being in control, taking part and feeling involved in consultation with their treating practitioner. For example, in order to increase participation in skin cancer screening, awareness campaigns that highlight the benefits of screening and address potential barriers, such as those relating to time and cost associated with screening, may encourage older men to become more involved in the process. In addition, advertising that encourages discussions with family and friends about skin cancer and screening may also be helpful in highlighting subjective norms which are in turn associated with increased perceptions of participation. Additional research exploring potential harms associated with skin cancer screening described, for example the potential economic and social costs - including negative experiences
or outcomes as a consequence of unjustified intervention and over-treatment is needed.

The findings of both studies one and two also suggest that clinicians may be able to enhance older men’s perceptions of ‘patient participation’ and ‘voice opportunity’ by providing them with opportunities to express their opinions or to ask questions throughout the skin cancer screening consultation. The results of Study Two indicated that men’s reported levels of ‘patient participation’ were positively associated with their perceptions of ‘voice opportunity’. Therefore, it is possible that enhancing older men’s experience of ‘patient participation’ may also enhance their perceptions of ‘voice opportunity’. Clinicians may be able to achieve this by consulting with men at the outset of their appointment and inviting them to actively participate (e.g. by asking if they have any concerns or wish for additional information) throughout the consultation.

In addition, for those men who wish to be actively involved in the skin cancer screening process, there may be some things older men can do themselves to enhance their experience of skin cancer screening. For example, older men could choose a clinician who possesses certain attributes, to undertake their skin cancer screening. This is suggested by Study Two given that some men’s experience of being actively engaged with their clinician was found to be positively related to their perceptions of similar characteristics (i.e. ethnic background and age). In light of this finding it is therefore feasible that older men who choose clinicians with such characteristic or attributes may influence their willingness to actively participate.
Conclusion

There is a large body of research dedicated to the investigation of the variables that affect willingness to undertake skin cancer screening. However, as argued throughout this thesis, ‘participation’ in skin cancer screening research has usually been left ill-defined, and the conceptualisation of ‘participation’ has been restricted to compliance with medical requests. Interdisciplinary research suggests, however, that ‘participation’ in health is a dynamic and socially-constructed process (e.g. Campbell & Jovchelovitch, 2000; Dunst & Trivette, 1996; McGregor, 2006; Sahlsten et al., 2008; Tribe & Webb, 2012). Drawing on this body of research, this thesis has examined and extended the conceptualisation of participation used in skin cancer screening literature; explored men’s subjective experience of skin cancer screening and their perceptions of skin cancer; and investigated variables that predict ‘patient participation’ and ‘perceived voice opportunity’.

Overall, this thesis has revealed that participation in skin cancer screening is more complex than simply taking a test, and that older men’s perceptions of their participation in this health context are related to processes such as ‘power’ and ‘empowerment’ and ‘communication’. This thesis has also highlighted that some variables featured in commonly utilised theoretical models can be used to predict ‘patient participation’ and ‘perceived voice opportunity’ and indicates that future theoretical models that incorporate a range of these variables may be useful for predicting older men’s willingness to undergo skin cancer screening.
By establishing a better understanding of older men’s experiences of more than one type of participation in skin cancer screening, older men’s experiences of skin cancer screening may be enhanced, which may in turn positively influence the uptake of this important health behaviour.
References


Appendix A

Ethics Approval

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**Memo**

**To:** Dr Janine Webb  
School of Psychology  

**From:** Secretary – HEAG-H  
Faculty of Health  

**CC:** Michaela Hall  

**Date:** 7 January, 2013  

**Re:** HEAG-H 148_2012: A critical analysis of screening for skin cancer: empowerment and participation

Approval has been given for Dr Janine Webb, School of Psychology, to undertake this project for a period of 3 years, from 7 January, 2013. The current end date for this project is 7 January, 2016.

The approval given by the Deakin University HEAG - H is given only for the project and for the period as stated in the approval. It is your responsibility to contact the Secretary immediately should any of the following occur:

- Serious or unexpected adverse effects on the participants
- Any proposed changes in the protocol, including extensions of time
- Any events which might affect the continuing ethical acceptability of the project
- The project is discontinued before the expected date of completion
- Modifications that have been requested by other Human Research Ethics Committees

In addition you will be required to report on the progress of your project at least once every year and at the conclusion of the project. Failure to report as required will result in suspension of your approval to proceed with the project.

