Exploratory Study of High Risk Behaviours Amongst Muslim Adults Living in Australia

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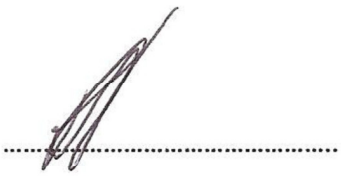
Declaration

I hereby declare that this thesis is my own original work, except as acknowledged in the text.

I hereby declare that no part of this work whatsoever has been submitted to any other University or Tertiary institution for any other degree.



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Date

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ABSTRACT

The aim of this study was to explore a broad range of high risk behaviours amongst the Muslim community in Australia. Social supports, decision making and lifestyle factors were also investigated. Previous studies have found religiosity to be a protective factor for risk behaviours. However few studies have examined a broad variety of risk behaviours, particularly in the Muslim community.

Respondents for this study included 149 adults who identified as Muslims and participated in an online survey adapted from that used by (Abbott-Chapman & Denholm, 2001; Abbott-Chapman, Denholm, & Wyld, 2008a, 2008b). The Risk Activity by Personal Risk Assessment (RAPRA) index was used to combine risk perception and risk involvement scores of 24 risk behaviours to determine risk propensity from the perspective of the participants. Weighted averages of the 24 risk behaviours were correlated with demographic data using Pearson's correlations and one way Analysis of Variance (ANOVA) tests to determine factors associated with each risk behaviour. The religiosity index which combined religious beliefs, place of worship attendance and religious importance was also correlated with weighted averages to determine if religiosity was a protective factor. Relationships between risk activities were also explored. Data on social support networks, decision making and lifestyle values were also collected.

On average, behaviours involving manufactured illegal drug use were of least concern and sex without self/partner being on the pill, watching R or X rated movies, sex without a condom and speeding in a car were of highest concern. However risk

propensity ranged from low to moderate across all 24 behaviours. Characteristics related to the most risks were being a male, being a parent and low religiosity which were all related to alcohol, smoking marijuana/hash and smoking cigarettes. All risk activities had significant relationships with other risk activities in the study. High religiosity was found to be protective for binge drinking, alcohol use, cigarettes, gambling, smoking marijuana/hash, snorting cocaine and taking speed/ecstasy.

Muslims would seek support from their close family members and same gender friends for personal and career issues and parents were most trusted. Doctors were most relied on for health problems and teachers/educators were most relied on for study problems. When making decisions about risk, Muslims concern for safety, morality, legality and family were found to be important. Lifestyle values considered important by Muslims included self-respect, being responsible for one's own actions, perceptions of right and wrong and respecting others. Muslims considered following rules set by religion, sharing experience with someone more experienced, seeking advice from parents and seeking advice from members of their religious community all as important when making decisions about their lifestyle.

These findings provide significant data for future research in specific areas of concern in the Muslim community particularly with men and parents. This study also supports research that implies that high religiosity is effective in preventing involvement in risk activities. Religion, family and community were found to important values in the lives of Muslims and in their decision making processes.

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CHAPTER 1

INTRODUCTION & LITERATURE REVIEW

History of Muslims in Australia

The Muslim community form a part of the multicultural fabric of Australia and throughout our history, have made vibrant contributions to Australian society (Department of Foreign Affairs and Trade, 2008; Yasmeen, 2010). Muslims have had a presence in Australia prior to European settlement as Macassan traders, who sailed annually from South Celebes to the Northern Territory to collect trepang (sea cucumber) along the coast (Macknight, 1976).

The first semi-permanent population of Muslims was established in the 1800's by the Afghan cameleers who had migrated from the Indian subcontinent. The cameleers had contributed to inland exploration and establishment of major services in the country including the famous Ghan railway line (Department of Foreign Affairs and Trade, 2008).

Due to the economic boom after World War II, European Muslims migrated to Australia and significantly increased the population of Muslims. The Lebanese Civil War erupting in 1975 also brought a large number of Lebanese Muslim immigrants to Australia (Department of Foreign Affairs and Trade, 2008) and Muslims from other countries have arrived since.

Muslims have been increasing in number and now make up 1.7% of the Australian population (Australian Bureau of Statistics, 2007). They predominately live in Sydney and Melbourne (Department of Foreign Affairs and Trade, 2008).

Challenges faced by Muslims in Australia

In more recent times, Muslims have gained widespread media attention due to world events most notably, the September 11 attacks of 2001 in the US and the Bali bombings of October 2002. These events and others plus media reports have portrayed Muslims negatively and therefore resulted in stereotyping and discrimination of Muslims (Aly, 2010; W. Jonas, 2004).

In 2003, the Human Rights and Equal Opportunity Commission launched the Isma project. This project involved a national consultation of over 1400 Arab and Muslim Australians. It looked at how they perceived and experienced discrimination since September 11 2001 (W. Jonas, 2004).

The consultations found that Muslims in general and women in particular, were affected by discrimination and vilification, predominantly based on their dress or appearance (W. Jonas, 2004). This discrimination based on perceived religious attire extended to other areas, with turban wearing Sikhs and Christian Arabs also reporting being attacked because of perpetrators mistaking them for Muslims (W. Jonas, 2004).

The findings from this project also revealed that Muslims and Arabs had experienced a variety of attacks including physical violence, property damage, violent threats, discrimination and vilification (W. Jonas, 2004). As a result of this prejudice, Muslims and Arabs reported; "a substantial increase in fear, a growing sense of alienation from the wider community and an increasing distrust of authority" (W. Jonas, 2004, p.4).

Muslims reported that they were more likely to resort to family, friends or their local ethnic or religious community organisation to complain about their negative experiences rather than the police or government organisations because of; "fear of victimisation; lack of trust in authority; lack of knowledge about the law and complaints processes; the perceived difficulty in making a complaint and the perception that outcomes were unsatisfactory" (W. Jonas, 2004, p.4).

Australian Muslims have also faced economic disadvantages as a result of discrimination. Muslims have reported having difficulty when trying to gain employment and have felt discrimination due to having an Islamic name, their country of origin, accent or adhering to the Islamic dress code despite being highly skilled or qualified (W. Jonas, 2004; Kabir, 2004).

According to the 2001 Census of Australia, "43% of Australian Muslims compared with 27% of all Australians had a weekly income under $200" (Australian Bureau of Statistics, 2001, cited in W. Jonas, 2004, p.26) and in the 1996 Census, "…the unemployment rate of Muslims was 25%, compared to 8% for the United Kingdom and Irish-born, and 9% for the Australian-born and national total, in spite of the fact that

Muslims' skill levels were almost equivalent to the Australian-born and national total." (Australian Bureau of Statistics, 1996: Census of Population and Housing, cited in Kabir, 2004, p.272).

A study of the Lebanese community in Australia found that Lebanese Muslims are more socially disadvantaged than Lebanese Christians and other Australians and have lower income, lower levels of education and higher unemployment (Betts & Healy, 2006).

Because of the negative stigma towards them, Muslims are likely to feel victimised and isolated in the community. This marginalisation may lead to poverty and risk of criminal activity (Betts & Healy, 2006). Wakim (2006) suggests that some Lebanese youth identify with American rap culture with its themes of "rejection, victimhood and revenge" (p.2). Some Muslims may even resort to higher forms of alienation such as Islamist extremism (Betts & Healy, 2006).

Discrimination can also be a predictor of health risk behaviours such as unhealthy eating (Brodish et al., 2011), smoking and alcohol consumption (Borrell et al., 2010; Borrell et al., 2007; Todorova, Falcón, Lincoln, & Price, 2010), and lifetime use of marijuana and cocaine (Borrell et al., 2007).

Thus having a social environment where discrimination is experienced can influence social and developmental problems (Paradies et al., 2009) and impact on physical and mental health (Pascoe & Richman, 2009; Williams, Neighbors, & Jackson, 2008).

Positive interventions within the community

Recognising these challenges, the federal government has given Muslim youth an opportunity to provide input into the development of a National Action Plan to build social cohesion, harmony and security through the National Muslim Youth Summit held in 2007 (Department of Immigration and Citizenship, 2008). The report from this summit identified a number of concerns felt by Muslim youth. It revealed that a combination of negative media portrayal and irresponsible comments made from high profile people within the Muslim and wider community contributed to emphasising differences and was a major cause for Muslims feeling alienated and marginalised. It also revealed that key media spokespeople within the Muslim community did not truly represent community views and further contributed to negative stereotypes (Department of Immigration and Citizenship, 2008).

Muslim youth also spoke of the frustration, stress and mental health implications of the continued feelings of isolation. This could further intensify anti-social behaviour and the marginalisation of young people (Department of Immigration and Citizenship, 2008).

The National Muslim Youth Summit not only gave young Muslims the opportunity to raise issues they face in the community, it also provided an opportunity to discuss solutions to these problems. Muslim youth recommended that programs were needed to increase awareness and understanding of Islam in order to prevent discrimination and negative stereotyping (Department of Immigration and Citizenship, 2008).

It was also acknowledged that positive role models can be a good source of advice and support to young people(Department of Immigration and Citizenship, 2008). This process suggests that having input from Muslims can offer solutions which can potentially break down social barriers and prevent problems.

A program to prevent social problems between Muslim youth and Police had been implemented recently in South-West Sydney. The NSW Police force has implemented the "Stand Tall Project" which involved Police officers mentoring Muslim high school students over a three day period to "…promote harmony between police and Muslim youths in the Bankstown area by dismantling ethnic and religious typecasts and improving communication" (NSW Police Force, 2011, Para 2). In this program, police and Muslim youth discussed issues such as cultural and religious stereotypes, perceptions of police, domestic violence and road safety. They also participated in activities that allowed them to bond and improve relations (NSW Police Force, 2011). The Bankstown Local Area Commander deemed the project an overwhelming success (NSW Police Force, 2011).

The Stand Tall project was not directly linked with the National Muslim Youth Summit; however it implemented some of the ideas suggested by Muslim youth in the summit and resulted in a positive outcome in improving relations and wellbeing between the Muslim youth and wider community.

Muslims as a Minority

A review of literature by Factor, Kawachi, and Williams (2011), found that non-dominant minority groups are more likely to engage in unhealthy behaviours such as smoking, alcohol consumption, sexual risk and unsafe driving across many different societies.

Reasons for this could be because of mistrust towards the dominant system, avoidance of conforming to attitudes and behaviours associated with the majority group in order to affirm their own social identity, or experiencing of alienation from society; which then leads to lack of commitment towards the law of the country and becomes a cause for disobedience to the laws including health-related laws and restrictions (Factor et al., 2011).

As Muslims in Australia are a non-dominant minority group that has reported experiencing discrimination and alienation, this could be applicable to them. These are some possible reasons why Muslims could be engaging in health risk behaviours.

However, another local study of minority groups found the opposite effect. A study of senior school students in Sydney revealed that Arabic and Vietnamese speaking students were less likely than students from an English speaking background to engage in marijuana and alcohol use (Rissel, McLellan, & Bauman, 2000).

Students from an English speaking background who used marijuana were more likely to report being a smoker, drinking at hazardous levels, have a negative perception of school, spend a lot of evenings out with friends and in general report not being happy with life (Rissel et al., 2000).

Smoking and peer influence were common factors that contributed to students engaging in alcohol and marijuana use across all cultural groups; however the authors propose that migrant children are more likely to use substances when acculturating to the norms of the host culture through observing their peers (Rissel et al., 2000). This suggests that integrating into a dominant culture can influence health risk behaviours which is very different to the view expressed by Factor et al. (2011).

The authors further suggest that more research is needed among these cultural groups to understand how culture can reduce or delay alcohol and marijuana consumption (Rissel et al., 2000).

Although religiosity was not a focal point of this study, the study noted one aspect of religion and reported that “Arabic students who worshipped in a church were more likely to have ever tasted alcohol than students who worshipped at a mosque” (Rissel et al., 2000, pp. 147-148) which would imply that Arabic speaking Muslims were less likely to taste alcohol than Arabic speaking Christians. This would indicate that religious affiliation may have an impact on how one would engage in substance use regardless of culture.

It is important to consider this as no Australian studies have directly examined if Muslims are more or less likely to engage in unhealthy or risk behaviours.

There are also no studies that explore how Muslims perceive health compromising activities or risk behaviours or possible contributing or protecting factors that influence their level of involvement.

RISK BEHAVIOURS

Definition of risk

Despite the fact that risks can have negative consequences, risk can also be seen as a natural characteristic of the human condition which is a product of free choice (Abbott-Chapman & Denholm, 2001).

To further understand risk, studies need to consider sociocultural and normative bases that inspire choice processes rather than targeting specific risk behaviours and approaching them narrowly (Abbott-Chapman & Denholm, 2001).

The definition of risk is based on the perception of the individual and is complex and subjective (Slovic, Fischhoff, & Lichtenstein, 1982) and there is no commonly accepted definition of what risk is within the sciences or public understanding (Renn & Rohrmann, 2000, p.13).

Giddens (1991) defines risk as a concern for the future in relation to present practices (p.117) and describes risk assessment as a method of controlling time by colonising the future in order to reduce life threatening dangers (Giddens, 1991). He also suggests that institutions are much more manifest and relied upon in reducing risks in modern society as compared with pre-modern societies (Giddens, 1991).

Renn and Rohrmann (2000) define risk as "the possibility of physical or social or financial harm/detriment/loss due to a hazard within a particular time frame" (p.14).

Mc Knight and Sutton (1994) define risk as a referring to situations that are "likely to produce unpleasant consequences to an individual not likely to be experienced in the course of everyday behaviour" (p.44).

Aaron and Dake (1990) study on risk perception came up with 36 categories of societal concerns associated with technology and the environment, war, social deviance, and economic troubles. The study found that cultural bias and political worldviews had an impact on risk perception (Aaron and Dake, 1990) and concluded that people perceive risk "in a manner that supports their way of life" (Aaron and Dake, 1990, p. 57). Risk in this context was described as a concern that can have social consequences, which in turn, can impact on the individual.

Although the definitions of risk have slight variations in how risk is defined, it appears that most definitions reflect that risk involves '*a future consequence with an undesirable outcome to the individual or group*' as a common theme.

This recurring theme is found in studies defining risk behaviours. For example, Wallace and Forman (1998) study on adolescents defined risk as health behaviours that are predictors of adolescent and adult mortality and morbidity. Jessor (1998) states that risk behaviours, "…can, or indirectly, compromise the well-being, the health, and even the life course of young people" (p.1).

Behaviours deemed 'risk behaviours'

Behaviours that are classified as risk behaviours include, but are not limited to, dietary habits (Brener et al., 2003, Keery et al., 2005), driving behaviours (Boufous et al., 2010, Lenton et al., 2009), gambling (Messerlian, Derevensky, & Gupta, 2005; Wheeler, Rigby, & Huriwai, 2006), hitchhiking (Abbott-Chapman & Denholm, 2001; Jenny, 1988), pornography use (Manning, 2006; Vega & Malamuth, 2007), sexual behaviours (Beier et al., 2000, Brener et al., 2003), tattoos and body piercing (Antoszewski, Sitek, Fijalkowska, Kasielska, & Kruk-Jeromin, 2010; Stirn, Hinz, & Brahler, 2006), tobacco use, alcohol consumption, drug use (Felt et al., 2008, Beier et al., 2000, Brener et al., 2003), and sunbaking (Abbott-Chapman & Denholm, 2001; Pratt & Borland, 1994).

Much of the studies on risk behaviours have observed specific behaviours such as alcohol use (Abu-Ras, Ahmed, & Arfken, 2010; Ghandour, Karam, & Maalouf, 2009), sexual risks (Dariotis, Sifakis, Pleck, Astone, & Sonenstein, 2011; Lawrence et al., 1995; Li & Boulay, 2010; Zaleski & Schiaffino, 2000), driving risks (Boufous et al., 2010; Keskinen, Ota, & Katila, 1998; Scott-Parker, Watson, & King, 2009; Stevenson &

Palamara, 2001) or gambling (Hoffmann, 2000). There are few studies that examine a wide range of risk behaviours (Brener, Billy, & Grady, 2003).

However there are some exceptions. A youth study on risk reduction and religiosity in America observed 11 specific risk behaviours based on unintentional and intentional injuries, substance use, and lifestyle behaviours (Wallace & Forman, 1998). This study found that regarding religion as important and attending church were factors that assisted in constraining against risk behaviours. Additionally, these very factors helped to promote and encourage healthy behaviours (Wallace and Forman, 1998).

Another example was a multi-stage Tasmanian study which explored 26 various risk behaviours among adolescents from Christian schools (Abbott-Chapman and Denholm, 2001, Abbott-Chapman et al., 2008). They reported that affiliation with a Church and/or community group (Abbott-Chapman and Denholm, 2001) and having a wide range of social supports (Abbott-Chapman et al., 2008) were factors that reduced risk taking in adolescents.

Social support as a protective factor against risk appears to be a common theme in the literature. A US study on college students observed 12 health-risk behaviours and categorised them under binge drinking, illicit drug use, sexual behaviours and impaired driving (Schwartz et al., 2009). It found that college students who felt that they were accepted by their parents were less likely to engage in 6 of the 12 behaviours (Schwartz et al., 2009). They also highlighted the importance of social support.

These studies have indicated that religion and social support are common factors that reduce risk taking. They also suggest that religiosity may have a relationship with social support. However there are limited studies that have explored this with a large variety of risk behaviours.

Age and lifestyle factors

The literature on risk behaviour has predominately focused on youth or adolescent age groups and little attention has been paid to the adult population (Furstenberg, 2006; Park, Paul Mulye, Adams, Brindis, & Irwin Jr, 2006). A reason for this focus could be because of an awareness of developmental factors at play during adolescence such as having intense friendships, extreme emotions, being more masculine (among males) and having less awareness of responsibility (Arnett, 2002).

However there is some evidence that suggests that early adulthood could be a period of increased risk taking. National data from the US indicated that the rates of homicide, motor vehicle injury, STI's, binge drinking and other substance use peaked in the young adult years as compared to other age groups (Park et al., 2006). Another US study found that drink driving, dangerous driving, binge drinking, marijuana use and sexual risk behaviours were prevalent amongst adults in their twenties (Arnett, 1998).

Furthermore, this study investigated relationships between different types of risk behaviours to determine if adults who engage in one risk behaviour would also engage in others. It found that dangerous driving was associated with substance use and with

sexual risk behaviours (Arnett, 1998). It also found that sex without contraception, sex with a stranger and having multiple sex partners were all associated with both binge drinking and marijuana use (Arnett, 1998).

Arnett (2005) suggests that an explanation for risk in this age group could be that early or emerging adulthood is a time of identity explorations, instability in relationships, work and education, self-focus, feeling in-between adolescence and full adulthood and a time of possibilities where hopes flourish. These developmental factors could have the potential for risk taking.

The potential for risk taking or avoidance during adulthood could be influenced by lifestyle factors. Studies have found that adult problems such as unemployment can impact on unhealthy behaviours such as increased alcohol consumption, tobacco use and maintenance of physical health (Dooley, Fielding, & Levi, 1996; Fukuda, Nakamura, & Takano, 2005).

Adult relationships can also be protective against risk behaviours. Studies have shown that being married can protect against binge drinking (Arnett, 1998; Power, Rodgers, & Hope, 1999) drink driving and racing in a car (Arnett, 1998).

Having a higher education was also found to protect against racing in a car in adults (Arnett, 1998) although more research is needed to understand adult education and furthermore, employment and relationships on risk behaviours during adulthood.

Religion as a Protective Factor

Previous review studies have found that religious belief can have a positive effect on mental health and is linked with reducing depression, anxiety and suicide risk and helps people to recover from trauma (Klocker et al., 2011).

Religious belief and practices have also been found to reduce risk behaviours such as alcohol use (Ghandour et al., 2009; Klocker, Trenerry, & Webster, 2011), drug use and smoking cigarettes (Chen, Dormitzer, Bejarano, & Anthony, 2004; Klocker et al., 2011), sexual risk taking (Arnett, 1998; Elifson, Klein, & Sterk, 2003; Zaleski & Schiaffino, 2000), dangerous driving (Arnett, 1998) and a variety of other risk behaviours (Abbott-Chapman & Denholm, 2001).

