AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN
MASCULINITY, CULTURAL WORLDVIEWS, AND SOCIETAL RISK
PERCEPTIONS IN A SAMPLE OF SCHOOL-GOING BOYS

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DECLARATION

Submitted in partial fulfilment of the requirements for the degree of Master of Social Science Psychology, in the Graduate programme in Health Promotion, University of Kwa-Zulu-Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references, and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Master in Social Science Psychology in the faculty of Humanities, Development, and Social Science, University of Kwa-Zulu Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

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DEDICATION

This dissertation is dedicated to my Lord and Saviour, Jesus Christ, the source of all my strength and passion; and to Gavin, the one who has shown me how to dream and discover life.
ACKNOWLEDGEMENTS

I have been blessed by the support and encouragement of so many people throughout the process of writing this dissertation. I would like to express my appreciation to a few people in particular.

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- To Gavin, thank you for your steadfast love and encouragement and for graciously giving me the time and space I needed to complete this dissertation.
ABSTRACT

This study investigated the relationship between masculinity, cultural worldviews, and societal risk perceptions in a sample of school-going boys between the ages of 17 and 18 years old. The main objective was to examine the nature of the relationship between these variables of interest with the purpose of gaining insight into the type of societal risks that are of most concern and those risks that are rejected by males conforming to traditional masculine norms. Furthermore, this study compared the pattern of societal risk perceptions held by males conforming to the traditional masculinity type with the risk perceptions of males adhering to the accommodating and progressive masculinity types. This study also attempted to identify the type of cultural worldviews that were held by individuals adhering to traditional masculine norms and values. One hundred and fifty seven adolescent boys participated in the study and were given two questionnaires and two psychometric scales to complete. The findings of this study showed that males embracing traditional masculine norms and values were more likely to endorse hierarchical and individualist worldviews and to be less concerned about a variety of societal risks and the impact these posed for the South African public. In contrast, participants conforming to progressive masculine norms were more likely to be risk sensitive, showing heightened concern for the negative impact of a number of societal risks on the South African public. In accordance with cultural theory of risk, the risk ideologies upheld by each of the masculinity types were found to be functional in the sense that they supported the core values and agenda of that masculinity type.
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INTRODUCTION

This study investigated the relationship between three masculinity typologies, cultural worldviews, and societal risk perceptions in a sample of school-going boys between the ages of 17 and 18 years old. The main objective was to examine the nature of the relationship between these variables of interest with the purpose of gaining insight into the type of societal risks that are of most concern and those risks that are rejected by males conforming to traditional masculine norms. Furthermore, this study compared the pattern of societal risk perceptions held by males conforming to the traditional masculinity type with the risk perceptions of males adhering to the accommodating and progressive masculinity types. This study also attempted to identify the type of cultural worldviews that were held by individuals adhering to traditional masculine norms and values.

In this regard, Connell’s concept of hegemonic masculinity (1987, 1995, 2000a, 2000b, 2001, 2002) and cultural theory of risk, developed by Douglas and Wildavsky (1982), provided the theoretical framework in which these relationship were analysed. Cultural theory of risk provides an explanatory framework that sheds light on the processes by which risks are constructed and selected in society and, thus, enables us to understand why certain risks become politicised in a society whilst others remain latent (Tansey & O’Riordan, 1999). According to cultural theory of risk, risks are socially and collectively constructed and, therefore, the particular worldview an individual adheres to will influence what they fear and how much they fear it (Dake, 1991; Rippl, 2002). Cultural worldviews, thus, “provide powerful cultural lenses, magnifying one danger, obscuring another threat, selecting others for minimal attention or even disregard” (Dake, 1992, p.33).

The connections between cultural theory of risk and Connell’s theory of hegemonic masculinity have not been investigated in relevant literature. This study attempted to examine the relationship between traditional masculinity and societal risk perceptions in light of cultural theory of risk in order to understand how traditional masculinity and cultural worldviews may intersect to influence societal risk perceptions. More specifically, this study investigated whether traditional masculinity is associated with particular cultural worldviews, which consequently will determine
the type of societal risks that are considered serious or not. The specific societal risks which are considered to pose minimal harm or danger to society were of particular interest, because previous research has found that this tendency towards risk-scepticism can be motivated by identity protective cognition (Kahan, Braman, Gastil, Slovic, & Mertz, 2007a). In this regard, males conforming to traditional masculine norms and beliefs may be unwilling to associate a high level of risk with items and activities that are central components of their traditional masculine identity.

This study has pursued this line of reasoning in order to examine wider social issues and dangers such as environmental risks, technological and industrial risks, risks connected to inequality and social instability, and health risks. According to Connell (1995), the normal operation of the state and large corporations that function to maintain the hegemonic masculinity and the patriarchal dividend is also responsible for the growing destructiveness of military technology, the increase in income inequality, and environmental degradation. He also argues that men’s control of social power and resources and the processes that maintain that control directly impact on issues relating to violence, technology, pollution, and inequality. Thus, it is within the processes of establishing and defending hegemonic masculinity and the patriarchal dividend that many societal risks are created and aggravated (Connell, 1995). It is hypothesised, then, that males adhering to traditional masculine norms will be reluctant to acknowledge the risks that are associated with the operation of gendered institutions and the consequences of the defence of hegemonic masculinity, because of the social privileges and identity affirmation which these provide. In contrast, societal risks which hold the potential to challenge and disrupt the processes which maintain hegemonic masculinity and the status quo may be perceived as a severe threat by these males.

In regard to the relationship between traditional masculinity and cultural worldviews, it is reasoned that individuals’ conformity to traditional masculine norms and beliefs may influence males to view their world in particular ways, or subscribe to certain cultural worldviews, namely hierarchicalism and individualism. Individuals conforming to these worldviews, or ways of life, have been found to hold less concern for long term risks and risks associated with technology or the environment (Douglas & Wildavsky, 1982). Indeed, many researchers have found that
individuals with hierarchical or individualist worldviews are less concerned about environmental risks (Kahan et al., 2007a; Peters & Slovic, 1996), technological risks (Peters & Slovic, 1996), and health risks (Finucane, Slovic, Mertz, Flynn, & Satterfield, 2000; Peters & Slovic, 1996) in comparison to those individuals endorsing an egalitarian worldview. In contrast, however, anything which constitutes a threat to hierarchists’ or individualists’ way of life and the status quo will be regarded as high risk and severe (Douglas & Wildavsky, 1982; Tansey, 2004).

In addition to traditional masculinity, the relationship between other forms of masculinity such as accommodating and progressive masculinity (Morrell, 2001) and cultural worldviews and societal risk perceptions was examined in this study. These forms of masculinity have been constructed in response to recent changes in South Africa, especially in regard to gender relations and equality, and represent different categories of responses amongst men (Morrell, 2001). The inclusion of the notion of ‘multiple masculinities’ in this study enabled a comparison between these masculinities in terms of their relationship to cultural worldviews and societal risk perceptions. It is hoped that this will facilitate our understanding of the risks and activities which are viewed as a threat to the way of life, or those which are supportive of the identities of different South African masculinities.

A central objective of this study is to determine whether a specific risk ideology is held by males conforming to each of the masculinities, and the functional role which this performs. According to cultural theory of risk, social institutions, or cultures, are actively involved in the activity of sense-making in a society (Tansey, 2004), producing classifications of phenomena and guidelines for attributing blame and responsibility. Thus, the values and beliefs, related to societal risks, which hold power and public attention in a society, are propagated by dominant cultures that benefit from society’s awareness of them. This forms part of a conflict over meaning in society between dominant and subordinated cultures, which is central to the political struggle for power and governance within societies (Tansey, 2004). Similarly, theory concerning hegemonic masculinity also highlights the role of dominant masculinities in establishing ideologies that define the norms and ideals within society (Barrett, 2001). Donaldson argues (1993) that crucial to the defence of hegemonic masculinity is the ability for traditional masculinity to impose an ideology within society that determines the way in which events are
understood and issues are discussed, and the types of ideals and morality which hold power within society. In view of this, then, it is hypothesised that each masculinity will endorse a particular pattern of risk perceptions, or an ideology of risk, that functions to support their core values and norms and uphold their way of life. Ultimately, this will have significant implications in regard to the way in which risk management and communication is carried out in South Africa as well as the consequences this may have for certain groups of individuals.
CHAPTER 2: THEORETICAL FRAMEWORK

2.1. Hegemonic masculinity

Early research into the field of masculinity was conducted within the framework of sex role theory, which rose to prominence in the 1950s (Whitehead, 2002). According to sex role theory, individuals undergo a process of socialisation in which they learn and internalise the particular behavioural norms and expectations of their sex role. Within this framework, masculinity is conceptualised as the internalisation of the male sex role and is situated in a complementary and reciprocal relationship with femininity (Connell, 1987; Kimmel, 1987).

In the mid 1980s, researchers belonging to the second wave sociology of masculinity began to argue for a new perspective into the critical study of men which would account for the dynamics of power relations between men and women (Whitehead, 2002). Sex role theory received a number of criticisms from this group of theorists for its conceptualisation of masculinity and femininity. For instance, Connell (1987) argues that sex role theory exaggerates the differences between men and women and portrays individuals as passive actors by overemphasising the role which socialisation plays in determining behaviour. In addition, both Connell (1987) and Kimmel (1987) highlighted the failure of sex role theory to account for the existence of social inequality, power relations, and notions of change which occur within the relations between men and women in the gender structure.

Connell’s theory of masculinity (1987, 1995, 2000a) is situated within the domain of theorists contributing to the second wave sociology of masculinity (Whitehead, 2002) and will provide the theoretical framework for this study. His theory emphasises the social constructionist dynamics of masculinity and the power relations that exist between men and women. According to this theory, notions of masculinity are historically and socially constructed and embedded within a complex and dynamic gender order¹ (Connell, 2000a). As an active social construction, masculinity is constructed in opposition to femininity and is created through social relationships and interactions. Masculinity is located within a dynamic structure of gender relations and can be

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¹ The gender order, according to Connell (2002), comprises the pattern of gender arrangements within institutions and organisations together with broader patterns of gender relations in society and personal life.
described as “the practices through which men and women engage that place in gender, and the
effects of these practices in bodily experience, personality, and culture” (1995, p. 71).

Research has shown that multiple masculinities exist which emerge through a process that
“involves contestation between rival understandings of what being a man should involve.”
(Morrell, 2001, p. 7) The formation of multiple masculinities, each with its own pattern of signs,
practices, and behaviours, arises out of interactions between gender, race and class (Connell,
2002; Hearn & Collinson, 1994). Therefore, within a given setting, and especially within
multicultural societies such as South Africa, different versions of masculinity exist each with its
own ideological way of enacting manhood (Connell, 2002). Relations between masculinities and
between masculinity and femininity are fundamentally hierarchical and power-based (Brod,
1994; Connell, 2000a). Hierarchical relations between masculinities establish relations of
subordination, domination and control within the gender order. Connell (1995) refers to these
relationships as the politics of gender. In his view, further research needs to go beyond simply
identifying the existence of multiple masculinities to reveal the deeper politics of gender which
underlie these relationships and the consequences of these relationships for individuals (Connell,
1995).

According to Connell, an important characteristic of masculinities is their collective nature
(2002). Masculinities, according to Segal (1993), derive their power and meaning from the wide
networks of social relations which they hold in society. For this reason, Connell (2001)
highlights the importance of research to draw attention to the large scale institutions and the
world gender order. Research on traditional masculinity must be located within this larger
context, taking cognisance of the fact that such arenas as politics, technology, and economics are
fundamentally gendered (Donaldson, 1993). Institutions such as schools, corporations, the state,
churches, government, and the media can function as sites for the construction and enactment of
masculinities and on a broad scale (Connell, 2000a).

Hierarchical relations and imbalances in power between men and women are maintained by the
hegemonic masculinity of the gender order. Connell’s concept of hegemony is borrowed from
Gramsci’s notion of hegemony, which refers to the processes by which certain groups come to
acquire and sustain power and their ability to impose definitions of ideals and normality within a society (Barrett, 2001). The hegemonic masculinity refers to a particular version of masculinity that has ascended into the dominant position in a society (Connell, 1995), “which exercises power over other, rival masculinities, and which regulates male power over women and distributes this power, differentially, amongst men” (Morrell, 2001, p.9). Thus, hegemonic masculinity embodies the currently accepted strategy for the legitimacy of patriarchy which will guarantee the dominant position of men and the subordination of women (Connell, 1987, 1995; Donaldson, 1993).

2.1.1. Hegemonic masculinity in the global arena

In the global arena, hegemonic masculinity is connected to trade, investment, and communication. The ascendancy of the new right in Europe and North America has placed transnational capital and the creation of global markets on the centre stage in world politics. The neoliberal agenda, however, has an implicit gender politics that serves to exalt the masculine values and attributes of the male entrepreneur and, through the processes of deregulation of the economy, attempts to place power and authority into the hands of particular men such as managers and entrepreneurs (Connell, 1997, 2005). In this new world order, the form of masculinity achieving the hegemonic position is the traditional masculinity associated with the capitalists and businessmen who control the dominant institutions and the political executives who interact with them (Connell, 2001). Connell refers to this type of masculinity as transnational business masculinity (Connell, 1997, 2005) and it functions to stabilise the world gender order through organising and legitimising men’s dominance over women (Connell, 2005).

Closely connected to this global hegemonic masculinity, Connell considers the hegemonic ideal of Western cultures to be associated with the masculinity that defines the White, middle class, early adulthood, heterosexual male. This individual is independent, a risk-taker, rational, heterosexual and aggressive (1995). It is the image of a “man with power, and the man of power” (Kimmel, 2001, p.272).
The fact that many men may fail to live up to the standards and ideals exalted by the hegemonic masculinity is not problematic, because the public face of hegemonic masculinity is what sustains men’s power (Donaldson, 1993). The global institutions and gender arrangements of the world gender order, Kimmel (2005) argues, are fundamentally gendered and succeed in awarding men a number of social and material privileges. This is the patriarchal dividend which men stand to receive through their support of the ideals and standards of hegemonic masculinity. Though not all men benefit equally from the patriarchal dividend, the majority of men have an interest in defending and sustaining this inequitable gender order (Donaldson, 1993). Many men receive this patriarchal dividend in the form of honour, prestige, authority, respect, safety, and the right to govern and command. Men are also awarded with material benefits such as higher incomes, better packages, and more opportunities in the public domain (Connell, 2000a, 2002; Donaldson, 1993). Men overwhelmingly occupy the majority of powerful public positions such as in parliament, military organisations, religious organisations, and in upper levels of global corporations (Whitehead & Barrett, 2001). Even within the local gender order, significant gender differences in personal incomes of South African men and women have failed to improve in the last ten years. In 1997, a comparison of personal incomes showed that women earned, on average, 54% of what men earned. Ten years later this gap still exists with women now earning approximately 67% of what men earn (The Sunday Tribune, 10/08/2008).

2.1.2. The consequences associated with the defence of hegemonic masculinity
The patriarchal dividend awarded to men establishes conditions of inequality in power and social resources (Connell, 1987) that are achieved through men receiving “higher incomes, higher labour force participation, unequal property ownership, and greater access to institutional power” (Connell, 2005, p.82). One way in which this defence of patriarchy and hegemonic masculinity is secured is through the routine operation of gendered institutions such as the state and large corporations, which are headed by high powered businessmen and politicians who uphold the ideals associated with hegemonic masculinity (Connell, 1995). The operation of these large institutions is the core of the collective project of hegemonic masculinity, which promotes the masculine agenda inconspicuously through their focus upon economic efficiency, the advance of science, national security, corporate profit, and individual competitiveness (Connell, 1995, 2002).
Connell argues that these significant gender differences in power and resources make the gender order a “scene of significant injustice and other toxic effects” (2002, p.112). For instance, the conditions of inequality that give men increased social power over women and some men can lead to displays of violence in an attempt to demonstrate their masculinity, dominance, and control (Connell, 1995; Kaufman, 2000). Secondly, Connell (1995) notes that men’s power and control of social resources can have a direct influence on issues such as inequality, technology, pollution, and world development. Furthermore, it appears that the defence of hegemonic masculinity can produce similar harmful consequences that are apparent in the long term trends of masculinised institutions that include environmental degradation, the growing destructiveness of military technology, and income inequality (Connell, 1995). In addition, Connell argues that harmful consequences associated with hegemonic masculinity make it a global danger because, through its relationship to the state and corporations, “it drives arm races, strip mining and deforestation, hostile labour relations, and the abuse of technologies” (Connell, 2002, p. 143).

The above paragraph highlights that the defence of hegemonic masculinity is accompanied by many harmful and potentially destructive effects in a number of domains. These harmful consequences are brought about through making of gendered power by men in masculine arenas such as politics, technology, economics, the military, and large corporations. It is reasonable to suggest that these harmful effects may create a variety of risks for both people and the environment. This thesis hypothesises, however, that the risks which result from the defence of hegemonic masculinity, such as those associated with technology, industry, environmental degradation, and inequality, may be judged as low risk and of little concern by men who support hegemonic masculinity. In other words, because these risks are connected to the actions of men in high-powered positions and relate to the making of gendered power in masculine arenas, men who stand to gain a patriarchal dividend may undermine the risks associated with these activities.

By pursuing this line of investigation, this research also attempts to examine the existence of a possible ideology of risk which is specific to males who conform to traditional masculine norms. According to Donaldson (1993), an integral part of the process in establishing hegemony and maintaining dominance within the gender order requires that the ruling class masculinity impose
a definition of the situation, define the terms in which events are understood and issues discussed, define morality, and formulate ideals. In regard to the perception of societal risks, men in positions of power and who conform to traditional masculine norms may contribute to the development of a particular ideology of risk which aligns itself with the masculine agenda.

2.1.3. Men’s responses to recent changes within the local gender order
In recent years the world gender order has been subject to a number of external and internal forces that have brought about instabilities and opportunities for change within gender relations and practices (Connell, 1997, 2002, 2005; Whitehead & Barrett, 2001). The most significant catalysts of change, in Connell’s view (2002, 2005), are associated with the movement of women into the labour force and the increased legitimacy of homosexuality as an alternative lifestyle to heterosexuality. The reactions of men to changes in the gender order can take a variety of different forms from a violent backlash that attempts to maintain the status quo to an acceptance and of the change required (Connell, 1995).

Morrell (2001) and Walker (2005) have extended Connell’s work on masculinity to the South African context and examined the variation in men’s responses to recent changes within gender relations. According to Walker (2005), the transition to democracy and the increasing liberalised version of sexuality embedded within the South African constitution have challenged and served to destabilise traditional versions of masculinity based on male privilege and entitlement. The legislative changes that have addressed gender equality, the increased rights of homosexuals, and the public discourse of a human rights culture have diminished the patriarchal dividend that accrues to men, albeit on a legislative level (Walker, 2005). She boldly highlights the connection, or perhaps consequence, which has followed the liberalisation of sexuality, which can be seen in the profound increase in gender-based violence such as rape, domestic violence, and homophobic violence. A number of researchers believe such violent actions stem from an attempt by men to reassert their masculinity and confirm their manhood (Campbell, 1992; Connell, 1995; Kaufman, 2000). This highlights, once again, the potential connection between the defence of patriarchy and the creation of risks and harmful consequences.
Morrell (2001) has organised South African men’s responses to the changes in gender relations into three categories, namely, reactive or defensive responses, accommodating responses, and progressive responses. The reactive response category which sees men attempting to reassert their power and authority to sustain the legitimacy of patriarchy can be construed, in Connell’s view (1997, 2005), as a form of masculine fundamentalism. These responses are typical of traditional masculinities which contain features of violence and aggression that is aimed at challenging the feminist movement and undoing the progress in gender transformation in South Africa. In comparison, accommodating responses are associated with masculinities that have turned away from violence and, instead, emphasise the importance of responsibility, wisdom, level-headedness, and restraint as features central to being a man. Although accommodating masculinities display tolerance towards changes in gender equality and the acceptance of homosexuality, misogyny and homophobia still remain common features embedded within notions of manhood. Lastly, Morrell (2001) has identified a progressive form of masculinity that most often connected with notion of the “new man” discourse. Progressive masculinities are strongly opposed to patriarchy, gender inequality and discrimination against homosexuals, and attempt to create new images and versions of manhood that challenge traditional and violent masculinities.

2.1.4. The contribution of Connell’s theory to this research study
The discussion of Connell’s theory of masculinity has highlighted a number of important reasons for the use of his theory within this study. Firstly, the application of Connell’s theory will provide this research with a wider context in which to locate and understand traditional masculinity and its relationship to societal risk perceptions and cultural worldviews. The incorporation of such a global perspective of masculinity will enable a deeper understanding of the social power held by men. This theory also provides a more comprehensive conceptualisation of men’s social power which connects men’s propensity for violence and aggression with the power which men derive from their superior position and resources in the world gender order.

In relation to societal risk perceptions, Connell’s theory critically examines the activities, individuals, and institutions which are central to the making of gendered power and the consequences this may have for technology, the environment, inequality, violence, and pollution.
The social constructionist perspective of this theory is also complementary with the conceptualisation of societal risk which is grounded in a social constructionist paradigm. This theory provides a framework for multiple masculinities to be examined within the context of cultural worldviews and societal risk perceptions (Connell, 2000a). In particular, this will allow for integration of Morrell’s research of South African masculinities which, he claims (2001), have emerged in response to democracy and gender equality.

2.2. Cultural theory of risk

In recent years, through the work and research of Douglas (1985, 1992) and Douglas and Wildavsky (1982), cultural theory has been extended and applied to the phenomenon of risk. However, in the early years research into the phenomenon of risk was primarily conducted from a realist perspective using techno-scientific approaches. From a realist perspective, risk is conceptualised as an objective danger, threat, or hazard which can be measured independently of social and cultural processes (Lupton, 1999). Using techno-scientific approaches, researchers believed that the application of scientific measurement and calculation to risk research would enable risks to be reliably identified and managed. These approaches emphasised the distinction between the objective risk calculations of experts and the biased subjective judgements of lay people, which are noted to be the product of inferior and unreliable knowledge sources and intuition. Psychometric approaches fall within this category of techno-scientific approaches and examine the influence of cognitive biases and mental models on the risk assessments of individuals. (Lupton, 1999; Taylor-Gooby, 2004).

Techno-scientific approaches have received a number of criticisms from researchers. Douglas (1992) argues that cognitive science approaches incorrectly represent individuals as care-free and calculating in their judgements of risk. Moreover, that symbols, meanings, and behaviours which are associated with risk perceptions and an individual’s social world are disregarded. Consequently, “people tend to be positioned outside the cultural and political frameworks, relationships, and institutions within which they construct their beliefs” (Lupton, 1999).