HEAG-H may need to audit this project as part of the requirements for monitoring set out in the National Statement on Ethical Conduct in Human Research (2007). An Annual Project Report Form can be found at [http://www.deakin.edu.au/hmbx/research/ethics/ethicssubmissionprocess.php](http://www.deakin.edu.au/hmbx/research/ethics/ethicssubmissionprocess.php) which you will be required to complete in relation to this research. This should be completed and returned to the Administrative Officer to the HEAG-H, Pro-Vice Chancellor’s office, Faculty of Health, Burwood campus by **Tuesday 19th November, 2013** and when the project is completed.

Good luck with the project!
Appendix B
Advertisement – Study One

Can You Help?

Research Project on men’s experience of skin cancer screening

My name is Michaela Hall and I am enrolled in the Doctorate of Psychology (Health Psychology) at Deakin University. I am undertaking a research project under the supervision of Dr. Janine Webb (senior lecturer) in the School of Psychology, Deakin University.

AIM:

- The aim of this research is to explore men’s experiences of participation in skin cancer screening.

WHO CAN PARTICIPATE?

- Men over 50 years who have ever noticed any skin mole changes
- Participation is entirely voluntary. If you do choose to take part, participation is confidential.
- All people who participate are eligible to enter a draw to win a $100 Coles Myer gift voucher.

WHAT IS INVOLVED?

- An interview that will take approximately 15 minutes. This can be done over the phone, or at Deakin University
- The interview will involve questions related to experiences of skin cancer screening, such as “Can you tell me about your experience of skin cancer screening?”
- Information such as age and family history (if any) of skin cancer will be collected.
If you are interested in being a participant in this research or would like further information, please contact:

Michaela Hall on 0433055697 or
Email: mehal@deakin.edu.au

Appendix C

Plain Language Statement – Study One

PLAIN LANGUAGE STATEMENT

TO: Participants

Plain Language Statement

Date: December 2012 – December 2015
Full Project Title: A critical analysis of skin cancer screening: participation among older males
Principal Researcher: Janine Webb
Student Researcher: Michaela Hall

1. Introduction

You are invited to take part in this research project. Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. Deciding not to participate will not affect your relationship to the researchers or to Deakin University. Once you have read this form and agree to participate, please sign the attached consent form. You may keep this copy of the Plain Language Statement.

2. Purpose

The purpose of this research is to explore older men’s experiences of participation in skin cancer screening and also to investigate men’s perceptions of the physician(s) who have performed their skin cancer screening.

3. Participant Involvement
If you are a man who has ever noticed changes in skin moles you are invited to participate in this research. If you agree to participate, you are invited to have an interview with the researcher that will take approximately 30 minutes of your time. You may of course decide to stop the interview at any point. You may also ask up to the end of data collection that any information collected at your interview be destroyed or not used for the research. The interview will involve questions related to your experiences of skin cancer screening. Example questions are:

*Have you ever noticed changes to any of your skin moles?*

*If you have had skin cancer screening, tell me about your role in the decision to have the screening*

Information such as your age, the approximate timing since your last skin cancer screening and past history of skin mole changes will also be requested.

**4. Possible Benefits**

Possible benefits include participants gaining some awareness of the issues associated with the uptake of skin cancer screening. We cannot guarantee or promise that you will receive any benefits from this project.

**5. Possible Risks**

The risk or harm to participants is no greater than that experienced in everyday life. Participants can suspend or end their participation in the project at any time. If you feel you need any support throughout any stage of this research project, please contact the Cancer Council Help Line, 13 11 20 or Lifeline, 13 11 14.

**6. Voluntary Participation, Confidentiality and Privacy**

Participation is entirely voluntary. If you do choose to participate, participation is confidential; the data collected will not contain your name or any other information that would allow you to be personally identified. The information obtained from participants will be kept confidential. Only the researchers will have access to the data collected. Interviews will be conducted in a room at Deakin University (Burwood), at GrainCorp if that is your place of work or over the phone. Interviews may be completed at a time that suits you. With your written informed consent, interviews will be audio-taped and transcribed by the researcher. Your name or any other identifying information will not be collected. To comply with government requirements all data will be stored securely for a period of a minimum of six years after final publication.