Positive religiosity has also been associated with, "strong concepts of what is right and wrong, legality and illegality and positive attitudes to the future" (Abbott-Chapman & Denholm, 2001, p.295). Positive attitudes towards the future have also been shown to be protective against substance use and emotional and conduct problems (Patton et al., 2011). Therefore optimism, as an outcome of positive religiosity may protect against risk.

Although religiosity may serve as a protective factor, there is evidence to suggest that this may only serve as a deterrent from opportunities to engage in risk and once an opportunity arises to participate in risk, the protective factor may be lost despite being religious (Abu-Ras et al., 2010; Chen et al., 2004; Zaleski & Schiaffino, 2000). Therefore

it cannot be assumed that religious people are detached from opportunities to engage in risk behaviours.

Various risk behaviours from different religious groups have been explored in the literature, particularly from Christian denominations (Abbott-Chapman & Denholm, 2001; Chen et al., 2004; Lorch & Hughes, 1985; Sinha, Cnaan, & Gelles, 2007; Zaleski & Schiaffino, 2000). However there is a lack of empirical research globally on Muslims in regards to risk behaviours.

There are only a few exceptions to this including a couple of studies observing the use of alcohol among Muslim college or University students as compared to students of other faiths (Abu-Ras et al., 2010, Ghandour et al., 2009). Both studies found that Muslims were found to be less likely to engage in alcohol use compared to other religious groups. The studies commented that this would be expected because of the prohibition of intoxicants in Islam (Abu-Ras et al., 2010; Ghandour et al., 2009).

However both the studies have found that a minority of Muslims do engage in drinking, and have attributed this to low religiosity (Abu-Ras et al., 2010; Ghandour et al., 2009), having parents who drink and social reasons (Abu-Ras et al., 2010).

Furthermore, Abu-Ras et al. (2010) study found that "…Islam no longer served as a protective factor for other prohibited behaviours once a student began to drink" (p. 217). They also reported that Muslims' drinking behaviour was also associated with marijuana and cigarette smoking (Abu-Ras et al., 2010).

It is also important to note that this particular study found that no Muslims had sought help for alcohol related problems compared to 1.3% (136) of the non-Muslim sample (Abu-Ras et al., 2010). Reasons for Muslims not seeking social support when they are involved in risk behaviours may be due to the social stigma faced within their community which has been shown in mental health studies (Youssef & Deane, 2006) or perhaps Muslims feeling uncomfortable about approaching secular or mainstream healthcare systems which may not understand them (Haque, 2004).

Little is known about how Muslims perceive and interact with other varieties of risk behaviour besides alcohol use. A more comprehensive study of risk behaviours is needed for Muslims. It is also important to know if or where Muslims seek social support.

SOCIAL SUPPORT & RISK BEHAVIOURS

Much of the literature on risk behaviour has looked at risk behaviours in the context of social support and has focused predominately on three main categories: parents, siblings and peers.

As there is no research on the Muslim community and social support in regards to risk behaviours, these three domains will be reviewed to provide a broader understanding of how social supports have impacted on risk behaviour in a general sense.

Parental Influence

Research shows that parents have an influence on how their children engage in risk behaviours. Studies have shown that adolescents with parents who are less available to them are more likely to engage in sexual risk behaviours and these sexually active adolescents are less likely to use condoms (Biglan et al., 1990). Adolescents are more likely to drink excessively and frequently when there is a lack of parental monitoring and when they are less satisfied with the relationship with their parents (Gossrau-Breen, Kuntsche, & Gmel, 2010). They are also more likely to engage in less pro-social behaviour, smoke cigarettes, drink alcohol and use illicit drugs when their parents are less physically and psychologically available for them (Biglan et al., 1990).

Conversely, parents who put too much pressure can also lead to risk behaviours. An Israeli study found that adolescent girls who suffered from an eating disorder reported

having experienced inappropriate parental pressure. Some of these pressures were having to reflect an exaggerated feminine style of behaviour, having age inappropriate topics discussed with them such as parental sex and being made to engage in activities which reflected their parent's ambitions rather than their own (Horesh et al., 1996).

Parents' values also have a protective influence against risk behaviours. In Bangladesh, respecting parent's values and beliefs about sex was found to be a protective factor against premarital sex in unmarried males aged 15-19 (Li & Boulay, 2010). However this study was a self-report household-based survey where parental consent was required so there was some possibility that confidentiality and data validity could have been compromised as the researchers' state that "sex is still a taboo subject in Bangladesh" (Li & Boulay, 2010, p.475).

A US study found parental pressure to stay away from alcohol or tobacco predicted lower use of these substances in adolescents (Scull, Kupersmidt, Parker, Elmore, & Benson, 2009). However this study also asked the youth how often they would consider using these substances as an adult and surprisingly, found that adolescents who believed that their parents would react negatively to their alcohol and tobacco use were more likely to report an intent to use these substances in the future (Scull et al., 2009).

Further reasoning for this outcome was not reported however the researchers suggest that it may be because youth may plan to drink and smoke when they are older and it

becomes socially acceptable or because they want to model other adolescents they see drinking and smoking despite their parents beliefs (Scull et al., 2009).

In families where parents are highly protective, youth can still engage in risk behaviours however the quality of relationship with parents appears to be a deciding factor in predicting risk. A Canadian longitudinal study of boys from childhood to adolescence found that boys with disruptive (aggressive, hyperactive and oppositional) behaviours were more likely to engage in heavy substance use when attachment to parents is low and monitoring is high (Fallu et al., 2010). However, parental monitoring was only a protective factor against later heavy substance use and disruptive behaviours when an adolescent has had a positive attachment with their parents (Fallu et al., 2010). It should also be noted that participants from this finding were from low socioeconomic neighbourhoods (Fallu et al., 2010) and that the 'heavy substances' (alcohol, cigarette, cannabis, and hard drugs) were not observed individually.

Other studies have reported similar results with parent involvement. Parental availability (Biglan et al., 1990), parental monitoring (Gossrau-Breen et al., 2010) , implementing rules and discipline around alcohol use and the quality of relationship between parents and child (Habib et al., 2010; Ryan, Jorm, & Lubman, 2010) as well as limiting availability of alcohol to the child, disapproval of adolescent drinking, parental support and general communication (Ryan et al., 2010) negatively influence drinking behaviours of adolescents. Also parental pressure to avoid alcohol as well as tobacco has been linked to decreased use in adolescents (Scull et al., 2009).

The role of the father has also been found to be a significant factor in influencing risk behaviours. A US study found that college students who felt that they had a positive connection with their parents during high school, especially their father, were less likely to engage in a number of health-risk behaviours including illicit drug use, casual sex, driving under the influence of alcohol or drugs, and riding with a driver who has been drinking or using drugs (Schwartz et al., 2009). An Australian study found that young adolescents aged 10 to 14 who have poorer relationships with their father were more likely to have drunk more than a few sips of alcohol in their lifetime and engaged in binge drinking as opposed to those who were emotionally close to their fathers (Habib et al., 2010).

Negative behaviours in the father can also influence other family members to push a child towards risk. A US study on body image in 11-15 year old girls found that fathers were more likely than mothers to tease their child about their weight and father's teasing was correlated with restrictive and bulimic eating behaviours as well as higher levels of body dissatisfaction, social comparison, internalization of the socio-cultural ideal of thinness, and depression and lower levels of self-esteem (Keery, Boutelle, van den Berg, & Thompson, 2005). Additionally, father's teasing increased the odds of having a sibling who also teases (Keery et al., 2005).

Experiencing physical abuse from a parent can also negatively impact on an individual. A Chinese study found that adolescents who were physically abused by their parents reported higher rates of engaging in health compromising behaviours such as smoking, alcohol use, illicit drug use, sexual experimentation, non-fatal self-harm behaviours

and suicide behaviours (Tang et al., 2011). This is supported by a review of literature by Kendall-Tackett (2002) which suggests that having experienced abuse from parents can influence substance abuse, eating disorders, suicide attempts and ideation, sexual behaviours, smoking and sleep activities as well as social, cognitive, and emotional pathways as an adult. Thus experiencing physical and verbal abuse from a parent can influence an individual towards engaging in risk behaviours.

However, Tang et al. (2011) study also found that a positive school experience had been a protective factor against the practice of non-fatal self-harm behaviours for those youth who did experience parental abuse. This suggests that youth can find positive support elsewhere.

Significant people who act as a protective influence against risk is not just limited to parents. Youth studies have looked at the association of having an adult mentor with risk behaviours and found that having a connection with a trusted adult made a positive contribution to the life, development, and behaviours in adolescents regardless of family membership (Beier, Rosenfeld, Spitalny, Zansky, & Bontempo, 2000). Adult mentors may find themselves in a parental-type role in the life of an individual thus serving as a parent figure.

Having an adult mentor was found to be a protective factor against risk behaviours including carrying a weapon, illicit drug use, having multiple sex partners and smoking cigarettes (Beier et al., 2000). Alcohol use was also explored but was not found to be correlated with having an adult mentor.

Peer influence has been studied in comparison with parental influence on risk behaviours. A Tasmanian study of teenage risk taking across 26 risk behaviours found that adolescents who sought social support from their parents only, or a had a wider range of social support networks were less likely to engage in risk behaviours than those who sought support from their peers only (Abbott-Chapman et al., 2008b).

A longitudinal study in the US which looked at how changes during adolescence influenced delinquent behaviour reported a similar outcome; finding that lower levels of parental attachment and higher levels of influence from delinquent peers to be significantly associated with higher levels of antisocial behaviour (Childs, Sullivan, & Gulledge, 2011).

The researchers suggest that youth maturing through mid to late adolescence experience a gradual shift from parental attachment to peer influence; therefore peers become their primary social support (Childs et al., 2011).

Another possibility for this increasing association with delinquent peers and deviant behaviours could be a consequence of decreasing parental attachments (Childs et al., 2011). This is supported by Fallu et al. (2010). In a longitudinal study which followed boys aged from 6 until 15, they found that boys who had experienced a combination of high monitoring by parents and low attachment with them were more likely to engage in substance use than those who had experienced high monitoring and high

attachment. Low availability of parents has also been associated with adolescents having more friends who engage in problem behaviour (Biglan et al., 1990).

The literature indicates the important role that parents play in the life of their children. Depending on how a parent raises their child and/or the type of relationship they have with their child can be predictive of whether the child is more likely or less likely to engage in risk behaviours. Having a relationship with parents that is strong or positive can be protective against engaging in risk behaviours whereas when this relationship is weak or negative, it can increase the likelihood of an individual engaging in risk.

Siblings

Siblings can also be a determining factor for influencing risk behaviours particularly when siblings are abusive as was found in two US studies.

A study of 11-15 year old girls found that girls who have at least one sibling who teases them about their weight were more likely to compare their own appearance to others and experience depressive symptoms than those girls who have no siblings or have siblings who do not tease (Keery et al., 2005).

Along with comparing physical appearance with others and experiencing depressive symptoms, other types of risk factors looked at in this study were associated with girls who had an older brother who teases them in particular; including being dissatisfied with their bodies, restrictive eating and bulimic behaviours (Keery et al., 2005).

Additionally, data from a Delaware school census investigated other types of sibling abuse and risks and found that adolescents who were verbally abused, physically assaulted or threatened with a weapon by a sibling were more likely to use substances such as tobacco, alcohol, or marijuana and have delinquent or aggressive behaviours (Button & Gealt, 2010).

Both these studies indicate that abuse by siblings is related to risk behaviours however they do not explore the alternative of whether siblings can be a protection against risk. One exception was a study on African-American adolescent siblings which found that for older siblings, having a combination of strong solidarity with family and a warm relationship with siblings was associated with low levels of depression and higher bonding with their school; whereas for younger siblings, a combination of low family solidarity and high relational aggression with an older sibling was linked with risk behaviours (Soli, McHale, & Feinberg, 2009).

Another US study on European Americans found that close relationships between siblings were linked to peer social competence whereas conflicting relationships between siblings were linked with depressive symptoms (Kim, McHale, Crouter, & Osgood, 2007).

The research on peer influence on risk shows that having a negative relationship with siblings can be a factor which influences depression and risk behaviours particularly self-destructive behaviours.

Because positive sibling relationships have been associated with peer social competence (Kim et al., 2007), it is expected that positive sibling relationships can be a protective factor against risk. Soli et al.'s (2009) study shows some evidence of this; however more research is needed in this area.

Peer Influence

Having friends who engage in risk is consistent with involvement in various risk behaviours. This is consistent with many studies globally.

Contrary to what was mentioned above about the role of parents being a protective factor against engaging in risk, Beck and Treiman (1996) had found that the role of parental influence was weak when looking at various types of drinking behaviours amongst adolescents. Rather, they found that adolescents perception of what drinking intensity was normal amongst their peers was more strongly associated with binge drinking and negative consequences of alcohol use (Beck & Treiman, 1996).

This notion of normative perception among peers in influencing risk is supported by Scull et al. (2009) in a longitudinal study which found that adolescents with peers who used alcohol, as well as tobacco, and perceived the use of these as normal influenced current and future use.

A Laos study found that adolescents with peers who engage in risk behaviours were more likely to engage in multiple risks such as alcohol use, smoking and being sexually active (Sychareun, Thomsen, & Faxelid, 2011).

Peer norms have been found to affect sexual risk behaviours. Li and Boulay (2010) study of unmarried Bangladeshi male adolescents found that youths who discussed premarital sex with peers and who had peers that supported this behaviour were more likely to have initiated premarital sex. It must be mentioned that Li and Boulay (2010) had considered premarital sex to be a risk behaviour because of the large proportion of unmarried males having unprotected sex with commercial sex workers in Bangladesh reported in previous studies (Caldwell, Pieris, Barkat e, Caldwell, & Caldwell, 1999; Ubadur & Muthahara, 2000-2001).

Biglan et al.'s(1990) US study reported that having friends who engage in problem behaviour and alcohol use were predictors of high risk sexual behaviours in adolescents. This suggests that having friends who take risks in general may influence the individual to engage in other forms of risk taking and not necessarily the same risk behaviour or behaviours as their peers.

A study of young adult university students in the US found that having a particular understanding with peers can increase the chances of risk and also protect against risk depending on the type of agreement they make with them. Students who had prior understandings with friends to get drunk during their spring break period were more likely to binge drink and experience negative consequences related to alcohol (Patrick,

Morgan, Maggs, & Lefkowitz, 2010). Those who had a prior understanding to engage in sex were more likely to have sex without a condom (Patrick et al., 2010).

Belonging to a particular group or society can also be a risk factor. Members of a fraternity or a society who had prior understandings to get drunk and have sex and were more likely to engage in these risk behaviours compared to non-members (Patrick et al., 2010). This is supported by McCabe et al.'s (2005) study which found that members of college fraternities and sororities were more likely to engage in binge drinking, marijuana and cigarette smoking compared to non-members.

However, Patrick et al. (2010) also found that students who had a prior understanding with friends to abstain from sex during spring break were more likely to use condoms. This suggests that peer influence may have worked as a buffer to unprotected sex even though the particular understanding of no sex may not have been fully met. Therefore friends can be protective depending on the type of understanding or social norm among them.

This notion is supported by Tang et al.'s (2011) study of Chinese adolescents which found that a high level of support from peers worked as a protective factor for those experiencing abuse and acted as a buffer against risk behaviours, particularly sexual experimentation and suicidal behaviours.

Much of the literature indicates that peer influence has a strong association with risk behaviours particularly with adolescents. However the studies by Patrick et al. (2010)

and Tang et al. (2011) show that peers can also have a positive influence and act as a buffer against risk behaviours.

CONCLUSION

The Muslim community in Australia has faced challenges in recent times, particularly post-September 11 2001. The Government and Police have since implemented positive programs to support the Muslim community and bring about awareness of issues experienced by Muslims.

The emphasis on Muslims in Australia from these organisations and the media has predominately focused on preventing or reacting to issues of alienation, discrimination, crime prevention and integration with the wider Australian community.

Although working to prevent alienation, discrimination and crime is a positive outcome, previous studies have found that other minorities who have experienced these issues are more prone to engaging in risk behaviours (Factor et al., 2011) and no studies have explored the context of risk behaviours in Australia's Muslim community.

However, there is reason to expect that being part of a faith-based minority can act as a safeguard for engaging in risk as religiosity has been proven to serve as a protective factor in other religious groups (Abbott-Chapman & Denholm, 2001; Chen et al., 2004; Sinha et al., 2007; Zaleski & Schiaffino, 2000).

International studies have shown that Islam can be protective against alcohol use (Abu-Ras et al., 2010; Ghandour et al., 2009). However, no known research on Muslims use of alcohol is available in Australia and a wider range of risk behaviours also needs to be explored.

Positive social support networks, particularly in the family such as parents and siblings have been shown to protect against risk behaviours and peers can influence risk depending on their own perception of what is 'normal' behaviour. However there are no known studies of Muslims in Australia in regards to social support networks as well as risk behaviours.

PRESENT INVESTIGATION

This study aims to explore the health, wellbeing and lifestyle of this growing religious minority in Australia. The main objectives of this study are:

1. To determine which risk activities are of most concern to Muslims based on their reported perception of and involvement with a variety of risk activities.

2. To determine what factors are associated with the propensity towards these risk activities.

3. To determine whether high religiosity is protective against any of these risk activities.

4. To determine whether there are relationships between different types of risk activities.

5. To explore how Muslims make decisions in regards to risk, where Muslims seek social support from and their lifestyle values.

6. To provide baseline data on the Australian Muslim community for future research.

CHAPTER 2

METHODOLOGY

The aims of this study were to explore:

- How 'at risk' Muslims in Australia are with a broad range of risk activities.

- The characteristics which determine a propensity to risk behaviour in the Australian Muslim community.

- Religiosity and its effectiveness in protecting against risk behaviours.

- The relationships if any, between different types of risk activities.

- Decision making, social support and lifestyle values of the Australian Muslim community.

This study takes a constructivist approach and will observe individual perceived risk and involvement from the viewpoint of the participants. This is important for understanding the building of resilience in individuals and communities and access to health resources as validated by the participants themselves (Ungar, 2004).

Ethics approval was obtained for the questionnaire (appendix 3), participant information sheet (appendix 1) and advertisement (appendix 2) from The University of Sydney's Human Research Ethics Committee: Reference number: 05-2009/11695.

QUESTIONNAIRE DESIGN

A previous multi-stage study of Christian high school students in Tasmania had similar aims to this current study but focused on Christian youth (Abbott-Chapman & Denholm, 2001; Abbott-Chapman et al., 2008a, 2008b). The questionnaire from this previous study (appendix 4) was utilised as a framework for developing the current questionnaire (appendix 3) with permission from the authors. The current questionnaire was tailored specifically for an adult population.

Religious Terminology

Religious questions in the current survey used general religious terms rather than Muslim-focused terms. This makes this survey useful for future research. Another consideration from the researchers was that Muslims may use a specific term for one category which may not be used or understood universally by all Muslims. For example a Muslim's "place of worship" could be a mosque, masjid, musallah, youth centre, prayer room, hall, etc. Also, their "religious leader" could be interpreted as a Sheikh, Imam, Mufti, Maulana, Maulvi, etc.

The questionnaire included five sections:

Demographics

The first section of the questionnaire collected background information. This included demographic information including age, gender, state of residence, employment status, being a student, their relationship status, whether the participant lived with their partner, had children, lived in a suburban/city or rural area, were born in Australia and level of education.

Due to the complexity of intimate relationships (Masters, Johnson, & Kolodny, 1988), the relationship status question allowed for the participant to choose “other” and specify their type of relationship if he/she felt they did not fit into the suggested categories. This is the only question in the current study which allowed the participant to provide qualitative information.

Group Membership & Religiosity

The second section explored membership of groups and religiosity. It enquired if the participant belonged to any clubs and societies and requested the participant to tick from a list of suggested clubs and societies (appendix 3). It also enquired how important their club or society was to the participant. Questions about having religious beliefs and whether or not they attend a place of worship or worship services were also included.