During the 1980s sociocultural perspectives on risk were increasingly acknowledged as valuable approaches to risk research as they accounted for the influence of the social and cultural context
in risk perceptions, which techno-scientific approaches had been criticised for neglecting
(Lupton, 1999). According to Lupton (1999), sociocultural perspectives can be divided into three
main groups, namely the cultural/symbolic perspective developed by Douglas, the “risk society”
theorists who advance the work of Beck and Giddens, and “governmentality” theorists which
draw from the work of Foucault. The symbolic/cultural perspective of risk assumed by Douglas
is known as cultural theory of risk and it will be used as the theoretical framework for
understanding and analysing societal risk perceptions in this thesis.

Cultural theory can be classified as a functional structuralist approach to risk, because it focuses
on the ways in which social and cultural structures and institutions maintain the social order and
manage deviant behaviour and norm-breaking. The functional approach also places emphasis on
the important role which these underlying cultural structures and hierarchies play in influencing
the risk perceptions and practices of individuals (Lupton, 1999). According to Lupton (1999),
cultural theory can be further classified as a social constructionist approach to risk, because it
conceptualises risk as a socially created and negotiated construct that is formed through social
interactions and shared meaning. In addition, cultural theory considers risk to be something that
is only knowable and understandable if it is studied within the context of individuals’ and
communities’ moral values and pre-existing knowledge and belief systems (Lupton, 1999).

2.2.1. Basic tenets of cultural theory of risk

In the last twenty years cultural theory of risk has emerged as an important theory for explaining
how and why social groups come to form judgements in regard to pollution, danger, and threat.
According to cultural theory of risk these shared beliefs and judgements, whether they relate to
attributions of responsibility or blame, classifications of risks and dangers, or anything else,
derive from a group’s cultural membership and represent their commitment to a particular form
of institutional life (Douglas & Wildavsky, 1982; Thompson, Ellis, & Wildavsky, 1990). Thus,
owing to the role which the social context plays in shaping individuals’ values, attitudes, and
worldviews, a central aim of cultural theory is to show how adherence to a particular culture will
influence the way individuals perceive, interact, and act upon the social world around them
(Oltedal, Moen, Klempe, & Rundumo, 2004). Indeed, cultural theory asserts that across different
ethnic groups, nationalities, and race groups, basic convictions and values about life can be
classified into four cultural worldviews (Thompson et al., 1990). Based upon the belief that individuals’ values and beliefs are shaped by two aspects of social life, namely the nature of the social groups to which they belong and the degree to which individuals are constrained by the rules and prescriptions of larger groups, cultural theory of risk has developed a typology to distinguish between these cultural worldviews (Tansey & O’Riordan, 1999). This typology is commonly referred to in literature as the “grid-group typology”.

![Grid-group typology](image)

Figure 1: The grid-group typology illustrating the four cultures proposed by Douglas (2003)

By using the two dimensions mentioned above cultural theory constructs four types of cultures or social organisation. The vertical and horizontal axes in the figure above represent different types of social control (Douglas, 2005). Social control is a form of power and, hence, the cultures described by the grid-group typology will differ in regard to the types of individuals entitled to exercise this power and who they exercise it over (Thompson et al., 1990). The vertical axis is known as the grid dimension and represents the degree to which the social context is regulated by larger conventions and prescriptions on individual behaviour. The horizontal axis represents the strength of group allegiance and the constraints of behaviour which derive from group membership (Douglas, 2003). Each culture represented in the typology above is comprised of a particular cultural bias and a compatible pattern of social relations, which together can be
referred to as a way of life. Relations between the cultural bias and social relations are mutually reinforcing, interacting, and reciprocal. Cultural biases, or cultural worldviews, refer to the shared values and beliefs of the culture, which are founded in institutional forms, whereas social relations refer to patterns of interpersonal relationships (Thompson et al., 1990).

Douglas (2003, 2005) has specified important assumptions which govern this model. Firstly, all forms of social organisation and every level of society are considered to comprise all four cultures. These cultures are set in conflicting and oppositionary relationships with one another, with each culture challenging the values and beliefs of the others. Thirdly, each culture is viewed as a collective project based upon the efforts of its members to establish an acceptable working order. Lastly, the dominant ideology promoted by each culture will legitimise a form of social organisation, its stability depending on the support of its members. In regard to this point, cultural theory offers interesting links to Connell’s theory of hegemonic masculinity as it draws attention to the ascendancy of particular cultures over others in a society. According to Douglas (2005), there exists a ranking of cultures in a society, which allows for one culture to attain the hegemonic position. In the case that a particular social system or culture has remained in the hegemonic position over a number of years, this shows that its proponents have succeeded in gaining public consensus and support for the values, ideals, and norms of the particular culture (Douglas & Wildavsky, 1982).

2.2.2. Cultural theory applied to the politics of risk

Cultural theory recognises the role which institutions play in the activity of sense-making in society. This enables it to account for why politicised debates over meaning are central to risk research. In addition, it provides a theoretical framework for the study of risks which transcends the culture in which risks are debated (Douglas, 2003). It focuses on how groups of individuals interpret danger and how they come to trust or distrust institutions responsible for generating or regulating risk. A central premise is that judgments concerning risks are a window into a larger social debate regarding “rights to know, justice for those likely to be affected by damage or loss of peace of mind, and about blame, responsibility, and liability” (Tansey & O’Riordan, 1999, p. 71). These social debates about risk are carried out amongst experts at the organisational level in such arenas as law, economics, psychology, science, and medicine. These debates are central to
the construction and politicisation of risks and are interwoven with issues of power, justice, and legitimacy (Lupton, 1999; Tansey & O’Riordan, 1999).

According to Douglas (1992), it is no coincidence that the concept of risk has acquired new prominence in the global political arena at a time when the world is moving towards a global village and public concerns about health, environmental, and safety issues are on the increase. In this emerging political climate, which upholds concerns of fairness and protection of the individual from harm, new social relations and loyalties, and a heightened sense of vulnerability at being part of a global community, requires a new level of inter-community discourse and vocabulary. The concept of risk offers a higher level of protection and a new weapon of defence and accountability to secure the need for justice and welfare (Douglas, 1992). In Douglas’ view (1992), the idea of risk is a perfect fit for the new global society.

“[It universalising terminology, its abstractness, its power of condensation, its scientificty, its connection with objective analysis, make it perfect. Above all, its forensic uses fit the tool to the task of building a culture that supports a modern industrial society]” (p.15).

Douglas’ interest in this new concept of risk has lead cultural theory of risk to expand upon two of its dimensions. Firstly, Douglas has highlighted the political utility of risk as a concept. In political speech the word risk is used as a weapon against the abuse of power. For an individual to be ‘at risk’, according to cultural theory of risk, means they are being sinned against and made vulnerable to harm from others (Douglas, 1992). It is invoked to highlight their role as a victim and to attribute blame for the danger threatening them. The charge of causing risk bolsters enormous political pressure designed to hold the powerful accountable, to gain restitution for victims, and to shake lazy bureaucrats into action (Douglas, 1990). Furthermore, it serves to protect individuals from the encroachments of others, particularly large organisations and, in so doing, reinforces the system of thought which upholds individualistic societies (Douglas, 1992). It has come to take on a political function in that it sheds light on cultural systems of accountability, blame, and responsibility (Douglas, 1992; Tansey, 2004). Within the current global culture, the blaming system that has emerged “is almost ready to treat every death as
chargeable to someone’s account, every accident as caused by someone’s criminal negligence, every sickness a threatened prosecution” (Douglas, 1992, p.15).

The second dimension of risk which cultural theory of risk investigates is the processes and function for which risks are selected. This dimension is underpinned by questions about why certain risks in society are ignored or downplayed, whilst others are responded to with considerable anxiety and fear (Lupton, 1999). According to Douglas (1992), certain threats are singled out by societies as risks based on their shared values and concerns. The cultural lenses used to make these judgements are of a moral and political nature, functioning to identify the risks connected to legitimating moral principles in a society (Douglas, 1985). Douglas’ forensic approach to risk highlights the functional nature of these classifications, which serve to strengthen particular ways of life whilst undermining others. This forensic perspective directs attention to the social context and the social institutions which promulgate these classifications. These classifications of risks are defended because they legitimate the distribution of social power that exists within an institution or culture. Risks will, therefore, become politicised because they represent a threat to a particular way of life (Tansey, 2004). The ultimate purpose of these endeavours is to create political pressure to defend a particular culture, whilst another is attacked or rejected (Wildavsky & Dake, 1990).

It is evident from the above that social debates about risk concerns tap into issues surrounding the legitimacy of power relations within a society (Tansey & O’Riordan, 1999). Risk evaluations and judgements are not objective, but are inherently a moral, aesthetic, and political matter (Douglas, 1990). The conflict over meaning in regard to risks forms part of a political struggle for influence between different cultural institutions, which is aimed at securing the power relations inherent to the governance of industrial societies (Tansey, 2004). Cultural theory of risk, thus, provides a framework for the investigation of risk which tackles some very important questions, such as “Who is being held to blame? What is being defended? What is being rejected? And, what compensation is due to the victims?” (Douglas, 1992; Tansey, 2004).

2.2.3. Cultures and their risk portfolios
Cultural theory of risk asserts that individuals choose what to fear and how much to fear it in relation to their way of life or cultural worldview (Douglas & Wildavsky, 1982; Wildavsky & Dake, 1990). These cultural worldviews or ideologies are deeply held values and beliefs corresponding to the four different cultures mentioned earlier. They frame the interpretation of risk information and serve to construct a unique risk portfolio for individuals from each culture (Rippl, 2002). Thus, according to cultural theory of risk, individuals can be said to have a self-preserving pattern of risk perceptions in that they will perceive the most risk in those things which endanger their way of life (Oltedal et al., 2004).

Within a hierarchical culture, individuals are subject to the demands of socially imposed roles and the rules of group membership (Thompson et al., 1990). These cultures value authority, tradition, rules, and social order and attempt to diminish competition between members who are firmly segregated from one another on the basis of institutional classifications such as age, race, class, or other characteristics (Douglas, 2003). Hierarchists seek to preserve harmony within society and the hierarchical structures of superiority and subordination which maintain these (Peters & Slovic, 1996). Thus, it is the risks which threaten the stability of the social order which they regard as the most threatening. Such risks relate to foreign weapons and invasion, social deviance, and crime (Douglas & Wildavsky, 1982; Rippl, 2002). However, hierarchists are willing to accept risks if they are managed and controlled by experts and if they believe they will contribute positively to the strengthening of society (Wildavsky & Dake, 1990).

Individuals within individualist cultures, in contrast, are not bound by societal prescriptions or group regulations (Thompson et al., 1990). In their view, all boundaries and are subject to negotiation and they value self-regulation and the freedom to bid and bargain (Dake, 1991). Individualist cultures, like hierarchies, are stratified, but in this case according to power and money (Douglas, 2003). However, unlike hierarchies, wealth and power are assigned to people on the basis of personal responsibility rather than position or status within a society. This leads to individualists feeling little sense of responsibility for their fellow citizens, especially those whose misfortunes are considered to be of personal consequence (Langford, Georgiou, Bateman, Day, & Turner, 2000). It is a fiercely competitive culture that is dominated by the entrepreneurs and pioneers who are at the forefront of science, technology, and development (Douglas, 2005).
Risks are generally viewed as opportunities, although the risks most feared by individualists are associated with threats to the market economy and individuals’ personal freedom (Oltedal et al., 2004; Rippl, 2002).

Individualism and hierarchy are the two cultures normally dominant within a society. Together, they are known as the “establishment” (Thompson, et al., 1990). They are allies and rivals simultaneously (Douglas, 2003). Both are technologically optimistic and tend to downplay long-term risks, whilst giving preference to risks which threaten the status quo (Douglas & Wildavsky, 1982; Thompson, et al., 1990; Wildavsky & Dake, 1990). In contrast, egalitarian cultures elevate the risks associated with technological advancement and the environment, which hierarchies and individualists dismiss (Wildavsky & Dake, 1990). This group of individuals has very strong group boundaries and, thus, a strong sense of social connectedness (Langford et al., 2000). They succeed in painting hierarchies and individualist cultures as thoroughly evil (Douglas, 2003). However, its weak internal role differentiation means that it is prone to internal factions and conflict (Thompson et al., 1990). Inequalities and rankings of any kind are abhorred by egalitarians who, instead, strive for justice and equality (Douglas, 2005). They are extremely suspicious of expert knowledge and decision-making, believing that it may result in the abuse of power and exploitation of the marginalised (Oltedal et al., 2004). Consequently, they are distrustful of risks imposed on society by elite groups of experts or government (Rippl, 2002). In comparison to hierarchies and individualists, egalitarians are concerned with long term risks, no matter how low the probability, and generally perceive future dangers to be catastrophic and imminent (Douglas & Wildavsky, 1982).

Lastly, fatalists, like egalitarians, are defined by their dissent from the majority (Douglas, 2003). They find themselves subject to societal rules and prescriptions, yet are not integrated into group membership possibly because they are uneducated, have the wrong skin colour, or do no have enough money (Thompson, et al., 1990). At the extreme, these individuals may be the refugees or delinquents. Fatalists perceive injustices and inequality in society, but, because they view themselves as ‘outsiders’, believe they lack the resources or power to do anything about it (Douglas, 2005; Langford et al., 2000). They are relatively indifferent to risks and would rather
be unaware of dangers, which they believe they have no control over (Oltedal et al., 2004; Rippl, 2002).

2.2.5. Minority risks
Each culture will discriminate against particular individuals (Douglas, 1992). According to Douglas (2005), should the hegemonic culture succeed in oppressing and marginalising other cultures, it will severely endanger the harmony and wellbeing of society. For instance, if the individualist culture is allowed total domination and rule, the weak, elderly, and orphans will suffer most under the intense competition which prevails. In addition, the elite will have no regard for the poor in a rich and material-driven society. Individualist cultures hold people accountable for their own misfortunes and bad luck, and manage not to know about the risks and hardships faced by disadvantaged and minority groups (Douglas & Wildavsky, 1982). Similarly, should hierarchy reign without any challenges from individualistic and egalitarian cultures, those in the lowest positions will endure the most difficulty and hardship (Douglas, 2005). Although being a political system enables hierarchies to be more aware of the risks faced by minority groups, it will still place the maintenance of the social system above individual survival (Douglas & Wildavsky, 1982).

2.2.6. Criticisms of cultural theory of risk
Cultural theory of risk has been targeted with a number of criticisms from theorists and researchers. The majority argue that the grid-group typology and the use of a functional structural approach serve to make it static and, thereby, unable to account for the process of change in risk perceptions and worldviews (Lupton, 1999; Tansey & O’Riordan, 1999). Much of the critique has also resulted from the limited number of applications of cultural theory of risk in research (Tansey & O’Riordan, 1999), and the low level of explanatory power which it has demonstrated in these empirical studies (Oltedal et al., 2004; Ravetz, 2001). Furthermore, conflict exists between the level at which cultural theory of risk conceptualises the different cultures and the level of explanation which is used when research findings are discussed. Ravetz (2001) has noted that the social solidarities are theorised on the level of groups and institutions and, yet, the findings of research will presented and discussed at the individual level. The grid-group typology has also received criticism from researchers who argue that it represents a
relative rather than absolute analytical tool and, therefore, is primarily of heuristic value to researchers (Tansey and O’Riordan, 1999).

2.2.7. Value of using cultural theory of risk

The decision to use cultural theory of risk in this research was motivated by a number of reasons. Cultural theory of risk argues that individuals choose what they fear in relation to their way of life, or the culture they belong to (Rippl, 2002). The value of cultural theory of risk is, thus, located within its ability to provide an explanation as to why individuals will disagree over what risks are important, why they are important, and what should be done about them (Peters & Slovic, 1996). In this light, cultural theory of risk can offer potential explanations as to why risk management strategies have often failed to alleviate public anxieties and controversies over risk continue to persist within societies. It also suggests alternative strategies for managing risks which may prove more productive and acceptable for a larger portion of societies (Marris, Langford, & O’Riordan, 2004). In addition, cultural theory of risk approaches the issue of societal risk from the perspective of the lay individual rather than the expert, which is congruent with the focus of this dissertation. It conceptualises risk as having political and moral implications in that the politicisation of risk can serve to justify and maintain certain ways of life and patterns of social organisation (Douglas, 1992). In this regard, cultural theory of risk may provide an explanation for the particular patterns of societal risks which are considered severe, and those which are dismissed by males conforming to traditional masculine ideology. Moreover, this theory draws attention to the fate of particular minority groups which face discrimination and hardship when certain cultures dominate within a society.

This chapter has served to introduce the two theories which will provide the theoretical framework upon which this study is based. To the researcher’s knowledge this is one of the first studies that has applied these two theories in conjunction with one another to the investigation of the relationship between traditional masculinity, cultural worldviews and societal risk perceptions. The following chapter will provide a discussion of the empirical literature concerning these two theories.
CHAPTER 3: EMPIRICAL LITERATURE REVIEW

3.1. Traditional masculinity and its connection to social inequality, violence, and risks

The strategic manoeuvres undertaken by men in order to maintain the rule of hegemonic masculinity and the patriarchal dividend are referred to as the politics of masculinity. According to Connell (2000b), certain masculinities that achieve hegemony within the gender order such as the traditional masculinity of the world gender order, transnational business masculinity, are not necessarily violent, but their hegemonic position in the gender order stabilises a gender order that creates conditions for violence and hardship, such as inequality and dispossession. The patriarchal dividend accruing to men is, thus, a main determinant of social inequality amongst men and women and a primary reason for the use of violence by men as a means to secure their superior position. For instance, research amongst African men in South Africa has shown that interpersonal violence between men and against women has been used as a strategy amongst black working class men to reassert their masculinity at a time when their traditional masculine power and dominance was eroded by the impact of Apartheid and capitalism. Campbell (1992) notes that amongst this group of men traditional avenues for the assertion of masculine power such as through material wealth and decision-making power have been undermined in recent years, which has contributed to a crisis in masculinity. Consequently, violence has been chosen by these working class men as a compensatory mechanism through which their manhood and dominant position can be reaffirmed.

In whichever way the hegemonic masculinity is defended, Connell argues (2002) there are harmful consequences that arise from a gender order with such inequalities in power and resources. For instance, it is men who, collectively, have the power and capabilities to be implicated in economic exploitation, methods of domination and mass destruction, and ecological, biological, nuclear, and chemical innovation and disasters (Hearn, 1992). In the realm of business, corporate executives have the power to make decisions which can result in pollution to the public, industrial injury to workers, and environmental destruction. Case studies have highlighted the relationship between such business decisions and a masculinised management style which promotes profit above people, risk-taking, and toughness (Connell, 2000b). Most importantly, however, the potential consequences associated with men’s social power and the
defence of the patriarchal dividend can produce a multitude of risks connected to the environment, technology, industry, public well-being and safety, and inequality. This marks the intersection between men’s social power derived from their privileged position in an inequitable gender order, and the expression of that power, which is evident in violence and circumstances that create risks and inequality for women and some groups of men in society.

Demonstrations of violence by men and the subsequent risks that are created can also be examined on an interpersonal level. Researchers have noted that the performance of traditional masculinity is alarmingly dangerous because of its strong connections with violence and aggression. Numerous research studies have found strong correlations between masculinity and hegemonic norms of aggression and violence (Archer, Holloway, & McLoughlin, 1995; Hammock & Richardson, 1991; Truman, Tokar, & Fischer, 1996). For instance, Hammock and Richardson (1991) found that masculinity, both on its own and in a three-factor combination, was one of the most significant predictors of both provoked and unprovoked aggression in their sample of university students. Research conducted by Archer et al., (1995) amongst university men revealed that conformity to the masculine norm of toughness significantly predicted fight involvement, recency of last fight, and levels of physical aggression. In addition, in a research study investigating the influence of traditional masculine beliefs on college men’s sexual aggressive towards women in bar settings, Thompson and Cracco (2008) found that sexual aggressiveness towards women amongst this group of men was strongly related to their acceptance of culturally dominant features of masculinity such as forcefulness, risk-taking, toughness, dominance, and assertiveness.

Within the AIDS pandemic, conformity to traditional masculine norms amongst men has been shown to place their female partners at an increased risk of contracting HIV. According to UNAIDS (2000), unequal gender relations place women in a vulnerable situation due to men’s greater social and economic power over them. In the South African context, research has been conducted to explore gender dynamics within the sexual relationships of young rural youth (O’Sullivan, Harrison, Morrell, Monroe-Wise, & Kubeka, 2006). The researchers found that girl’s vulnerability to HIV infection was increased in situations where the enactment of traditional roles caused men to use coercive behaviour to get sex, and caused women to feel
compelled to provide or unable to refuse sex. Although some men in the sample allowed women to assume a more empowered stance to sexual interactions, men who endorsed firm patriarchal orientations to sexual interactions were aware of their relative power over women to get what they desired. In another South Africa study examining the relationship between gender-based violence, relationship power, and risk of HIV infection, it was found that women in physically violent relationships or women whose partners displayed high relationship control and dominance had an increased chance of being infected with HIV (Dunkle, Jewkes, Brown, Gray, McIntyre, & Harlow, 2004). The findings of the above research studies demonstrate that inequalities in power between men and women and the performance of traditional masculine traits such as violence, aggression, and dominance by men can succeed in placing other men and women in a position of increased risk and victimisation.

3.1.1. Masculinities in South African history

It is evident from the above that “masculinities are the forms in which many dynamics of violence take shape” (Connell, 2000b, p.29). It appears that the history of South African masculinities are no exception to this statement. In his exploration of masculinities in South Africa, Morrell states that “masculinities and violence have been yoked together in South African history” (2001, p. 12). Beginning with Colonialism, Campbell (1992) argues that the foundation of white rule in South Africa has been marked by militarisation, brutality, and violence. The masculinity of the colonisers was associated with notions of toughness and superiority that was demonstrated in their brute force and aggressive control of colonised settlements (Morrell, 1998, 2001). These masculinities instituted masculinities of violence into the hegemonic position that were heavily underpinned by notions of egocentric individualism (Connell, 1997, 2000b).

The coming of the Union produced a blending of the various forms of white masculinities such as the colonial, young white, and Afrikaner masculinities. Their joined obsession with sport, in particular rugby, acted as a conduit for the features of a masculinity associated with war and struggle to be incorporated into the various forms of white masculinity. Such features related to willingness to take risks, capacity to ignore danger and to put up with discomfort, little regard for the rights of others, and dogmatism (Morrell, 2001). In addition, an obsession with rugby
amongst white masculinities resulted in certain features of rugby becoming interwoven with white masculinities such as physical confrontation, perseverance and skill, an emphasis on winning, and physical and mental toughness (Morrell, 2001).

The relations between white and black masculinities were fundamentally hierarchical, based upon the white man as the ‘boss’ and the black man as the ‘boy’ (Morrell, 1998). According to Breckenridge (1998), within the gold mines between 1900 and 1950 high levels of violence became a defining feature of the relationship between White and African men. Physical violence was used by White men to assert dominance over the African men, who resisted using violence and physical strength to take revenge against their subordination and affirm their manhood (Breckenridge, 1998; Morrell, 1998, 2001). Consequently, physical violence emerged as a central feature of White and African masculinities that was highly prized by both groups.