The results will be written up in the form of a thesis and may be published in a peer review journal article and presented at academic conferences and seminars. Only de-identified data will be reported.

**7. Monitoring of Research**

The progress of the research project will be monitored by Dr. Janine Webb via regular supervision sessions with the student researcher (usually weekly).
8. Incentives to Participate

For those who take part in the study there will be an invitation to enter a draw to win a $100 Coles Myer gift voucher. In order to enter the lottery, participants will provide their email address. This information will be stored in the supervisor’s office until the draw, after which time it will be destroyed.

9. Funding

This research is entirely funded by Deakin University.

10. Voluntary Participation

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage without consequence but given that the interview is anonymous, once the interview is completed, data cannot be withdrawn.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with Deakin University. Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Only agree to participate in the study after you have had a chance to ask your questions and have received satisfactory answers.

11. Complaints

Approval to undertake this research project has been given by the Human Research Ethics Committee of Deakin University. If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity,
Deakin University,
221 Burwood Highway,
Burwood Victoria 3125,
Telephone: 9251 7129, research-ethics@deakin.edu.au
Please quote project number [2012-148].

12. Further Information, Queries or Any Problems

If you require further information, wish to withdraw your participation or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher. The researchers responsible for this project are:

Dr. Janine Webb
School of Psychology, Deakin University
221 Burwood Hwy
Burwood, Vic 3125
Email: Janine.webb@deakin.edu.au
Phone: (03) 92443753

Michaela Hall
TO: Participants

Consent Form

Date: 1/07/2013

Full Project Title: A critical analysis of skin cancer screening: participation among older males

Reference Number: HEAG-H 148_2012

I have read and I understand the attached Plain Language Statement.

I freely agree to participate in this project according to the conditions in the Plain Language Statement.

I have been given a copy of the Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal my identity and personal details, including where information about this project is published, or presented in any public form.

I am aware that the interview will be audiotaped and give my consent for this to occur.

Participant’s Name (printed) ...........................................

Signature ......................... Date ..........................

Michaela Hall

c/o Dr Janine Webb
Interview Guide – Study One

1. Have you ever noticed changes to any of your skin moles?
2. Have you ever been screened for skin cancer?
3. Is skin cancer screening something that is important to you? Why?
4. Have you ever known anybody who has had skin cancer? Tell me about it.
5. Tell me about your experiences of skin cancer screening.
6. Tell me about your experiences of ‘participation’ in skin cancer screening.
7. Tell me about your role in the decision to have skin cancer screening.
8. If you have had screening in the past, tell me about your perceptions of/relationship with the physician who performed your last skin cancer screening.
9. How empowered did you feel when in consultation with the doctor?
10. Is there anything else about your experience of skin cancer screening that you feel we should discuss or that you would like to add?
Can You Help?

Research Project on Men’s Willingness to Undertake Skin Cancer Screening

My name is Michaela Hall and I am enrolled in the Doctorate of Psychology (Health Psychology) at Deakin University. I am undertaking a research project under the supervision of Dr. Janine Webb (senior lecturer) in the School of Psychology, Deakin University.

AIM:
- The aim of this research is to explore men’s experiences of participation in skin cancer screening.

WHO CAN PARTICIPATE?
- Men age 50 years and over
- Participation is entirely voluntary. If you do choose to participate, participation is confidential; no information allowing personal identification will be passed on to any third party.

WHAT IS INVOLVED?
- You will be required to complete a hard copy questionnaire that will take approximately 15 minutes. The questionnaire will involve reading a hypothetical scenario and answering questions. You will also be asked other demographic questions such as your age and whether or not you have had prior experience of skin cancer or mole changes.
If you have any queries or require further information, please contact: Michaela Hall 0433055697

Appendix G

Email Invitation – Study Two

Hello,

My name is Michaela Hall and I am currently undertaking research for a Doctoral Degree in Health Psychology. This research is exploring older males’ willingness to engage in skin cancer screening. I am seeking males over the age of 50 years to complete a short, anonymous online questionnaire which will involve reading a hypothetical scenario and answering questions related to screening behaviours. It should take no longer than 15-20 minutes to complete. If you are interested in participating please click on the link below for more information and to access the questionnaire.

http://www.deakin.edu.au/psychology/research/michaela_hall

Please also feel free to send this link to anyone else you think may be interested in this research. Thank-you for your time, it is very much appreciated.