Risk Behaviours

The third section explored reactions to different types of risk behaviours. It provided a list of 24 risk behaviours (appendix 3). The participant was instructed to rate each of the risky behaviours on a scale of 1 to 7 to determine how risky they thought each one was with 1 being not risky and 7 being very risky. A 'don't know' option was also provided. The participant was then requested to indicate whether or not they had participated in any of the 24 risky behaviours. For each risk, the participant could select from four options: 'no never', 'yes once', 'yes occasionally' and 'yes regularly'.

One risk category which was added to the current study was the use of 'Crystal meth or 'Ice''. This category was included as a new type of health risk in Australia due to previous drug research indicating an increase of supply and use of 'ice' in 1999 (McKetin & McLaren, 2004) and the increased availability of more potent and higher purity forms of methamphetamine from 1999 to 2001 (Topp et al., 2002). The risk behaviour 'Injecting heroin' from the Tasmanian study (Abbott-Chapman & Denholm, 2001) was modified to 'Injecting illegal drugs' as it is a more general term and includes the possibility of other illegal substances being used as a health risk.

The participant was then requested to rate how important a particular type of influence was when deciding whether or not to participate in a risky activity. A 7 point scale was provided for each influence with 1 being 'not important' to 7 being 'very important'. A 'don't know' option was also provided.

These influences included: fun and excitement, knowing whether it is legal or illegal, feelings about what it is right or wrong, knowing how dangerous it is to their health and wellbeing or the health and wellbeing of others, and what their friends and family think about it.

The participant was asked how easy or difficult it was for them to say 'no' to friends who suggested doing something risky or dangerous and to rate how strongly influenced they were or not by what they see on TV or the movies.

The participant was asked about their interest or involvement in adventure activities. They were asked to indicate if they have either experienced, would like to experience or not interested in: bungee jumping, canyoning, caving, outdoor rock/Mountain climbing, parasailing or parachuting/skydiving.

Social Support & Feelings about the future

The fourth section determined who the participants would talk to or seek advice from for personal, study, health and career/work problems.

Social support categories included were: Boss, Counsellor, Doctor, Friends (other gender), Friends (same gender), Grandparent/s or other family member/s, No one, Other, Parent/s, Religious leader, Sibling/s, Teacher/Educator. Participants were advised to tick all that apply.

This section also explored feelings about the future for students and the employed. The questionnaire included questions which determined whether students enjoyed attending their institution or not, how important their studies were to them, how successful they think they will be and how much influence they have in making this happen. These questions were similarly applied to working people in regards to their jobs.

Lifestyle Values

The last section of the questionnaire explored lifestyle values.

This section provides a list of 20 values (appendix 3) and requested the participant to rate how important they felt each value was. Options included **'**not at all important', 'not very important', 'neutral', 'important' and 'very important' on a scale of 1 to 5 accordingly.

Participants were requested to select their favourite place from a list of 8 options which included own home, other family/friend's place, sports events/places, place of worship, beach/river, shopping centres/marketplace, interstate and bush/nature.

The final question provided a list of 16 categories and asked the participant to indicate which of them they thought were good options that can help a person to make decisions for themselves about their own lifestyle (appendix 3). The participant was requested to tick as many categories as were applicable.

DELIVERY OF QUESTIONNAIRE

Online Survey

The questionnaire was hosted online via Zoomerang.com (MarketTools.Inc., 2011) which generated a link to the survey. Once the link was activated, participant information was provided prior to the survey questions.

The survey was advertised on The University of Sydney - Graduate Program of Sexual Health website with a button linking directly to the online survey.

Brief information about the survey and contact information was provided on the website for participants interested in completing a paper-based survey however no requests were made. Clicking on the online survey displayed the participant information (appendix 1) followed by the questionnaire.

Muslims who lived in Australia, were fluent in English and were a minimum of 18 years of age were invited to participate in the survey. Participants anonymity was assured prior to and throughout the survey.

Recruitment

A purposive sampling strategy (Kerlinger, 1986) was used to recruit participants via the internet. The research project was advertised on various Australian Muslim community websites and forums. These included popular websites such as MuslimVillage (MuslimVillage Inc., 2009), AussieMuslims.Net (AussieMuslims.Net., 2009) and Queensland Muslims websites.

Emails promoting the study were sent to working group emails, Muslim community organisations and other contacts known to the researcher. Advertisements were also placed on noticeboards in prayer rooms of various universities.

Responses

151 surveys were completed. Responses indicating an age of under 18 were excluded from the analysis; resulting in a total of 149 completed eligible responses.

ANALYSIS OF DATA

All data was analysed using SPSS for Windows version 20.0. The following describes the instruments and tests used for analysis.

RAPRA Index

Risk behaviour was analysed utilising the Risk Activity by Personal Risk Assessment (RAPRA) index utilised by the Abbott-Chapman and Denholm (2001) study. This analysis combines the participants' scores of risk perception with risk participation scores.

The four risk participation scores were ranked into 3 categories. P0: never (scored 1), P1: once (scored 2), and PS: sometimes (scored 3 &4). As engaging in risk 'occasionally' and 'regularly' can be subjective (Abbott-Chapman & Denholm, 2001) the two scores were combined into one category 'sometimes'.

The risk perception scores were ranked into 2 categories. LR: Low Risk Perception (scored 1-4) and HR: High Risk Perception (scored 5-7).

Participants who had missed indicating an item were given a score of 1. This low value was assigned because it is expected that participants are more likely to provide responses to activities which they have been involved in rather than less important items which they may have missed because of "respondent fatigue" (Abbott-Chapman

& Denholm, 2001, p.73). Adding this value also allows for analysis to be complete without discarding all data from each participant who had missed an item.

The combination of the 3 risk participation categories with the low and high risk perception provides 6 weights as illustrated in Table 2.1.

Table 2.1: Definition of the index of Risk Activity by Personal Risk Assessment (RAPRA) (Abbott-Chapman & Denholm, 2001, p.73).

RAPRA Category	Risk Assessment		Risk Participation		Weights
	Rank	Label	Rank	Label	
HRP0	5,6,7	HR	1	P0	1
LRP0	1,2,3,4	LR	1	P0	2
HRP1	5,6,7	HR	2	P1	3
LRP1	1,2,3,4	LR	2	P1	4
HRPS	5,6,7	HR	3,4	PS	5
LRPS	1,2,3,4	LR	3,4	PS	6

Notes:
HRP0: High perceived risk and no participation
LRP0: Low perceived risk and no participation
HRP1: High perceived risk and participation once
LRP1: Low perceived risk and participation once
HRPS: High perceived risk and participation sometimes
LRPS: Low perceived risk and participation sometimes

The use of this model allows the observation of risk behaviour relative to the participant's perception of risk. This provides a more of a real world view of risk assessment rather than observation within an experimental environment (Abbott-Chapman et al., 2008b). It also provides a more holistic view and allows discrimination between which of the participants had not engaged in risk, those who have just

experimented with the risk activities and those who are the higher risk takers (Abbott-Chapman & Denholm, 2001).

Each risk activity was assigned a score based on the average weighting of the participants. These risk activity scores indicate the overall level of riskiness for each activity relative to the other activities.

Background Characteristics

Demographic information including, gender, employment status, being a student, living with partner, being a parent, being born in Australia and club and society membership were correlated with risk activity scores using Pearson's correlation coefficient.

Demographic information with more than two variables including age, relationship status and level of education were analysed as independent variables and compared with risk activity scores using one way Analysis of Variance (ANOVA) tests. Scheffe's test was used for post-hoc analysis.

Scheffe's method was used because it does not assume equal group size, provides flexibility in analysing more than two groups and is a conservative test that protects against Type I error. (Holm & Christman, 1985; Ruxton & Beauchamp, 2008). ANOVA and Scheffe's tests have also been used to compare differences between demographic

groups in other risk behaviour studies (Booth, Koester, Brewster, Salloum, & Salloum, 1991; Keskinen et al., 1998; Lawrence et al., 1995).

Religiosity Index

To determine how religiosity had an impact on risk behaviour, an Index of Religiosity was utilised which was adapted from the Abbott-Chapman and Denholm (2001) study. This study used three measures of religiosity which included religious beliefs, churchgoing attendance and church group membership.

The first measure of 'religious beliefs' was included in the index of religiosity in the current study. However as the current study focused on the Muslim community, the religious questions were modified to use more general terms. 'Place of worship attendance' replaced the term 'Church attendance' and observed 'religious importance' was used instead of 'church group membership'.

The first measure asked the participants if they had any religious beliefs, which they could answer: 'no never have', 'not sure', 'not now but previously held religious beliefs' or 'yes;' rated from 1 to 4 accordingly.

The second measure for religiosity asked the participant if they regularly attend a place of worship or any worship services. The options provided were: 'never', 'hardly ever', 'sometimes' and 'often'; rated from 1 to 4 accordingly.

The third measure was a 5 point scale which asked the participant how important religious beliefs were to them. The options included: 'not at all important', not very important', 'neutral', 'important' and 'very important'; rated from 1 to 5 accordingly.

The religious beliefs measure and place of worship attendance measures were summated for each respondent. This summated score was then multiplied with their level of religious importance score to give a mean score for religiosity with a low score indicating low religiosity and a high score indicating high religiosity. Pearson's correlations were used to correlate the religiosity scores with the 24 risk activity scores to determine if religiosity had an impact on any of the risk activities.

Syndrome of Risk

Pearson's correlations were used to discover if there was a "syndrome" of related risk behaviours as termed by Arnett (1998). RAPRA scores of each risk activity were correlated with that for all other risk activities to determine if any of the risk activities had relationships.

CHAPTER 3

RESULTS

DEMOGRAPHICS

One hundred and fifty one responses were collected between 11th August 2009 and 4th December 2011. Two of the participants identified as being under the age of 18 which did not meet the criteria as advertised and were excluded from the analysis. Therefore the total number of valid responses was 149.

The gender of participants included 91(61.1%) females and 57 (38.3%) males. One participant completed the survey but did not indicate gender. All demographic data are displayed by gender in Table 3.1.

Respondents by age comprised of 18 (12.1%) aged 18-19, 56 (37.6%) aged 20-25, 36 (24.2%) aged 26-30, 35 (23.5%) aged 31-49 and 4 (2.7%) aged 50 and over.

Analysis by state of residence indicated that 92 (61.7%) participants lived in New South Wales, 22 (14.8%) were from Victoria, 17 (11.4%) from Queensland, 16 (10.7%) from Western Australia and 2 (1.3%) from the Australian Capital Territory. No responses were recorded for other states and territories.

Table 3.1: Demographic Information.

	Male		Female		Missing		Total	
	No.	%	No.	%	No.	%	No.	%
Age								
18-19	5	8.8%	13	14.3%	0	0.0%	18	12.1%
20-25	14	24.6%	41	45.1%	1	100.0%	56	37.6%
26-30	18	31.6%	18	19.8%	0	0.0%	36	24.2%
31-49	16	28.1%	19	20.9%	0	0.0%	35	23.5%
50 and over	4	7.0%	0	0.0%	0	0.0%	4	2.7%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
State/Territory								
NSW	29	50.9%	63	69.2%	0	0.0%	92	61.7%
VIC	10	17.5%	12	13.2%	0	0.0%	22	14.8%
WA	8	14.0%	8	8.8%	0	0.0%	16	10.7%
QLD	9	15.8%	7	7.7%	1	100.0%	17	11.4%
ACT	1	1.8%	1	1.1%	0	0.0%	2	1.3%
SA	0	0.0%	0	0.0%	0	0.0%	0	0.0%
TAS	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NT	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
Employment status								
Employed full-time (paid work)	25	43.9%	26	28.6%	0	0.0%	51	34.2%
Employed part-time/casual (paid work)	18	31.6%	36	39.6%	0	0.0%	44	36.2%
Not in the workforce/Not working for pay	14	24.6%	29	31.9%	1	100.0%	54	29.5%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
Student Status								
Student	20	35.1%	47	51.6%	1	100.0%	68	45.6%
Non-Student	37	64.9%	44	48.4%	0	0.0%	81	54.4%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
Relationship Staus								
Single & not in a committed relationship	24	42.1%	41	45.6%	1	100.0%	66	44.6%
In a committed relationship/de-facto	4	7.0%	7	7.8%	0	0.0%	11	7.4%
Engaged	3	5.3%	4	4.4%	0	0.0%	7	4.7%
Married	26	45.6%	35	38.9%	0	0.0%	61	41.2%
Other relationship	0	0.0%	3	3.3%	0	0.0%	3	2.0%
Total	57	38.5%	90	60.8%	1	0.7%	148	100.0%
Resides with partner*								
Yes	27	81.8%	35	71.4%	0	0.0%	62	75.6%
No	6	18.2%	14	28.6%	0	0.0%	20	24.4%
Total	33	40.2%	49	59.8%	0	0.0%	82	100.0%
*Single & not in a rel. Responses Filtered out								
Parental Status								
Has Children	24	42.1%	27	30.0%	0	0.0%	51	34.7%
No Children	33	57.9%	63	70.0%	0	0.0%	96	65.3%
Total	57	38.8%	90	61.2%	0	0.0%	147	100.0%
Suburban, city or rural area								
Suburban/city	54	94.7%	89	97.8%	1	100.0%	144	96.6%
Rural	3	5.3%	2	2.2%	0	0	5	3.4%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
Born in Australia								
Yes	29	51.8%	54	59.3%	0	0.0%	83	56.1%
No	27	48.2%	37	40.7%	1	100.0%	65	43.9%
Total	56	37.8%	91	61.5%	1	0.7%	148	100.0%
Level of education								
Under year 12	1	1.8%	2	2.2%	0	0.0%	3	2.0%
Completed year 12	11	19.3%	11	12.1%	0	0.0%	22	14.8%
Certificate (I, II, III, IV)	6	10.5%	4	4.4%	0	0.0%	10	6.7%
Diploma	5	8.8%	9	9.9%	0	0.0%	14	9.4%
Undergraduate Degree	21	36.8%	49	53.8%	0	0.0%	70	47.0%
Post-graduate Degree	13	22.8%	16	17.6%	1	100.0%	30	20.1%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%
Club or society membership								
Yes	30	52.6%	43	47.3%	1	100.0%	74	49.7%
No	24	42.1%	41	45.1%	0	0.0%	65	43.6%
Not now but in past	3	5.3%	7	7.7%	0	0.0%	10	6.7%
Total	57	38.3%	91	61.1%	1	0.7%	149	100.0%

In response to the question on employment, 51 (34.2%) participants reported working full-time, 44 (36.2%) were working part-time or casual and 54 (29.5%) were not in the workforce.

Sixty eight (45.6%) of the participants were students and 81 (54.4%) were not.

One participant did not indicate a relationship status. From the remaining 148, 66 (44.6%) participants were single and not in a relationship, 61 (41.2%) were married, 11 (7.4%) were in a committed or de-facto relationship and 7 (4.7%) were engaged. Three (2.0%) participants had selected “other” and did not specify their relationship type. These choices were: “In a long term relationship”, “Considered married to some, engaged to others” and “long distance bf”.

From the 82 participants who were either married, in a relationship or de-facto, engaged or answered “other”; 62 (75.6%) lived in the same residence with their partner and 20 (24.4%) did not.

Two participants did not specify their parental status. Out of the 147 who specified, 51 (34.7%) participants had children and 96 (65.3%) did not have children.

The majority of the participants; 144 (96.6%) lived in a suburban or city area and only 5 (3.4%) lived in a rural area.

One participant did not specify if born in Australia or overseas. Out of the other 148 who specified birthplace, 83 (56.1%) of participants were born in Australia and 65 (43.9%) were born overseas.

The majority of participants had a university level of education. Seventy (47%) had an undergraduate degree, 30 (20.1%) had a postgraduate degree, 14 (9.4%) had a diploma, 10 (6.7%) had attained a certificate, 22 (14.8%) had completed year 12 and 3 (2%) had a current education level under year 12.

Group Membership

In terms of club and society information, 74 (49.7%) participants currently belonged to a group or society, 65 (43.6%) had not belonged to a club or society and 10 (6.7%) belonged to a club or society in the past.

Five options were given for clubs and society information and participants were instructed to select all that applied to them for each option. Results are presented in Table 3.2.

Table 3.2: Type of Club or Society.

	Male (N=57)		Female (N=91)		Missing (N=1)		Total (N=149)	
	No.	%	No.	%	No.	%	No.	%
Sports club or team	12	21.1%	9	9.9%	0	0.0%	21	14.1%
Music (include choir/band etc)	2	3.5%	0	0.0%	0	0.0%	2	1.3%
Hobby or Interest club or group	7	12.3%	12	13.2%	0	0.0%	19	12.8%
Volunteer for a community service/group	20	35.1%	30	33.0%	1	100.0%	51	34.2%
Other	7	12.3%	11	12.1%	1	100.0%	19	12.8%

Fifty one (34.2%) participants volunteered for a community group or service, 21 (14.1%) of participants belonged to a sports club or team, 19 (12.8%) belonged to a hobby or interest group, 2 (1.3%) belonged to a music group and 19 (12.8%) selected "other".

Participants were questioned about how important these groups were to them. From the 74 (49.7%) participants who said they belonged to a club or society, 30 (40.5%) rated it as 'very important', 35 (47.3%) rated it as 'important' and 9 (12.1%) rated it as 'not very important'. No responses were received for 'not important'.

Religiosity

Participants were questioned about their religious beliefs and were instructed to select from four options. The majority of 143 (96%) participants said 'yes' to religious belief. Only 6 (4%) said that they had 'previously held religious beliefs'. The two other options 'not sure' and 'no never have' received no responses.

Participants were questioned about how often they had attended a place of worship and were instructed to choose from four options. 61 (40.9%) of participants attended a place of worship 'often', 53 (35.6%) 'attended sometimes', 25 (16.8%) answered 'hardly ever attended' and 10 (6.7%) answered 'never'.

Participants were instructed to rate on a five point scale how important religious beliefs were to them. One hundred and fourteen (76.5%) participants rated religious beliefs as very important, 23 (15.4%) rated them as important, 7 (4.7%) were neutral, 2 (1.3%) rated not very important and 3 (2%) rated not at all important.

RISK BEHAVIORS

Risk Perception

Participants were instructed to rate how risky or dangerous they thought a list of 24 risk behaviours were on a scale from 1 ('not risky') to 7 ('very risky').

Mean scores for risk perception were relatively high across for all risk behaviours as presented in Table 3.3. Drink driving was perceived to be the highest risk behaviour, followed by injecting illegal drugs, sharing needles and taking crystal meth or ice.

Body piercing/tattoos were perceived to be the lowest risk, followed by watching R or X rated movies, sex without self or partner being on the pill and watching pornography on the internet.

Table 3.3: Perceived Risk Mean Scores From Highest Perceived Risk (7) To Lowest Perceived Risk (1).

	Risk Behaviour	N	Mean	Std. Dev.
D	Drink driving	149	6.89	0.58
H	Injecting illegal drugs	149	6.86	0.69
L	Sharing needles	147	6.86	0.70
U	Taking Crystal Meth or ice	147	6.75	0.88
Q	Snorting cocaine	148	6.74	0.86
V	Taking speed/ecstasy	148	6.67	0.95
A	Bingedrinking/gettingdrunk	149	6.5	1.11
K	Sex with someone you don't know very well	146	6.45	1.24
M	Shoplifting	147	6.37	1.07
F	Gambling	148	6.36	1.19
P	Sniffing glue or solvents	148	6.36	1.18
G	Hitchhiking	148	6.13	1.32
O	Smoking marijuana/hash	148	6.1	1.56
S	Starving to get slim/eatingdisorder	147	5.94	1.21
I	Sex without a condom	148	5.91	1.73
C	Drinking alcohol	148	5.86	1.60
R	Speeding in a car	147	5.73	1.43
E	Driving without a licence	147	5.65	1.60
N	Smoking cigarettes	149	5.5	1.59
T	Sunbaking without sunscreen	149	5.39	1.53
W	Watching pornography on the Internet	142	5.18	1.91
J	Sex without self or partner being on the pill	142	5.08	2.06
X	Watching R or X rated videos/movies	143	4.94	1.99
B	Bodypiercing/tattoos	149	4.6	1.92

Risk Participation

Participants were requested to indicate if they had done any of the 24 risk behaviours. For each of the behaviours, participants could choose from four options: 'no never', 'yes once', 'yes occasionally' and 'yes regularly'.