The effects of urbanisation in the 1950s led to the creation of a working class of black men that were forced to accept jobs that were often menial, demeaning, brutal, and emasculating. Gangs began to develop within this group of men and gradually a new form of masculinity, black masculinity, which was disconnected from the traditional masculine homestead and opposed to white masculinity, started to emerge. The disruption of rural family life and a slump in the economy in the 1970s saw this masculinity gravitate towards crime and violence that was most often directed towards women, the state, white people, and authority figures (Morrell, 1998). According to Morrell (1998), this was a masculinity in which men lost their jobs, their dignity, and expressed their feelings of emasculation in violent ways.

It is evident from the above that South Africa’s history has succeeded in producing masculinities that are prone to violence and aggression. For many women and groups of men, the emergence of such masculinities has placed them in positions of vulnerability and risk. Amongst white men, power and privilege has left them defensive and ready to confront any perceived challenges to that privilege. For black men, the harshness of the labour they had to endure and the political and social emasculation and inferiority that were imposed on them has given their masculinity a dangerous side. Amongst this group of men violence has been associated with the attainment of honour and respect (Morrell, 2001). Even at the present time with the transition to democracy
and the improvement in women’s equality, there still remains a very high level of violence in South African society in the form of domestic violence, rape, homophobic violence, and child sexual abuse (Walker, 2005). A study published by the Canadian Medical Association Journal found that, amongst a sample of 834 South African males, 27% had been physically violent towards their intimate partners, girlfriends, or wives (The Mercury, 16/09/08). Furthermore, a quarter of this sample reported having witnessed parental violence during their childhood and 20% admitted to being physically abused as a child. In Connell’s view (1995), such cases of violence against women can be construed as an attempt by men to maintain their dominance and patriarchal dividend. Similarly, he asserts that violence between men can be seen as an attempt to assert one’s dominance and masculinity above another individual’s and to draw boundary lines of exclusion between masculinities.

3.1.2. Masculinity and risk-taking behaviour

The historical construction and emergence of South African masculinities shows that contestation between rival masculinities and the defence of hegemonic masculinity is inextricably connected to violence, the creation of circumstances of risk and vulnerability, and inequalities in power and resources. Risk-taking behaviour amongst men is closely connected to demonstrations of violence and social power. According to Williams and Best (1990, in Courtenay, 1998) there exists societal beliefs that men are tougher and stronger than women, which reinforce men’s personal beliefs of their invulnerability. Consequently, many men participate in unhealthy or risky behaviours as a means to demonstrate their manhood and invincibility. Risk-taking has, thus, has been identified by many researchers as a core norm upon which traditional masculinity is constructed.

Across a variety of domains, researchers have found that men have a greater propensity for risk-taking compared to females. For instance, Courtenay (1998) conducted a review of research on American college men’s involvement in risky health behaviours and found that men consistently, and across a wide range of behaviours, engaged in behaviour that placed their health at risk. Risk behaviours related to smoking, alcohol and drug use, inadequate use of sunscreen, poor exercise and eating habits, inconsistent seat belt use, and driving over the speed limit.
Amongst young males, research has been undertaken to discover the personal meanings and subjective experiences of risk involvement. Bunton, Crawshaw, and Green (2004) found that compared to young women, young men in their sample reported experiencing less fear and more excitement in regard to risk involvement. The males in their sample appeared to gain more pleasure from their involvement in a variety of different risks related to health and lifestyle, crime and safety, and the environment. In their view, the male participants took part in risky behaviour because of the pleasure and the positive identity affirmation which they derived from the experience. They concluded that actively engaging in dangerous and risky practices provided these males with a “means of defining and developing masculine identities within the peer group” (2004, p. 174).

Jones (1993, in Bunton et al., 2004) believes that such demonstrations of masculine behaviour channelled through risky and dangerous practices are the result of a decline in traditional manual labour opportunities for young males. In his view, the traditional labour market and business world does not provide males with the opportunity for such exaggerated masculine expressions. Consequently, young males turn to risk taking behaviours that will promote the toughness and resilience of the male body and function to confirm their masculine identities. In the South African context, research amongst adolescent boys has revealed that risk taking behaviours are a central aspect of masculinity which transcends race and cultural barriers (IRIN, 2003). In support of Jones’ argument (1993, in Bunton et al., 2004), the nature of risk-taking behaviour amongst these South African males appears to be connected to bodily demonstrations of toughness and invincibility such as alcohol abuse, fast driving, heterosexual success, breaking rules, sexual prowess, criminal activity, and violence (IRIN, 2003).

In regard to driving, Morrell (1999) argues that men should largely be held responsible for South Africa’s high road fatality record since 90% of the drivers involved in fatal road accidents are men. He urges that more research be done to investigate, in particular, why men drink and drive aggressively, ignore traffic instructions, and take risks on the road. Lupton (2004) conducted research into the driving experiences of Australian youth and found that amongst the young men, in particular, aggressive and risky driving was most predominant. The participants’ accounts of their driving experiences indicated that many of them viewed the road as a masculine space or
arena that allows for displays of force, aggression, risk-taking, and brute strength. For some men, the risky and aggressive driving had become intertwined in their construction of masculinity and the driving experience as a whole provided them with feelings of power, strength, and pride.

Alcohol use provides another avenue for the enactment of male privilege and power, although some researchers also believe that it is used by men to negotiate the stress and hazards of living up to masculine norms (Capraro, 2000). Similar to the domain of the road, drinking can be viewed as a masculine space (Johnson, 1997, in Capraro, 2000) that is inherently associated with risk-taking in men’s lives and, therefore, the masculine identity. According to Capraro (2000), drinking must be understood in the context of other behaviours and ways of performing and constituting masculinity. For instance, Pleck and O’Donnell (2001) conducted research into beliefs about traditional masculinity and their relationship to certain health risk behaviours amongst urban American and Latino adolescent boys. Their findings revealed that traditional masculine attitudes amongst these boys were significantly correlated with a variety of violence-based and substance use risk behaviours such as fight involvement, weapon carrying, threatening to injure or fight with another individual, and the use of cigarettes, alcohol, and marijuana.

The above research studies indicate that men have a higher propensity for risk-taking compared to females. However this does not mean that all men engage in risk-taking behaviour to the same degree. Conformity to traditional forms of masculinity appears to increase male’s likelihood of involvement in risk taking behaviours. This relationship has been confirmed by researchers such as Blackbeard and Lindegger (2007) who conducted research to examine the male identity ‘position’ of South African adolescent boys in relation to their construction of masculinities. The researchers found that male peer groups were a central arena for the construction of masculinities against standards of acceptability. These norms of acceptability contained core features of masculinity which boys used as standards against which to construct their masculinity and measure themselves. Such norms of acceptability were found to place an enormous amount of pressure on the boys as they represented, simultaneously, standards for inclusion and exclusion of peer groups. These norms of acceptability required the boys to perform and prove their masculinity through acts of toughness, non-relational heterosexuality, contestation, and risk-taking.
Other research studies have confirmed this relationship between adherence to masculine norms and risk behaviour. In the financial domain, research investigating the effects of masculinity and femininity on individuals’ propensity to take risks has shown that conformity to masculine norms increases males’ tendencies towards financial risk-taking (Meier-Pesti & Goetze, 2006). Miller (2008) conducted a research study into the relationship between sport-related “jock” identity, conformity to traditional masculine norms, risk-taking, and energy drink consumption. Her results show that traditional masculinity is significantly correlated with risk-taking behaviour. In particular, the endorsement of traditional masculine norms was associated with practicing unprotected sex, and involvement in extreme sports, fighting, and dangerous activities such as breaking the law. Further research investigating masculinity and men’s health behaviours has provided evidence that men embracing traditional masculine norms practice more risky health behaviours (Mahalik, Burns, & Sydek, 2007). Amongst the men in the sample, those conforming to traditional masculine norms were found to consistently engage in risk behaviours which placed their health in jeopardy. These risk behaviours related to poor eating and exercise habits, smoking, inconsistent seat belt use, inadequate use of social support, avoidance of annual medical check ups, involvement in physical fights, and excessive alcohol use.

3.2. Gender differences in risk perceptions

In addition to their greater tendency towards engaging in risk behaviours, research has shown that men hold substantially lower risk perceptions for a variety of phenomena compared to women. In a research study that investigated individuals’ perceptions of their own road traffic and mortality risks, Andersson and Lundborg (2007) found evidence that male drivers underestimated their risks of having an accident whilst driving. Across a variety of age groups, men’s perception of their risk was substantially lower than the objective risk for their gender and age group. In addition, it was found that males’ perception of their risk of having an accident was lower than women’s risk perception.

In a review of research studies investigating the health behaviour of American college men, researchers have found that males perceive themselves at less risk for illness and injury (Savage, 1993, in Courtenay, 1998), underestimate the risks associated with physically dangerous activities (Zuckerman, 1983, in Courtenay, 1998), and in comparison with college women
perceive significantly less risk associated with the use of cigarettes, alcohol, and drugs (Spigner, Hawkins, & Loren, 1993, in Courtenay, 1998). These gender differences in risk perceptions allude to feelings of personal invulnerability that men may hold towards engaging in risky activities. Furthermore, research into adolescent perceptions of risk-taking behaviour has revealed that the nature of the risk has a large influence on the risk perceptions of adolescent girls and boys (Gillen, Guy, and Banim, 2004). In this study, boys were found to perceive less risk in activities that were physically exciting and which enhanced their status and position in the peer group, whilst girls held lower risk perceptions towards activities such as drinking and smoking that would increase their social connection and affiliation with friends. It is interesting to note that the apparent risks for which boys are found to hold lower risk perceptions towards have been indicated in the above paragraphs by Bunton et al., (2004), Miller (2008), and Blackbeard and Lindegger (2007) to be risks and activities that are associated with the performance and affirmation of the traditional masculine identity.

Moving away from personal risk behaviours, gender differences in risk perceptions have been found to extend to larger social issues such as nuclear power, chemical manufacturing and usage, hazardous waste disposal, and global warming. Bord and O’Connor (1997) conducted a research study to examine gender differences in risk perceptions towards health and ecological risks caused by hazardous chemical waste sites and global warming. The researchers hypothesised that this gender gap could be explained by differences in men and women’s perceived level of vulnerability towards the environmental risk in question. Findings showed as expected that women experienced elevated levels of concern that surpass those of men for both the health and ecological risks associated with global warming and hazardous waste sites. In addition, their results revealed that personal vulnerability was a key factor that explained the difference in risk perceptions between men and women.

In addition to perceptions of personal vulnerability, possible explanations for gender differences in risk perceptions towards technology and industry have centred upon an individual’s level of scientific and technical knowledge. However, a research study by Barke, Jenkins-Smith, and Slovic (1997) into the risk perceptions of men and women scientists provided evidence that even among scientists with similar levels of education and training men still tend to perceive
substantially less risk from nuclear technology compared to women. In comparison to women scientists, male scientists were more confident in the ability of technology to reduce risks and held less concern for the potential harmful impact nuclear technology could have on the environment. Interestingly, male scientists were also more accepting and tolerant of risks being imposed upon the public without their consent.

Kraus, Malmfors, and Slovic (2000) have also found evidence that challenges the explanation that gender differences in risk perceptions are knowledge based. Their research examined the gender differences in risk perceptions of lay and expert individuals in regard to chemical risks such as pesticides, food additives, industrial chemicals, and household cleaning agents. In both the lay and expert samples men were found to perceive less risk associated with the manufacture and use of chemicals compared to females. Gender differences were also found in regard to the perceived benefit which chemicals offered society. Findings revealed that men held more favourable attitudes towards the benefits of chemicals and were more likely to agree that chemicals were a major contributor towards technological advancement and had improved their health more than they had harmed it.

3.3. Sociopolitical factors as potential explanations for variation in risk perceptions
The above studies highlight that efforts to develop potential explanations for gender differences in risk perceptions should steer away from viewing risk as an objective phenomenon and rather take into account the subjective and value-laden nature of risks (Slovic, 2000). Furthermore, research has shown that explanations need to centre upon the characteristics of the individual rather than the risk (Finucane et al., 2000). One of the most influential studies in this regard was a research study conducted by Flynn, Slovic, and Mertz (1994) which, for the first time, brought to light evidence of a ‘white male’ effect. This term was given by the researchers to account for the finding that white males, consistently and across a wide range of hazards, reported substantially lower risk perceptions compared to non-white individuals and women. Even controlling for income and education levels within their sample did not reduce the impact of this ‘white male’ effect on risk perceptions. A closer examination revealed that this pattern was caused by a third of the white males who judged risks to be extremely low. Amongst this subgroup of males the researchers found evidence of strong individualist, hierarchical, and anti-
egalitarian attitudes that were marked by high levels of trust in government, institutions, and professionals and a willingness to impose risks on individuals without their consent. According to researchers, the low risk perceptions amongst these white males could be explained by the fact that white males occupy positions of greater power and control than nonwhites and women and, therefore, are more involved in the creation, management, control, and benefits of major technology and activities. Furthermore, it has been suggested that nonwhites and women may perceive greater risk and danger in such technologies, because they hold less power, control, and decision-making authority over their lives and stand to benefit less from technologies compared to white males (Finucane et al., 2000; Slovic, 2000).

Further research investigating the phenomenon of the ‘white male’ effect has confirmed this pattern of lower risk perceptions amongst white males compared to non-white individuals and females. Finucane et al., (2000) found that whites compared to nonwhites and men compared to women perceive a range of health, environmental, and food hazards to pose lower risk to both themselves and the American public. In regard to socio-political factors, their results revealed that white males held more individualist, hierarchical and anti-egalitarian worldviews. They were also found to hold important beliefs and values such as individual achievement, initiative, self-regulation, trust in experts and intolerance for community-based decision-making and regulation. This sub-sample of white males appeared more trusting in technology and technological experts and less trusting in government to correctly manage technological hazards. This, perhaps, indicates that they would prefer to be in positions of control and decision-making authority over technology (Finucane et al., 2000).

Some researchers have attempted to explain the ‘white male’ effect in terms of the higher social structural positions which white males generally occupy in society. According to Marshall (2004), white males may feel less personally vulnerable to environmental and chemical risks because they occupy higher social structural positions in society and, thereby, derive greater benefits from industrial production compared to other race groups and women. Participants in Marshall’s (2004) research were drawn from a chronically polluted environment along the Mississippi river and were required to report on their level or risk perceptions for eleven different environmental hazards. Findings demonstrated that after controlling for important
factors such as income, education, having an industrial plant in your community, and efficacy, being a white male or black female had a significant effect on risk perceptions.

According to Palmer (2003), however, the ‘white male’ effect is more complex than previously thought. Her research investigated the ‘white male’ effect and its connection to the risks associated with health, technology, and finance in a multi-racial and ethnic sample of Americans. Whilst white men were found to possess the lowest mean risk perceptions for health and technological risks, US Asian men demonstrated similar, and in some instances lower, risk perceptions in this category of risks. Both groups of men endorsed individualist and anti-egalitarian worldviews, although US Asian men held more hierarchical worldviews than white men. Conversely, African-American men and women were found to hold more egalitarian worldviews and to have heightened perceptions of risks associated with health and technology, which placed over 40% of them in the ‘high risk’ classification. Overall, Palmer’s findings (2003) suggest that the ‘white male’ effect may be localised to health and technology risks and may stem more form the influence of socio-political factors on judgements of risk, rather than factors such as age, knowledge, gender or race.

3.4. Empirical evidence of cultural theory of risk
The research findings above highlight the important influence of socio-political factors in determining individuals’ judgement and acceptance of risks. A number of researchers have called for further research to explore the impact of mediating variables such as trust, worldviews, socio-economic status, and vulnerability on individuals’ judgements of risk (Marshall, 2004; Slovic, 2000). Cultural theory of risk has been used in numerous research studies of risk perception to account for the variation in risk perceptions between groups and individuals. According to cultural theorists, people will interpret information about risks “in such a way as to maintain their system of beliefs and moral codes” (Peters & Slovic, 1996, p. 1437). Consequently, individuals will attribute the most risk to activities and hazards which threaten to disrupt their preferred way of life (Douglas & Wildavsky, 1982).

Baxter and Greenlaw (2005) used cultural theory of risk to explain the difference in the risk perceptions between three communities from a hazardous waste facility near their area of
residence. The researchers explored individual’s worldviews contained in their perceptions of community life, social relationships, physical surroundings, and their view of the facility operators and managers. The researchers found that the communities’ perceptions of the hazardous site were shaped and maintained within the local context of community and social life. The perceived risk was, hence, “socially constructed in place and is connected to broadly defined ways of life and more narrowly defined worldviews” (p.75). The communities with the highest risk perceptions towards the waste facility subscribed to worldviews and ways of life that were directly threatened by the operation of the waste facility in their area. This supports the assertions of cultural theory of risk that individuals will select for attention particular risks which threaten their way of life (Douglas & Wildavsky, 1982).

Dake (1991) has also highlighted the important role which the social context plays in shaping individuals’ worldviews. His research aimed to show “that an understanding of who fears what and why requires serious attention to the political, social, and historical context in which the risks are framed and debated” (p. 62). His research into the relationships between societal risk concerns and cultural biases amongst 300 San Francisco Bay residents revealed that particular cultural biases, or worldviews, determined a specific ranking system of possible dangers. For instance, individuals endorsing egalitarian views were most concerned with the risks associated with technological and environmental risks, which is consistent with their liberal political orientation and more critical view of society (Peter & Slovic, 1996). Individualism was associated with higher levels of perceived risk within economic issues such economic inflation, an unstable investment climate, and federal overregulation. Such economic problems will be viewed by individualists as a threat to the market performance and their ability to bid and bargain, which represented a direct assault against their valued way of life. Whilst hierarchical worldviews were also concerned about such problems, it was issues related to social deviance, such as loss of respect for authority and civil disobedience, which posed the most threat to hierarchists’ way of life (Dake, 1991).

Other research studies have attempted to find evidence for this specific pattern of risk perceptions associated with each cultural worldview. In a study undertaken by Sjoberg (2003) amongst 797 Swedish individuals, an egalitarian worldview was found to be definitively risk-
averse and associated with a heightened level of risk perceptions across the majority of the hazards in questions, whilst individualism was generally negatively correlated with the hazardous risk items. Egalitarians showed most concern for the risks associated with the environment, such as depletion of the ozone layer and polluted drinking water, and activities or items perceived as ‘unnatural’ such as genetic engineering, natural background radiation, and nuclear power. In contrast, individualists had no significant concerns for any of the hazards in questions, but viewed the risks associated with nuclear power, nuclear and chemical waste, war, and environmental degradation as posing little danger to themselves. Individualism and egalitarianism were also found to be significant predictors of personal nuclear risk, with nuclear technology evoking a high level of concern amongst egalitarians and a low level of concern amongst individualists.

Peters and Slovic (1996) have also found cultural worldviews to be highly predictive of perceptions of nuclear power and support for nuclear technology. In their view, these worldviews perform the function of orienting mechanisms which enable individuals to make sense of and navigate through the complexities and dangers of their social worlds. In their research amongst a representative sample of 1512 American participants, egalitarians were found to be strongly against nuclear power, whilst hierarchists and individualists held significantly positive views about nuclear technology. Egalitarians were found to distrust government and industry to properly manage technological risks, desiring instead a higher level of public control over the management of nuclear power plants. This finding is consistent with egalitarians quest for justice and equality in regard to wealth, race, gender, and authority. In contrast, hierarchists and individualists showed far less concern for technological and environmental risks and perceived far less health risks associated with a variety of hazards to the American public. These results lend important insight into the reasons why risk communication and information often fails to change public attitudes. According to Peters and Slovic (1996), “our attitudes towards nuclear power are a part of who we are” and, thus, they are largely resistant to change “without changing some parts of our social worldviews and emotional make-up” (p.1451).

Further evidence for the distinct pattern of risk perceptions associated with each of the cultural worldviews has been found within a research study conducted by Marris et al (2004). In their
study, environmental threats evoked the highest risk concerns from egalitarians as well as risks perceived to be ‘unnatural’ such as food colourings, genetic engineering, and microwave ovens, which confirms the results of Sjoberg’s study (2003). Individualists and hierarchists demonstrated the lowest risk concerns for nuclear power and ozone depletion. However, activities associated with personal risks such as alcoholic drinks, sun bathing, car driving, food colourings, AIDS, and home accidents were deemed to be of little concern to individualists. The researchers suggest that for individualists who value self-regulation and personal choice these activities may be perceived as lower risk because they are considered to fall within the bounds of personal control and choice. For hierarchists, who consider social deviance and anything which disrupts the social system of subordination and control to be most threatening, muggings and terrorism were found to evoke the highest risk concerns.

3.4.1. Cultural theory of risk and the issues of trust, blame, and accountability

Cultural theory of risk asserts that cultural worldviews will have an influence on the level of trust individuals’ hold for different groups in society. The issue of trust as a major determinant of risk perceptions has emerged in the findings of numerous research studies (Baxter & Greenlaw, 2005; Bouyer, Bagdassarium, Chaabanne, & Mullet, 2001; Finucane et al., 2000; Mertz et al., 1994; Langford et al., 2000; Marris et al., 2004; Peters & Slovic, 1996; Poortinga & Pidgeon, 2004). In accordance with cultural theory of risk, Marris et al., (2004) found that hierarchists placed most trust in experts such as doctors and scientists, and hierarchical institutions such as religious organisations, government, companies, and families to tell them the truth about risks. Egalitarians, in contrast, are generally distrustful of large, powerful organisations that are perceived to be responsible for maintaining an inequitable social system. Confirming this, the findings showed an egalitarian worldview was negatively correlated with government and companies, and positively correlated with organisations such as trade unions who are perceived to strive for fairness and equality. Individualists, however, are most fearful of organisations functioning to restrict their freedom to bid and bargain and maximise economic gain. The findings revealed that individualists hold less trust in environmental organisations, the media, trade unions, and religious organisations, whilst larger, more powerful organisations such as companies and government are regarded as most trustworthy.
Research undertaken by Bouyer et al., (2001) has also shown that trust can help explain the variation on risk perceptions for a range of hazards. In their research amongst 16 to 78 year old men and women, individuals found to endorse hierarchical views that expressed high levels of trust for government regulations and expert management were found to perceived significantly less risk for activities associated with public transportation and energy production such as nuclear power plants, hydroelectric power plants, aviation, railroads, and supersonic aircrafts. Conversely, egalitarians, who are distrustful of powerful organisations responsible for technological and industrial development, perceived high levels of risk associated with ‘pollutants’. This category was related to industrial and agricultural development and included hazards such as industrial pollution, deforestation, chemical fertilisers, nuclear waste dumping, and batteries.