Kind regards,
Michaela Hall
Appendix H

Plain Language Statement – Study Two

PLAIN LANGUAGE STATEMENT

TO: Participants

Plain Language Statement

Date: December 2012 – December 2015
Full Project Title: A critical analysis of skin cancer screening: participation among older males.
Principal Researcher: Janine Webb
Student Researcher: Michaela Hall

1. Introduction

You are invited to take part in this research project. This Plain Language Statement contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project so that you can make a fully informed decision whether you are going to participate.

Please read this Plain Language Statement carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this. By returning the questionnaire, you indicate that you understand the information provided in this Plain Language statement and that you give your consent to participate in the research project.

2. Purpose

The purpose of this research is to explore older male’s willingness to engage in the skin cancer screening process. Existing research on skin cancer screening has revealed there is a particular need to encourage older men (aged 50 years and above) who are at high risk of developing skin cancer to undergo skin cancer screening as early detection and treatment has a higher probability of cure (Balch et al., 2001).
This research will explore two health models in relation to skin cancer screening behaviour. You are invited to participate in this research project as this will assist our understanding of how males perceive skin cancer screening. The results of this research may be used to help researcher Michaela Hall to obtain a Doctoral Degree in Psychology.

3. Participant Involvement

Participation in this project will involve completing a questionnaire, which will take around 20 minutes. Participation will be voluntary and anonymous and return of the questionnaire will signify consent. The questionnaire involves reading a hypothetical scenario and answering items related to different aspects of skin cancer and skin cancer screening.

Participants will also be asked general demographic questions such as their age, marital status, family history of skin cancer and whether or not they have had prior experience of skin cancer or mole changes. This research will be conducted under the supervision of Dr. Janine Webb, Senior Lecturer, School of Psychology, Deakin University.

4. Possible Benefits

Possible benefits include participants gaining some awareness of the issues associated with the uptake of skin cancer screening. We cannot guarantee or promise that you will receive any benefits from this project.

5. Possible Risks

The risk or harm to participants is no greater than that experienced in everyday life. Participants can suspend or end their participation in the project at any time. However, once the questionnaire is returned, data cannot be removed, as all data is anonymous. If you feel you need any support throughout any stage of this research project, please contact the Cancer Council Help Line, 13 11 20 or Lifeline, 13 11 14.

6. Data Collection

Data from surveys will be entered and saved into computer files, which will be put onto a CD. Identifiers will not be attached to collected information so it cannot be linked to individual participants. Data will be stored in a locked room in the School of Psychology. All data will be stored for a minimum of six years from publication. This period of time has been selected as it is the minimum period of time required by Deakin University for the storage of data.

7. Privacy and Confidentiality

Any information obtained in connection with this project and will be de-identified and will remain confidential. In any publication, information will be provided in such a way that you cannot be identified.

The results will be written up in the form of a thesis and may be published in a peer review journal article and presented at academic conferences and seminars. Only de-identified data will be reported. There will be no identifying features of participants recorded in the results.
Participants will be able to contact the principal researcher for details of the results if they desire. If participants seek out this information, they will receive a brief written or verbal summary of grouped or averaged results only.

8. Monitoring of Research

The progress of the research project will be monitored by Dr. Janine Webb via regular supervision sessions with the student researcher (usually weekly).

9. Incentives to Participate

For those who take part in the study there will be an invitation to enter a draw to win a $100 Coles Myer gift voucher. In order to enter the competition, participants will provide their email address. This information will be stored in the supervisor’s office until the draw, after which time it will be destroyed.

10. Funding

This research is entirely funded by Deakin University.