Involvement in risk behaviours was low across all categories. Raw scores are presented in Table 3.4. The majority of participants had reported 'never' or 'once' engaging in each of the risk categories and only few had reported doing these behaviours 'occasionally' or 'regularly'.

Table 3.4: Risk Involvement raw scores in order of participation rate.

	Risk Behaviour	Participation Rate (%)	Never	Once	Occasion	Regularly	Number
R	Driven dangerously/speeding	58.4	62	38	37	12	149
X	Watched X or R rated videos/movies	58.1	62	42	33	11	148
N	Smoked cigarettes	56.1	65	39	20	24	148
T	Sunbaked without sunscreen	52.1	70	25	44	7	146
W	Watched pornography on the Internet	50.7	73	32	29	14	148
I	Had sex without a condom	50.3	74	11	30	34	149
J	Had sex without your partner being on the pill	49.0	75	6	31	35	147
C	Drank Alcohol	47.0	79	29	31	10	149
F	Gambled	30.4	103	31	14	0	148
E	Driven without a licence	30.2	104	21	19	5	149
A	Been Drunk/Excessively intoxicated	29.5	105	18	22	4	149
O	Smoked marijuana/hash	28.2	107	20	17	5	149
B	Had a tattoo/bodypiercing	26.8	109	25	12	3	149
S	Had an eating disorder	22.3	115	17	13	3	148
M	Shoplifted	21.6	116	28	4	0	148
K	Had sex with someone you don't know very well	20.1	119	11	13	6	149
G	Hitchhiked	14.8	127	16	6	0	149
V	Taken speed/ecstasy	11.6	130	11	5	1	147
D	Driven while drunk	10.1	134	8	7	0	149
P	Sniffed glue or solvents	6.8	138	7	3	0	148
Q	Snorted cocaine	5.4	141	6	2	0	149
H	Injected illegal drugs	2.7	144	2	1	1	148
U	Taken Crystal Meth or "ice"	1.3	147	1	1	0	149
L	Shared needles	0.7	148	0	1	0	149

The behaviour that participants had engaged in the most was driving dangerously/speeding followed by watching R or X rated movies, smoking cigarettes and sunbaking without sunscreen.

Participants were least likely to engage in sharing needles, followed by taking crystal meth or ice, injecting illegal drugs and snorting cocaine.

DECISION MAKING

From the 7 point scale of risk taking influences, results indicated that on average, participants rated level of danger as the most important consideration when deciding to do risky things. This was followed by what is 'right or wrong', legality and family's opinion. Friend's opinion had the lowest mean score followed by fun and excitement. Mean scores are presented in Table 3.5.

Table 3.5: Importance of Consideration for Risk-Taking. Rated from 1 (lowest) to 7 (highest).

Influence on risk-taking decisions	N	Mean	Std.Dev.
Dangerous	148	6.26	1.30
Right and wrong	146	6.23	1.30
Legal or illegal	145	5.85	1.84
Family's Opinion	148	5.34	1.93
Fun and Excitement	142	3.82	1.86
Friend's Opinion	145	3.68	2.09

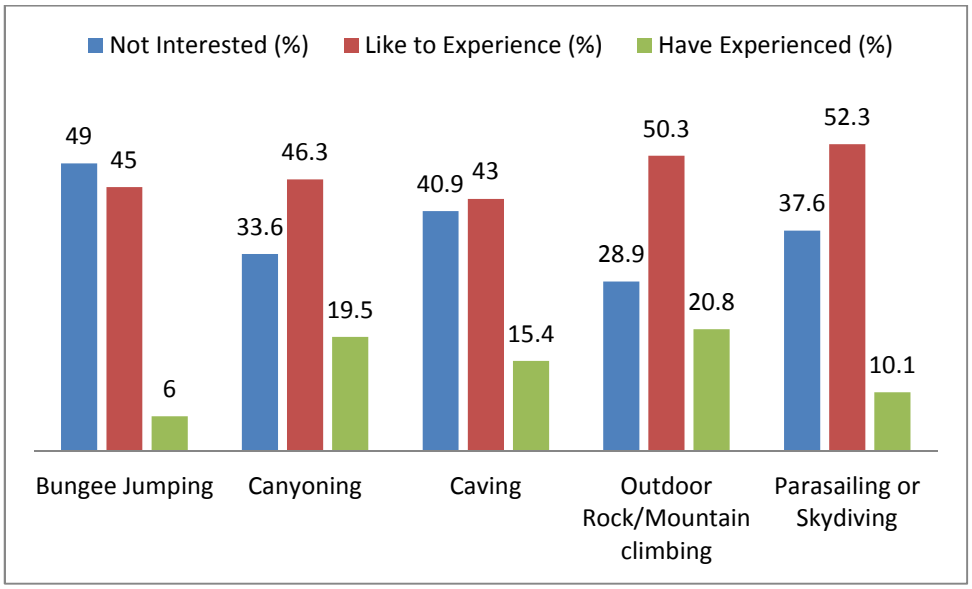
Participants were questioned about how easy it was for them to say “no” if friends suggest doing something risky. Those who selected very easy included 57 (38.3%) of participants, 63 (42.3%) selected easy, 12 (8.1%) selected not so easy, 15 (10.1%) selected difficult and 1 (0.7%) selected very difficult.

Participants were questioned about how much they were influenced by what they see on television or movies. Forty three (28.9%) selected not at all, 88 (59.1%) selected not much, 11 (7.4%) selected strongly and 4 (2.7%) selected very strongly.

Participants were instructed to record their level of involvement or interest in thrill seeking adventure activities including bungee jumping, canyoning, caving, outdoor rock/mountain climbing and parasailing or parachuting/skydiving. Only a small percentage of participants (6-20.8%) had actually experienced any of these activities.

For each adventure activity, approximately half of the participants (N=64-78 or 43-52.3%) said that they would like to experience them. Percentages of responses for each activity are illustrated in Fig. 3.1.

Fig. 3.1: Interest/ Involvement in Adventure Activities (N=149).



SOCIAL SUPPORT & FEELINGS ABOUT THE FUTURE

Participants were questioned about whom they would seek support from for personal, study, career, health and trust issues. For each issue, they were provided with 12 social support categories including: parents, counsellor/s, sibling/s, same gender friends, other gender friends, grandparents/other family, teacher/educator, religious leader, boss, doctor, no one and other. They were instructed to tick all categories that apply to them.

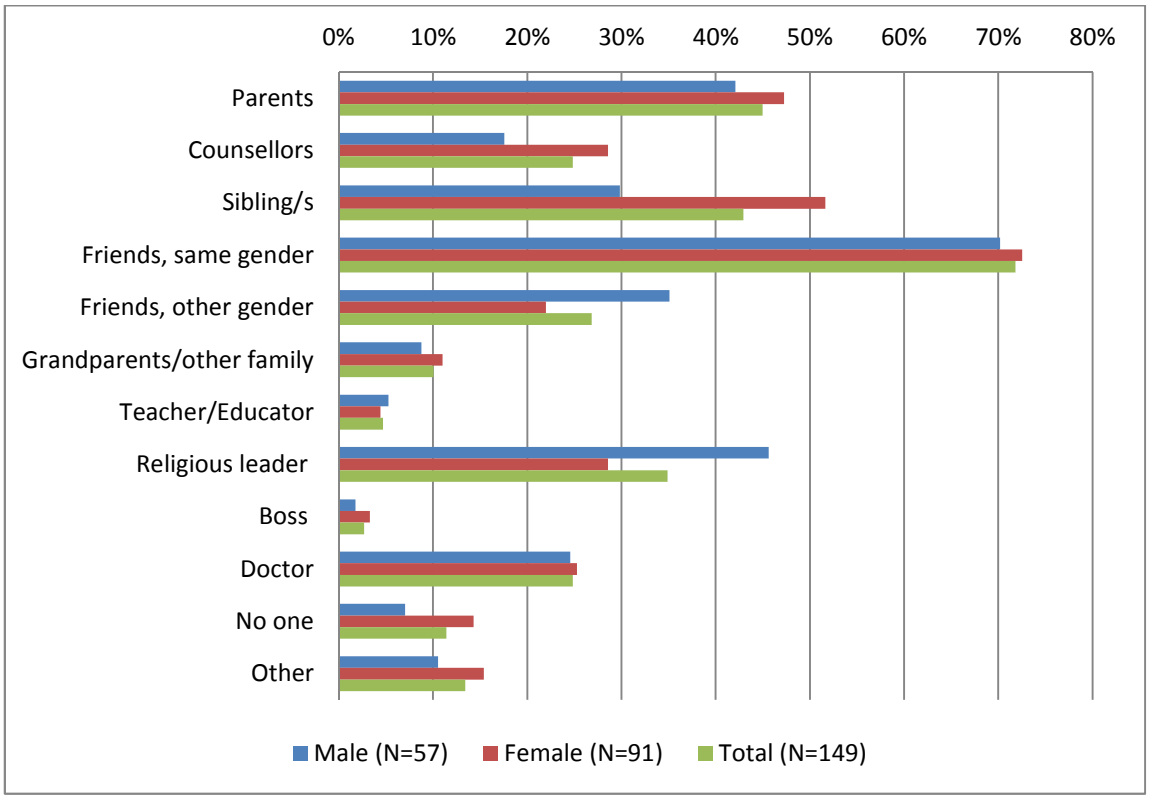
Full results for all social support issues and categories are displayed by percentage in appendix 6. The following are the main findings for each issue.

Personal Problems

Most participants (71.8%) had relied on same gender friends to talk to or seek advice from for personal problems and this was consistent with both genders (males=70.2%, females= 71.8%) as shown in Fig. 3.2. Second overall was parents (45%) followed by siblings (43%).

However when broken down by gender, 45.6% of males would seek support from their religious leader followed by their parents (42.1%) and 51.6% of females would seek support from their siblings followed by their parents (47.3%).

Fig. 3.2: Social Supports for Personal Problems.



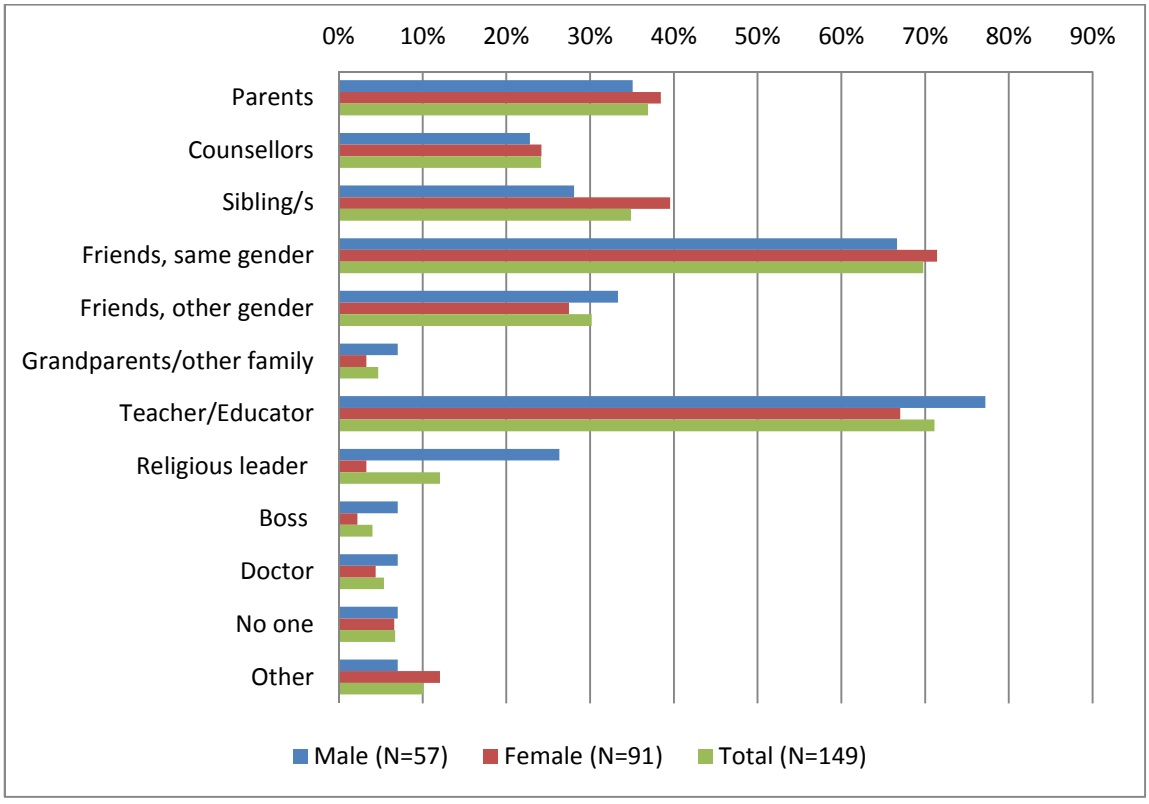
Study Problems

Overall, most participants (71.1%) said that they would talk to or seek advice for study problems from their teacher/educator as shown in Fig. 3.3. This was followed by same gender friends (69.8%), parents (36.9%) and siblings (34.9%).

Most males (77.2%) were likely to seek support from their Teacher/educator, followed by same gender friends (66.7%) and parents (35.1%).

Females however, were most likely to seek support from same gender friends (71.4%) followed by Teacher/educator (67%) and siblings (39.6%).

Fig. 3.3: Social Supports for Study Problems.

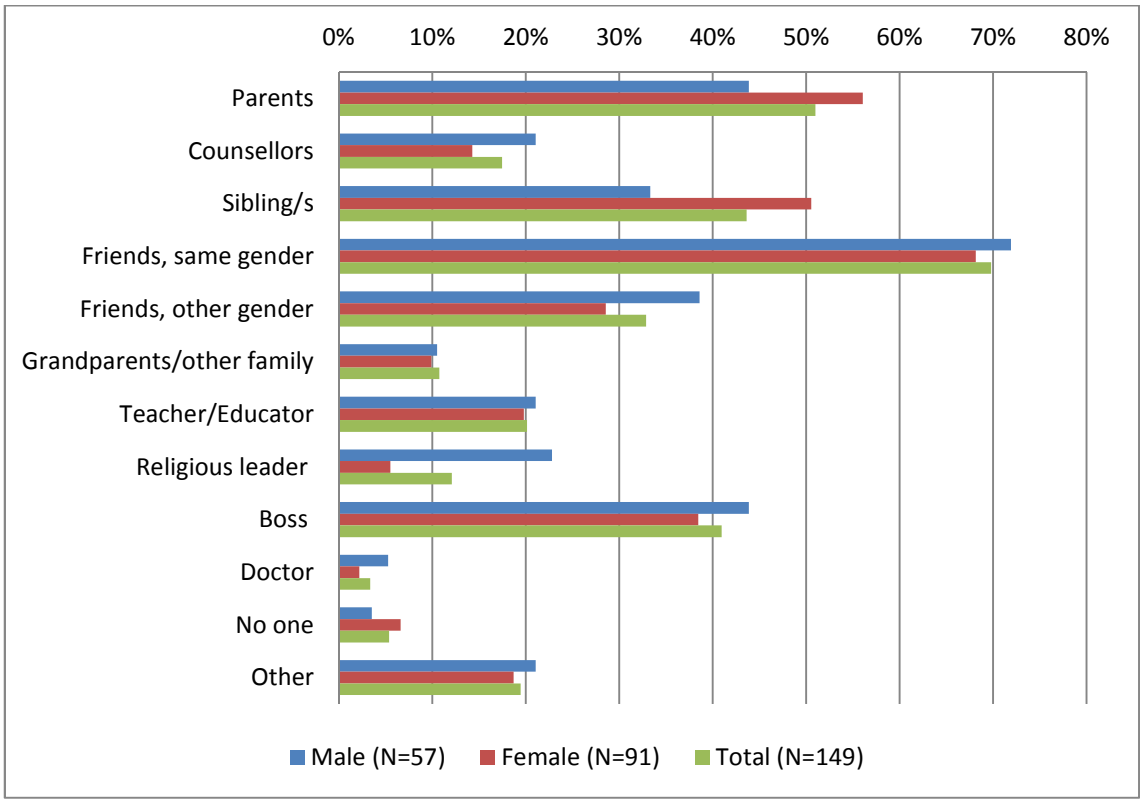


Career Problems

Overall, most participants said that they would talk to or seek advice from same gender friends for career problems (69.8%). This was consistent for both genders (males=71.9%, females=69.8%) as shown in Fig. 3.4. This was followed by parents (51%), siblings (43.6%) and then their boss (40.9%).

Following same gender friends, males were more likely to seek support from their parents or their boss (43.9%) and then female friends (38.6%). Females were more likely to seek support from their parents (56%) followed by their siblings (50.5%).

Fig. 3.4: Social Supports for Career Problems.

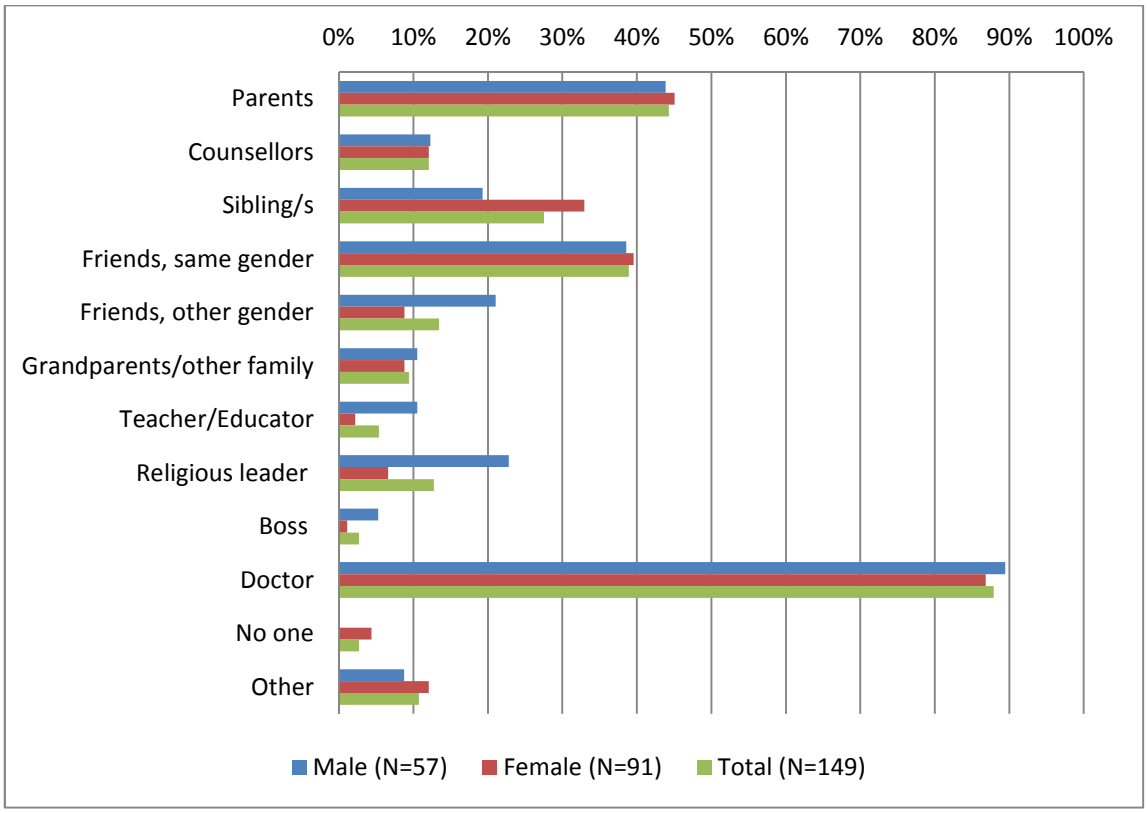


Health Problems

The majority of participants would talk to or seek advice from their doctor for health problems (87.9%) as shown in Fig.3.5. This is consistent across both genders (male=89.5%, female=86.8%).