In addition to trust, researchers have shown that using cultural theory of risk can bring to light information about the relationship between cultural worldviews and issues such as blame, accountability, government regulation, public consultation, and risk management strategies within risk research. Research investigating public perceptions of polluted coastal beaches in the United Kingdom has revealed that individuals’ opinions and attitudes towards the above issues are consistent with the beliefs and value embedded in the worldviews which they subscribe to (Langford et al., 2000). For instance, in regard to public consultation about the health risks associated with the polluted beaches, individualists believed that experts and policy makers should be in charge of developing new standards of acceptability, whilst egalitarians believed that the public should participate in this process. Hierarchists and individualists both believed that strategies to manage the health risks and solve the pollution problem could be found within the current regulatory structures or market mechanisms, which already their support their preferred values and beliefs. In contrast, egalitarians felt that a more radical solution and system change needed to take place, one that took into account broader issues of social equity and environmental protection. Furthermore, individualists, who advocate for self-regulation and freedom from personal constraints, believed that individuals needed to assume personal responsibility for finding out about the health risks of swimming. They were also against paying higher taxes as a potential solution to curb pollution and, instead, offered support for economic solutions as the way forward.
3.5. Traditional masculine identity, cultural theory of risk, and societal risk perceptions

This research study will examine the influence of cultural worldviews and conformity to traditional masculine ideology on males’ perceptions of different types of societal risks. The potential relationship between traditional masculinity and risk perceptions has been briefly mentioned in earlier paragraphs where it was shown that adolescent boys will perceive less risk associated with particular risk behaviours which provide them with opportunities to perform and prove their masculinity. The reasoning behind this proposed relationship is further strengthened by research into the influence of identity-protective cognition and cultural worldviews on risk perceptions. In an effort to explain the reasons why white men fear a range of risks less than women and minority groups, Kahan et al., (2007a) integrated work from these two theories. Their research found that white men endorsing hierarchical and individualist worldviews will perceive less risk involved in those activities which are integral to their cultural identities, even if these have been identified as potentially harmful. In regard to environmental and gun risks, the lowest risk perceptions were found amongst white males endorsing hierarchical and individualist worldviews. These findings provided evidence that the ‘white male’ effect can be understood as a form of motivated cognition aimed at protecting identities individuals form through their commitment to cultural norms.

Applying this reasoning to theory surrounding traditional masculinity, it can be hypothesised that through conforming to traditional masculine ideology males will construct for themselves a masculine identity that is connected to group membership and masculine norms. For adolescents, in particular, this group affiliation could derive from the peer group. Therefore, the risks associated with any particular activities upon which the traditional masculine identity or norms are based may be viewed as low risk in order to preserve and defend their masculine identity and group membership. In other words, this reasoning suggests that men conforming to traditional masculine norms may show less concern compared to women and other men for activities and behaviours which serve to affirm and support their masculine identities.

In the global arena, research has highlighted the connection between the traditional, hegemonic form of masculinity and the business executives and government officials who occupy high-powered positions in the gendered domains of trade, technology, economics, and industry
(Connell, 2001; Donaldson, 1993). In addition, Connell (1987) has identified four core dimensions of men’s power and authority that together serve to institute an ideology which associates masculinity with authority and technological violence. He identifies the hierarchies and work forces of institutionalised violence (prisons, parliament, and the military), the hierarchy and organisations involved in heavy industry and high technology industry, the planning and control machinery of the state, and the working-class masculinities which emphasise physical toughness and dominance of machinery. Thus, it appears that a central part of men’s power and authority is embedded within the connection between masculinity and the fields of heavy industry, technology, and institutional violence, and men’s dominance within these domains.

Based on a thorough review of the literature and the theoretical contribution of Connell’s work (1987, 1995, 2000, 2001, 2005) and cultural theory of risk (Douglas, 1985, 1990, 1992, Douglas & Wildavsky, 1982), it may be reasoned that the risks associated with the operation of these gendered domains may be judged as lower risk by men who conform to traditional masculine ideology. According to cultural theory of risk, these judgements of lower risk will be functional in the sense that they will strengthen certain ways of life, or worldviews, whilst undermining others (Tansey, 2004). In this case, the low perceptions of risks may be functional in the sense that they serve to defend the hegemonic masculinity and, consequently, protect males’ masculine identity and the patriarchal dividend. Therefore, it is hypothesised in this thesis that males embracing traditional masculine ideology may show lower risk perceptions and concern for risks and activities that support the making of gendered power and that relate to domains viewed as masculine spaces such as technology, industry, driving, alcohol, the economy, and business (Connell, 1987, 1995, 2000b, 2001; Donaldson, 1993; Johnson, 1997, in Capraro, 2000; Lupton, 2004). In addition, this thesis hypothesises that the risks selected for attention and considered to be of severe threat by males endorsing traditional masculine ideology are those which function to diminish the patriarchal dividend and erode the hegemonic masculinity’s superior position in the gender order. According to Tansey (2004), the purpose in classifying, or politicising, something as high risk is that it serves to defend and legitimise a particular way of life and the distribution of social power within an institution or culture. In this case, it can be reasoned that the distribution of social power in question relates to the inequitable distribution of power, status, and income which was discussed in earlier paragraphs.
The empirical literature related to hegemonic masculinity and cultural theory of risk has been discussed in this chapter as well as the rationale guiding the research study. In the following chapter the broad research objectives and the specific aims of this study will be outlined and discussed in relation to the methodology employed.
CHAPTER 4: METHODOLOGY

4.1. Research design
This study used a quantitative, correlational design to investigate the relationship between masculinity, cultural worldviews, and societal risk perceptions in a sample of adolescent boys. The aim of a correlational research design, according to Gravetter and Forzano (2006), is to examine and describe the relationships between the variables of interest. Thus, this research design attempted to determine whether significant relationships exist between masculinity, cultural worldviews, and societal risk perceptions, and to describe the nature of these relationships (i.e. the strength and direction). This research design is, however, limited in its ability to determine causal relationships and to identify the influence of potential third variables on the relationship between two variables of interest (Gravetter & Forzano, 2006).

4.2. Broad objectives and research questions
The objective of this research study was to determine whether a significant relationship exists between masculine ideology, cultural worldviews, and societal risk perceptions in a sample of school-going boys. This research attempted to determine whether conformity to traditional masculine ideology exerts an influence on the types of societal risks that are considered serious and those that are dismissed by male participants in this sample, and whether these risk perceptions significantly differ from those held by males conforming to the accommodating and progressive masculinity types. In addition, this study attempted to identify the cultural worldviews held by males adhering to traditional masculine norms. These broad objectives can be narrowed down into the following three research questions, which comprised the main focus of this research study:

- Does traditional masculine ideology significantly correlate with particular cultural worldviews?
- Will particular cultural worldviews influence males to perceive certain types of societal risks as more severe than others?
- Will males conforming to the traditional masculinity type differ in their perception of societal risks in comparison to males conforming to the accommodating or progressive masculinity types?
4.3. Participants and research setting

A local boys’ high school was the chosen site for this research study. It is a multi-racial, single sex, public school in the Durban Metropolitan area. In the Durban Metropolitan area there are approximately 45 public high schools and 15 private high schools. The high school draws most of its learners from the Westville and Cowies Hill area, which are relatively affluent areas. Sport is highly valued by the school and much attention and recognition is given to the school’s sporting achievements.

The sample for this research study comprised of 157 Grade 12 boys between the ages of 17 and 18 years. Purposive sampling was used to ensure that the sample participants selected were in their final year of schooling (Grade 12). Purposive sampling, as a form of non-probability sampling, will reduce the generalisability of the results (Hedges, 2004). However, it ensured that the sample acquired was congruent with the focus of the study. This particular age group was chosen because this group represents a crucial period in which boys, both physically and socially, are transformed into men. Within high schools a hierarchical structure exists, which confers power and status onto individuals from these higher grades. Such boys are given more responsibility and autonomy, whilst at the same time they have higher expectations placed upon them both on the sporting field and in the classroom. Adolescent boys at this age are faced with many social pressures such as drinking, smoking, taking drugs, and sexual activity and will have to negotiate these risks and the peer pressure associated with these. In regard to societal risks, it was felt that boys in late adolescence would be more aware and knowledgeable of societal risks, such as those stemming from technology and industry, the economy, and the environment. In addition, as they enter into late adolescence their personal values, beliefs, and ways of seeing the world would have had more time to develop and evolve. Thus, it is assumed that, compared to younger boys, the worldviews of this sample may be more established and they will have more self-insight and knowledge with which to complete the self-report measures.

The sample selected for this study consisted of 58.3% White, 27.6% Indian, 9.6% Black, and 2.6% Coloured learners. Two thirds of the sample was 17 years of age (66.7%) and the remainder was eighteen years old (33.3%). The majority of the sample resided in Westville (50%), followed by Pinetown (22.4%), Cowies Hill (5.8%), and Durban (5.8%). Soccer (34%)
and rugby (31.4%) were the main sports the participants are involved in as well as cricket (16.7%) and athletics (13.5%). However, 22.4% of the sample did not participate in any sport. In regard to their future studies, the majority of the sample (47.8%) was planning to embark on a professional qualification in areas such as engineering (27.9%), the medical profession (9.7%), architecture (3.9%), and law (4.5%). Approximately a third of the sample (34.2%) had decided to study something in the domain of business such as a business degree (29.7%) or chartered accountancy (4.5%).

4.4. Data collection and procedure
The Grade 12 boys who participated in the research study were informed about the purpose and nature of the research by their Life orientation teacher before being given a letter and an informed consent form for their parents to sign. Participants were informed that their involvement was voluntary and anonymous and that they could withdraw at any time should they so desire. The boys were also assured that confidentiality would remain a high priority at all times. Data collection was carried out during the Life Orientation lesson for each Grade 12 class. Participants each received a questionnaire booklet containing three measuring instruments and a biographical questionnaire, which they were asked to complete as honestly and accurately as possible. Two psychometric scales were used to measure the constructs of traditional masculine ideology and cultural worldviews and two questionnaires were administered to gather information regarding societal risk perceptions and biographical data. Participants were given instructions on how to complete each measuring instrument. Teachers remained present throughout the 40 minute lesson to answer queries and to control for noise, peer distraction, and peers looking at each other’s responses.

4.5. Measuring instruments
4.5.1. Conformity to traditional masculine ideology
Conformity to traditional masculine ideology was measured using the Male Attitude Norms Inventory – II (MANI – II), which assesses the degree to which an individual adheres to traditional masculine ideology (Luyt, 2005). Luyt developed the scale in South Africa amongst university students and asserts that it is a contextually sensitive and multidimensional measure of South African masculine ideology. He does admit, however, that owing to the majority of the
sample being young, white, and of privileged upbringing, the sample used in the development of the MANI-II is not representative of the male South Africa population. This limitation to the MANI-II will be noted in the analysis and reporting of the results.

The statements contained in the MANI-II describe normative behaviours of how men should or should not behave, which has been recommended as an effective means to measure traditional masculine ideology (Pleck, 1981, in Levant, Smalley, Aupont, House, Richmond, & Noronha, 2007). Responses for each item were coded on a five-point likert scale where 1 indicated ‘strongly disagree’, 3 indicated ‘no opinion’, and 5 indicated ‘strongly agree’. The MANI-II consists of three subscales, namely Toughness, Control, and Sexuality. The Toughness subscale comprised nine items which address the norms relating to restrictive emotionality and physical toughness. Twelve items combined to form the Control subscale which included items such as, “it is important for a man to be successful in his job” and “a man deserves the respect in his family”. This subscale was based upon beliefs about men’s roles in exerting mastery and control within different contexts such as finances, family, and experiences related to the self. Lastly, the Sexuality subscale was made up of eight items and emphasised the importance of heterosexuality connected to demonstrations of heterosexual performance and the subordination of gay masculinities. It contained statements such as “gay men should be beaten up” and “men should be embarrassed if they cannot get an erection”.

Overall, the MANI – II has demonstrated high internal consistency as indicated by a Cronbach alpha coefficient of .90. The reliabilities of the three subscales range between .81 and .85 (Luyt, 2005). In the current research study, the MANI-II was found to possess good internal consistency, with a Cronbach alpha coefficient of .85. The Toughness and Sexuality subscales demonstrated good internal reliability achieving an alpha of .81 and .84 respectively. However, the Control subscale was found to have a poor internal reliability indicated by an alpha coefficient of .55. In regard to validity, the MANI – II was found to possess good construct validity as indicated by a factorial analysis that highlighted the presence of three factors which corresponded to current theory regarding traditional masculine ideology. The MANI – II also displays good convergence validity with the Masculine Role Norms Inventory (Levant et al., 2007), which is a measure of traditional masculine ideology (r = 0.84, p. <0.001).
4.5.2. Cultural worldviews

Cultural worldviews was measured using a survey instrument developed by Kahan et al., (2007a). The instrument consisted of 31 worldview items to which the participants had to indicate their level of agreement or disagreement on a four-point likert scale. The worldview items were designed to form two scales, namely an Individualism – Communitarianism scale and a Hierachy – Egalitarianism scale. The Individualism – Communitarianism sub-scale was based upon the group dimension of Douglas’ typology and has been found o demonstrate an alpha reliability of .77 (Kahan et al., 2007). Within the current research study, the sub-scale achieved an alpha reliability of .76. It consisted of items which measure a person’s concern for individual versus collective interests and beliefs about how responsibility for meeting people’s needs should be allocated between individuals and society as a whole. The Hierarchy – Egalitarianism was based upon the grid dimension of Douglas’ typology and was found to have an Alpha reliability of 0.81 (Kahan et al., 2007). However, amongst the current research sample the internal consistency of the sub-scale decreased to .64. It included items which measure attitudes towards group stratification such as “we have gone too far in pushing equal rights in this country”. This sub-scale also contained items which measure attitudes towards deviance from dominant norms and roles such as “a gay or lesbian couple should have just as much right to marry as any other couple”.

4.5.3. Societal risk perceptions

Societal risk perceptions were measured using a questionnaire developed by the researcher for the present study. The instrument required individuals to indicate the level of risk or severity they perceive certain items or activities to pose for the South African public. Participants indicated their perceptions of the risk on a scale of 1 to 4 where 1 indicated ‘no/little risk’, 2 indicated ‘slight risk’, 3 indicated ‘moderate risk’, and 4 indicated ‘high risk’. The societal risk perceptions questionnaire was comprised of 43 risk items or activities, some of which were extracted from other research studies (Bouyer et al., 2001; Dake, 1991; Finucane et al., 2000; Peters & Slovic, 1996; Rippl, 2002) that were deemed relevant and appropriate for research into the phenomenon of risk perceptions within the South African context. Additional risk items and activities that were considered relevant for adolescent boys and those which related to significant
occurrences in South Africa at the time of the data collection were also included in the societal risk perceptions questionnaire.

The risk items and activities combined to form different categories of societal risks such as health and personal risks, technological and industrial risks, economic risks, risks associated with crime and social instability, and risks connected to current social problems and inequality in South Africa. Health and personal behaviour risks included items such as having sex without a condom and driving over the speed limit, whereas industrial and technological risks included items such as the transportation and storage of hazardous chemicals, and building a nuclear power plant. The depletion of natural resources and the ozone layer and global warming, for example, were some of the items that comprised the environmental risk category and high unemployment and low economic growth were included the economic risks. Risks related to crime and instability consisted of items such as corruption in the police force, strikes and protests. Issues such as poverty, HIV/AIDS, and discrimination against homosexuals were included in the category of risks associated with social problems and inequality. These categories of risk items were theoretically derived from the literature concerning cultural theory of risk, which delineates the types of societal risks which are most likely to be either selected or dismissed by individualistic, egalitarian, and hierarchical cultural worldviews. Each of these risk categories was found to demonstrate good internal reliability. The cronbach alphas for each of the risk categories are as follows; industrial and technological risks (alpha = .81), risks associated with health and personal behaviours (alpha = .76), environmental risks (alpha = .87), risks associated with crime and social instability (alpha = .79), economic risks (alpha = .70), and risks associated with social problems and inequality (alpha = .77).

4.5.4. The biographical questionnaire

To supplement the above information, participants were asked to fill in a biographical questionnaire. The biographical questionnaire was designed to elicit information regarding participants’ age, race, studying and career ambitions, socioeconomic status, and trust in individuals and institutions. The final three questions required participants to select out of a range of possible options the statements about manhood they most agree with. Participants were classified as either conforming to the traditional, progressive, or accommodating masculinity
types by selecting at least two of the three statements which correspond to each type of masculinity. In this way, the masculinity typology became a mutually exclusive classification system whereby participants’ responses allowed the researcher to classify them according to Morrell’s typology of South African masculinities (2001).

Findings of this research study highlight significant correlations between the MANI-II and the masculinity typology of South African masculinities, which provide evidence to support the construct validity of the different masculinities within this measure. For instance, a moderate significant relationship was found between traditional masculine ideology as measured by the MANI-II and the traditional masculinity type (TM) (r = .426, p<.01) on the masculinity typology. The results also revealed a highly significant negative relationship between the MANI-II and the progressive masculinity type (PM) as measured by the masculinity typology (r = -.371, p<.01).

4.6. Ethical considerations
The two main ethical issues that were considered in this research project were informed consent and confidentiality. The headmaster of the local high school has granted the researcher his consent to conduct the research study amongst the Grade 12 boys (Appendix C). An informed consent and a letter addressed to parents and guardians was distributed amongst the Grade 12 boys after the purpose and requirements of the research had been explained to them (Appendix D). The letter to the parents/guardians outlined the purposes of the research and the requirements of individuals wishing to participate in the study. The boys were informed that participation is voluntary and anonymous and that they can withdraw at any stage of the research process should they so desire. To assure confidentiality, no names were necessary on the participants’ questionnaire booklet, as a coding system was used. In addition, the questionnaire booklets have been, and will continue to be, kept confidential throughout the storage, analysis and disposal of the data collected. This information will not be accessible to the principle or teachers of the high school. Hard copies of all the data collected are stored in a secure location that is only accessible to the researcher and no data has been stored directly to a computer. To ensure the anonymity of participants, data analysis was carried out at a group level. At the completion of the research study, the data will be deleted off the researcher’s memory stick and a back-up copy of the data
will be kept in a secure location at the UKZN, Howard College Campus in the Department of Psychology. Furthermore, hard copies of the data will also be stored at the UKZN, Howard College Campus in the Department of Psychology.

4.7. Data analysis
The data collected by the three psychometric tests was analysed using the statistical program SPSS (version 15.0). Descriptive statistics (frequencies, means, and standards deviations) were used to analyse the biographical information and some information from the psychometric instruments. Mean values were used to facilitate a comparison between the severity of risk perceptions associated with variety of societal risks. Participants’ level of trust in different institutions and individuals were also analysed in this way. To determine whether significant differences existed between the trust scores for each of the institutions, paired-sample t-tests were conducted. Paired-sample t-tests compare the mean scores of two variables and can be used to compute the difference between participants’ trust scores for two different institutions. This analysis tests the null hypothesis which states there is no difference between the two mean scores (Pallant, 2005). The mean values were also calculated for the subscales of the MANI-II and compared to the results gathered by Luyt (2005) in his study. One sample t-tests were used to determine if the subscale scores differed significantly from one another. This statistical procedure tests whether the mean derived from a sample differs significantly from a specified constant or known value (Pallant, 2005).

To determine the degree of linear association between different masculinity types, specific cultural worldviews, and societal risk perceptions, Pearson’s correlation coefficient (r) was employed. Correlations attempt to both measure and describe the direction and degree of relationship between two variables of interest. As a statistical value, correlations determine two qualities about the relationship between the above variables; the strength and the direction of the relationship, whether it be positive, negative or no relationship (Gravetter & Forzano, 2006; Neuman, 2006; Schroeder, Sjoquist, & Stephan, 1986). Correlations were also run between items from the biographical questionnaire, including trust, race, and the three masculinity types comprising the masculinity typology.
The Chi-square test was conducted to determine whether significant differences exists between the proportion of participants allocated to either the traditional (TM), progressive (PM), or accommodating masculinity types (AM). According to Bless and Kathuria (1993), the Chi-square test is a measure of correspondence between the actual observed frequencies and the frequencies expected to exist in a sample under the null hypothesis, where the null hypothesis states that the proportions in the population do not differ. The null hypothesis can be rejected in situations where the observed frequency scores are greater than the expected frequency scores and it can be concluded that significant differences exists between the proportions or categories. The Chi-square test is limited, however, by its inability to provide information about the direction of the relationship and the association between the categories of interest (Bless & Kathuria, 1993; Gravetter & Forzano, 2006).

One way analysis of variance (ANOVA) was used to determine whether the three masculinity types in the masculinity typology significantly differ from one another in regard to the risk perceptions associated with different societal risks. ANOVA procedures involve an independent variable with at least three levels, in this case the three types of masculinities, and a continuous dependent variable. This statistical procedure compared the variability in scores between the three masculinity types with the variability occurring within the groups themselves to determine if the null hypothesis, which states that the population means are equal, can be rejected (Gravetter & Forzano, 2006).

The multivariate technique, hierarchical regression, was used to evaluate the strength of a model to account for the variance in traditional masculinity scores. Although hierarchical regression is a technique based on correlation, it enables a more sophisticated exploration of the interrelationships amongst a set of variables. Hierarchical regression allowed the variables to be entered in separate blocks in a predetermined order in order for these variables to be statistically controlled for in subsequent blocks. In this way, the additional contribution each block made to the prediction of traditional masculinity, over and above the variance explained by prior blocks, was examined. Moreover, this technique evaluated the unique contribution of each variable entered into the model in accounting for the variance in conformity to masculine norms (Pallant, 2005). The predictor variables included in the hierarchical regression related to field of chosen
studies, trust scores in institutions, cultural worldviews, and risk perceptions for the different categories of risks. In the first block the items study nothing, study business, and study technical were included as predictor variables. The second block consisted of the items: trust in Government; trust in private companies; trust in the medical profession; trust in scientists; trust in environmental groups; and trust in women’s groups. Finally, Hierarchy /Egalitarianism and Individualism /Communitarianism were included in the third block along with health and personal risks, industrial and technological risks, environmental risks, crime and social instability risks, economic risks, and social problems and inequality risks.
CHAPTER 5: RESULTS

Descriptive and inferential statistics were carried out to analyse the data and are presented hereunder.

5.1. Descriptive statistics

Descriptive statistics in the form of mean and standard deviation scores and frequencies were computed to determine the demographic characteristics of the sample and were reported in the previous chapter. In addition to this data, it was found that 29.6% of the participants have a father who holds professional employment such as a doctor, engineer, lawyer, or chartered accountant. The majority of participants’ fathers (53.3%) work in the business arena either as managers, entrepreneurs, accountants, or CEOs. A small minority of the participants (13.8%) have a father who works in technical arenas such as plumbing, construction, or auto mechanics. On the basis of this data it can be deduced that the socioeconomic profile of the majority of the sample is more than likely middle class.