11. Voluntary Participation

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage without consequence but given that the questionnaire is anonymous, once the questionnaire is returned, data cannot be withdrawn.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with Deakin University. Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Only agree to participate in the study after you have had a chance to ask your questions and have received satisfactory answers.

12. Complaints

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

The Manager, Research Integrity,  
Deakin University,  
221 Burwood Highway,  
Burwood Victoria 3125,  
Telephone: 9251 7129,  
research-ethics@deakin.edu.au

Please quote project number: HEAG-H 148_2012

13. Future Research

Participants in this study are also invited to participate in a second, related, study involving an interview of approximately 30 minutes in duration. The interview will
involve questions related to your experiences of skin cancer screening. Example questions are:

Tell me about your experience of skin cancer

Tell me about your role in the decision to have skin cancer screening

Information such as your age, the approximate timing since your last skin cancer screening and past history of skin mole changes will also be requested. If you are interested in learning more about this additional study please contact Michaela Hall via email, mehal@deakin.edu.au.

14. Further Information, Queries or Any Problems

If you require further information, wish to withdraw your participation or if you have any problems concerning this project (for example, any side effects), you can contact the principal researcher.

The researchers responsible for this project are:

Dr. Janine Webb
School of Psychology, Deakin University
221 Burwood Hwy
Burwood, Vic 3125
Email: Janine.webb@deakin.edu.au
Phone: (03) 92443753

Michaela Hall
c/o Dr Janine Webb
School of Psychology, Deakin University
221 Burwood Hwy
Burwood, Vic 3125
Appendix I

Organisational Consent Form – Study Two

ORGANISATIONAL CONSENT FORM

TO:

Organisational Consent Form

Date: 21/12/2012

Full Project Title: A critical analysis of skin cancer screening: participation among older males

Reference Number: HEAG-H 148_2012

I have read, and I understand the attached Plain Language Statement.

I give my permission for ......................................................of .................................................................to participate in this project according to the conditions in the Plain Language Statement.

I have been given a copy of Plain Language Statement and Consent Form to keep.

The researcher has agreed not to reveal the participants’ identities and personal details if information about this project is published or presented in any public form.

I agree that
1. The organisation MAY/MAY NOT be named in research publications or other publicity without prior agreement.

2. I DO/DO NOT require an opportunity to check the factual accuracy of the research findings related to the organisation.

3. I EXPECT / DO NOT EXPECT to receive a copy of the research findings or publications.

Name of person giving consent (printed) .................................................................

Signature ................................................................. Date .................................
Appendix J

Questionnaire – Study Two

A critical analysis of skin cancer screening: participation among older males

DEAKIN UNIVERSITY
SCHOOL OF PSYCHOLOGY

The purpose of this survey is to investigate individual’s willingness to undertake skin cancer screening. The questionnaire comprises sections in which you are required to read hypothetical scenarios and respond to a series of questions. The questionnaire should take approximately 20 minutes to complete. Please try to complete all questions in one sitting. Give your first response, rather than dwelling over any particular question. For each question only select one response. If at any time you wish to withdraw from this study you are free to do so without consequence but given that the questionnaire is anonymous, once the questionnaire is returned, data cannot be withdrawn. You must be 50 years or over to participate in this study.

Here is an example of the items in the questionnaire:

_Skin cancer screening can detect abnormal changes before I would notice any symptoms_

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Your responses on the questionnaire are completely confidential and anonymous. **Please ensure that you do not write your name, or any other comments that will make you identifiable.** You will not be personally identified in any subsequent reporting of this study. Completing the questionnaire signifies your consent to participate in this study. This study is part of a doctoral thesis in which Michaela Hall is enrolled, with Dr. Janine Webb supervising the study. If you have any questions concerning this study please contact Janine Webb at the School of Psychology, Deakin University, pH: 03 9244 3753 or email: janine.webb@deakin.edu.au. This questionnaire can be completed online and your assistance in the completion of this questionnaire is very much
This is an anonymous survey. Please ensure that you do not write your name, or any other comments that will make you identifiable. By completing the survey and submitting your responses back to the researchers you are consenting to take part in the research. As such you should read the preceding plain language statement carefully as it fully explains the intention of this project.