Second were parents (44.3%). This again was consistent across genders (male=43.9%, female= 45.1%); and then same gender friends (38.9%) also consistent for both genders (male=38.6%, female= 39.6%).

Fig. 3.5: Social Supports for Health Problems.



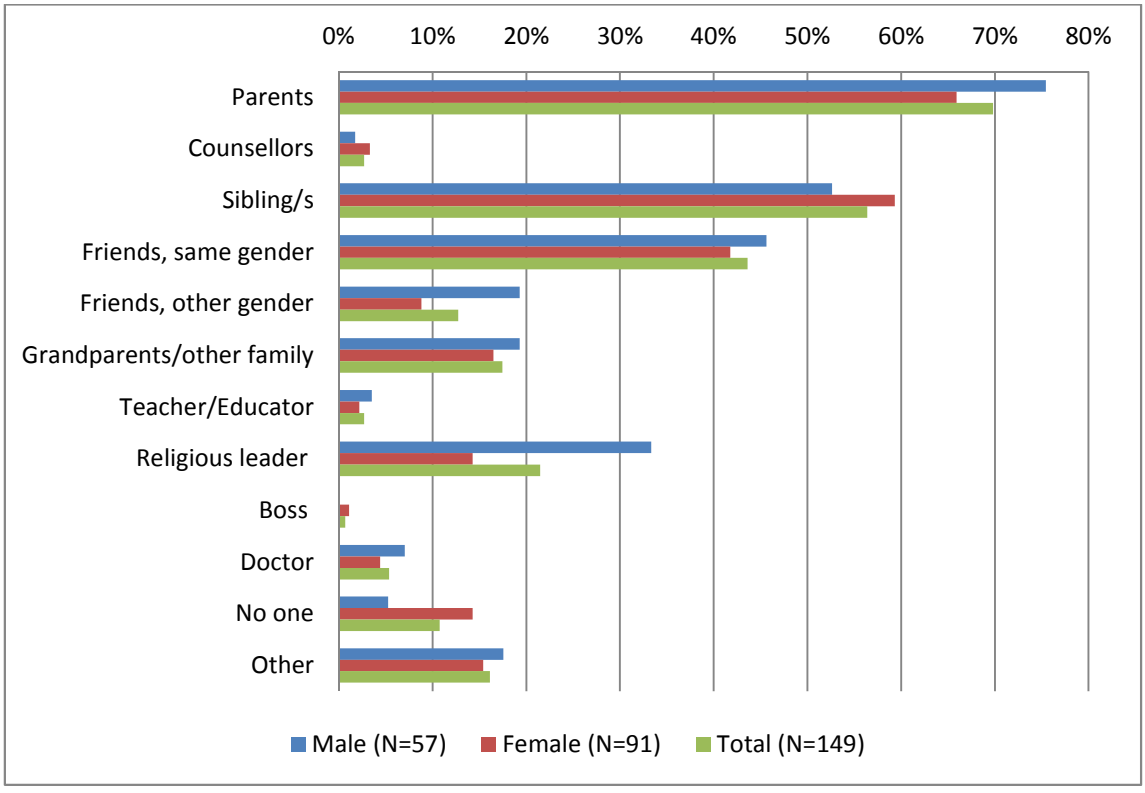
Trust

Participants were questioned as to who they most trust to be there when they need them.

Most participants would trust their parents most (69.8%). This was consistent across both genders (male=75.4%, female=65.9%) as shown in Fig. 3.6.

This was followed by siblings (56.4%) consistent across both genders (male=52.6%, female=59.3%) and by same gender friends (43.6%) also consistent across both genders (male=45.6%, female=41.8%).

Fig. 3.6: Most Trusted Social Supports.



Education/Training

The 68 (45.6%) participants from the total population who selected a student status were questioned about feelings towards their education or training. This group was requested to indicate if they enjoyed studying at their institution and could choose from four options. Responses to 'yes' included 45 (66.2%) students, 17 (25%) students said 'sometimes', 2 (2.9%) were 'unsure' and 1 (1.5%) student said 'no'. Three (4.4%) students had not responded.

Those indicating student status were requested to rate from 1(lowest) to 7 (highest) how important their education or training was to them. In the 65 respondents, the average 'importance' score was 6.75 with a standard deviation of 0.50.

On the same scale, when instructed to rate how successful they thought they would be with their education or training in the future (N=65), students on average, rated 5.22 with a standard deviation of 1.71.

When instructed to rate how much influence they thought they would have in making this happen (N=63), students on average, rated 5.43 with a standard deviation of 2.09.

Employment

The sample of 105 (79.5%) participants who indicated that they were employed for paid work was questioned about their feelings towards their work.

These respondents were instructed to choose from four options to indicate their enjoyment or not of their job. Those who answered 'yes' included 53 (50.5%) workers, 39 (37.1%) of workers said 'sometimes', and 6 (5.7%) did not enjoy their job. No responses for 'unsure' were received however 7 (6.7%) workers had not responded.

When instructed to rate from 1 (lowest) to 7 (highest) how important developing their career was to them (N=99), the average rating was 5.66 with a standard deviation of 1.86.

On the same scale, when instructed to rate how successful they thought they would be in their career (N=99), the average rating was 5.27 with a standard deviation of 1.71.

When instructed to rate how much influence they thought they would will have in making this happen (N=99), the average rating was 5.43 with a standard deviation of 1.82.

LIFESTYLE VALUES

Participants were provided with a list of lifestyle values and instructed to rate how important each of the values were to them on a scale of 1 ('not important') to 5 ('very important'). Mean ratings for all lifestyle values are presented in Table 3.6.

Self-respect was ranked as the most important lifestyle value on average by the participants. This was followed by being responsible, and deciding what is right and wrong for one's self along with respecting others. Doing what friends do was the least important followed by breaking the rules/testing the limits and doing things on the spur of the moment.

Table 3.6: Lifestyle Values (rated from 1=not important, to 5=very important) in order of highest importance to lowest importance.

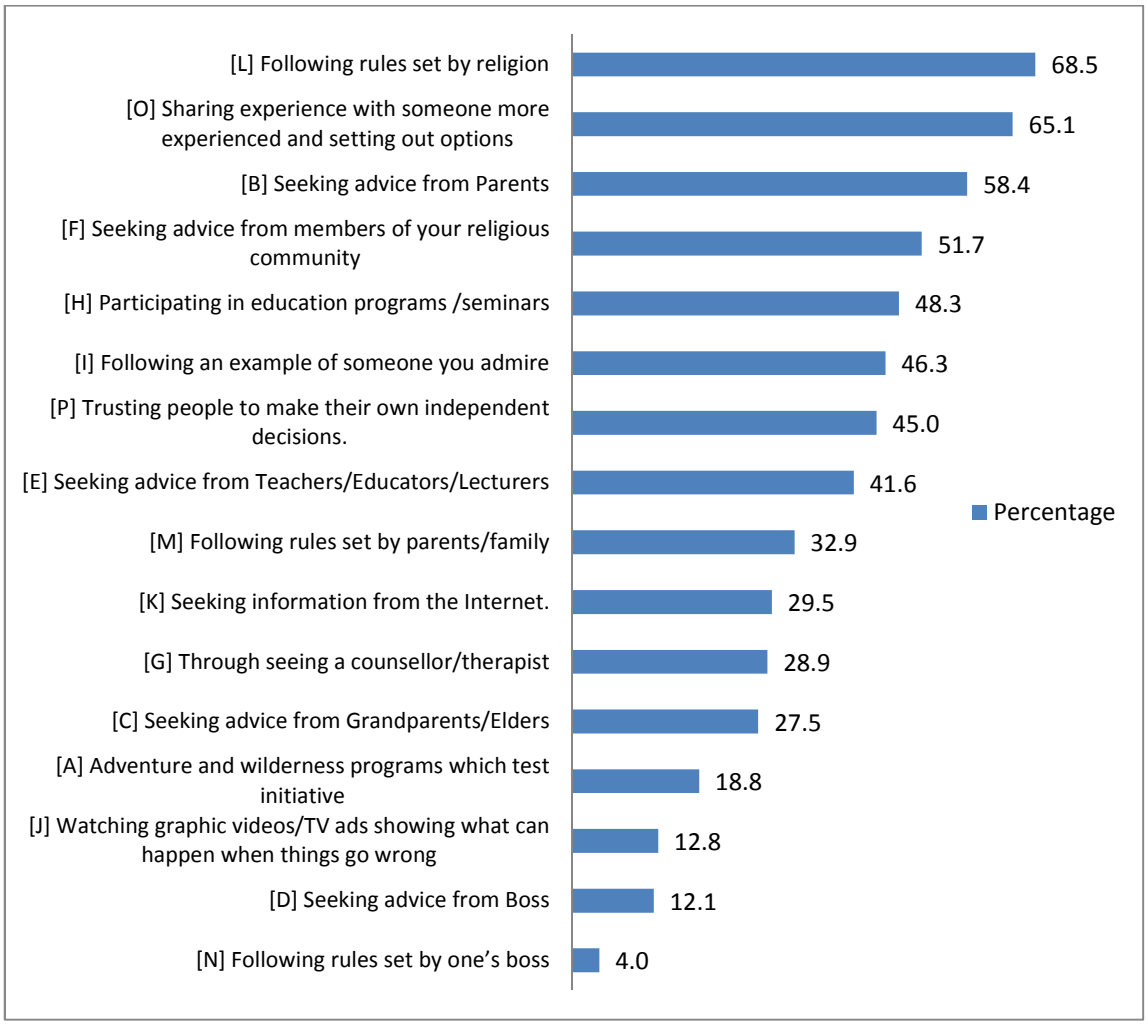
	Lifestyle Values	N	Mean	Std. Deviation
p	Respecting yourself	149	4.74	0.56
d	Being responsible for your own actions	148	4.73	0.46
k	Deciding what is right or wrong for you	149	4.71	0.51
o	Respecting others	146	4.71	0.60
s	Family values	148	4.69	0.59
c	Making good decisions	149	4.68	0.53
q	Religious beliefs	149	4.63	0.81
a	Your health and feeling fit and well	149	4.54	0.64
g	Thinking about the welfare of others	149	4.52	0.63
f	Thinking about things before you do them	148	4.52	0.61
e	Feeling in control of your life	149	4.51	0.72
j	Thinking for yourself	149	4.41	0.80
h	Helping your mates	149	4.35	0.73
b	Looking good	149	3.97	0.85
l	Having fun, finding excitement	148	3.75	0.97
t	Participating in sports	148	3.39	1.24
n	Experimenting with new experiences	149	3.20	1.19
s	Doing things on the spur of the moment	148	3.14	0.96
m	Breaking the rules/testing the limits	149	2.16	1.16
i	Doing what your mates do	148	2.11	0.92

Participants were instructed to indicate their favourite place from 8 different options. Seventy two (48.3%) selected their own home, 23 (15.4%) selected place of worship and another 23 (15.4%) selected beach or river, 17 (11.4%) selected bush/nature, 6 (4%) chose sports events or places, 5 (3.4%) chose other family/friends place, 2 (1.3%) selected shopping centres or marketplaces and 1 (0.7%) selected interstate.

A list of 16 categories was provided and participants were questioned about which of them they thought were good ways to help a person to make decisions for themselves about their own lifestyle. They were instructed to select all categories that apply. All responses are presented in Fig. 3.7.

The highest number of responses was for following rules set by religion with 102 (68.5%) participants having selected this option. The second most selected option was sharing experience with someone more experienced 97 (65.1%). Third most selected was seeking advice from parents 87 (58.4%) followed by seeking advice from members of their religious community 77 (51.7%).

Fig. 3.7: Approaches to Decision Making by Percentage.



RAPRA Scores

The Risk Activity by Personal Risk Assessment (RAPRA) index provided each individual with a weighted score from 1, being the least "at risk of" activity (high perceived risk/no participation) to 6 being the most "at risk of" activity (low perceived risk/participation sometimes) based on their perception of and involvement with each activity (see Table 2.1).

When observing the risk activities by each of the six RAPRA groups, the majority of the participants were found to be in the high perceived risk/no participation (HRP0) group. Full results for each RAPRA group by risk activity are presented in appendix 5.

The average score of the RAPRA weights for each of these 24 risk activities are presented in Table 3.7 which illustrates the hierarchy of riskiness of each activity.

Table 3.7: Risk Activity by Personal Risk Assessment Weighted Averages Hierarchy (N=149).

	Risk Activity	Mean	Std. Deviation
L	Sharing needles	1.05	0.36
U	Taking Crystal Meth or ice	1.09	0.42
H	Injecting illegal drugs	1.10	0.58
Q	Snorting cocaine	1.17	0.68
P	Sniffing glue or solvents	1.25	0.78
D	Drink driving	1.30	0.94
V	Taking speed/ecstasy	1.37	1.00
G	Hitchhiking	1.52	1.14
M	Shoplifting	1.56	1.08
K	Sex with someone you don't know very well	1.77	1.53
S	Starving to get slim/eatingdisorder	1.82	1.42
F	Gambling	1.87	1.38
A	Bingedrinking/getting drunk	2.01	1.66
O	Smoking marijuana/hash	2.01	1.67
E	Driving without a licence	2.16	1.70
B	Bodypiercing/tattoos	2.19	1.58
C	Drinking alcohol	2.68	1.92
W	Watching pornography on the Internet	2.92	2.00
N	Smoking cigarettes	2.95	1.93
T	Sunbaking without sunscreen	2.95	1.97
R	Speeding in a car	3.01	1.87
I	Sex without a condom	3.05	2.07
X	Watching R or X rated videos/movies	3.13	1.92
J	Sex without self or partner being on the pill	3.21	2.15

Gender

Gender was correlated with the 24 risk activities as presented in Table 3.8 to determine whether males or females had a tendency towards any of the risk activities.

Being a male was found to be significant ($p<0.05$) for most of the risk activities.

This included binge drinking, drink driving, driving without a licence, gambling, hitchhiking, injecting illegal drugs, sex without a condom, sex with someone you don't know very well, smoking cigarettes, smoking marijuana/hash, snorting cocaine, speeding in a car, taking crystal meth or ice, taking speed/ecstasy, watching pornography on the Internet and watching R or X rated videos/movies.

Females were only significantly more likely to have a higher risk activity score for body piercing/tattoos.

Table 3.8: Pearson's Correlation Coefficients – Risk Activity by Demographics & Religiosity.

	GENDER	EMPLOYMENT	STUDENTS	LIVE W/PARTNE	PARENTS	URBAN/RURAL	BIRTHPLACE	CLUB & SOC.	RELIGIOSITY
RISK ACTIVITY	Male=1, Female=2	Employed=1, Unemployed=2	Student=1, Non-student=2	Lives With Partner=1, Not Living with Partner=2	Children=1, No children=2	Suburban/ City=1, Rural=2	Aust. Born=1, Born Overseas=2	Club or society=1, No club or society=2	Low Religiosity=1, High Religiosity=2
	N=148	N=149	N=149	N=82	N=147	N=149	N=148	N=149	N=149
[A] Bingedrinking/ gettingdrunk	-.228**	-.047	.167*	.025	-.163*	-.046	-.139	.161*	-.383**
[B] Bodypiercing/ tattoos	.169*	.138	.007	.121	.071	.001	-.257**	.028	-.185*
[C] Drinking alcohol	-.155	-.109	.152	.105	-.118	-.047	-.094	.084	-.530**
[D] Drink driving	-.334**	-.052	.051	-.085	-.127	-.060	-.098	.073	-.134
[E] Driving without a licence	-.305**	.155	-.222**	.174	.031	.026	-.055	-.004	.243**
[F] Gambling	-.261**	-.079	.218**	-.177	-.185*	-.010	-.031	.133	-.282**
[G] Hitchhiking	-.364**	.064	-.088	.012	-.162	.013	.037	.005	.129
[H] Injecting illegal drugs	-.173*	-.062	-.027	-.098	-.094	-.033	-.014	.046	-.044
[I] Sex without a condom	-.203*	-.017	.168*	-.128	-.450**	.104	.078	.066	-.124
[J] Sex without self or partner being on the pill	-.131	-.076	.233**	-.158	-.485**	-.018	.024	.063	-.116
[K] Sex with someone you don't know very well	-.347**	.129	.053	.129	-.194*	.078	-.045	.028	-.071
[L] Sharing needles	-.111	-.096	-.125	-.077	-.048	-.028	-.019	.013	.056
[M] Shoplifting	-.111	-.038	-.058	.050	-.183*	-.063	.018	.041	-.073
[N] Smoking cigarettes	-.195*	-.015	.090	.176	-.171*	.024	-.033	.097	-.178*
[O] Smoking marijuana/hash	-.248**	.039	.137	.037	-.196*	-.091	-.110	.163*	-.229**
[P] Sniffing glue or solvents	.004	-.037	-.141	.143	.052	-.012	-.057	-.072	.003
[Q] Snorting cocaine	-.171*	-.073	.087	.003	.056	-.046	-.060	.028	-.291**
[R] Speeding in a car	-.340**	-.018	-.098	-.019	.008	.140	-.111	.032	.062
[S] Starving to get slim/eatingdisorder	.016	.020	.006	-.068	-.067	.076	-.015	-.020	-.039
[T] Sunbaking without sunscreen	-.139	-.007	.026	.029	-.040	.156	-.213**	-.033	-.092
[U] Taking Crystal Meth or ice	-.199*	-.039	-.019	.030	-.051	-.041	-.005	-.025	.045
[V] Taking speed/ ecstasy	-.308**	-.018	.055	-.079	-.132	-.069	-.070	.050	-.224**
[W] Watching pornography on the Internet	-.476**	-.099	.017	.283**	-.004	.120	.107	.059	-.106
[X] Watching R or X rated videos/movies	-.360**	-.053	.120	.077	-.168*	-.091	.168*	-.008	-.125

**. Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed).

Age

An ANOVA test was carried out to determine if participants from a particular age group were more inclined towards any of the risk activities. Significant risk activities were followed up with Scheffe's post-hoc tests to determine where the significant the differences were between each age group.

Gambling, sex without a condom, sex without self or partner being on the pill (and for Watching R or X rated videos/movies were all significant for age ($p<0.05$).

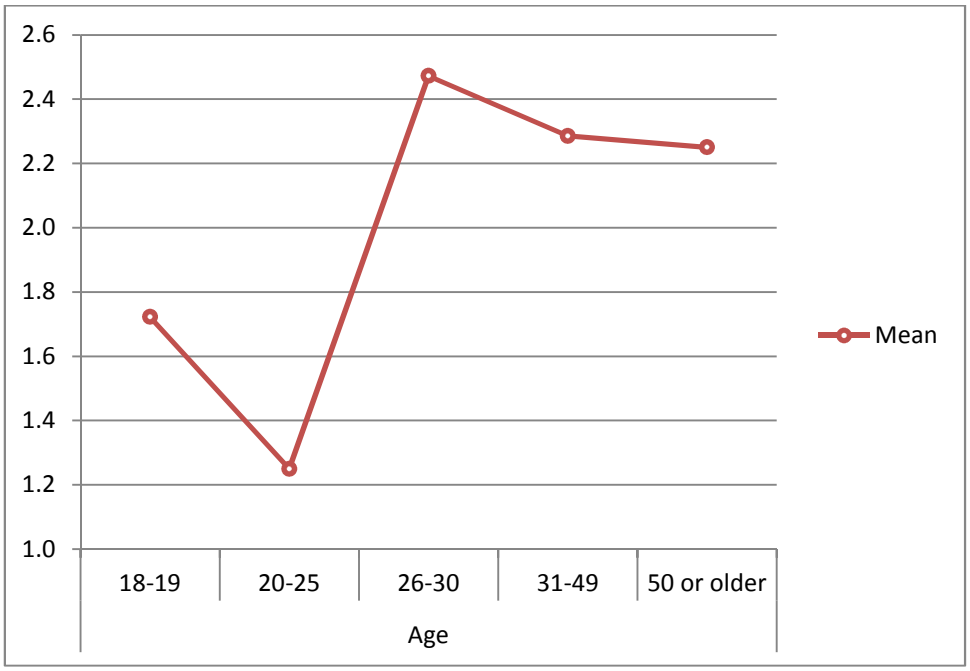
Drinking alcohol and smoking marijuana/hash were also significant however Scheffe's post-hoc tests did not reveal any significance between age groups for these. Significant results from ANOVA are presented in Table 3.9.