Participants were asked to indicate the level of trust which they place in certain institutions and people to deal with risks effectively. The results in Table 1 show that participants had the least trust in Government’s ability to effectively manage risks (M = 1.80) followed by women’s groups (M = 2.37). It is evident that participants place higher levels of trust in experts and professional such as the medical profession (M = 3.38), scientists (M = 3.06), and environmentalists (M = 2.93). Consistent with these results, the data revealed that 46.8% of the sample held ‘complete trust’ in the medical profession, followed by environmentalists (24.4%) and scientists (23.1%). However, only 11.5% and 6.4% of participants indicated they had ‘complete trust’ in private companies and women’s groups to effectively manage the societal risks facing our society. A closer inspection of the frequencies for this data revealed that 39.7% of the participants had ‘no trust at all’ in Government, whilst 25.7% of the sample had either ‘no trust’ or ‘slight trust’ in private companies and businessmen to deal with risks effectively.
Table 1: Mean scores indicating levels of trust in institutions and people to deal with societal risks.

<table>
<thead>
<tr>
<th>Institution/ people</th>
<th>Mean score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>1.80</td>
<td>.74</td>
</tr>
<tr>
<td>Private companies and businessmen</td>
<td>2.83</td>
<td>.65</td>
</tr>
<tr>
<td>Medical profession</td>
<td>3.38</td>
<td>.67</td>
</tr>
<tr>
<td>Scientists</td>
<td>3.06</td>
<td>.65</td>
</tr>
<tr>
<td>Environmentalists</td>
<td>2.93</td>
<td>.81</td>
</tr>
<tr>
<td>Women’s groups</td>
<td>2.37</td>
<td>.87</td>
</tr>
</tbody>
</table>

Responses were coded on a four-point scale where 1 indicated ‘no trust’, 2 indicated ‘slight/little trust’, 3 indicated ‘moderate trust’, and 4 indicated ‘complete trust’.

The results of paired-sample t-tests demonstrated that participants placed a significantly higher amount of trust in environmental groups (M = 2.93, S.D. = .81) compared to the South African Government in terms of their ability to manage risks effectively (M = 1.8, S.D. = .74, t(154) = -14.88, p < .01\(^2\)). However, participants’ responses for trust in the medical profession (M= 3.38) were found to be significantly higher than their responses for trust in environmental groups (M = 2.93, t(154) = 5.77, p < .01). Medical professionals (M = 3.38) were considered to be significantly more trustworthy than women’s groups (M = 2.37, t(154) = 12.74, p < .01) in their ability to manage societal risks. According to participants’ responses, women’s groups (M= 2.37) were also considered to be significantly less trustworthy than scientists (M = 3.06, t(153) = 8.96, p < .01).

5.1.1. Traditional masculinity

The results for participants’ response to the MANI-II showed a total mean score of 136.28 (Std. Dev. = 18.49). The mean and standard deviation scores for each of the subscales are presented in Table 2. For each of the subscales, the total mean scores from the current research study were higher compared to the results found by Luyt (2005) in his sample of South African university students. The results of one sample t-tests indicated that all three subscales were significantly higher than the subscale scores achieved in Luyt’s study. Participants’ mean scores for the

\(^2\) The Bonferroni test was used to control for the familywise error rate, where the familywise error rate (\(\alpha\)) was divided by the number of comparisons (\(c\)) (Howell, 1995).
Control subscale were 1.36 points higher than the participants in Luyt’s sample \((t(151) = 2.73, p < .01)\). Mean scores for the Sexuality \((t(153) = 10.70, p < .01)\) and Toughness subscales \((t(153) = 13.10, p < .01)\) were 5.09 and 6.66 points higher than the comparison sample, respectively. In addition, the total scale score which consists of the combined raw scores for each of the items included in the subscales also appeared to be higher than that attained by Luyt (2005). The sample characteristics of Luyt’s research study are similar in that the majority of participants are white, young, and of privileged educational background. However, the average age of the males in Luyt’s study is 20.75 years, which is slightly older than participants in the current research sample.

**Table 2: Mean and standard deviation scores for the MANI-II**

<table>
<thead>
<tr>
<th></th>
<th>Current research study (N=157)</th>
<th>Luyt (2005) (N= 339)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean score</td>
<td>Standard Deviation</td>
<td>Mean score</td>
</tr>
<tr>
<td>Control subscale</td>
<td>47.88** 6.13</td>
<td>46.53 6.38</td>
</tr>
<tr>
<td>Toughness subscale</td>
<td>27.72** 6.31</td>
<td>21.06 6.15</td>
</tr>
<tr>
<td>Sexuality subscale</td>
<td>26.57** 5.90</td>
<td>21.48 6.78</td>
</tr>
<tr>
<td>Total scale score</td>
<td>102.17 14.71</td>
<td>89.07 15.96</td>
</tr>
</tbody>
</table>

Responses were coded on a five-point likert scale where 1 indicated ‘strongly disagree’, 2 indicated ‘disagree’, 3 indicated ‘no opinion’, 4 indicated ‘agree’, and 5 indicated ‘strongly agree’. **p < .01

A masculinity typology was created by the researcher for the present study which served to classify the boys into one of three mutually exclusive category types of South African masculinities according to Morrell (2001). The three binary categories included the traditional masculinity type (TM), the accommodating masculinity type (AM), and the progressive masculinity type (PM), where ‘1’ indicated a positive classification and ‘0’ indicated no classification. Out of 156 participants, 131 satisfied the requirement to be classified according to one of the three masculinities. The majority of the participants (42.9%) were classified as conforming to the AM type as they agreed with such statements like men ‘should restrain themselves from being violent or aggressive and rather be respectable, wise, and level headed’, and ‘heterosexual men need to be tolerant of gay men and accept they have equal rights’.
Slightly over a third of the boys (34.6%) were classified as the PM type and agreed with statements such as ‘men should enjoy taking some responsibility for the cooking, cleaning, and childcare’ and ‘a real man does not need to live up to masculine standards, he can be sensitive, caring, and emotionally open if he wants’. An unexpected finding was that only 6.4% of the sample agreed with statements that corresponded to the TM type such as ‘women should be encouraged to look after the home and leave men to run the business world and political domain’, and ‘violence, aggression, and toughness are essential qualities that real men need to possess to distinguish them from homosexuals, women, and men’. This could be indicative of a social desirability bias in these responses due to the way in which traditional masculine men were conceptualised, in that they are inherently violent and superior to women. A Chi-square test was used to determine whether a significant difference existed in the proportion of participants conforming to the TM, AM, or PM types. The test produced a significant result indicating that the proportion of participants belonging to each of the masculinities significantly differs from one another ($\chi^2(3, N=157) = 52.46, p <.01$).

5.1.2. Societal risk perceptions

In regard to societal risk perceptions, the average number of high risk responses for each of the risk categories was calculated to determine the societal risks which evoke the most concern and anxiety from participants. This figure was calculated by dividing the total number of high risk responses for each risk category by the number of risk items in the particular category, where the maximum score for high risk responses would equal 157. Environmental risks (92.2), risks associated with crime and social instability (82.2) and risks associated with social problems and inequalities (78.7) had the highest average number of high risk responses. This was followed by economic risks (63.7), health and personal behaviour risks (49.3), and industrial and technological risks (39.5). Overall, the combined mean score for the six categories of societal risks was 131.74 (Std. Dev. = 17.29). Table 3 presents the mean scores for each of the risk categories which were calculated by dividing participants’ total score for the risk category by the number of risk items listed in the category. Environmental risks (mean = 3.43), risks associated with crime and instability (mean = 3.34), and risks associated with social problems and inequality (mean = 3.19) represent the societal risks that evoked the highest risk perceptions among the boys in the sample.
Table 3: Mean and standard deviation scores for societal risk perceptions

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Mean scores</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental risks</td>
<td>3.43</td>
<td>.64</td>
</tr>
<tr>
<td>Risks associated with social instability and crime</td>
<td>3.34</td>
<td>.54</td>
</tr>
<tr>
<td>Risks associated with social problems and inequality</td>
<td>3.19</td>
<td>.56</td>
</tr>
<tr>
<td>Economic risks</td>
<td>3.10</td>
<td>.54</td>
</tr>
<tr>
<td>Industrial and technological risks</td>
<td>2.79</td>
<td>.66</td>
</tr>
<tr>
<td>Health and personal behaviour risks</td>
<td>2.75</td>
<td>.45</td>
</tr>
</tbody>
</table>

Responses were coded on a four-point scale where 1 indicated ‘little/no risk’, 2 indicated ‘slight risk’, 3 indicated ‘moderate risk’, and 4 indicated ‘high risk’.

5.1.3. Cultural worldviews

Descriptive analysis of the cultural worldview survey instrument indicated a total mean score of 36.14 (Std Dev. = 4.90) for the hierarchy/egalitarian subscale and a total mean score of 34.21 (Std Dev. = 5.04) for the individualism/communitarianism subscale. This survey instrument has been used in other studies (Gastil, Braman, Kahan, & Slovic, 2005; Kahan et al., 2007a; Kahan, Braman, Slovic, Gastil, & Cohen, 2007b). However, a review of this literature found no published information relating to the mean and standard deviation scores of the two subscales comprising the survey instrument.

5.2. Inferential statistics

Correlations, one-way ANOVA, and hierarchical regression were conducted to analyse the relationship between traditional masculinity, cultural worldviews, societal risk perceptions and other variables of interest. The data analysis produced a number of significant findings which will be presented in the following sections.

5.2.1. Masculinities and correlated variables of interest

Traditional masculinity, as measured by the MANI-II, was significantly associated with a low concern for a number of societal risks such as health and personal behaviour risks ($r = -.359$), environmental risks ($r = -.254$), risks associated with crime and social instability ($r = -.266$), risks
associated with social problems and inequality (r = -.342), as well as the total score for societal risks (r = -.301). These were all highly significant relationships at p< .01. No significant correlations were found between traditional masculinity and race. Interestingly, the data showed that traditional masculinity was significantly correlated with cultural worldviews such as hierarchy (r = .575; p < .01) and individualism (r = .406; p < .01), which also indicates that males conforming to a traditional masculine ideology are less likely to subscribe to egalitarian and communitarian values. In regard to traditional masculinity and trust, males conforming to traditional masculine norms were found to hold lower levels of trust in Government (r = .293; p < .01), environmental groups (r = -.169; p <.05), and women’s groups (r = -.317; p < .01) to deal with risks effectively.

Significant correlations were found between the three types of South African masculinities, as measured by the masculinity typology, and particular cultural worldviews, societal risks, and levels of trust in institutions. Firstly, the TM type demonstrated highly significant positive relationships with individualism (r = .216; p <.01) and hierarchicalism (r = .314; p <.01), which is consistent with the results found for traditional masculinity using the MANI-II and, thereby, contributes to the validity of the masculinity typology. The PM type was found to be negatively related to hierarchicalism (r = -.322; p <.01) indicating that it is more closely connected to an egalitarian worldview. In regard to levels of trust, the TM type had a significant negative correlation with trust in women’s groups (r = -.263; p < .01) and the AM type was negatively associated with trust in environmental groups (r = -.232; p <.01). Males conforming to the PM type were found to be more likely to trust government’s ability to deal with risks effectively (r = .183; p <.05).

The three types of masculinities also demonstrated significant correlations between various categories of societal risks. Table 4 shows that the TM type yielded the same pattern of societal risk perceptions as the traditional masculinity measured by the MANI-II. The TM type was associated with a low concern for four out of the six categories of societal risks as well as the total score for societal risk perceptions. Males conforming to the AM type were also more likely to perceive less risk and severity in a number of risk categories. Higher levels of concern for societal risks were found amongst participants adhering to the PM type, which was positively correlated with four out of six categories of societal risks.
Table 4: Correlations between three types of masculinities and societal risk perceptions

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Traditional masculinity type (TM)</th>
<th>Accommodating masculinity type (AM)</th>
<th>Progressive masculinity type (PM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and personal behaviour risks</td>
<td>-.181*</td>
<td>x</td>
<td>.203*</td>
</tr>
<tr>
<td>Industrial and technological risks</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Environmental risks</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Economic risks</td>
<td>-.266*</td>
<td>x</td>
<td>.220**</td>
</tr>
<tr>
<td>Risks associated with crime and social instability</td>
<td>x</td>
<td>-.170*</td>
<td>x</td>
</tr>
<tr>
<td>Risks associated with social problems and inequality</td>
<td>-.204*</td>
<td>-.180*</td>
<td>.177*</td>
</tr>
<tr>
<td>Total societal risk perceptions</td>
<td>-.179*</td>
<td>-.159*</td>
<td>.188*</td>
</tr>
</tbody>
</table>

*p < .05   
**p < .01

A one way ANOVA was conducted to determine the variability in risk perceptions across the three masculinity types. The results revealed that significant differences in risk perceptions for total societal risks ($F(3,141) = 5.09, p <.01$), health and personal behaviour risks ($F(3,148) = 3.57, p <.05$), environmental risks ($F(3,148) = 5.32, p <.01$), crime and social instability risks ($F(3,151) = 5.39, p <.01$), and social problems and inequality risks ($F(3,151) = 4.07, p <.01$) existed between participants conforming to the TM, AM, and PM types. In regard to the total score for societal risk perceptions, post hoc tests found that participants conforming to the PM type held significantly higher risk perceptions ($M = 135.84$) than participants conforming to the TM type ($M = 118.00$) at $p <.05$. For environmental risk perceptions, males conforming to the PM type and values were, again, found to have significantly higher risk perceptions ($M = 21.70$) compared to males conforming to the AM type ($M = 19.88, p <.05$) and the TM type ($M = 17.30, p <.01$). The PM type was associated with significantly higher risk perceptions for health and personal risks ($M = 34.50$) compared to the TM type ($M = 29.30$) and this was also significant at the level .05. A similar pattern of differences in societal risk perceptions was found for risks associated with crime and instability and risks associated with social problems and inequality. Significantly higher risk perceptions for risks associated with crime and social instability were
found amongst participants conforming to the PM type (M = 20.81) in comparison to those conforming to the TM type (M = 17.50) and this was significant at p < .05. The PM type (M = 23.36) was also found to have significantly higher risk perceptions than the TM type in regard to the risks associated with social problems and inequality (M = 19.70, p < .05).

Hierarchical regression using the ‘enter’ method was conducted to identify the variables that most significantly predict conformity to traditional masculine norms. The tolerance values for each of these predictor variables were examined for the presence of multicollinearity and were found to be above the recommended level .10. According to Pallant (2005), a tolerance value of less than .10 can be used as a cut off point for determining the presence of multicollinearity. Variables with tolerance values below this should be excluded from the hierarchical regression because they share high correlations with other predictor variables. The results of the hierarchical regression are presented in Table 5 on the following page.

The first block of variables entered into the hierarchical regression comprised three variables that related to the field of study chosen by participants. This model explained 1% of the variance in conformity to traditional masculine norms and was not significant (F(3,116) = .379, p = .768). After the second block of variables had been entered, which included levels of trust in institutions and field of study, this model explained 15.8% of the variance as indicated by the R Square value and was found to significantly predict traditional masculinity scores (F(9,110) = 2.30, p < .05). The adjusted R Square value indicated that levels of trust in institutions was able to explain an additional 14.9% of the variance in traditional masculinity. After the third block was entered, which added the effects of cultural worldviews and societal risk perceptions, the model was found to explain a further 31.6% of the variance in traditional masculinity, even when controlling for the effects of levels of trust and field of study. The overall model explained 47.5% of the variance in conformity to traditional masculine norms and was found to significantly predict traditional masculinity scores (F(17,102) = 5.42, p < .001).

Overall, three predictor variables made a statistically significant contribution to the prediction of traditional masculinity. The two cultural worldviews were found to significant predict traditional masculinity. A hierarchical worldview was the strongest predictor of conformity to traditional
masculine norms (Beta = .400, p < .001), whilst an individualist worldview had a beta value of .200 and was significant at p < .05. A review of the literature suggests that this may be the first study that has attempted to examine the relationship between traditional masculinity and cultural worldviews. Only one of the risk categories significantly predicted traditional masculinity and that was health and personal behaviour risks (Beta = -.300, p < .01).

Table 5: Hierarchical regression predicting traditional masculinity

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Standardised Beta Coefficients</th>
<th>t value</th>
<th>Tolerance values</th>
<th>R Square change</th>
<th>R Square</th>
<th>Model significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1:</td>
<td></td>
<td>-</td>
<td>.10</td>
<td>.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study technical</td>
<td>-.016</td>
<td>-.161</td>
<td>.548</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study business</td>
<td>-.130</td>
<td>-.129</td>
<td>.508</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study nothing</td>
<td>-.081</td>
<td>-.984</td>
<td>.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2:</td>
<td></td>
<td></td>
<td></td>
<td>.149</td>
<td>.158</td>
<td>.021</td>
</tr>
<tr>
<td>Trust in Government</td>
<td>-.064</td>
<td>-.757</td>
<td>.726</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in private companies</td>
<td>.074</td>
<td>.878</td>
<td>.722</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in medical profession</td>
<td>-.118</td>
<td>-1.348</td>
<td>.672</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in scientists</td>
<td>.036</td>
<td>.413</td>
<td>.687</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in environmental groups</td>
<td>.062</td>
<td>.672</td>
<td>.605</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in women’s groups</td>
<td>-.154</td>
<td>-1.763</td>
<td>.676</td>
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</tr>
<tr>
<td>Block 3:</td>
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<td></td>
<td></td>
<td>.316</td>
<td>.475</td>
<td>.000</td>
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<tr>
<td>Hierarchy/</td>
<td>.400***</td>
<td>4.551</td>
<td>.666</td>
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<td></td>
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<tr>
<td>Egalitarianism</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism/</td>
<td>.200*</td>
<td>2.296</td>
<td>.681</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communitariansim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and personal risks</td>
<td>-.300**</td>
<td>-2.816</td>
<td>.454</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial and technological risks</td>
<td>.110</td>
<td>1.162</td>
<td>.578</td>
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<td></td>
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</tr>
<tr>
<td>Environmental risks</td>
<td>.009</td>
<td>.089</td>
<td>.498</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime and Social</td>
<td>-.205</td>
<td>-1.837</td>
<td>.414</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2.2. Cultural worldviews and correlated variables of interest

Interestingly, significant relationships emerged between certain cultural worldviews and race groups. Correlation analysis indicated that white males are more likely to hold hierarchical worldviews (r = .211; p < .05), whereas Indian males are more likely to conform to egalitarian values and norms (r = -.182; p < .05). Hierarchicalism (r = -.308; p < .01) and individualism (r = -.205; p < .05) were negatively associated with trust in Government to manage risks effectively. In other words, males high in communitarian or egalitarian worldviews are more likely to trust in Government’s ability to successfully deal with risks. A hierarchical worldview was negatively correlated with trust in women’s groups (r = -.222; p < .01). Results of the data analysis also showed that participants with hierarchical an individualist worldviews held lower risk perceptions and concern for societal risks in general compared to participants adhering to egalitarian and communitarian worldviews. Table 5 presents the correlations between the cultural worldviews and participants’ risk perceptions associated with different societal risks. Individualism and communitarianism worldviews were measured using the same subscale where high scores indicate greater adherence to individualist values and low scores are associated with communitarian values. Hierarchicalism and egalitarianism were measured in the same way.

Participants holding individualist worldviews held low risk perceptions for health and personal behaviour risks (r = -.173, p < .05), risks associated with social problems and inequality (r = -.286, p < .01), and total societal risk perceptions (r = -.203, p < .01). Conversely, participants holding a communitarian worldview were likely to demonstrate a higher level of concern for these societal risks. Hierarchical worldviews were found to be negatively associated with risk perceptions for health and personal behaviour risks (r = -.234, p < .01), environmental risks (r = -.193, p < .05), risks associated with social problems and inequality (r = -.291, p < .01), and total

<table>
<thead>
<tr>
<th></th>
<th>.074</th>
<th>.685</th>
<th>.438</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social problems and</td>
<td>.107</td>
<td>.886</td>
<td>.353</td>
</tr>
<tr>
<td>inequality risks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependant variable: Traditional masculinity

*p < .05

**p < .01

***p < .001
societal risk perceptions ($r = -.190, p < .05$). Participants adhering to egalitarian norms and values, on the other hand, perceived high levels of risk associated with these risk categories.

### Table 6: Correlations between cultural worldviews and societal risk perceptions

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Individualism/Communitarianism</th>
<th>Hierarchicalism/Egalitarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and personal behaviour risks</td>
<td>-.173*</td>
<td>-.234**</td>
</tr>
<tr>
<td>Industrial and technological risks</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Environmental risks</td>
<td>x</td>
<td>-.193*</td>
</tr>
<tr>
<td>Economic risks</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Risks associated with crime and social instability</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Risks associated with social problems and inequality</td>
<td>-.286**</td>
<td>-.291**</td>
</tr>
<tr>
<td>Total societal risk perceptions</td>
<td>-.203**</td>
<td>-.190*</td>
</tr>
</tbody>
</table>

*p < .05<br>**p < .01

#### 5.2.3. Societal risk perceptions and correlated variables of interest

Correlations between father’s occupations and societal risk perceptions revealed that participants who have fathers who work in the business domain (manager, accountant, CEO, entrepreneur etc.) had lower risk perceptions for every type of societal risk. Significant negative relationships exist between fathers occupation in business and health and personal behaviour risks ($r = -.204; p < .05$), environmental risks ($r = -.219; p < .01$), risks associated with social problems and inequality ($r = -.212; p < .01$) and total societal risk perceptions ($r = -.218; p < .01$).

Correlations between societal risk perceptions and levels of trust in various institutions yielded interesting results. The results showed that participants who place high levels of trust in government, women’s groups, and environmental groups to deal with risks effectively are more likely to be highly concerned with a number of different societal risks. Table 6 below presents the results of the correlation analysis showing that trust in Government is associated with high concern for health and personal behaviour risks, environmental risks, risks associated with social problems and inequality, and concern for societal risks in general. Similarly, participants
who trust women’s groups to manage risks effectively perceive greater threat and danger from risks associated with health and personal behaviours, the deterioration of the environment, crime and social instability, and social problems and inequality. Participants placing high levels of trust in environmental groups were found to have higher risk perceptions for every category of societal risks investigated and these correlations were significant at the level .01.