1. What is your age?

2. What is your marital status?

3. Are you currently employed?

4. On average, how many times per year do you see a GP?

5. Have you ever been screened for skin cancer?

6. Do you have a family history of any form of skin cancer?

7. How would you rate your overall health status?

   
   1  2  3  4  5  6  7
   Poor  Average  Excellent

8. Do you live in a rural area?

9. Approximately how far (in kilometres) do you need to travel to get to the doctor?

10. Over 95% of skin cancers can be successfully treated and cured if found early

   True  False  Not Sure

11. Only around 50% of melanomas that arise in the skin can be detected by the naked eye

   True  False  Not Sure

12. Skin cancer can be easily detected since it appears externally in changes on the skin

   True  False  Not Sure

13. Skin cancer always develops from pre-existing moles

   True  False  Not Sure
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

14. I believe that skin cancer screening will only find evidence of skin cancer when it is too late to treat it

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

15. Skin cancer screening can detect abnormal changes before I would notice any symptoms

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

16. If I have regular screening skin cancer will be found before it is advanced

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

17. Having skin cancer screening would not give me peace of mind

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

18. Having regular skin cancer screening is not a good idea

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

19. I have a lot to gain by having regular skin cancer screening
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree

20. I would be reassured about skin cancer if I had screening regularly
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree

21. Skin cancer screening is no good at detecting skin cancer in its early stages
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree

22. I am very afraid of getting screened for skin cancer
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree

23. Getting screened for skin cancer is too inconvenient for me
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree

24. I would be likely to get flustered if I were to get screened for skin cancer
   1 2 3 4 5 6 7 8 9 10
   Strongly  Neither agree  Strongly
   Disagree nor disagree Agree
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

25. Getting skin cancer screening would not interfere with my other activities

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

26. Getting skin cancer screening is time consuming

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

27. I wouldn’t mind giving up my time to be screened for skin cancer

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

28. I would not feel embarrassed if I were to be screened for skin cancer

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

29. I would be likely to find skin cancer screening painful

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree

30. The way skin cancer screening is performed would likely cause me distress

   1 2 3 4 5 6 7 8 9 10
   Strongly Disagree Neither agree nor disagree Strongly Agree
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

31. I am likely to feel uncomfortable if I were to be screened for skin cancer

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32. Attending for skin cancer screening in the next six months if given the chance would be:

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33. Most people who are important to me would think I should attend for skin cancer screening in the next three months if I am given the chance

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Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

34. Most people who are important to me would approve of me having skin cancer screening in the next three months if I am given the chance

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35. It would be difficult for me to attend for skin cancer screening in the next three months

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36. If I was given the chance, I am confident I could attend for skin cancer screening in the next three months

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37. I feel I have a great deal of control over whether or not I attend for skin cancer screening in the next three months

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38. If I were to visit a GP for screening, I would be able to discuss my concerns about skin cancer screening

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Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

39. If I were to visit a GP for screening, I am likely to gather information about skin cancer screening

1 2 3 4 5 6 7 8 9 10
Strongly Disagree Neither agree nor disagree Strongly Agree

40. If I were to visit a GP for screening, I am likely to ask any questions that I have regarding skin cancer screening

1 2 3 4 5 6 7 8 9 10
Strongly Disagree Neither agree nor disagree Strongly Agree

41. If I were to visit a GP for screening, I am likely to ask him/her about why I should have the screening that he or she recommended

1 2 3 4 5 6 7 8 9 10
Strongly Disagree Neither agree nor disagree Strongly Agree

42. If I were to visit a GP for screening, I would consider my personal risks and values in relation to skin cancer screening

1 2 3 4 5 6 7 8 9 10
Strongly Disagree Neither agree nor disagree Strongly Agree

43. If I were to visit a GP for screening, I would be able to express my opinions regarding skin cancer screening to my GP

1 2 3 4 5 6 7 8 9 10
Strongly Disagree Neither agree nor disagree Strongly Agree
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

44. If I were to visit a GP for screening, I am likely to have the choice to reject my provider’s recommendation (to be screened)

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<td>Strongly Disagree</td>
<td>Neither agree nor disagree</td>
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45. If I were to visit a GP for screening, I would likely feel as though I had personal control over the decision to be screened for skin cancer