Table 3.9: One way Analysis of Variance – Significant Risk Activities between age groups (<0.05).

	Mean	Std. Deviation	Std. Error	F	Sig.
[C] Drinking alcohol	2.68	1.92	0.16	2.56	.041
[F] Gambling	1.87	1.38	0.11	6.21	.000
[I] Sex without a condom	3.05	2.07	0.17	7.16	.000
[J] Sex without the pill	3.21	2.15	0.18	7.04	.000
[O] Smoking marijuana/hash	2.01	1.67	0.14	3.53	.009
[X] Watching R or X rated videos/movies	3.13	1.92	0.16	4.05	.004

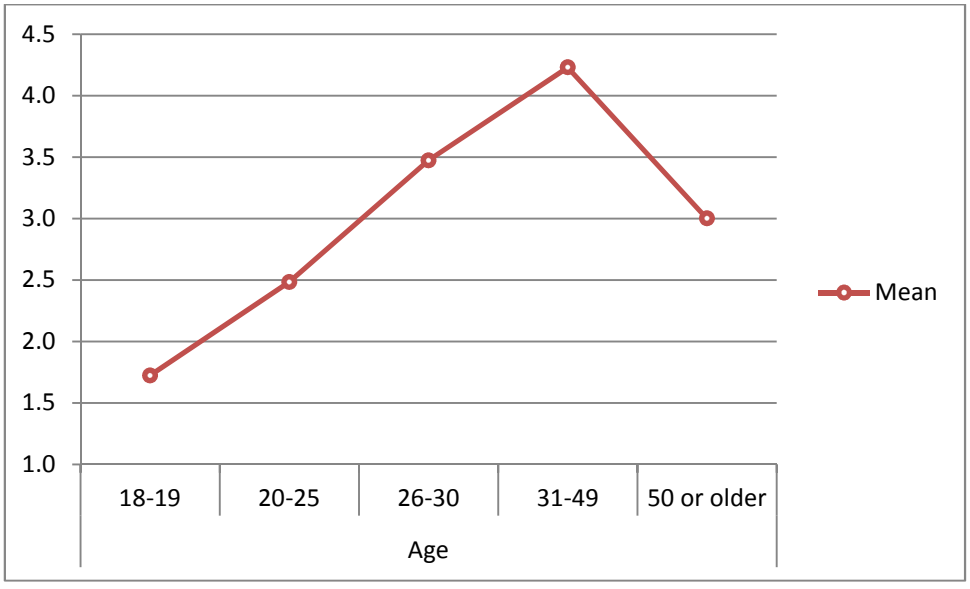
The post-hoc tests revealed that for gambling, the 26-30 (M=2.47) and 31-49 year old groups both (M=2.29) had significantly higher risk averages ($p<0.05$) than those aged in the 20-25 year old group (M=1.25). Means for each age group are presented in Fig. 3.8.

Fig. 3.8: Gambling Mean Scores by Age.



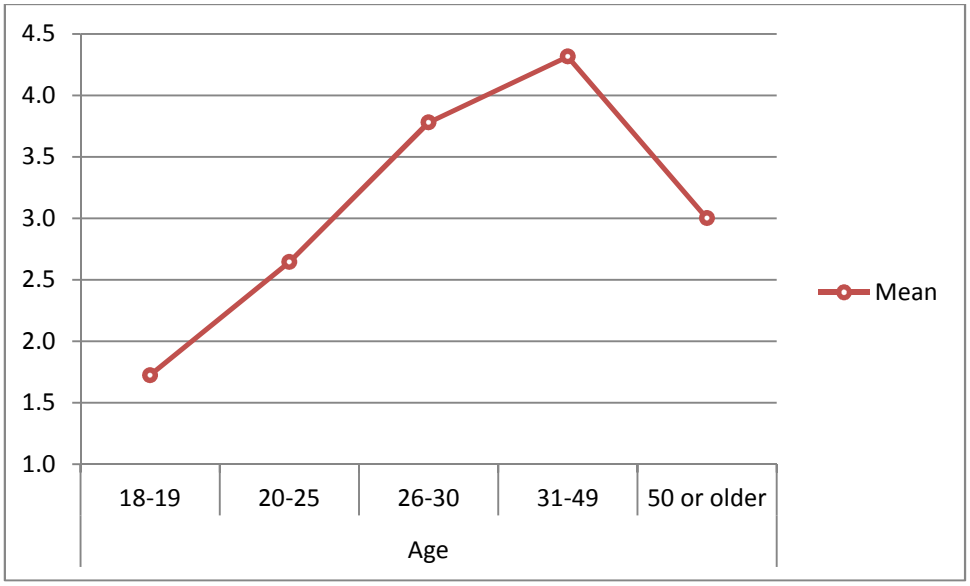
For sex without a condom, the 26-30 (M=3.47) and 31-49 (M=4.23) year old groups had significantly higher risk averages ($p<0.05$) than the 18-19 year old group (M=1.72). The 31-49 year old group score was also significantly higher risk ($p<0.05$) than the 20-25 year old group (M=2.48). Means for each age group are presented in Fig. 3.9.

Fig. 3.9: Sex without a condom Mean Scores by Age.



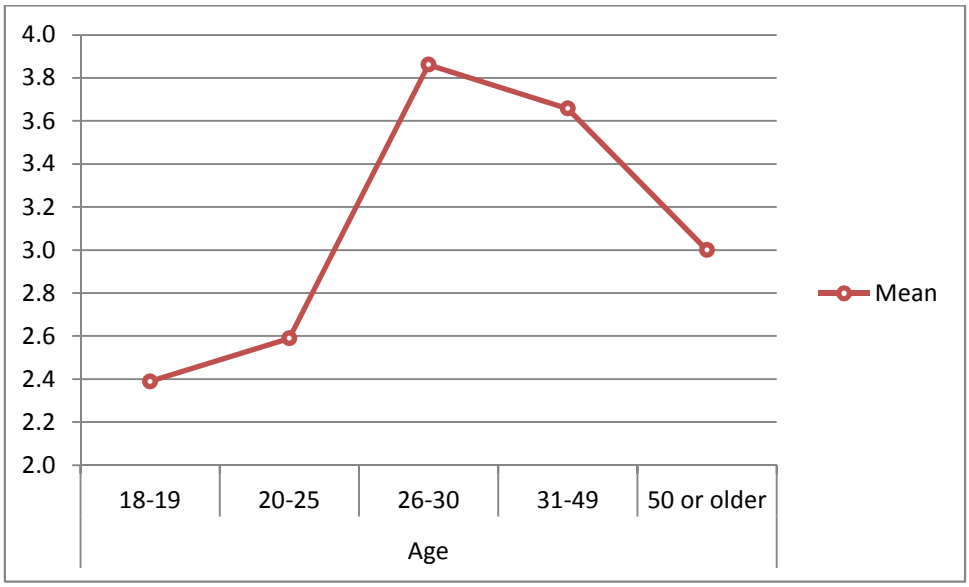
For sex without self or partner being on the pill, the 26-30 (M=3.78) and 31-49 (M=4.31) year old groups had significantly higher risk averages ($p<0.05$) than the 18-19 year old (M=1.72) group. The 31-49 year old group score was also significantly higher risk ($p<0.05$) than the 20-25 year old group (M=2.64). Means for each age group are presented in Fig. 3.10.

Fig. 3.10: Sex without self/partner being on the pill Mean Scores by Age.



For watching R or X rated videos/movies, the 26-30 year old group (M=3.86) had significantly higher risk averages ($p<0.05$) than the 20-25 year old group (M=2.59). Means for each age group are presented in Fig. 3.11.

Fig. 3.11: Watching R or X rated Movies Mean Scores by Age.



Employment

Full time and part time employment were coded into one variable "employed" and compared with those "not in the workforce". These were then correlated with the risk activities to determine whether those who were employed or unemployed were inclined towards any of the risks however no significance was found.

Students

Being a student was only found to have a significant ($p<0.05$) relationship with driving without a license. Not being a student was found to be significant for binge drinking, gambling, sex without a condom and sex without self or partner being on the pill. Correlations are presented in Table 3.8.

Relationship status

ANOVA tests revealed that relationship status was only significant for tendency towards sex without a condom and sex without self or partner being on the pill ($p<0.05$). Results are presented in Table 3.10.

Table 3.10: One way Analysis of Variance – Significant Risk Activities between relationship status groups (<0.05).

	Mean	Std. Deviation	Std. Error	F	Sig.
[I] Sex without a condom	3.05	2.07	0.17	12.17	.000
[J] Sex without the pill	3.21	2.15	0.18	15.39	.000

Post-hoc Scheffe's tests revealed that both these activities were more significant ($p<0.05$) for those who are married (I: M=4.03, J: M=4.41) and in a committed relationship or de-facto (I: M=4.45, J: M=4.27) compared to those who are single and not in a relationship (I: M=1.98, J: M=19.5). Means for each group are presented in Fig. 3.12 (I) and Fig. 3.13 (J).

Fig. 3.12: Sex without a Condom (I) Mean Scores by Relationship Status.

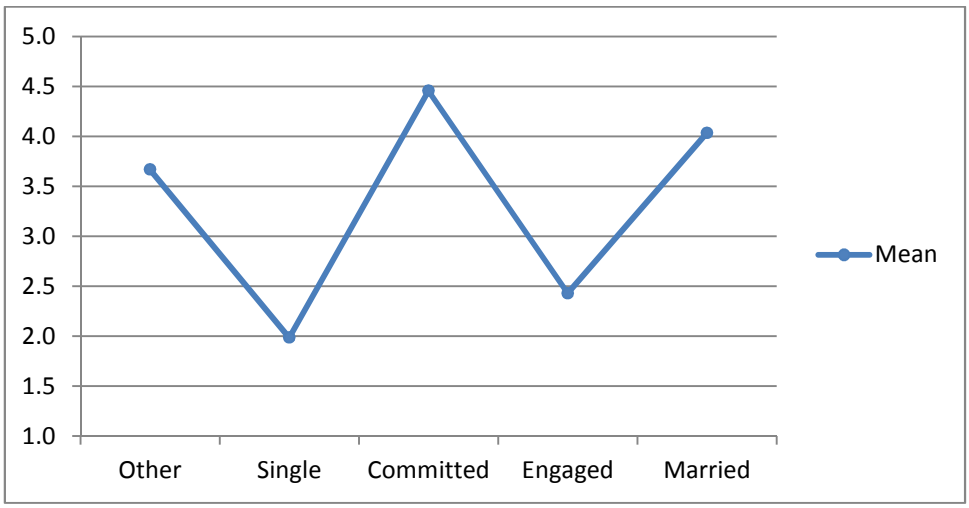
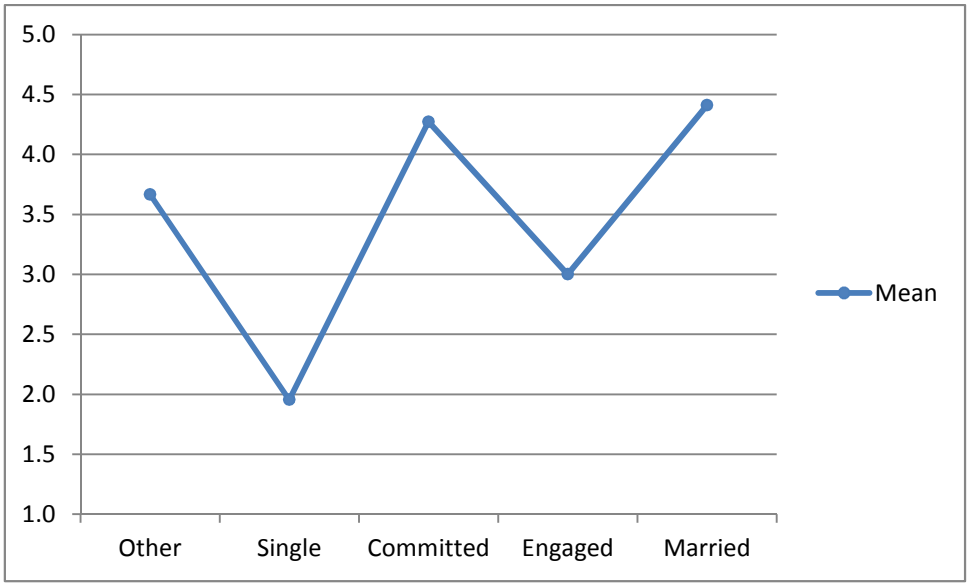


Fig. 3.13: Sex without self or partner being on the pill (J) Mean Scores by Relationship Status.



Living with Partner

For residing with a partner those who were either married, in a relationship/de-facto, engaged or selected 'other' were included and responses indicating being 'single and not in a relationship' were filtered out. The only significance found was that not residing with a partner was associated with watching pornography on the internet ($p<0.05$) as presented in Table 3.8.

Parents

Risk activities significantly associated with having children ($p<0.05$) were binge drinking, gambling, sex without a condom and sex without self or partner being on the pill, sex with someone you don't know very well, shoplifting, smoking cigarettes,

smoking marijuana/hash and watching R or X rated videos/movies. No significance was found for having no children. Correlations are presented in Table 3.8.

Urban/ Rural

As mentioned earlier, the vast majority of the population was from a suburban or city area. Hence no significant results were found for either living in an urban or rural area.

Country of Birth

Being born in Australia was found to be a significant ($p<0.05$) for body piercing/tattoos and sunbaking without sunscreen propensity. Being born overseas was only significant for watching R or X rated videos/movies. Correlations are presented in Table 3.8.

Level of Education

ANOVA tests were carried out to determine if there was a relationship between education level and propensity towards any of the risk activities. Sex with someone you don't know very well ($F=2.84$), smoking marijuana/hash ($F=2.56$), sniffing glue or solvents ($F=4.3$) and watching R or X rated videos/movies ($F=5.14$) were found to be significant ($p<0.05$) with education level as presented in Table 3.11.

Table 3.11: One way Analysis of Variance –Significant Risk Activities between level of education groups (<0.05).

	Mean	Std. Deviation	Std. Error	F	Sig.
[K] Sex with someone you don't know well	1.77	1.53	0.13	2.84	.018
[O] Smoking marijuana/hash	2.01	1.67	0.14	2.56	.030
[P] Sniffing glue or solvents	1.25	0.78	0.06	4.30	.001
[X] Watching R or X rated videos/movies	3.13	1.92	0.16	5.14	.000

However post-hoc testing revealed that only sniffing glue or solvents (P) and watching R or X rated videos/movies (X) had significant differences between groups. Means for each group are presented in Fig. 3.14 (P) and Fig.3.15 (X) for these two activities.

Fig. 3.14: Sniffing glue or solvents (P) Mean Scores by Current Level of Education.

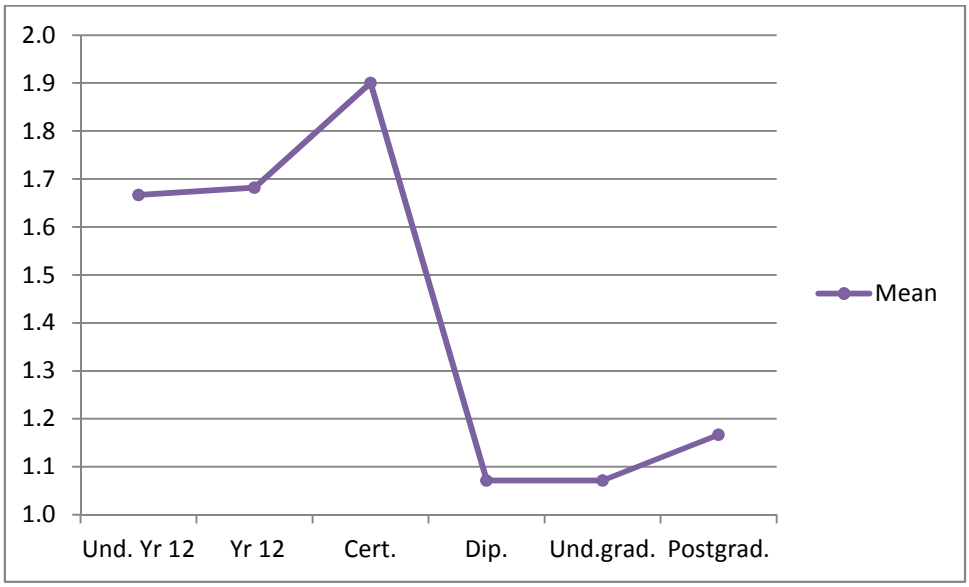
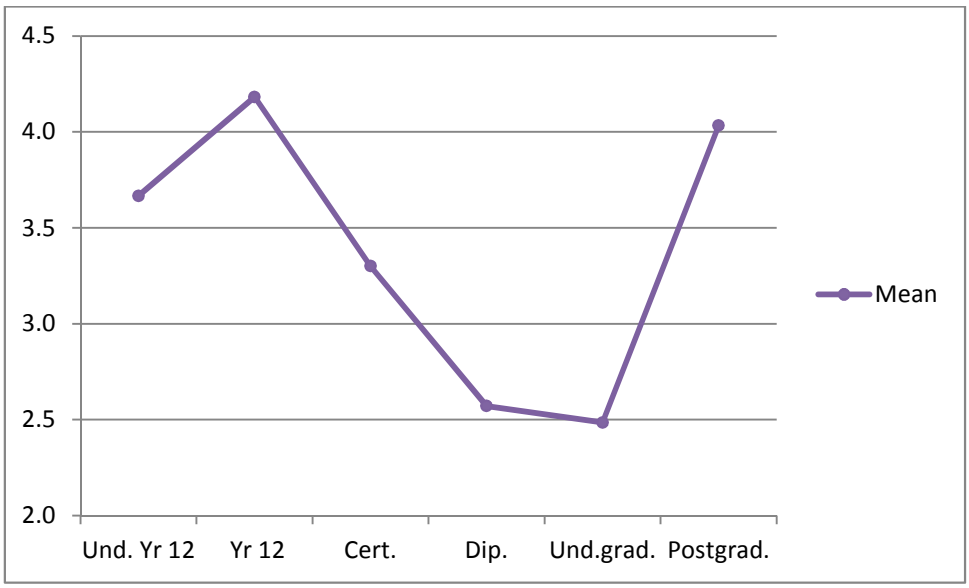


Fig. 3.15: Watching R or X rated videos/movies (X) Mean Scores by Current Level of Education.



Having completed year 12 was more significant ($p<0.05$) for both these behaviours (P: M=1.68, X: M=4.18) compared to having an undergraduate degree (P: M=1.07, X: M=2.49). Having a postgraduate degree was also more significant ($p<0.05$) for watching R or X rated videos/movies (X: M=4.03) compared to having an undergraduate degree.

Club & Society Membership

Belonging to a club or society was not found to be significant for any of the 24 risk activities. However not belonging to a club or society was significant ($p<0.05$) for propensity towards binge drinking and smoking marijuana/hash. Correlations are presented in Table 3.8.

Religiosity

Religiosity scores were correlated with each risk activity to determine the effect of religiosity towards the risk activities. Low religiosity was significant ($p<0.05$) for propensity towards binge drinking, body piercing/tattoos, drinking alcohol, gambling, smoking cigarettes, smoking marijuana/hash, snorting cocaine and taking speed/ecstasy.

High religiosity was only found to be significant with driving without a license. Correlations are presented in Table 3.8.

Syndrome of Risk

All 24 risk activities were correlated with the other risk activities to determine if each risk activity can be associated with other risk activities and increase the likelihood of engaging in other risks.

Taking speed/ecstasy was significantly related to almost all of the risk activities with the exception of sniffing glue or solvents and starving to get slim/eating disorder. Results for all correlations are presented in Table 3.12.