Table 7: Correlations between societal risk perceptions and levels of trust in institutions

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Trust in government</th>
<th>Trust in women’s groups</th>
<th>Trust in environmental groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and personal behaviour risks</td>
<td>.262**</td>
<td>.330**</td>
<td>.301**</td>
</tr>
<tr>
<td>Industrial and technological risks</td>
<td>x</td>
<td>x</td>
<td>.189*</td>
</tr>
<tr>
<td>Environmental risks</td>
<td>.206*</td>
<td>.314**</td>
<td>.327**</td>
</tr>
<tr>
<td>Economic risks</td>
<td>x</td>
<td>x</td>
<td>.253**</td>
</tr>
<tr>
<td>Risks associated with crime and social instability</td>
<td>x</td>
<td>.233**</td>
<td>.304**</td>
</tr>
<tr>
<td>Risks associated with social problems and inequality</td>
<td>.191*</td>
<td>.297**</td>
<td>.409**</td>
</tr>
<tr>
<td>Total societal risk perceptions</td>
<td>.174*</td>
<td>.294*</td>
<td>.389**</td>
</tr>
</tbody>
</table>

*Correlation significant at the level .05  
**Correlation significant at the level .01

The analysis of the data for this study has revealed numerous significant relationships between different masculinities, cultural worldviews, levels of trust in institutions, and societal risk perceptions. These results will be discussed in light of relevant theory and empirical evidence in the following chapter.
CHAPTER 6: DISCUSSION

The findings of this study will be discussed in relation to the relevant literature and structured according to the three research questions which were presented in Chapter 4.

6.1. Traditional masculinity and its relationship with hierarchical and individualist worldviews

The findings of a correlational analysis between traditional masculinity and cultural worldviews indicated that males conforming to traditional masculine norms are more likely to hold hierarchical and individualist worldviews. Furthermore, adhering to a hierarchical or individualist worldview was found to significantly predict an individual’s conformity to traditional masculine norms. The literature read suggests that this is the first study that has examined the relationship between traditional masculinity and cultural worldviews. It is interesting to observe a significant relationship between traditional masculinity and hierarchical and individualist worldviews, because hierarchical and individualist cultures are most often the cultures which hold power and hegemony within a society (Thompson et al., 1990). They are commonly referred to as ‘the establishment’ and are both primarily concerned with upholding the present social system and maintaining the status quo (Douglas & Wildavsky, 1982). In light of this, it is not unexpected to note that the norms and values of the hegemonic masculinity of the gender order, traditional masculinity, contain important features of individualist and hierarchical worldviews.

A possible explanation for the relationship between traditional masculinity and a hierarchical worldview may lie within the social structures and forms of organisation in which these are constructed. The gender order, according to Connell (1995, 2000b, 2002), and the relations between masculinities and traditional masculinity and femininity is fundamentally hierarchical and power-based. The relationship between traditional masculinity, as the hegemonic masculinity of the gender order, and other masculinities and femininity are, thus, characterised by power imbalances, dominance, subordination, and control (Brod, 1994; Connell, 2000b; Hearn & Collinson, 1994). Similarly, individuals subscribing to hierarchical worldviews have preferences for forms of social organisation in which individuals throughout society are stratified according to various characteristics such as age, gender, heredity or combinations of all three
Power and authority are centralised at the top levels of formal hierarchical organisations (Langford et al., 2000). Furthermore, within hierarchical cultures, this power and decision-making authority is most often located amongst individuals who are White, privileged, and heterosexual (Kahan et al., 2007a). Although not altogether identical, this archetype of the ‘hierarchical male’ portrayed by the literature shares similar characteristics with the hegemonic masculine ideal exalted by Western cultures which, in Connell’s view (1995), is White, middle class, heterosexual male.

In addition to the hierarchical structure and power relations that characterise the gender order and hierarchical cultures, inequalities in social and material resources are another common feature of the social structures in which traditional masculinity and hierarchical worldviews are constructed and maintained. Within hierarchical cultures, according to Douglas (2003, 2005), there exists definite divisions and inequalities in power, decision-making ability, and authority, which are established and maintained through relations of subordination and control (Douglas, 2005). Furthermore, the notion of manhood embedded in hierarchical cultures aligns itself with traditional versions of men as the provider and head of the home. White men are awarded privileged positions and its inherent values and structure are set against women, homosexuals, and people of colour attaining equal status and power. (Kahan et al., 2007a). In a similar vein, the ascendancy of traditional masculinity into the hegemonic position within the gender order serves to preserve the patriarchal dividend and create conditions of inequality in power and social resources between certain groups of men and between men and women (Connell, 1987; Donaldson, 1993).

Thus, it is apparent that the social structures and forms of social organisation in which hegemonic masculinity and hierarchical worldviews are situated, that is the gender order and hierarchical cultures, share fundamentally similar aspects such as a clearly defined hierarchical structure, power relations, relations of control and dominance, and inherent social and material inequalities (Connell, 1995, 2000a; 2002; Douglas, 2005; Douglas & Wildavsky, 1982). One of the basic theoretical beliefs of cultural theory of risk is the form of social organisation an individual belongs to will generate a distinctive way of looking at the world, otherwise known as a worldview (Langford et al., 2000). In view of this and in support of the above finding, then, it
can be reasoned that males conforming to traditional masculinity may hold hierarchical worldviews because their way of looking at the world, or worldview, has been influenced and constructed within a gender order that shares similar elements with hierarchical cultures.

The relationship between traditional masculinity and an individualist worldview may be explained in the same way. Individualist cultures are based upon fierce competition where the wellbeing of the individual supersedes the well-being of society. It is vertically stratified according to power and wealth (Douglas, 2005b), where individuals are relatively free from the control of others, but frequently engage in the control of others (Thompson et al., 1990). Its competitive nature along with its primary virtues of courage, success, determination, and self-reliance are related to core features of hegemonic masculine norms (Levant et al., 2007; Mahalik, Talmadge, Locke, & Scott, 2005). Furthermore, individualism is the culture of the entrepreneurs and the pioneers who are responsible for developing modern technology and leading industry and science into the future (Douglas, 2003). Such arenas have been identified by literature as fundamentally gendered and instrumental to the maintenance of hegemonic masculinity (Connell, 1987, 1997, 2001; Donaldson, 1993).

The hegemonic masculinity of the new world order, transnational business masculinity, is connected to the business and political executives who operate within these domains. Particular features of this hegemonic masculinity are heavily influenced by individualist norms and values that have been exalted by neoliberalism and entrepreneurialism. According to Connell (2000b), this masculinity is marked by increasing egocentrism, very conditional loyalties, and a declining sense of responsibility to others. Hence, owing to the similarities between core norms and values of traditional masculinity and the values and beliefs of individualist cultures as well as the influence of neoliberalism in the construction of the global hegemonic masculinity, it can be reasoned that males conforming to traditional masculine norms may hold individualist worldviews.

6.1.1. Progressive masculinity and an egalitarian worldview
An interesting finding of the study was the classification of roughly a third of the sample as conforming to the progressive type of masculinity. This finding indicates that within the school
environment multiple masculinities exist which are in conflict with one another for hegemony. Progressive masculinities, in Morrell’s (2001) view, challenge traditional versions of masculinity and attempts to establish new images and versions of manhood. They are contained within the popular umbrella term of the ‘new man’ and are strongly opposed to patriarchy, gender inequality, and discrimination of homosexuals. Most prominent amongst middle class, White professionals, these emancipatory masculinities may be found in men’s groups engaged in introspection or gender-conscious raising (Morrell, 2001). These alternative masculinities can arise out of changes within gender relations (Morrell, 2001), or larger changes that occur within technological, economic, and political domains that result in instabilities within the gender order (Whitehead & Barrett, 2001).

Progressive masculinities, or the ‘new man’ discourse, have recently gained popularity in South African media for presenting alternative versions of manhood that challenge patriarchy. The ‘new man discourse’, according to Toerien and Durrheim (2001), was identified as one of the clearest voices alongside the ‘macho man’ discourse in 15 editions of the Men’s Health magazine published between 1997 and 1998. In addition, a recent article in a local newspaper, the Independent on Saturday (Grange, 2009), titled “Ladies, meet the new Alpha male”, presented Brad Pitt as the archetypal progressive male who, the article states, is a dedicated father, loving husband, gay activist, and successful actor. The use of exemplary figures in this way to promote the norms and ideals of progressive masculinity may be viewed as a form of masculinity politics, such as that undertaken by the project of hegemonic masculinity (Connell, 1995; Donaldson, 1993). However, in this case it is an attempt on behalf of men conforming to progressive masculinities to challenge the dominant position of hegemonic masculinity in the gender order (Connell, 1995).

Similar to the values and norms of progressive masculinities, individuals holding egalitarian worldviews embrace justice and equality as primary virtues of their way of life. Their three primary commitments are to human goodness, equality, and purity of heart and mind (Douglas & Wildavsky, 1982). Furthermore, both progressive masculinities and egalitarians are characterised by their challenge of the status quo. Egalitarians are known to be radical and angry in their attack of the status quo, that being the system upheld by the individualists and hierarchists, and abhor
the rankings, divisions, and inequality that it produces (Douglas, 2003, 2005). Like progressive masculinities, individuals adhering to egalitarian values align themselves in support of the rights of women, homosexuals, and people of colour. Moreover, both the progressive masculinity type and egalitarianism are associated with the construction of alternative forms of manhood that challenge the hegemonic norm (Kahan et al., 2007a).

In light of this, it appears that the significant relationship found between progressive masculinity and an egalitarian worldview may be partially explained by the common values and beliefs which they share. As an alternative, rival form of masculinity to hegemonic masculinity, progressive masculinities will be comprised of fundamentally different core values and beliefs which challenge the norms and ways of life associated with hegemonic masculinity. Recognising that individualist and hierarchical worldviews are associated with traditional masculinity, it, thus, seems essential for progressive masculinities to align themselves with an egalitarian worldview. Furthermore, cultural theory of risk asserts that adherence to particular cultural values and beliefs serves to legitimate a corresponding type of social relations, or way of interacting with the social world, which in turn generates and reinforces a particular worldview (Thompson et al., 1990). Possibly, then, the performance of progressive masculinity may influence the construction of an egalitarian worldview which may function to legitimate an individual’s conformity to progressive masculine norms and, simultaneously, reinforce their egalitarian values and beliefs. Hence, this mutually reinforcing relationship may by used to explain the association between traditional masculinity and commitment to individualist and hierarchical worldviews.

6.1.2. Traditional masculinity and lack of trust in women’s groups, environmental groups and Government

Wildavsky and Dake (1991) argue “that the most powerful factor for predicting risk perceptions is trust in institutions or ideology” (p. 56). Issues about trust and distrust pertaining to societal institutions, in their view, are essentially the foundation upon which societal debates about dangers are developed. Within this study, a significant negative relationship was observed between traditional masculinity and trust in women’s groups, environmental groups, and Government, indicating that males conforming to traditional masculine norms are less likely to believe in the ability of these institutions and organisations to manage societal risks effectively.
The relationship between traditional masculinity and lack of trust in Government may be mediated by the influence of cultural worldviews. Individualist and hierarchical worldviews, for instance, were found to be negatively associated with trust in Government. This finding is, however, contrary to cultural theory of risk which states that individuals with hierarchical worldviews will be more likely to trust hierarchical institutions of authority such as Government (Bouyer et al., 2001; Marris, et al., 2004).

In the South African context, Government has received a substantial amount of bad publicity in recent years in regard to the energy crisis, internal corruption, criminal investigations of ministers of parliament, lack of effective response to the HIV/AIDS pandemic, decline in economic growth, and worsening poverty and inequality which may have served to erode participants’ trust in the ability of government to address important societal risks. According to Slovic (2000), trust is fragile and is governed by the asymmetry principle in that it is easier to destroy rather than to create.

Another potential explanation for this lack of trust may stem from a perceived incongruence on behalf of individuals conforming to traditional masculine norms between the values and beliefs which they adhere to and the values and agenda of Government. It has been mentioned above that both traditional masculinity and hierarchical worldviews are supportive of the status quo and inextricably connected to social forms of organisation that are inequitable and in which power and control are localised at the top by White, privileged, heterosexual men (Brod, 1994; Connell, 1995, 2000b, 2002; Douglas, 2005; Kahan et al., 2007a; Langford et al., 2007). However, in recent years the South African Government has undergone crucial changes in its transition to democracy that have seen it attempt to reduce gender inequality and increase women’s rights, increase the rights of homosexuals and other marginalised groups, reduce poverty and inequality, and introduce affirmative action and black empowerment companies. Many of these changes, in Walker’s (2005) view, have served to diminish the patriarchal dividend that accrues to men, which may explain the reason for males conforming to traditional masculine norms to distrust Government’s ability to manage risks. Moreover, the demographics within Government have undergone drastic changes in that it has essentially transitioned from being a White apartheid Government to a Black democratic Government. The values and agenda of Government,
therefore, may be perceived by hierarchists and men adhering traditional masculine ideology as a challenge to their way of life and status quo. Consequently, they may fear that the actions of Government to address societal risks may threaten their preferred social form of organisation and, as a result, they classify Government as untrustworthy in an attempt to undermine their ability to deal effectively with societal risks. Similar findings by Langford et al., (2000) have found that hierarchists and individualists will show preference for strategies to reduce health risks that are supportive of their values and beliefs and that are developed from within the current regulatory structures and market mechanisms already in place.

This line of reasoning can be useful in explaining why males conforming to progressive masculinities were found to place a high degree of trust in Government’s ability to manage risks. Egalitarianism was found to be associated with trust in Government and progressive masculinities, which suggests that this relationship between progressive masculinity and trust in Government may be mediated by cultural worldviews. This positive relation between trust in Government and egalitarian worldviews does, however, contradict the findings of other studies (Marris et al., 2004) and the argument of cultural theory of risk, which states that egalitarians will not place their trust in powerful institutions such as Government that are aimed at maintaining the status quo, or those institutions that are perceived to promote injustice and inequality (Douglas & Wildavsky, 1982). Although in the South African context, there appears to be a greater congruence between the values and norms of progressive masculinity and the values and agenda upheld by Government. Both advocate for gender equality, both have accepted a more liberalised version of sexuality that upholds the rights of homosexuals and lesbians (Walker, 2005), and both, overtly, uphold the virtues of equality and justice. Consequently, egalitarians may express their trust in Government’s ability to manage societal risks because the nature of their actions undertaken to address important societal risks may be perceived by egalitarians as congruent with and supportive of their way of life.

In a similar vein, males conforming to traditional masculine norms may be distrustful of women’s groups and environmental groups because they are perceived to hold drastically different values and beliefs, and are known to be more critical of the status quo and radical in their attempts to address social problems and risks. They may be concerned that should these
groups be entrusted with the responsibility and authority for managing societal risks, the actions undertaken by these groups may be effective in challenging the inequitable system maintained by traditional masculine values and, thereby, reducing the patriarchal dividend accruing to males. Moreover, it is to be expected that males upholding traditional masculine norms will claim women groups to be ineffective in dealing with risks, because hegemonic masculinity serves to subordinate women and constrain their power and authority within society (Brod, 1004; Connell, 1987, 1995, 2000a; 2000b; Donaldson, 1993; Morrell, 2001).

In sum, the relationship between traditional masculinity and particular cultural worldviews and lack of trust suggests that individuals are less likely to trust in the ability of certain institutions and organisations to effectively manage risks if their values and beliefs are perceived to be incongruent with the values and agenda of these organisations. Moreover, although it requires further investigation, it can be reasoned that individuals are less likely to trust in institutions and organisations whose actions and strategies for reducing societal risks will be perceived to challenge their way of life or worldview. In addition, it appears that individuals will place a lower amount of trust in institutions and organisations whose social structural and organisation is different from their preferred organisational structure.

6.2. Cultural worldviews and their relationship to societal risk perceptions

In response to the second research question this study set out to investigate, different cultural worldviews were found to be associated with either high or low risk perceptions for various societal risks. In particular, individuals with hierarchical and individualist worldviews were found to hold significantly lower risk perceptions for total societal risk perceptions, which was the combined score for each of the risk categories. This is in accordance with cultural theory of risk which asserts that individualists generally view risks as opportunities (Olgedal, 2004; Rippl, 2002; Thompson et al., 1990). Individualists have been shown to perceive less personal danger across a number of hazardous risk items such as nuclear power, chemical waste, war, and environmental destruction in comparison to egalitarians (Sjoberg, 2003). Conversely, the findings of this study indicated that individuals holding egalitarian and communitarian worldviews perceived a high degree of risk and danger associated with various societal risks for the South African public. This has been confirmed in a study undertaken by Wildavsky and Dake
(1990) where egalitarians were found to hold high risk perceptions for risks associated with technology and the environment, social deviance, war, and economic troubles. In addition, the results of study conducted by Dake (1990) revealed that an egalitarian worldview was positively correlated with 35 of the 36 societal risk concerns in question indicating that ‘egalitarians are more critical of society and more risk averse across a wide variety of issues than are other political culture’ (p. 70).

Contrary to the assertions of cultural theory, cultural worldviews did not demonstrate any significant relationship with economic risks and industrial and technological risks. Cultural theory of risk predicts that individuals holding egalitarian worldviews will perceive a high amount of risk associated with industry and technology, whereas individualists will show great concern for economic risks such as unemployment, low economic growth, and affirmative action policies (Douglas, 2005; Douglas & Wildavsky, 1982; Douglas, 1992). Due to the sample being in their final year of schooling and still living at home, participants have not yet been exposed to the working world. Therefore, it is believed that participants may not hold strong perceptions of risk, either higher or low, for these economic problems because they are relatively distanced from them in their lives. Similarly, these boys may not have come into close contact with risks stemming from industry and technology such as mining, storage of hazardous waste substances, and chemical manufacturing, and may not have adequate knowledge about these issues. In comparison to health and personal behaviour risk items and environmental risks, it is possible that the industrial and technological risks are not as relevant and important to them as adolescents and, furthermore, they do not receive the degree of media attention which health and environmental risks receive.

6.2.1. Hierarchical worldviews and low concern for environmental risks and risks associated with social problems and inequality
Males with hierarchical worldviews believed that environmental risks such as depletion of the ozone layer, global warming, and environmental pollution were less likely to pose severe risks for the South African public. Conversely, this finding indicates that males possessing egalitarian worldviews perceived a significant amount of risk associated with environmental degradation. Other studies have found evidence for this relationship between environmental concerns and
hierarchical and egalitarian worldviews (Dake, 1991; Marris et al., 2004; Peters & Slovic, 1996; Sjoberg, 2003; Wildavsky & Dake, 1990). The risk portfolio of hierarchists, according to cultural theory of risk, is aimed at prioritising the risks that threaten the stability of the social system, or the status quo. Hence, long term risks such as the risks brought about by the deterioration of environmental resources and global warming are dismissed by hierarchists because they believe they may never materialise, and if so, there institutional arrangements will protect them from being singled out for blame (Douglas & Wildavsky, 1982).

On the other hand, it can be argued that participants subscribing to egalitarian values and beliefs selected environmental risks for attention because, cultural theory of risk asserts, the politicisation of environmental risk will function to strengthen their way of life. By drawing attention to environmental risks and connecting environmental destruction and the danger it poses to society with the operation of hierarchical and individualist cultures, egalitarians attempt to discredit those in authority and undermine their way of life, or social organisation (Douglas, 2003; Douglas & Wildavsky, 1982; Tansey, 2004; Thompson et al., 1990). In so doing, cultural theory asserts, environmental risks are used as an instrument to hold those in power accountable for their actions and to gain restitution for victims harmed by environmental degradation (Douglas, 1990; Tansey, 2004). Douglas & Wildavsky (1982) believe that the recent widespread concern about environmental pollution and personal contamination that has arisen in the Western world and, in particular, North America, can be explained by historical social changes that have resulted in egalitarian values and beliefs rising to the fore in Western societies.

Contrary to cultural theory of risk and numerous other research studies, this study found that males conforming to hierarchical worldviews were not inclined to perceive the risks associated with social instability and crime as a danger to South African society (Dake, 1991; Douglas & Wildavsky, 1982; Marris et al., 2004; Peters & Slovic, 1996; Wildavsky & Dake, 1990). Perhaps in the South African context, high levels of risk perception for crime and social instability may be more adequately explained by other variables such as socio-economic status, area of residence, trust in social institutions, gender, race, or previous exposure to crime or social unrest.
Males adhering to a hierarchical worldview, however, demonstrated low concern for the risks associated with social problems and inequality such as poverty, HIV/AIDS, child malnutrition, violence against women, and high income inequality. Conversely, this indicated that egalitarians perceived these social problems to pose a high risk to the South African public. A review of the literature suggests that this may be the first study that has investigated the relationship between cultural worldviews and a risk category of this nature. Hierarchists may dismiss the risks associated with social problems and inequality because these risks are viewed as natural consequences of the social system which they uphold. Indeed, Douglas and Wildavsky (1982) argue that although it is not an explicit aim of hierarchies to establish social inequalities, it is nevertheless “written into its constitution” (p.179). Maintenance of the system and harmony within society is exalted above the individual in hierarchical cultures, no matter what the risks they face (Douglas & Wildavsky, 1982). The social and material inequalities as well as the patriarchal nature of hierarchical cultures have been previously discussed in the above paragraphs (Douglas, 2005; Douglas & Wildavsky, 1982). Owing to its inherent stratification of society, hierarchical cultures, although more aware of the risks faced by minority groups, discriminate against the poor and marginalised on the basis of their difference (Douglas & Wildavsky, 1982). As a result, the risks associated with social problems and inequality faced by individuals other than white, privileged males who hold power and authority in hierarchical societies (Kahan et al., 2007a), such as women, children, the poor, the sick, and homosexuals, will be overlooked or considered inconsequential because they form part of the consequences associated with the status quo.

This finding, thus, supports the argument of cultural theory of risk which asserts that the selection of particular risks for worry or dismissal, relevant in this case, is functional and even politically motivated, because it serves to strengthen ways of life and weaken others (Wildavsky & Dake, 1991). For this reason, males embracing egalitarian values were found to highlight the severity of these risks for the South African public. In line with Douglas (2003), this can be viewed as an attempt to present hierarchical cultures as thoroughly corrupt and evil which, consequently, will lead egalitarians to “build up a wall of virtue that makes outsiders sinners and insiders saints” (Douglas, 2003, p. 1368).
6.2.2. Individualist worldviews and low concern for risks associated with social problems and inequality and health and personal behaviour risks

Similar to hierarchical worldviews, males holding individualist worldviews demonstrated less concern for the risks associated with social problems and inequality that are faced by women, children, the poor, the sick, and homosexuals. This finding is congruent with the premise of cultural theory of risk which asserts that individuals adhering to individualist worldviews are more likely to hold others personally responsible for the problems they face. Blaming individuals for their misfortunes is a popular strategy used to silence complaints of social inequality within individualist cultures. Furthermore, the weak, orphans, widows, and pensioners will suffer the most within the fierce competition of individualist cultures, and individualists will manage not to know about their fate (Douglas & Wildavsky, 1982). Indeed, individualist cultures are able to forget about the powerless individuals within society and “find ways of making their disadvantaged members disappear from sight” (Douglas, 1992, p. 36).