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46. If I were to visit a GP for screening, I could have had the decision to be screened re-considered

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47. If I were to visit a GP for screening, I would feel that I had personal control over how the situation was handled

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48. If I were to visit a GP for screening, it is likely my physician would ask me for my preferences for what should be done

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Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Scale</th>
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<tbody>
<tr>
<td>49. My lifestyle makes it likely that I will get skin cancer</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
<tr>
<td>50. I believe that my chances of getting skin cancer are high</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
<tr>
<td>51. With my family history I am unlikely to get skin cancer</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
<tr>
<td>52. There is a good possibility that I will get skin cancer</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
<tr>
<td>53. I worry a lot about getting skin cancer</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
<tr>
<td>54. I do not think I am the sort of person who would get skin cancer</td>
<td>1 Strongly disagree, 2 Disagree, 3 Neither agree, 4 nor disagree, 5 agree, 6 Strongly agree</td>
</tr>
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</table>
Please read and imagine the following hypothetical scenario carefully and indicate your responses to the questions by circling the number that best represents your answer. Please try to imagine this situation applies to you when responding to questionnaire items.

One month ago you noticed that a mole on your forearm had changed in shape and size. Your friend is concerned about it and is encouraging you to go to the doctor to get it checked out. While you are very busy earning money you are also aware that it takes time to get in to see the doctor.

55. Getting skin cancer would interfere with my day-to-day life

1 2 3 4 5 6 7 8 9 10
Strongly Agree
Disagree
Neither agree nor disagree

56. If I got skin cancer I would have problems which would last a long time

1 2 3 4 5 6 7 8 9 10
Strongly Agree
Disagree
Neither agree nor disagree

57. If I got skin cancer my whole life would change

1 2 3 4 5 6 7 8 9 10
Strongly Agree
Disagree
Neither agree nor disagree

58. My feelings about myself would not change if I got skin cancer

1 2 3 4 5 6 7 8 9 10
Strongly Agree
Disagree
Neither agree nor disagree

59. Getting skin cancer would not be a problem for me

1 2 3 4 5 6 7 8 9 10
Strongly Agree
Disagree
Neither agree nor disagree

Thank-you!
Appendix K

Data Screening – Study Two

**Missing values**

Prior to analyses, data were screened to ensure that the assumptions of factor analysis and structural equation modelling were met. Consistent with the recommendations of Tabachnick and Fidell (2007), SPSS Missing Values Analysis (MVA) was used to screen for missing values and revealed no variable had more than 5% of its data missing. Tabachnick & Fiddel (2007) suggest than an acceptable amount of missing values on any given variable in anywhere up to 5%. When the proportion of missing values is under 5%, testing to examine whether the data is missing at random, missing completely at random or not missing at random is not required (Tabachnick & Fiddel, 2007). Any technique to replace the missing data is acceptable (Tabachnick & Fiddel, 2007). Due to the fact that this study was running a path analysis which requires there be no missing data, missing values were replaced using Expectancy Maximisation (EM).

**Outliers**

Univariate outliers were defined as cases that had standardized scores of greater than 3.29 (Tabachnick and Fidell, 2007). Three univariate outliers were found within the summary scores of ATTITUDE and BEHAV_CONT, two were found within PERC_COST, and once was found within SELF_EFF, SUB_NORM and PAT_PART. These were re-coded to one unit above the next highest score as recommended by Tabachnick and Fidell (2007). Multivariate outliers were assessed using Mahalonobis distance values. One case was identified as a multivariate outlier.
and was deleted prior to running analyses.

**Distributions**

Normality was assessed by examining the skew and kurtosis of the variables to be used in the analyses, where an absolute skew greater than two or less than negative two indicates a skewed distribution and an absolute kurtosis value greater than seven or less than negative seven indicates a kurtotic distribution. No violations of normality were identified in the variables.

**Multicollinearity and Singularity**

Consistent with the recommendations of Tabachnick & Fidell (2007), mutlicollinearity and singularity were assessed by examining the squared multiple correlations of each variable. Neither multicollinearity nor singularity were observed in the data.