Table 3.12: Risk Activity Matrix.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
[A] Bingedrinking/ gettingdrunk																							
[B] Bodypiercing/ tattoos	.276**																						
[C] Drinking alcohol	.760**	.225**																					
[D] Drink driving	.552**	.198*	.445**																				
[E] Driving without a licence	.081	.119	-.044	.197*																			
[F] Gambling	.502**	.116	.461**	.455**	.106																		
[G] Hitchhiking	.094	-.029	-.010	.122	.470**	.167*																	
[H] Injecting illegal drugs	.267**	.186*	.181*	.303**	.066	.101	.094																
[I] Sex without a condom	.241**	.150	.275**	.217**	.159	.192*	.234**	.080															
[J] Sex without self or partner being on the pill	.244**	.143	.267**	.179*	.101	.236**	.175*	.081	.818**														
[K] Sex with someone you don't know very	.428**	.195*	.373**	.482**	.337**	.354**	.315**	.226**	.411**	.352**													
[L] Sharing needles	.134	.171*	.092	.288**	.160	.148	.306**	.520**	.041	.029	.145												
[M] Shoplifting	.371**	.116	.265**	.276**	.222**	.316**	.274**	.395**	.344**	.280**	.401**	.284**											
[N] Smoking cigarettes	.447**	.201*	.425**	.272**	.239**	.236**	.232**	.120	.337**	.276**	.348**	.110	.351**										
[O] Smoking marijuana/hash	.728**	.214**	.540**	.435**	.255**	.507**	.382**	.271**	.279**	.311**	.525**	.099	.534**	.472**									
[P] Sniffing glue or solvents	-.012	.121	-.029	-.057	.153	-.021	.141	.034	.000	.009	.106	-.024	.202*	.044	.137								
[Q] Snorting cocaine	.405**	.228**	.293**	.268**	.070	.073	.043	.197*	.137	.109	.233**	-.009	.146	.248**	.431**	.074							
[R] Speeding in a car	.203*	.020	.112	.264**	.469**	.260**	.287**	.143	.245**	.158	.352**	.089	.236**	.211**	.236**	.166*	.068						
[S] Starving to get slim/eatingdisorder	.112	.123	.063	.112	.123	.091	.017	.014	.111	.094	.126	.045	.054	.194*	.146	.187*	.087	.176*					
[T] Sunbaking without sunscreen	.229**	.105	.299**	.164*	.307**	.107	.176*	.117	.239**	.141	.286**	.145	.238**	.309**	.270**	.091	.182*	.413**	.221**				
[U] Taking Crystal Meth or ice	.085	-.077	.136	.283**	.110	.159	.065	.016	.102	.082	.191*	.055	-.043	.171*	.112	.133	.155	.153	.118	.167*			
[V] Taking speed/ ecstasy	.511**	.195*	.447**	.575**	.214**	.342**	.184*	.297**	.222**	.230**	.406**	.335**	.218**	.310**	.481**	.029	.621**	.179*	.076	.272**	.442**		
[W] Watching pornography on the Internet	.293**	.022	.324**	.246**	.323**	.314**	.273**	.159	.297**	.252**	.562**	.127	.318**	.355**	.378**	.256**	.163*	.344**	.151	.291**	.224**	.311**	
[X] Watching R or X rated videos/movies	.320**	.139	.343**	.272**	.156	.266**	.146	.158	.281**	.197*	.457**	.077	.350**	.297**	.396**	.266**	.163*	.201*	.130	.176*	.241**	.304**	.640**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Drink driving was associated with 20 of the risk activities including binge drinking, body piercing/tattoos, drinking alcohol , driving without a licence, gambling, injecting illegal drugs, sex without a condom, sex without self or partner being on the pill, sex with someone you don't know very well, sharing needles, shoplifting, smoking cigarettes, smoking marijuana/hash, snorting cocaine, speeding in a car, sunbaking without sunscreen, taking crystal meth or ice, watching pornography on the internet and watching R or X rated videos/movies.

Sex with someone you don't know very well was associated with binge drinking, body piercing/tattoos, drinking alcohol, driving without a licence, gambling, hitchhiking,

injecting illegal drugs, sex without a condom, sex without self or partner being on the pill, shoplifting, smoking cigarettes, smoking marijuana/hash, snorting cocaine, speeding in a car, sunbaking without sunscreen, taking crystal meth or ice, watching pornography on the internet and watching R or X rated videos/movies.

Smoking cigarettes was associated with binge drinking, body piercing/tattoos, drinking alcohol, driving without a licence, gambling, hitchhiking, sex without a condom, sex without self or partner being on the pill, shoplifting, smoking marijuana/hash, snorting cocaine, speeding in a car, starving to get slim/eating disorder, sunbaking without sunscreen, taking crystal meth or ice, watching pornography on the internet and watching R or X rated videos/movies.

Shoplifting was associated with binge drinking, drinking alcohol, driving without a licence, gambling, hitchhiking, injecting illegal drugs, sex without a condom, sex without self or partner being on the pill, sharing needles, smoking marijuana/hash, sniffing glue or solvents, speeding in a car, sunbaking without sunscreen, watching pornography on the internet and watching R or X rated videos/movies.

Smoking marijuana/hash was associated with binge drinking, body piercing/tattoos, drinking alcohol, driving without a licence, gambling, hitchhiking, injecting illegal drugs, sex without a condom, sex without self or partner being on the pill, snorting cocaine, speeding in a car, sunbaking without sunscreen, watching pornography on the internet and watching R or X rated videos/movies.

Watching pornography on the internet was associated with binge drinking, drinking alcohol, driving without a licence, gambling, hitchhiking, sex without a condom, sex without self or partner being on the pill, sniffing glue or solvents, snorting cocaine, speeding in a car, sunbaking without sunscreen, taking crystal meth or ice and watching R or X rated videos/movies.

Binge drinking was associated with body piercing/tattoos, drinking alcohol, gambling, injecting illegal drugs, sex without a condom, sex without self or partner being on the pill, snorting cocaine, speeding in a car, sunbaking without sunscreen and watching R or X rated videos/movies.

Sunbaking without sunscreen was associated with drinking alcohol, driving without a licence, hitchhiking, sex without a condom, snorting cocaine, speeding in a car, starving to get slim/eating disorder, taking crystal meth or ice and watching R or X rated videos/movies.

Watching R or X rated videos/movies was associated with drinking alcohol, gambling**,** sex without a condom, sex without self or partner being on the pill, sniffing glue or solvents, snorting cocaine, speeding in a car and taking crystal meth or ice.

Drinking alcohol was associated with body piercing/tattoos, gambling, injecting illegal drugs, sex without a condom, sex without self or partner being on the pill and snorting cocaine.

Speeding in a car was associated with driving without a licence, gambling, hitchhiking, sex without a condom, sniffing glue or solvents and starving to get slim/eating disorder.

Sex without a condom was associated with gambling, hitchhiking and sex without self or partner being on the pill.

Gambling was associated with hitchhiking and sex without self or partner being on the pill.

Hitchhiking was associated with driving without a licence, sex without self or partner being on the pill and sharing needles.

Snorting cocaine was associated with body piercing/tattoos and injecting illegal drugs.

Body piercing/tattoos was associated with injecting illegal drugs and sharing needles.

Injecting illegal drugs was associated with sharing needles.

Sniffing glue or solvents was associated with and starving to get slim/eating disorder.

CHAPTER 4

DISCUSSION

This chapter will discuss Australian Muslims' perception and participation of risk behaviours in relation to the literature. It will discuss the findings from the Risk Activity by Personal Risk Assessment Index (RAPRA) and its correlations with gender, age, student status, employment, relationships, parenthood, country of birth, level of education, group and society information and religiosity. The "syndrome of risk" will be discussed as well as decision making, social support and lifestyle values from the perspective of Muslims in Australia.

The overwhelming majority identified strongly with having religious beliefs (96%) and no participants who identified as Muslim reported 'not sure' or 'no' about their beliefs. Only a small minority (4%) indicated having previously held religious beliefs. There was variety in the level of attendance to a place of worship however most of the participants had indicated attending often or sometimes (76.5%), rather than hardly ever or never (23.5%). The majority had rated their religious importance as either very important or important (92%) and only a minority (8%) indicated neutral, not very important or not important.

Thus the majority of Muslims in the current study identified strongly with their religion, had attended a place of worship and valued their beliefs as important. This suggests that the population was predominately highly religious.

As the population of the current study were predominately highly religious, the current findings will be hypothesised in relation to Islamic teachings. References citing Islamic principles in this chapter will be limited to Sunni sources as Sunni Muslims represent the majority Muslim group in Australia and the world (Saeed, 2004).

Risk Behaviours – Perception & Participation

Studies of risk behaviours within the Muslim community have been limited and have focused on specific behaviours, mainly alcohol use (Abu-Ras et al., 2010; Ghandour et al., 2009). This is the first study of its kind to explore the perceptions and involvement of a broad range of risk behaviours from the perspective of Muslims in Australia.

The current findings show that on average, Muslims perceived the list of 24 risk behaviours as high to moderate with the highest mean score from 1 (low risk) to 7 (high risk) being 6.89 (SD=0.58) for drunk driving and the lowest mean score being 4.6 (SD=1.92) for body piercing and tattoos. No mean score for risk perception of any of

the behaviours was below 3.5 which suggest that most Muslims on average view these risk behaviours with caution.

Involvement in the 24 risk behaviours ranged from very low to moderate. The risk behaviour with the highest involvement on average was dangerous driving/speeding (58.4%) followed by watching R or X rated movies (58.1%), then smoking cigarettes (56.1%) followed by sunbaking without sunscreen (52.1%).

These behaviours also received high involvement rates in the in the Abbott-Chapman and Denholm (2001) study of adolescents, with the exception of speeding in a car which was moderately ranked as the 12th most participated out of 26 risk behaviours. This particular exception may be due to the participants in this current study being adults aged over 18 whereas the Abbott-Chapman and Denholm (2001) study had participants aged from 15 to 19 years, with some under the legal driving age of 16 and not permitted to drive. Those teenagers who do drive may also have been supervised while driving or may have had restricted access to a car which then limits opportunities for them to be involved in driving risk behaviours. This is different to the adults in the current study, who were mostly in their twenties or older and who may own their own cars and have more driving freedom.

Speeding in a car was perceived as the 17th lowest risk out of 24 risk behaviours. Smoking cigarettes was ranked 19th followed by sunbaking without sunscreen (20th)

and watching R or X rated movies (23rd). The low perception rankings of the behaviours in the current study appear to reflect the high involvement in these risks which suggests that the higher involvement may be explained by Muslims' assessing these behaviours as low risk. However the current study did not test for association between perception and involvement as low risk perception has been associated with high risk involvement in previous studies (Darke, Kelly, & Ross, 2004; Finn & Bragg, 1986; Gerrard, Gibbons, Benthin, & Hessling, 1996; Matthews & Moran, 1986). As the current study is quantitative, reasons for Muslims' involvement and perception of these risk behaviours were also not explored.

Islamic teachings require Muslims to observe the laws of the land they live in unless they are forced by law, to commit a sin against Islam (Ibn Adam al-Kawthari, 2004; *Sahih Al-Bukhari*, *Vol. 4, Book 52, Number 203*). Speeding in a car is going against the law of the land in Australia and for this reason as well as putting one's own self and others at risk of harm, it could be considered as inappropriate behaviour in Islam. Islam forbids harm to the self (Qur'an, 2:195; 4:29), making mischief on the earth (Qur'an, 2:11-12, 29:36) and encourages having concern and kindness for others (Menk, no date). Therefore behaviours that involve causing harm to the self or putting others at risk are discouraged which could also incorporate sunbaking without sunscreen and smoking.

Contemporary Islamic scholars also differ on whether smoking tobacco is either disliked (*makruh*) or outright forbidden (*haram*) (Rabbani, 2003) nonetheless it is at the very least, highly discouraged in Islam.

Further, Islam prescribes lowering one's gaze from looking at people of the opposite gender inappropriately and guarding and one's modesty/private parts from committing sin (Qur'an, 24:30-31; *Sahih Al-Bukhari*, *Vol.3 , Book 31, Number 129*) thus the observance of any pornographic material is strictly forbidden. Exposing the private parts which a Muslim is required to cover in public may also conflict spiritually with the practice of sunbaking.

The current findings show that despite what Islam teaches, there are some Muslims who have been involved in risk behaviours which lead to consequences that are either discouraged, disliked or prohibited in Islam. This may be due to lack of religious knowledge or understanding, a temporary or ongoing weakness in faith, compromising one's beliefs for some other benefit such as social acceptance, having little or no concern for these religious teachings or perhaps even forgetfulness. More qualitative research is needed to determine the reasons for this effect.

Conversely, a high perception of risk may protect against or prevent risk involvement (Bachman, Johnston, & O'Malley, 1990; Darke et al., 2004). Following drink driving as the highest perceived risk in the current study was injecting illegal drugs and sharing

needles, followed by use of crystal meth or ice, then snorting cocaine and then speed and ecstasy respectively. Thus Muslims on average perceived drink driving and the use of manufactured illegal substances as the most risky behaviours above all other behaviours used in the study.

This high perception of risk appears to reflect the low involvement in these risks although as mentioned, perception and involvement were not tested for association. Risk behaviours with the lowest involvement were sharing needles (0.7%), taking crystal meth or ice (1.3%), injecting illegal drugs (2.7%) and snorting cocaine (5.4%) respectively. Speed/ecstasy (11.6%) was ranked relatively low as the 18th most participated out of 24 behaviours followed by driving while drunk (10.1%) as the 19th most participated.

This study lends support to previous research which suggests that having a religious affiliation is protective of heavy drug use. Sharing needles, injecting heroin and snorting cocaine were also found to have the lowest level of involvement for the 26 behaviours observed in the Abbott-Chapman and Denholm (2001) study of Christian youth.

As the current study and the Abbott-Chapman and Denholm (2001) study both involve religious communities, this may imply that having a particular religious affiliation may be protective against heavy drug use. This is supported by a previous study which found that religious affiliation was protective for heavy drug use among Episcopalian,

Presbyterian and Latter-Day Saints youth in Lorch and Hughes (1985) study on substance use among Christian denominations and Jews. Future research should consider the impact of substance use behaviours on people who do not identify with any religion compared with those who identify with a religion.

Risk Activity by Personal Risk Assessment Index

To determine a more accurate picture of how "at risk" Muslims are in the 24 risk behaviours, the Risk Activity by Personal Risk Assessment (RAPRA) index was used. The RAPRA index was used in a previous multi-stage study of Christian adolescents and their parents in Tasmania (Abbott-Chapman & Denholm, 2001; Abbott-Chapman et al., 2008a, 2008b) and the questionnaire from this study was adapted to apply to an adult population of any religious group in general. The RAPRA index provides a holistic, real world view by combining the level of risk involvement relative to the perceived level of riskiness for each activity (Abbott-Chapman et al., 2008a). This is the first study to apply this index to a Muslim adult population.

As expected, the RAPRA index found that behaviours at least risk to Muslims were related to illegally manufactured drugs which were perceived as high-risk but had low involvement. This included sharing needles (m=1.05, SD=0.36), followed by taking crystal meth or ice (m=1.09, SD=0.42), injecting illegal drugs (m=1.1, SD=0.58) and snorting cocaine (m=1.17, SD=0.68). Low RAPRA scores of 'hard' drug use is also consistent with the youth and parent sample of the Abbott-Chapman et al. (2008a)

study. Both studies may indicate that being affiliated with a religion may serve as a protective factor against heavy drug use which would add support to Klocker et al. (2011) and Wallace and Forman's (1998) findings that religion can serve as a protective factor against health-risk behaviours.

The behaviours which Muslims are most at risk of included sex without self/partner being on the pill (m=3.21, SD=2.15), followed by watching R or X rated movies (m=3.13, SD=1.92), sex without a condom (m=3.05, SD=2.07) and speeding in a car (m=3.01, SD=1.87). Although these behaviours are of the highest risk, the overall mean scores for each activity are skewed to the lower end of risk taking, which is similar to the Abbott-Chapman et al. (2008a) study of Christian youth. The current findings suggest that risk propensity is relatively moderate even at the highest scores for Muslim adults in general. Further, individual scores found that most participants were ranked in the high perceived risk/low involvement group (HRP0) for each risk activity.

The skewering to the low end of risk in both studies may be due to the 'buffering' effect religion has in serving as a deterrent towards engaging in risk opportunities (Abu-Ras et al., 2010; Chen et al., 2004; Zaleski & Schiaffino, 2000) however the current study is limited as it is cross-sectional. More longitudinal research is needed to determine how first involvement with risk behaviours impact on the frequency of future involvement. Future research should also consider comparative studies of risk behaviours with religious groups and those who identify as having no religious affiliation.

RAPRA weighted averages of each risk activity were then tested with demographic variables using Pearson's correlations and one way ANOVA tests to determine what the factors were related to risk propensity in Muslim adults.

Gender

Muslim men were significantly more at risk than Muslim women for binge drinking, drink driving, driving without a licence, gambling, hitchhiking, injecting illegal drugs, sex without a condom, sex with someone you don't know very well, smoking cigarettes, smoking marijuana/hash, snorting cocaine, speeding in a car, taking crystal meth or ice, taking speed/ecstasy, watching pornography on the Internet and watching R or X rated videos/movies.

This shows consistency with the parent sample of the Abbott-Chapman et al. (2008a) study of adolescents and their parents. It found that men were at higher risk than women in certain risk behaviours (behaviours not specified) however no significant differences for gender in the adolescent sample were found (Abbott-Chapman et al., 2008a).

The current findings further support previous research which found that men are more likely to be at risk than women in engaging in binge drinking and alcohol use (Arnett,

1998; McCabe et al., 2005; Patrick et al., 2010), drunk driving (Calafat et al., 2009; Dunsire & Baldwin, 1999), sex without a condom (Patrick et al., 2010), using marijuana and other illicit drugs (McCabe et al., 2005), speeding in a car (Arnett, 1998) and in watching internet pornography (Stack, Wasserman, & Kern, 2004). The current findings suggest that for these particular risks, Muslim men are no exception from other men in general, despite holding Islamic beliefs which encourage them to obey local laws that do not force one to go against Islam and condemn the use of intoxicants, adultery and looking at unlawful images.

Muslim women however were only more likely to be more at risk than men of body piercing/tattoos and this behaviour was perceived to be the lowest risk activity. No other behaviours were found to be significant for Muslim women and reasons for this finding were not explored. It is possible that Muslim women are no different to other women in general in being less-riskier than men or perhaps they are more protected by their family as they were found to have close relationships with their parents and siblings. The current findings may also suggest that Muslim women adhere to Islamic tenets better than Muslim men.

Body piercing/tattoos could also have various interpretations. For example, a nose or ear ring may have been considered to be a body piercing by some participants or applying henna to the skin could have been considered to be a tattoo. These body art practices may also be related to cultural customs or practices from the participant's cultural background and may not be considered as risk behaviours. However this study

is limited as we were only interested in observing Muslims in Australia as a whole and did not account for the cultural backgrounds and customs of the participants. Further research is needed to explore this effect.

Age

Differences between adult age groups were discovered for gambling, sex without a condom, sex without self/partner being on the pill and watching R or X rated movies. Surprisingly, the significant results in the post-hoc testing revealed that the older age group in each category was more at risk than the younger group.

Those aged 26-49 were more likely to be at risk of gambling than 20-25 year olds and were also more at risk of sex without the pill than those aged 18-19. The 31-49 year old group alone was more at risk than the 20-25 year old group for sex without a condom and sex without the pill. The 26-30 year old group was significantly more at risk of watching R or X rated movies than the20-25 year old group.

Previous risk behaviour studies have mainly focused on youth (Abbott-Chapman & Denholm, 2001; Abbott-Chapman et al., 2008a, 2008b; Beck & Treiman, 1996; Brener et al., 2003; Green, Mitchell, & Bunton, 2000) or young adults in their twenties (Arnett, 1998; Green et al., 2000; McCabe et al., 2005; Park et al., 2006; Patrick et al., 2010)

however the current study has revealed that the potential for engaging in particular risk behaviours can extend from the late twenties to age 49.

A limitation to this finding is the possibility that the risk participation responses from the older groups could have been based on what had done when they were younger and reported “yes once” for something that they had done previously and not recently. Nonetheless, those in their early twenties or younger were not found to be more ‘risky’ on the RAPRA scale than their older counterparts.