This conflict over the severity which this category of risks poses for South African society, which is evident amongst males adhering to either individualist, hierarchical, or egalitarian worldviews, cannot be reduced to simple concerns about safety and security. Males adhering to egalitarian, hierarchical, or individualist worldviews will hold different beliefs about who should be held accountable for these risks, who should be given the power and responsibility to address them, and the compensation that should be given to victims affected by these risks (Douglas, 1992; Tansey, 2004). According to Tansey and O’Riordan (1999), this social debate about the severity and politicisation of risks associated with social problems and inequality is intimately connected to issues related to social justice, power, and legitimacy in South Africa.

An individualist worldview was also significantly associated with low risk perceptions for risk items related to health and personal behaviours. Individualists were, thus, less likely to believe that activities such as sun tanning, driving over the speed limit, smoking, and multiple sexual partners would threaten their health or wellbeing. This finding has been confirmed by other researchers who have found an individualist worldview to be associated with lower risk perceptions for activities such as drinking alcohol, car driving, and ingestion of food colourings (Marris, et al., 2004). In accordance with cultural theory of risk that identifies freedom, self
regulation, and personal choice as core values and norms of an individualist worldview (Douglas, 2003; Douglas & Wildavsky, 1982), it is reasoned that individuals adhering to an individualist worldview will perceive lower levels of risk in those activities considered to fall under their personal choice and control. For instance, car driving was identified as posing little risk to individualists who classified this activity under personal risks, whereas egalitarians classified car driving as an environmental threat and perceived this activity to be of higher risk (Marris et al., 2004).

6.3. Societal risk perceptions amongst different masculinity types
An examination of the pattern of societal risk perceptions presented in Table 4 in the Results chapter shows that each of the South African masculinities described by Morrell (2001) holds a unique pattern of risk perceptions. In other words, it is apparent that males conforming to each of the masculinities will hold a specific risk portfolio in which certain societal risks are either selected for attention or dismissed. The traditional masculinity type, for instance, was found to be relatively unconcerned about most categories of societal risks, holding a significant negative relationship with four of the five categories of risk as well as total societal risk perceptions. Males conforming to the accommodating masculinity type also held relatively low risk perceptions for three of the five risk categories and for total societal risk perceptions. Males adhering to the progressive masculinity type, in contrast, were more likely to perceive high levels of risk associated with four of the five risk categories and were, overall, more concerned about the risks these posed for the South African public. In general, these findings highlight that males conforming to progressive norms and values are relatively risk-averse in relation to the categories of risk under investigation in this study, whilst males adhering to accommodating or traditional norms and values were found to be more tolerant of societal risks and the danger these pose for the South African public.

6.3.1. Societal risk perceptions amongst traditional and accommodating masculinity
Similarly to the traditional masculinity type, the accommodating masculinity type was associated with low concern for the risks linked to social problems and inequality and the risks related to crime and social instability. The reasons hypothesised to underlie the relationship between traditional masculinity and low risk perceptions for these specific categories of risks will be
expounded in later paragraphs. However, they will be mentioned briefly in order to explain their connection with the accommodating masculinity type.

It is hypothesised that males conforming to traditional masculine norms and values will judge the dangers associated with crime and social instability and social problems and inequality to be of little concern to South African society for two reasons. Firstly, some of these risk items such as crime (specifically those crimes perpetrated by men), violence against women, and discrimination against homosexuals are associated with the performance of traditional masculinity and are instrumental to the maintenance of the patriarchal dividend and relations of domination and subordination between men and women, and groups of marginalised men (Connell, 1995; Kaufman, 2000; Morrell, 2001; Dunkle et al., 2004; MacInnes, 2001). Secondly, it is reasoned that social problems such as poverty, high levels of income inequality, and the spread of HIV/AIDS can be viewed as natural consequences which stem from a gender order constructed upon an inequality of power and social resources (Connell, 1995; Dunkle et al., 2004; O'Sullivan et al., 2006; UNAIDS, 2000).

It is argued that these same reasons will account for why males conforming to the accommodating masculinity type perceived lower risks associated with these risk categories. The accommodating masculinity, in Morrell’s view (2001), is constructed by males as they respond to the crisis in masculinity and the changes occurring in gender relations and equality. Although the accommodating masculinity type appears tolerant of the equal rights awarded to women and homosexuals in recent years, Morrell (2001) argues that misogyny and homophobia are still core components of this masculinity.

Similar to Morrell’s (2001) conceptualisation of accommodating masculinity, Toerien and Durrheim (2001) have conceptualised this form of masculinity, labelled the ‘real man’, as an integrated discourse drawing upon aspects from both the ‘macho man’ and ‘new man’ discourses. Most importantly, they highlight that that this version of masculinity is a collective resolution to the crisis of masculinity that enables the ‘real man’ to incorporate elements of the ‘macho man’, or traditional masculinity, without inviting the criticisms associated with traditional forms of masculinity. Hence, the ‘real man’ holds onto features of traditional
masculinity and displays only those ‘new man’ changes that will allow him to maintain his power over women in new and more socially acceptable ways. Thus, it can be argued that collective resolutions amongst men that give rise to new version of masculinity, “while attempting to position men as sensitive to recent changes in gender relations, serve to maintain a patriarchal power (im)balance” (Toerien & Durrheim, 2001). In agreement with this, Morrell (2001) adds that conformity to the accommodating masculinity type does not require males to give away their male power and status (Morrell, 2001).

Owing to the connection between the accommodating masculinity type and the patriarchal dividend, then, it is possible that males conforming to these norms and values, through their complicit relationship to the hegemonic masculinity (Connell, 1995), will dismiss the societal risks resulting from the defence and performance of hegemonic masculinity in the gender order. A similar explanation has been proposed by researchers investigating the ‘white male’ effect, where lower risks perceptions for technological risks amongst white males in the sample were argued to be influenced by the perceived benefit which they accrue from the use of technologies in society (Finucane et al., 2000). Hence, in accordance with cultural theory of risk, which states that individuals will select or dismiss risks in relation to their way of life (Douglas & Wildavsky, 1982), males conforming to accommodating norms and values may downplay the danger and severity which these risks pose to the South African public, because these risks are inextricably connected to their way of life and the status quo. Furthermore, the existence of societal risks such as those associated with inequality, crime, poverty, and those faced by less powerful groups such as women, children, and homosexuals may serve to maintain relations of power and dominance within South African society and, as a result, will preserve the patriarchal dividend awarded, albeit unevenly, to men (Donaldson, 1993). For this reason, males conforming to the accommodating masculinity type may be unwilling to acknowledge the severity of the risks which these problems pose for society, because this may undermine and threaten to destabilise the gender order from which they gain their favourable position.

A low concern for economic risks and the harm these pose for the South African public was also demonstrated by males conforming to the accommodating masculinity type, but not for the traditional or progressive masculinity types. Males conforming to the accommodating
masculinity type are, thus, less concerned about the current skills shortage in South Africa, high unemployment rates, low economic growth, overprotective labour laws, affirmative action policies, and government regulation of private businesses. This is an interesting and, somewhat, unexpected finding as the most obvious reasons that could explain this finding; for example, perceived invulnerability to economic risks, the security of receiving the patriarchal dividend, and the influence of neoliberalism and capital markets on the construction of hegemonic masculinity, will be unable to account for the lack of a significant relationship between traditional masculinity and economic risks. Further research should attempt to explore the reasons underlying this relationship between and seek to determine whether other variables mediate this relationship. However, it must be noted that the data for this study was collected prior to the economic recession currently affecting both South Africa and the rest of the world and it is to be expected that this significant relationship may have changed in recent months.

6.3.2. Societal risk perceptions and progressive masculinity

Males adhering to progressive masculine norms had a far greater sensitivity for societal risks in comparison to males adhering to traditional and accommodating masculine norms. Furthermore, these males were significantly more concerned than other males in the sample about the dangers which health and personal behaviour risks, environmental risks, crime and social instability, and risks associated with social problems and inequality pose for the South African public. In regard to health and personal behaviour risks, the progressive masculinity type held the highest risk perceptions for activities such as drinking alcohol, sun tanning, having sex without a condom, and using street drugs. These findings suggest that new versions of masculinity constructed within the ‘new man’ discourse are establishing alternative norms in regard to health and wellbeing amongst men. Whereas males conforming to traditional masculine norms are more likely to engage in risky health behaviours in an attempt to display their toughness and invincibility (Bunton et al., 2004; Capraro, 2000; IRIN, 2003; Jones, 1993, in Bunton et al., 2004; Lupton, 2004; Pleck & O’Donnell, 2001; Williams & Best, 1990, in Courtenay, 1998), it appears that males conforming to progressive masculine norms are more likely to acknowledge the health risks and danger associated with these activities. An awareness of the threat these activities pose to individuals’ health and wellbeing and, possibly, a heightened sense of
vulnerability to their negative consequences appear to be features of progressive masculinity that differentiate it from traditional masculinity.

Significantly higher risk concerns regarding social problems and inequality as well as crime and social instability were also evident amongst participants adhering to progressive norms in comparison to the rest of the sample. These findings suggest that core values and norms of the progressive masculinity type that include equality and fairness, anti-discrimination against homosexuals, and challenges to patriarchy (Morrell, 2001) will predispose these males to view societal risks stemming from inequality in social power and resources as high risk to society. For this reason, conformity to progressive masculine norms will be associated with greater concerns for the welfare and plight of women, children, homosexuals, and other groups of less power and status in society, such as the poor and sick, because the risks they face result from conditions in society that conflict with and threaten their primary virtues. This is consistent with cultural theory of risk which argues that risks become politicised in society by certain groups because they are viewed as a threat to their way of life, or social organisation (Tansey, 2004).

Furthermore, because the progressive masculinity type can be viewed as a rival masculinity challenging the dominance of hegemonic masculinity in the gender order (Connell, 1995), conditions of risk and inequality that are seen to arise from the defence of hegemonic masculinity may be politicised in an attempt to bolster political pressure to defend the progressive masculinity type, whilst attacking and undermining traditional masculinity (Wildavsky & Dake, 1990). In addition to these reasons, the presence of an egalitarian worldview amongst males conforming to progressive norms and values (Section 1.2.) may potentially mediate this relationship, serving to heighten their concern for groups of lower status and power in society (Douglas, 2003, 2005; Douglas & Wildavsky, 1982).

Possible reasons that explain the high level of concern shown by the progressive masculinity type for risks associated with crime and social instability may, again, highlight that core values and norms of the progressive masculinity type are threatened and undermined by the effects of crime and social instability. Further research is needed to better understand this relationship and the factors which give rise to this heightened concern. Nevertheless, the finding that males adhering to progressive norms are more likely to trust in the ability of Government to manage
risks effectively, whilst males conforming to traditional masculine norms demonstrate less trust in Government (Section 1.3.) may assist in explaining this apparent disagreement between progressive masculinity and traditional masculinity regarding the severity of risks linked to social problems, inequality, crime and social instability.

According to cultural theory of risk, the values and beliefs relating to risks which hold power and public attention in society are propagated by institutions, or cultures, that benefit from society’s awareness of them. Hence, the classification of risks in society is functional, in that it forms part of a political struggle for influence in society which will legitimise the power relations which these institutions hold over the governance and operation of societies (Tansey, 2004). The disagreement, then, between the progressive masculinity type and the traditional masculinity type over the severity and danger of these risks to society must be viewed as a struggle for influence and power within South African society (Tansey, 2004). Because males conforming to progressive norms are more likely to trust in the ability of Government to manage risks effectively (Section 1.3.), it appears that by politicising these risks as a high concern for society they legitimise the role of Government and their use of social power in addressing these issues. They, thereby, bring these societal risks back under the jurisdiction of Government, who is generally viewed as the social institution responsible for addressing social problems within these domains. In addition to being a consequence of the defence of hegemonic masculinity (Section 3.1.), males conforming to traditional masculine norms may not want to politicise the danger these risks pose for South African society because, in doing so, they may legitimise the role of Government in managing societal risks and exerting relations of power and control within society (Tansey, 2004).

Issues connected to environmental degradation such as global warming, environmental pollution, and the depletion of natural resources and the ozone layer are of great concern to participants conforming to progressive norms in comparison to the rest of the sample. This relationship could be mediated by the influence of an egalitarian worldview amongst these participants (Section 1.2.), which has been shown to be significantly correlated with environmental concerns in other studies (Dake, 1991; Marris et al., 2004; Peters & Slovic, 1996; Sjoberg, 2003; Wildavsky & Dake, 1990). However, this relationship can also be understood by examining in greater detail
the components of the environmental movement and the construction of masculinities that demonstrate support for it.

Connell (1990) explored the life histories of six Australian heterosexual men involved in environmental activism and countercultural social life. Although each of these six men showed an engagement with hegemonic masculinity and a commitment to the reproduction of patriarchy in their earlier years, after becoming involved in the environmental movement each of them separate themselves from the project of hegemonic masculinity and, as Connell (1990) describes it, ‘renunciated’ their masculine privileges and ways of being. Each began a journey of reconstructing masculinity for themselves in which new versions of masculinity, that brought together both feminine and masculine attributes, were influenced by the ethos and organisational practices of the Australian environmental movement, which centred upon the pursuit of personal growth, the practice and ideology of equality, collectivity, and solidarity. In relevance to this study, then, it appears that identification with the environmental movement and heightened concerns about environmental risks and degradation may be more likely amongst males embracing progressive masculine norms owing to the apparent similarities in values and practices between the two. Hence, in accordance with cultural theory of risk, environmental risks will be perceived as higher risk amongst progressive masculine males because these constitute a threat to their core values and way of life (Rippl, 2002; Tansey, 2004).

6.4. Traditional masculinity and low risk perceptions for societal risks linked to the defence or performance of hegemonic masculinity

One of the central hypotheses in this study was that males conforming to traditional masculine norms will be more likely to view those risks that are supportive of their masculine identity, or those that are associated with the defence of hegemonic masculinity, as low risk to South African society. An inspection of the results presented in Table 4 of the Results chapter indicates that the traditional masculinity type, in comparison to the progressive and accommodating masculinity types, is least concerned about the danger posed by most categories of societal risks to the South African public.
In regard to health and personal behaviour risks, males conforming to traditional norms and values were less likely to believe that activities such as multiple sexual partners, drinking alcohol, smoking, driving over the speed limit, and rugby pose a significant threat to an individual’s health and wellbeing. This finding was somewhat expected as many of these activities are associated with the performance of traditional masculinity and, more specifically, core masculine norms such as toughness, risk-taking, bodily strength, and invincibility (Blackbeard & Lindegger, 2007; Capraro, 2000; IRIN, 2003; Jones, 10993, in Bunton et al., 2004; Lupton, 2004; Mahalik et al., 2007; Pleck & O’Donnell, 2001). Indeed, it is believed that many males use unhealthy and risky behaviours in an attempt to demonstrate their manhood and prove that they are real men (Courtenay, 1998). Hence, it is argued that males will perceive less risk associated with particular risk behaviours and activities which provide them opportunities to perform and confirm their masculinity, and this may be influenced by identity-protective cognition (Kahan et al., 2007a). In other words, any activities that are viewed as supportive of the masculine identity will be evaluated as low risk, even if these are potentially harmful, because of the influence of motivated cognition that is aimed at protecting the identities individuals form through their commitment to cultural norms (Kahan et al., 2007a).

Environmental degradation and pollution, according to Connell (1995), is a harmful consequence resulting from the operation of masculinised institutions in the defence of hegemonic masculinity within the gender order. Connell (1995) argues that environmental degradation is directly linked to the inequitable distribution of power and social resources that men hold in society. Hence, participants conforming to traditional masculine norms were more likely to view the risks connected to environmental pollution and degradation as low risk to society, because these are caused through the routine operation of masculinised institutions such as the state and large corporations. Run by heterosexual men upholding the ideals and norms of hegemonic masculinity, these institutions play an important role in the making of gendered power and the maintenance of hegemonic masculinity (Connell, 1995). Overlooking the severity of the danger which environmental degradation poses to South African society, then, can be understood as a strategy on behalf of these participants’ to maintain the patriarchal dividend and the status quo. This line of reasoning also supports the argument proposed by cultural theory of risk that the
risks selected for worry or dismissal are functional in the sense that they strengthen a particular way of life, in this case hegemonic masculinity, and weaken others (Wildavsky & Dake, 1990).

Low risk concerns for risks stemming from social problems and inequality as well as crime and social instability can also be understood as a political strategy undertaken by males conforming to traditional masculine norms in this sample to ensure that the dominance of hegemonic masculinity is maintained within the gender order. The reasons hypothesised to explain the relationship between the traditional masculinity type and low risk perceptions for these risk categories relate to the performance of traditional masculinity and the maintenance of hegemonic masculinity and have been mentioned in earlier paragraphs (Section 3.1.). Indeed, Connell (1995) argues that, in addition to environmental degradation, the defence of hegemonic masculinity that is achieved through the operation of masculinised institutions is also responsible for creating other harmful consequences such as inequalities in income, social power and resources, and the growing destructiveness of military technology. He further argues that the significant gender differences in power and social resources within the gender order have made it a site of “significant injustice and other toxic effects” (Connell, 2002, p. 112).

It is reasoned, then, that social problems such as child malnutrition, high illiteracy rates, the spread of HIV/AIDS, high income inequality, and violence and discrimination against women and homosexuals were considered to be a low concern for the South African public by participants conforming to traditional masculine norms, because these circumstances are all generated out of conditions of inequality in social power and resources. Consequently, the males supporting the defence of hegemonic masculinity may be unwilling to acknowledge the severity of these risks because the inequitable distribution of social power and resources, that gives rise to these circumstances of risk, is tilted in their favour in the form of the patriarchal dividend (Connell, 1987, 1995, 2005).

According to Connell (1995), conditions of social inequality such as those present within the gender order are unable to be maintained without violence. More specifically, these conditions of violence can be created through the ascendancy of the hegemonic masculinity, although not necessarily violent itself, which can stabilise a gender order with immense inequalities in power.
and social resources (Connell, 2000b). For this reason, violence against women and homosexuals will be overlooked by males conforming to traditional masculinity as a serious threat to society. Similarly, the threat of violence and crime that confines women to a place of fearfulness and submission, or crimes perpetrated by men against other men will also be overlooked as a high risk for society, because violence has been shown to be a core feature of both White and Black masculinities in South Africa at present and in South Africa’s history (Breckenridge, 1998; Campbell, 1992; Morrell, 1998, 2001; Walker, 2005). Other instances of violence and social instability such as the high rate of juvenile offenders, strikes, and protests may also be viewed as lower risk by males embracing traditional masculine norms and values because of this connection between forms of violence and traditional masculinity, which ultimately serves to support their masculine identity and maintain the patriarchal dividend. These finding also suggest that the influence of identity-protective cognition on the risk evaluations of participants in this regard has led participants to view demonstrations of violence as low risk to society in order to protect their masculine identities and the cultural norms on which they are based (Kahan et al., 2007a).

6.4.1. Traditional masculinity and an ideology of risk

In accordance with cultural theory of risk (Wildavsky & Dake, 1990), the findings of this study indicate that each South African masculinity type has its own unique pattern of societal risk perceptions, or risk ideology. Similar to how different risks are given more or less importance than others amongst individualist, egalitarian, and hierarchical worldviews, it is apparent that there exists a disagreement between the traditional, progressive, and accommodating masculinity types about how these dangers should be ranked and prioritised in South Africa.

It is interesting to note that the progressive masculinity type was found to be highly concerned with most of the societal risks and problems that have received prominent media attention and social concern both nationally and internationally in recent months and years. These include; environmental issues such as global warming and environmental pollution, issues related to physical health and wellbeing, inadequate political leadership, crime, the deterioration of moral values, the spread of HIV/AIDS, and the rise of violence against women. In comparison to participants conforming to the traditional and progressive masculinity types, it was the
participants embracing progressive masculine norms and values that voiced most concern and anxiety about the impact of these risks for the South African public. It, thus, appears that the progressive masculinity type is far more risk-sensitive to a variety of different societal risks in comparison to other masculinities.

In contrast, the risk ideology of the accommodating and traditional masculinity types was highly risk insensitive and demonstrated a low concern in general for the many societal risks. A major feature of the risk ideology belonging to males embracing traditional and accommodating norms and values was the lack of concern for risks faced by women, children, homosexuals, and the sick and poor. Hence, it is the risks that arise out of conditions of inequality in power and social resources that are generally dismissed by these males. A low concern for health and personal behaviour risks was also found to be a significant feature of the risk ideology belonging to traditional masculinity, suggesting that the performance of activities known to be illegal or a threat to individuals’ health and wellbeing are strongly connected to the performance of traditional masculinity. In sum, the risk ideology of the traditional and accommodating masculinity types indicates that circumstances of risk and risk activities that are either supportive of traditional and accommodating identities, or that are associated with the defence of hegemonic masculinity and the maintenance of the patriarchal dividend, will be perceived as low risk to the South African public.

The implications of these ideologies of risk are far reaching and can enter into the domains of politics and risk management. According to Donaldson (1993), an integral part of the process in establishing and maintaining dominance in the gender order requires that the hegemonic masculinity impose a definition of the situation, define the terms in which events are understood and issues discussed, define morality, and formulate ideals. The ascendancy of traditional masculinity into the hegemonic position within the gender order, therefore, involves a “process by which normal and ideal definitions emerge, how the terms of morality surface and persuade” (Barrett, 2001, p.79). In line with cultural theory of risk (Douglas, 1982; Wildavsky & Dake, 1990), then, the risk ideology of the traditional masculinity type is functional in the sense that it will serve to strengthen the patriarchal agenda and maintain an inequitable gender order. In addition to judgements of risk, this ideology of risk will also influence individuals’ beliefs and
values that relate to wider social and political issues such as social justice, rights to know, blame, responsibility, restitution for victims, and liability (Tansey, 2004).

In reality, therefore, the implications of this mean that traditional masculinity, by way of its dominant position in the gender order, can uphold a hegemonic ideology of risk that will influence the way people in South Africa view societal risks. Due to its position of power and leadership in the gender order and the relations of complicity which it holds with other groups of men, the risk ideology of the traditional masculinity type has the potential to influence the cultural ideals and definitions of normality held by men in South Africa. Furthermore, should this ideology of risk be endorsed by men conforming to traditional norms and values who occupy positions of authority and power in South Africa, this will have broad implications that extend beyond risk evaluations to social and political issues such as justice, responsibility, and liability. Seeing that men occupy a number of high powered positions in society in gendered domains such as politics, business, technology, economics (Donaldson, 1993), this risk ideology which is fundamentally supportive of hegemonic masculinity may influence the management and communication of risks as well as policies of risk communication. An additional point of concern is the possibility for this ideology of risk to influence men in positions of power and decision-making authority in South Africa to neglect or underrate the severity of the risks faced by people of lower status and power.
7.1. Conclusion

This study has examined the relationship between traditional masculinity, cultural worldviews, and societal risk perceptions amongst school-going adolescent boys. A review of the literature suggests that this may be one of the first studies to investigate the relationship between different masculinity types and cultural worldviews, as well as the relationship between different masculinity types and societal risk perceptions. Owing to the recent changes in gender relations and the emergence of other, rival masculinities in South Africa (Morrell, 2001), further research efforts into this domain will be particularly valuable and constructive.

The findings of this study showed that males embracing traditional masculine norms and values were more likely to endorse hierarchical and individualist worldviews, and were less likely to trust in the ability of Government, women’s groups and environmental groups to manage risks effectively. Participants conforming to the traditional masculinity and accommodating masculinity types were found to hold a low concern about a variety of societal risks and the impact these posed for the South African public. Although no societal risks were perceived as a significant concern for participants adhering to the traditional or accommodating masculinity types in this study, further research should attempt to identify the societal risks that are perceived as a high concern in order to understand the factors which influence this relationship and functional role which these risk perceptions play. Indeed, it was evident that the risk ideology upheld by participants adhering to traditional masculine norms, as well as those adhering to accommodating masculine norms, was functional in the sense that it served to defend the hegemonic masculinity and the inequitable distribution of social power and resources within the gender order. As such, the risks faced by individuals of lower power and status, those that are connected to demonstrations of violence and social instability, those associated with environmental degradation, and those which concerned the performance of the body and risk-taking were perceived as lower risk to South African society.

In contrast, the progressive masculinity type was strongly supportive of egalitarian norms and values and placed a high level of trust in the ability of Government to manage risks effectively.
Males conforming to the progressive masculinity type were more likely to be risk sensitive, showing heightened concern for the negative impact of a number of societal risks on the South African public. The risk ideology connected to the progressive masculinity type demonstrated high levels of concern for many of the risks currently receiving substantial media and political attention. This risk ideology is fundamentally different from, and in some ways opposed to, the risk ideology belonging to the traditional and accommodating masculinity types. A comparison of the risk ideologies belonging to the different masculinities indicated that the societal risks in question are ranked and prioritised differently by each of them. In the literature, societal risks have also been found to be ranked and prioritised according to the cultural worldview an individual adheres to (Dake, 1991). This conflict in regard to the ranking of dangers or the risk ideologies upheld by the traditional and progressive masculinity types can be viewed as a political struggle for influence in our society which is aimed at securing the legitimisation of power relations inherent to the governance of society (Tansey, 2004).

Hence, it is apparent that the risk perceptions of the participants in this study were not objective, but instead were influenced by socio-political factors such as cultural worldviews and masculine norms and values. This confirms Douglas’ (1990) argument that evaluations of risk are inherently a political, aesthetic, and moral matter (Douglas, 1990). Moreover, these evaluations of risk, and the risk ideologies they belong to will have bearing on wider social debates regarding social justice, blame, responsibility, and restitution for victims (Tansey & O’Riordan, 1999).

In addition to these broader social issues, the implications of these risk ideologies, especially those connected to the defence of hegemonic masculinity, may determine the particular societal risks that receive the most political and social concern in South Africa and those that are dismissed as less important. The implications of these findings for the South African context suggests that men conforming to traditional masculine norms who occupy positions of power and decision-making authority in South Africa may operate in accordance with a particular ideology of risk which serves to maintain their way of life and patriarchal dividend, but which serves to underrate or dismiss the risks faced by individuals of lower power and status than themselves. In addition, the endorsement of hierarchical and individualist worldviews amongst individuals responsible for making decisions concerning risk policies, the management of risks, and risk
communication in South Africa can result in those risks connected to social problems and inequality being neglected in order to maintain their way of life and the status quo. The influence of these worldviews will ensure that the risks faced by the poor, weak, orphans, pensioners, homosexuals, and powerless are overlooked and forgotten about (Douglas & Wildavsky, 1982). This will have serious implications for these groups of individuals in South Africa, because it is these groups of individuals, the poor, powerless, and marginalised, which are exposed to more frequent and more severe societal risks.

7.2. Limitations
This study, while producing some valuable findings, does, however, have some limitations. Firstly, the use of self-report questionnaires and the potential influence of social desirability bias in participants’ responses is a key consideration. Further, the correlational design of the study only allows for one measurement of the variables of interest at a point in time. Future research using longitudinal measures of masculinity, cultural worldviews, and societal risk perceptions could yield interesting information about the change in these variables over time and the change in the relationships between these variables. Furthermore, the majority of the sample participating in this study lived in relatively affluent areas and could be classified as middle to upper class, which decreases the generalisability of the study’s findings. The use of a comparative sample from a less affluent High School or area to address this limitation may have revealed valuable information in regard to the societal risks that are most feared and the types of masculinity that are most common amongst adolescents in lower socio-economic levels. Hence, further investigation into the area of societal risk perceptions in South Africa will benefit from using more diverse samples of individuals in relation to race, socio-economic status, age, and even gender. Lastly, this study may have been limited by the age of the participants and the influence this may have had on the level of concern about different societal risks. No significant relationships between cultural worldviews and types of masculinities in terms of industrial and technological risks were evidenced in this study and only one significant relationship was found between economic risks and the accommodating masculinity type. This may have resulted from a lack of exposure to these risks, or a lack of knowledge about their impact and relevance for our society.
7.3. Recommendations

In light of the study’s findings, particular recommendations that relate to the management and communication of risks can be suggested. Firstly, it is to be recommended that individuals responsible for making decisions in regard to societal risks should view societal risks as a subjective, rather than an objective, phenomenon that generates different levels of concern amongst the South African public. A more effective approach to risk management may require individuals to listen to and consult with a diverse range of lay individuals, rather than relying on the decisions and assessment of professionals. In addition, optimal adoption of risk management or reduction strategies by individuals in South Africa may require information about risks and the purpose of risk management strategies to be communicated in such a way that leads individuals to accept and show support for these strategies because they are consistent with their cultural norms and values. Moreover, it has been shown that individuals will disagree over the ability of institutions to manage societal risks effectively. Thus, in order to ensure the risk and safety concerns of South Africans are managed effectively, issues related to the development of risk policies and important risk management strategies should attempt to include the input and involvement of different institutions and groups of people. It is believed that the implementation, or at least the consideration, of these recommendations will make a positive contribution to improving the appropriateness and effectiveness of risk management and communication strategies in South Africa.
REFERENCES


APPENDIX A

Biodemographic questionnaire

THANK YOU FOR AGREEING TO PARTICIPATE IN THIS STUDY. THESE QUESTIONNAIRES WILL BE KEPT CONFIDENTIAL AND ANONYMOUS.

1. How old are you? ___________

2. To which race group do you belong to? Please tick the appropriate block.

- Black
- White
- Indian
- Coloured
- Other

3. Which area do you live in? _____________________________________________________________

4. Do you participate in competitive sport? Yes / No. If so, what sport/s? _______________________

5. Are you planning to study after school? If so, what course or degree are you considering? _____________________________

6. What kind of career or job would you ideally like to have one day? ______________________________

7. What is your father’s occupation? _______________________________________________________

8. What is your mother’s occupation? _______________________________________________________  

9. How much trust do you have in the following institutions and people to deal with risks effectively? Place the appropriate number next to each.

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<thead>
<tr>
<th>Complete trust</th>
<th>Moderate trust</th>
<th>Slight/a little trust</th>
<th>No trust at all</th>
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<tr>
<td>Government</td>
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<td>Private companies and businessmen</td>
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<td>Medical professionals</td>
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<td>Women’s groups</td>
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<td>Other groups (Please name institution or people you are referring to)</td>
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</tbody>
</table>
10. The 9 statements below have been divided into 3 groups. Please circle the statement that you **most agree** with. In other words, circle the statement that most accurately reflects your attitude. **YOU CAN ONLY CIRCLE ONE STATEMENT IN EACH GROUP, EITHER A OR B OR C.**

1. A. Heterosexual men need to be tolerant of gay men and must accept they have equal rights.
   **OR**
   1. B. There is no reason why gay men should not be able to enjoy all the rights and privileges that heterosexual men have.
   **OR**
   1. C. A real man should disagree with the equal rights and status gay men receive because homosexual behaviour is perverse.

2. A. Women can have the same rights and opportunities in the workplace as men, but they are still primarily the ones responsible for doing the housework, cooking, and childcare.
   **OR**
   2. B. Men should enjoy taking some responsibility for the cooking, cleaning, and childcare.
   **OR**
   2. C. Women should be encouraged to rather look after the home and leave men to run the business world and political domain.

3. A A real man should restrain himself from being violent or aggressive; rather he needs to be respectable, wise and levelheaded.
   **OR**
   3. B. A real man doesn’t need to live up to “masculine norms or standards”; he can be sensitive, caring, and emotionally open if he wants.
   **OR**
   3. C. Violence, aggression and toughness are essential qualities that real men need to possess to distinguish them from homosexuals, women, and weaker men.
THE MALE ATTITUDE NORMS INVENTORY – II

The statements below describe interesting situations involving men. There are no right or wrong answers, what is needed is just your opinion. You are asked to express your feelings towards each statement by indicating whether you – (1) Strongly disagree, (2) Disagree, (3) Have no opinion, (4) Agree, (5) Strongly agree – by placing a circle or cross over the appropriate number.

For example: Men should eat vegetables every day.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</table>

1. A man should prefer sports like rugby and soccer to activities like art and drama.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
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<td>1</td>
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</table>

2. If a man hurts himself, he should try not to let others see he is in pain.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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<td>1</td>
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</table>

3. Men who cry in public are weak.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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</table>

4. Men should share their worries with other people.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
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</table>

5. To be a man, you need to be tough.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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</thead>
<tbody>
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</table>

6. Being called a “faggot’ is one of the worst insults to a man.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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</thead>
<tbody>
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<td>1</td>
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<td>4</td>
<td>5</td>
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</table>

7. Men should think logically about problems.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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</table>

8. Men should appear confident even if they are not.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>1</td>
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<td>5</td>
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</tbody>
</table>

9. A man should make all the final decisions in a family.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>4</td>
<td>5</td>
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</table>

10. Men participate in games to win.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>5</td>
</tr>
<tr>
<td>Strongly disagree</td>
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<td>No opinion</td>
<td>Agree</td>
<td>Strongly agree</td>
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</tbody>
</table>

11. Men should be able to sleep close to each other in the same bed.  
   1                2        3          4     5

12. Men should have a job that earns them respect.  
   1                2        3          4     5

13. A successful man should be able to live a comfortable life.  
   1                2        3          4     5

14. A man deserves the respect of his family.  
   1                2        3          4     5

15. Men have sex drive that needs to be satisfied.  
   1                2        3          4     5

16. Men should feel embarrassed if they are unable to get an erection during sex.  
   1                2        3          4     5

17. Men who teach children or cook in restaurants should be proud of what they do.  
   1                2        3          4     5

18. It is **not** important for men to achieve orgasm during sex.  
   1                2        3          4     5

19. It is OK for men to rely on others.  
   1                2        3          4     5

20. If a man is frightened, he should try to not let others see it.  
   1                2        3          4     5

21. It is wrong for a man to be seen in a gay bar.  
   1                2        3          4     5

22. Men should be prepared to physically fight their way out of a bad situation.  
   1                2        3          4     5

23. It is admirable for a man to take the lead when something needs to be done.  
   1                2        3          4     5

24. A heterosexual man **should not** be embarrassed that he has gay friends.  
   1                2        3          4     5

25. A man **should not** worry about the future.  
   1                2        3          4     5
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No opinion</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Gay men should be beaten up.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. A man’s decision <strong>should not</strong> be questioned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. Men should be determined to do well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>29. It is important for a man to be successful in his job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. Gay men are <strong>not</strong> suited to many jobs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. Men should remain focused in difficult situations.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. Men should have the respect and admiration of everyone who knows them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. Men should be able to kiss each other <strong>without</strong> feeling ashamed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. Men should feel embarrassed to talk about sex with their friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. Men are prepared to take risks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36. It is <strong>not</strong> always a man’s task to ask someone out on a date.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. A father should be embarrassed if he finds out that his son is gay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38. A man should make sure that he knows about sex.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39. A man is successful if he makes a lot of money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40. Men should be calm in difficult situations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Please indicate the **Severity of the Risk** you think these items pose for **South African society**. In this case, “risk” refers to **Poor Health, Sickness, or Accidents**. All of the items shown below use a four-point response scale: 1 = little or no risk, 2 = slight risk, 3 = moderate, and 4 = high risk.

For instance, if you think an activity like skateboarding is a high risk activity because it can cause accidents and injuries then you would assign a rating of 4 to skateboarding.

e.g. Skateboarding

<table>
<thead>
<tr>
<th>Little or no risk</th>
<th>Slight risk</th>
<th>Moderate risk</th>
<th>High risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Multiple sexual partners

1. Street drugs (e.g. ecstasy, marijuana, cocaine.)

3. Smoking

4. Drinking alcohol

5. Stress

6. Poor eating habits

7. Rugby

8. Having sex without a condom

9. Sun tanning

10. Driving over the speed limit
<table>
<thead>
<tr>
<th>Item</th>
<th>Little or no risk</th>
<th>Slight risk</th>
<th>Moderate risk</th>
<th>High risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Not wearing a seat belt whilst driving</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Eating red meat</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Chemical manufacturing (e.g. manufacturing of hydrochloric acid, or sulphuric acid)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Building a nuclear power plant</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. Road transportation of hazardous chemicals (e.g. oil, petrol, sulphuric acid etc..)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. Mining (e.g. coal, oil, platinum)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. Storage of hazardous substances (e.g. oil, manganese, chemical waste etc..)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Medical surgery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. Depletion of ozone layer</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. Global warming</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. Depletion of natural resources (e.g. water and fossil fuels)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. Environmental pollution (e.g. discharge from factories, rubbish, carbon etc..)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. Water contamination</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. Deforestation (i.e. decline of forests and natural vegetation)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

For the following items please indicate the **SEVERITY OF THE RISK** that you think these items pose for **South Africa society**. In this case, “risk” refers to **INJURIES, HARM, DAMAGE, OR ADVERSITY (i.e. Hardship).**
<table>
<thead>
<tr>
<th>Little or no risk</th>
<th>Slight risk</th>
<th>Moderate risk</th>
<th>High risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Lack of strong political leadership</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. Strikes and protests</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. Crime</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>28. Corruption in the police force</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29. High rate of juvenile offenders (i.e. crimes committed by youth under 18 years)</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>30. Deterioration of moral values</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>31. Government regulation of private businesses</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>32. Affirmative action policies</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>33. Overprotective labour laws (e.g. difficult dismissal procedures, minimum wage requirements)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>34. High unemployment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35. Skills shortage</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>36. Low economic growth</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>37. Poverty</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38. AIDS</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39. Child malnutrition</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>40. High illiteracy rates (i.e. high numbers of people who cannot read)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Risk Level</td>
<td>1</td>
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</tr>
<tr>
<td>Little or no risk</td>
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<tr>
<td>Slight risk</td>
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<td>Moderate risk</td>
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<tr>
<td>High risk</td>
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</tbody>
</table>

41. Discrimination against homosexuals
   1  2  3  4

42. High income inequality (i.e. large income difference between the rich and poor)
   1  2  3  4

43. Violence against women
   1  2  3  4
All of the items shown below use a four-point response scale: 1 = strongly agree, 2 = agree, 3 = disagree, and 4 = strongly disagree. Please complete the questionnaire by circling the number which indicates your level of agreement or disagreement with each statement. Give only one answer for each statement. These questionnaires will be kept confidential and anonymous. Thank you for your participation.

**Egalitarianism-Hierarchy Scale.**

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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<td>4</td>
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</tbody>
</table>

1. It seems like the criminals and welfare cheats get all the breaks, while the average citizen picks up the tab.
   1   2   3   4
2. We have gone too far in pushing equal rights in this country.
   1   2   3   4
3. Society as a whole has become too soft and feminine.
   1   2   3   4
4. Nowadays it seems like there is just as much discrimination against whites as there is against blacks.
   1   2   3   4
5. It seems like blacks, women, homosexuals and other groups don’t want equal rights, they want special rights just for them.
   1   2   3   4
6. A lot of problems in our society today come from the decline in the traditional family, where the man works and the woman stays home.
   1   2   3   4
7. The women’s rights movement has gone too far.
   1   2   3   4
8. Discrimination against minorities is still a very serious problem in our society.
   1   2   3   4
9. It’s old-fashioned and wrong to think that one culture’s set of values is better than any other culture’s way of seeing the world.
   1   2   3   4
10. A gay or lesbian couple should have just as much right to marry as any other couple.
    1   2   3   4
<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>We need to dramatically reduce inequalities between the rich and the poor, whites and people of color, and men and women.</td>
<td></td>
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</tr>
<tr>
<td>12.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Parents should encourage young boys to be more sensitive and less “rough and tough.”</td>
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</tr>
<tr>
<td>13.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Our society would be better off if the distribution of wealth was more equal.</td>
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<tr>
<td>14.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
</tr>
<tr>
<td>We live in a sexist society that is fundamentally set up to discriminate against women.</td>
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</tbody>
</table>

**Communitarianism-Individualism Scale.**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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<tbody>
<tr>
<td>15.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>People who are successful in business have a right to enjoy their wealth as they see fit.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>16.</td>
<td>1</td>
<td>2</td>
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<td>If the government spent less time trying to fix everyone’s problems, we’d all be a lot better off.</td>
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<td>17.</td>
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<td>Government regulations are almost always a waste of everyone’s time and money.</td>
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<td>18.</td>
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<td>The government interferes far too much in our everyday lives.</td>
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<td>Free markets--not government programs--are the best way to supply people with the things they need.</td>
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<td>Too many people today expect society to do things for them that they should be doing for themselves.</td>
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<td>21.</td>
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<td>It’s a mistake to ask society to help every person in need.</td>
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<td>22.</td>
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<td>The government should stop telling people how to live their lives.</td>
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<tr>
<td>Strongly agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly disagree</td>
<td></td>
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</table>

23. Private profit is the main motive for hard work.
   1     2     3     4

24. It’s not the government’s business to try to protect people from themselves.
   1     2     3     4

25. Society works best when it lets individuals take responsibility for their own lives without telling them what to do.
   1     2     3     4

26. Our government tries to do too many things for too many people. We should just let people take care of themselves.
   1     2     3     4

27. Sometimes our government needs to make laws that keep people from hurting themselves.
   1     2     3     4

28. Government should put limits on the choices individuals can make so they don’t get in the way of what’s good for society.
   1     2     3     4

29. It’s society’s responsibility to make sure everyone’s needs are met.
   1     2     3     4

30. The Government should do more to advance society’s goals, even if that means limiting the freedom and choices of individuals.
   1     2     3     4

31. People should be able to rely on Government for help when they need it.
   1     2     3     4
Dear Sir,

I would like to kindly request your permission to conduct a Psychology Masters research project at ………………….. with the Grade 12 boys. My research aims to investigate the relationship between masculine ideology, cultural worldviews and perceptions of risk. Research of this nature is both relevant and valuable at the present time in South Africa when many individuals are experiencing particularly high levels of risk and vulnerability. I specifically want to focus on young males to understand whether males conforming to traditional masculine norms experience similarly high levels of risk. In addition, my research attempts to discover if traditional masculine ideology will predispose males to view the world in a particular way.

My research is being supervised by a Clinical Psychologist, Dr. Kay Govender, at the University of Kwa-Zulu Natal and will go before an Ethical Board in May 2008 to ensure that it represents an ethical and valuable study before it can be conducted. The research project will require approximately 130 boys to complete a written questionnaire booklet containing questions designed to measure traditional masculine ideology, risk perceptions, and cultural worldviews. The questions are all closed ended questions that require the participants to simply indicate the most appropriate response. I have included two of the three questionnaires for your perusal. The time needed to complete these questions, including a brief discussion of the instructions and the purpose of the research, will be approximately 40 minutes.

Participation in this research project is on a voluntary basis and confidentiality and ethics will be high priorities at all times. Students wishing to participate will receive an Informed Consent form for themselves and their parents to sign informing them of the nature and requirements for participation. Students can participate in the research anonymously and their responses will be kept confidential. The questions they will be required to answer do not require the disclosure of highly sensitive information. I will be happy to provide the School with a copy of my completed research thesis and findings for any interested students or parents.

If you have any further questions I will be happy to come in and discuss things further.

Thank you for your kind consideration.

Yours sincerely

Candice Meyer
Student, Psychology Masters (Health Promotion)
082 720 5870
APPENDIX D

Title of the proposed study:
“An investigation into the relationship between masculine ideology, cultural worldviews, and societal risk perceptions in a sample of school-going boys.”

Consent form:

I……………………………………...(parent/guardian) of……………………….......................(full names of participant) hereby give permission for my child/ward to take part in the above mentioned study being conducted at …………………..Boy’s High School. I confirm that I have read the attached letter and understand the nature of the research project.

Signature Date

Please tear off and keep for future reference.

Researcher: Miss Candice Meyer
082 720 5870

Supervisor: Dr. Kay Govender
The School of Psychology
University of KwaZulu Natal
(031) 260 7616
Dear Parent/Guardian

RE: “An investigation into the relationship between masculine ideology, cultural worldviews, and societal risk perceptions in a sample of school-going boys.”

I am a psychology student at the University of KwaZulu Natal (Howard College). I am currently conducting a research project into the area of traditional masculine ideology. My specific focus is directed at investigating the influence of conformity to masculine norms on cultural worldviews and risk perceptions amongst adolescent boys between the ages of 16 and 18 years old. Research of this nature is both relevant and valuable at the present time in South Africa when many individuals are experiencing particularly high levels of risk and vulnerability. I specifically want to focus on young males to understand whether males conforming to traditional masculine norms experience similarly high levels of risk. In addition, my research attempts to discover if traditional masculine ideology will predispose males to a particular way of life and view of the world.

The research will be conducted on school premises during school time. An exact date and time is still to be set, and participants will be notified through the school about such information. Participation in this research is voluntary and will involve the completion of three measurement instruments and a biographical questionnaire that will take approximately 40 minutes. These measurement instruments are widely used, reliable measures that do not require the disclosure of any highly sensitive information. Students are free to withdraw at any such time should they so desire. Students who are willing to participate will do so in an anonymous capacity and all student information will be kept confidential and used only for the purposes of the above study. Information will not be accessible to the principal or teachers. In addition, the research findings will take the form of numerical data and reveal group results, ensuring that participants’ autonomy and confidentiality is protected.

Students will have an opportunity to access a copy of my research findings that will be made available to the school on completion of my research. Please do not hesitate to contact me if you have any queries regarding this study.

Thanking you for your kind consideration.

Yours sincerely

________________
Miss Candice Meyer (Researcher) 082 720 5870
Mr. Kay Govender (Supervisor) 031 –260 7423