This may suggest that the current generation of young adults are less risky than previous generations. Acculturation studies have found that being a first, second or third generation Australian can impact on the likelihood of drinking alcohol and smoking (Brandon, 2008). Third generation Australians were more likely to drink than previous generations and the second generation more likely to smoke than first or third generation Australians (Brandon, 2008). This could suggest that generational differences may be predictive on how Muslims of foreign backgrounds engage with risk.

However the current study is limited as it is cross-sectional and cultural generational differences were only explored in regards to whether participants were born in Australia or overseas. Future research should consider longitudinal or qualitative methods which observe developmental factors that can influence risk-taking during

young to middle age adulthood. Nonetheless the current findings do emphasise the need for more research on risk behaviours for adult populations.

Students

Muslims who indicated being a student were not found to be at risk for any of the risk behaviours with the exception of driving without a license. Muslim students mostly felt positive about studying at their institution (66.2%).

One quarter reported sometimes (25%) and only a small proportion was unsure (1.5%) or did not enjoy their studies (4.4%). Muslim students rated the importance of their studies (m=6.75, SD=0.5), their success in the future with their studies (m=5.22, SD=1.71) and their level of influence in making this happen (m=5.43, SD=2.09) as high. This suggests that Muslim students on average were mostly positive about their studies and on average, felt confident and believed that their studies were meaningful to them.

Non-students however were found to be more at risk of binge drinking, gambling, having sex without a condom and having sex without self or their partner being on the pill.

These findings suggest that being enrolled in a course of study may serve as a protective factor against risk involvement. This is supported by Sychareun et al.'s (2011) study which found that adolescents out of school were more vulnerable to substance use and sexual health risk taking. However studies are limited in this area and more research is needed to compare the risk propensity of students with non-students, particularly when adults.

Employment

Previous studies have shown that unemployment can increase the likelihood of health risk behaviours (Dooley et al., 1996; Fukuda et al., 2005). However the current findings did not reveal any significant correlations for unemployed or employed participants with any of the risk behaviours.

Just over half of the Muslims who indicated being employed reported enjoying their job (50.5%), 37.1% reported sometimes and only a small proportion (5.7%) reported not enjoying their job. Employed Muslims rated the importance of developing their career (m=5.66, SD=1.86), their future success in their career (m=5.27, SD=1.71) and their influence in making this happen (m=5.43, SD=1.82) as high. This suggests that working Muslims on average felt confident in their jobs and believed that their jobs were meaningful although enjoyment of work was moderate.

It is possible that Muslims may value their employment as a part of following their religion. Islamic principles place great emphasis on working to earn a living. The Prophet Muhammad stated that "…it is better for anyone of you to take a rope and cut the wood (from the forest) and carry it over his back and sell it (as a means of earning his living) rather than to ask a person for something and that person may give him or not" (*Sahih Al-Bukhari*, *Vol.2, Book 24, Number 549*). Therefore for Muslims, working to earn one's own sustenance is a part of following Islam as well as a part of life. However Islam requires that work should not take precedence over the remembrance of God (Qur'an, 24:37-38, 62:11) and religious obligations must be adhered to first.

Relationships

Previous studies have shown that relationships, particularly marriage, can moderate risk involvement with alcohol (Arnett, 1998; Labouvie, 1996; Power et al., 1999) and risky driving (Arnett, 1998) although neither of these risks were found to be significant for relationship status in the current study.

However the current findings revealed that Muslims who reported being married or in relationship/de-facto were found to be more at risk of having sex without a condom or having sex without the pill. These behaviours both relate to use of contraception during sex.

One possible interpretation for this result may be that consenting adults who are in a secure relationship may not regard these behaviours as being a 'risk'. In fact, they may be having unprotected sex deliberately in order to achieve a pregnancy. However for singles, there may be potential for unplanned/unwanted pregnancy, STD's or STI's and social consequences although this was not found in this study.

Those who were either married or engaged, in a relationship or de-facto and not living with their partner were found to be more at risk for watching pornography on the internet. As this behaviour was also correlated with being a male, it lends some support to Leonard's (2010) study of Egyptian males which suggests that getting married does not change a person desire to watch pornography although Leonard's (2010) finding was anecdotal and discovered through conversations with married men outside of the cohort of the study, thus cannot be totally relied upon.

Reasons for why Muslims who do not live with their partners were more at risk of watching internet pornography are unknown. However a U.S. study revealed that loneliness can be a factor associated with watching internet pornography (Yoder, Virden, & Amin, 2005). Additionally, pornography may be used to fulfil biological urges, for entertainment purposes and can also be utilised as a tool to learn about sex and sexual relations (Leonard, 2010) all which may be applicable to the current sample.

Watching pornography may also have detrimental effects, particularly for Muslims in a relationship. From an Islamic perspective, watching pornography could be considered as shameful, forbidden (*haram*) or as *zina al-ayn* or "adultery of the eye" in which this term implies harsh spiritual consequences (Leonard, 2010). Manning's (2006) review of literature suggests that internet pornography can also affect economic, emotional and relational stability in a marriage or family; can affect sexual satisfaction and intimacy and could be seen as an act of betrayal or infidelity by one's partner. Future studies should consider determining what impact internet pornography has on Muslims who are married or in committed relationships, particularly for males and those who live without their partner although this may be a difficult area to research because shame in the activity and fear of exposure may deter Muslims from participating in such a study.

Parents

Abbott Chapman's (2008a) study had compared generational differences of risk behaviour propensity between parents and their adolescent children and found little difference between them. As the current study was focused on adults only, generational differences were not investigated.

Muslims who indicated having children were more likely to be at risk of binge drinking, gambling, sex without a condom and sex without self or partner being on the pill, sex

with someone you don't know very well, shoplifting, smoking cigarettes, smoking marijuana/hash and watching R or X rated videos/movies.

The current findings are not consistent with previous research. Arnett (1998) found that being a parent can protect against binge drinking, driving while intoxicated and driving at high speeds. While the current study had not found drink driving or speeding in a car to be significant, binge drinking was found to have the opposite relationship and in fact, was more significant for those who have children.

Previous longitudinal studies have also found that becoming a parent can reduce alcohol consumption (Power & Estaugh, 1990) and predict the cessation of marijuana use in women (Kandel & Raveis, 1989) which is opposite to that seen in the current findings that suggest that parents are more prone to binge drinking and marijuana use.

Although the current study found the opposite effect to that reported in previous research, it must be emphasised that overall involvement in these risk behaviours was low with the exception of sex without a condom and sex without the pill (50.3 and 49% respectively) which were moderate.

As discussed previously, these two behaviours involve the use of contraception which may not be considered a risk for those who are in a secure relationship and are planning or have started a family.

Further, the current study is limited as it is cross-sectional and does not account for exactly "when" the respondents participated in the risk behaviour. For example, a participant indicating "yes once" for risk participation could mean that they had experimented with the risk behaviour before they became a parent. This would give them a higher risk participation score in the RAPRA index which would make them appear as higher risk, although they may have changed their behaviour once having a child which was proven for marijuana use in women in Kandel and Raveis's (1989) study. This may also explain the disparity between the current findings and previous research.

Nonetheless the current findings do reveal some potential for concern with parents in the Muslim community in regards to substance use, gambling, shop lifting, having sex with a stranger and watching R or X rated movies. These behaviours may lead to ill health, social and relationship problems and even criminal charges which may also affect the health and wellbeing of their children.

It is difficult to hypothesise a reason for this link in the current research. More research is needed to understand the dynamics behind why Muslims parents are more at risk of engaging in these behaviours. Future studies should consider observing risk longitudinally or using qualitative methods, which may assist in determining whether perception and involvement in risk taking changes from prior to having children and becoming a parent.

Country of Birth

Previous studies have shown that being born outside Australia was protective for smoking (Brandon, 2008) and drinking (Brandon, 2008; H. A. Jonas, Dobson, & Brown, 2000) behaviours. These were not found to be significant in the current study.

However the current study found that Muslims who reported being born in Australia were more at risk of having body piercing/tattoos and sunbaking without sunscreen. Those who were born overseas were more at risk of watching R or X rated videos/movies. Again the current study is limited as it is quantitative and reasons behind these findings were not explored.

Brandon's (2008) study of immigrant families suggests that drinking behaviours were more likely for second and third generation Australians compared to first generations because of their greater exposure to Australian culture. Although drinking behaviours were not significant in the current study for country of birth, it is possible that getting a piercing or tattoo may be more acceptable to those born and raised in a more 'liberal' country compared to who came from a more conservative country; as body piercings and tattoos are reflective of self-expression (Antoszewski et al., 2010).

Sunbaking is a common practice on Australian beaches and is a major concern for health, particularly when done without wearing sunscreen. The Cancer Council refers

to Australia as the “skin cancer capital of the world” where skin cancer kills more than 1850 Australians each year (Cancer Council Australia, 2012, para 1). Despite these health risks, Muslims who were born in Australia and more at risk for sunbaking without sunscreen may have grown up in a culture where sunbaking is a common pastime compared to those Muslims born in foreign countries where it may not be as popular. The current findings suggest that the Australian sunbaking culture is a valid health concern for Muslims born in Australia as well as for all other Australians.

Watching R or X rated movies may be a reflection of overseas-born Muslims integrating into a more liberal culture. A study of US and Canadian medical students found that Caucasian students who came from the US, Canada, Western Europe and South Africa had more liberal sexual attitudes than students of Middle-Eastern or Asian backgrounds (Leiblum, Wiegel, & Brickle, 2003) although their study did not explore country of birth.

This could suggest that the dominant Caucasian culture in Australia may also be influential in providing a more ‘open’ environment with easier access to sexual exploration and sexual materials such as R or X rated movies. People who were born in more conservative countries, where this practice may be less acceptable, may have more opportunity to engage in this behaviour in Australia where there is easier access and less shame or social risk involved.

Level of Education

Post-hoc testing for level of education revealed that Muslims who had an education and completed year 12 were more at risk of sniffing glue or solvents and watching R or X rated movies compared to those with an undergraduate degree. Muslims who had a postgraduate degree were also found to be more at risk of watching R or X rated movies compared to those with an undergraduate degree.

Few studies have explored education in the context of risk however Sychareun et al.'s (2011) adolescent study found that having a higher education was protective against multiple health risk behaviours such as alcohol, smoking, amphetamine use and sexual risks.

There are limited studies which observe glue or solvents sniffing in regards to education however previous studies of youth and children suggest that glue or solvent sniffing is related to teenagers poor academic achievement in school (Press & Done, 1967; Sterling, 1964). In light of the current findings, this may suggest that people who sniff glue or solvents are less likely to obtain a university level of education due to poor academic achievement during their high school years.

Although sniffing glue or solvents was significant with having a year 12 education, the level of riskiness was very low (M=1.25, SD=0.78) and only 6.8% of participants had done this once or occasionally and none had done it regularly. Therefore it appears to be only a small minority of Muslims who have experimented with this activity.

Interestingly, watching R or X rated movies was significant for both having completed year 12 and post graduate degrees when compared to having an undergraduate degree. It is unknown as to what the relationship is between watching pornography and particular levels of education and why those with an undergraduate degree were less likely than those with a qualification lower or higher than them were more likely to engage in it.

Træen, Spitznogle, and Beverfjord (2004) study of Norwegian adults found that people who had 9 years or less of schooling were less exposed to pornographic films and magazines than those with 10 or more years of schooling. However the current findings were more complex as watching R or X rated movies was more likely for both a low (year 12) educated group as well as the highest (post graduate) educated group although least likely for the undergraduate group.

Træen et al.'s (2004) study further suggests that people with a lower education saw pornography as a means of sexual enhancement whereas those with a higher education saw pornography as something morally acceptable and as a topic for

intellectual discussion rather than for sexual pleasure. This may also apply to Muslims with a year 12 or post graduate education respectively.

However most Norwegians found pornography to be acceptable with 90% of the population reporting exposure to some form of pornography (Træen et al., 2004) whereas for Muslims in the current study, exposure to R or X rated movies was only 58.1% of the population. As mentioned before, this behaviour can carry moral, spiritual or social consequences with it and can be seen as sinful by Muslims which may explain the relatively low rate of involvement when compared with the Norwegian study.

More research is needed to discover how people of a particular education level interact with pornography, particularly from conservative communities such as the Muslim community. As this is a sensitive area, future research must also consider participant concerns for confidentiality, which the current study has covered by providing an anonymous online survey.

Groups and Societies

Less than half (49.7%) of the participants indicated belonging to a group or society. Of these, most valued their group as either important or very important (87.8%). A small proportion (10.8%) of those belonging to a group or society indicated 'not important'. The most selected group membership was volunteering for a community group or service (34.2%). This suggests that most of the Muslims who belong to a group or society place high value on their respective group or society.

Correlations revealed that belonging to a club or society was not significantly associated with any of the 24 risk behaviours. However Muslims who did not belonging to a club or society were more at risk of binge drinking and smoking marijuana. These findings were contrary to Patrick et al. (2010) and McCabe et al.'s (2005) studies on U.S. college students which found that belonging to a group or society was found to predict binge drinking (McCabe et al., 2005; Patrick et al., 2010) and marijuana use (McCabe et al., 2005).

It is possible that Muslims may seek out affiliation with groups and societies where substance use is not a norm as engaging in these behaviours are against Islamic beliefs. The groups and societies that Muslims choose to join may also be affiliated with their religion, for example, a University affiliated Muslims Student Association.

Previous research has found public religiosity to be protective against substance use and sexual risk behaviours (Nonnemaker, McNeely, & Blum, 2003). However, none of the sexual risk behaviours in the current study were found to be significant for non-membership or membership of clubs and societies.

The current findings suggest that being part of a group or society can be a protective factor for Muslims against binge drinking and smoking marijuana. Future research should consider exploring the reasons that influence Muslims' choice to join particular groups, such as community groups and services. Future research should also consider the context of membership, particularly with regards to the selection (McCabe et al., 2005) and socialisation norms (McCabe et al., 2005; Patrick et al., 2010) within a particular group.

Religiosity

The index of religiosity which combined scores of religious beliefs, place of worship attendance and religious importance found that Muslims with low religiosity were more at risk of binge drinking, body piercing/tattoos, drinking alcohol, gambling, smoking cigarettes, smoking marijuana/hash, snorting cocaine and taking speed/ecstasy.

This study examined most of the risk behaviours used in the Abbott-Chapman and Denholm (2001) study and the current findings were in general, consistent with their results. However the Abbott-Chapman and Denholm (2001) study of Christian adolescents further found that drink driving, driving without a license, hitchhiking, sex without a condom, sex without self/partner being on the pill, sex with someone you don't know, sharing needles, shoplifting, sniffing glue or solvents, speeding in a car, watching pornography on the internet and watching R or X rated movies were also significantly associated with low religiosity. None of these risk behaviours were found to be significant for religiosity in the current study except driving without a license, although this was remarkably associated with high religiosity.

Driving without a license could be perceived as a minor offence which can incur a fine or demerit points and may be seen as a minor financial risk which is not harmful to others or one's own health or safety. However it was an unexpected finding to discover that driving without a license was significantly associated with highly religious Muslims as this behaviour can be seen as going against Islamic principles by not obeying the law of the land and does not appear to be justified in Islam. The current study is limited as it is cross-sectional and qualitative methods are needed to understand the underlying reasons for this effect.

However the current findings do support previous research which found that high religiosity can be a protective factor against various substance use behaviours (Chen et al., 2004; Klocker et al., 2011; Wallace & Forman, 1998) and drinking behaviours of

Muslims in particular (Abu-Ras et al., 2010; Ghandour et al., 2009). Further, the current findings add to the literature through discovering that high religiosity can also be protective for body piercing/tattoos and gambling for Muslims.

It is not surprising that high religiosity is protective against alcohol, substance use, gambling, body piercings and tattoos in Muslims. Intoxicants and gambling are explicitly forbidden in the Qur'an (5:90-91, 2:219) and teachings of the Prophet Muhammad (*Sahih Muslim*, *Book 23, Number 4966*) which Muslims abiding to the tenets of their faith adhere to. Permanent tattoos or changing the physical features created by God are also forbidden in Islam (*Sahih Al-Bukhari*, *Vol. 7, Book 72, Number 815*) and contemporary Islamic scholars consider body piercings to be impermissible (ibn Yusuf Mangera, 2003; Rasheed, 2006) with the exceptions of ear (ibn Yusuf Mangera, 2003; Rasheed, 2006) and nose piercings (ibn Yusuf Mangera, 2003) for women only as they are considered adornment.

The current findings appear to reflect that highly religious Muslims do adhere to these particular Islamic tenets which protect against risk. Ghandour et al.'s (2009) study of Christians, Muslims and Druze found that whereas high religiosity was associated with low alcohol use in both Christians and Muslims, the association was stronger for Muslims. Further, a youth study of different Christian denominations and Jews found being affiliation with the most proscriptive religion (Latter-Day Saints) was protective against ever using alcohol and substances compared to other religious groups in the

study (Lorch & Hughes, 1985). This suggests that the proscriptive nature of religious teachings can be effective in protecting against certain risk behaviours.

Syndrome of Risk

From the risk activity correlations based on Arnett's (1998) "Syndrome of Risk", many associations were discovered between the different risk behaviours. Taking speed/ecstasy was associated with 21 out of 23 behaviours. This had the highest amount of significant correlations. This was followed by drink driving, sex with someone you don't know very well, smoking cigarettes which were all associated with 20 other risk behaviours and shoplifting, smoking marijuana and watching R or X rated movies were all associated with 19 other risk behaviours.

This study supports Arnett's (1998) findings that that sex without contraception and sex with someone not known well are associated with each other and are both associated with binge drinking and marijuana use. It also supports Arnett's (1998) findings that drink driving behaviour is associated with binge drinking, marijuana use, sex without contraception and sex with someone not known well.

Dunlop and Romer (2010) study of young adults found that propensity for multiple use of alcohol, marijuana and tobacco use were related to driving crash risks rather than

use of marijuana and tobacco on their own. Binge drinking, smoking marijuana/hash and smoking tobacco were all significantly correlated in the current findings and furthermore, these behaviours were all related to drink driving and speeding in a car which lend support Dunlop & Romer's (2010) findings.

Dunlop and Romer's (2010) study further found that sensation seeking was related to multiple substance use propensity although sensation seeking itself was not directly related to road crashes. This implies that substance use propensity combined with sensation seeking tendencies is characteristics of a dangerous risk taker. This may also explain the large number of significant substance use correlations with other risk behaviours in the current findings. The current study adds to the research as it has observed a broader range of risk behaviours and has found several correlations between larger varieties of risk behaviours as presented in Table 3.12.

Decision Making

When considering whether or not to engage in risky activities, on average, Muslims rated 'danger', 'right and wrong', 'legality or illegality' and 'family's opinion' to be highly important in influencing their decision making processes. 'Fun and excitement' and 'friend's opinion' had moderate ratings.

Most Muslims found it either 'Very easy' or 'Easy' (80.5%) to say "no" to friends when they suggest doing something risky. Most reported feeling little or no influence by what they see on television or movies (87.9%).

Experience with adventure activities was low for bungee jumping, canyoning, caving outdoor rock/mountain climbing and parasailing, parachuting/skydiving. Level of interest was moderate across all adventure activities.

This suggests that safety, morality, legality and family were all important considerations to most Muslims when making decisions about risk. Fun and excitement, which demonstrates impulsivity (Abbott-Chapman et al., 2008b) was moderate among Muslims. Importance of friend's opinion received moderate ratings on average.

However most Muslims reported being confident in saying "no" to their friends when they suggest doing something risky, which suggests that making decisions for one's self can be made independent of peer pressure (Abbott-Chapman et al., 2008b). Television and movies were reported to be of little or no influence to Muslims. Participation in adventure activities involving physical risk was low (6-20.8%) however interest in these activities was moderate (43-52.3%).

Avoiding danger and considering right and wrong and legality also reflect Islamic teachings. As mentioned earlier, avoiding harm to the self (Qur'an, 2:195; 4:29), making mischief on the earth (Qur'an, 2:11-12, 29:36), having concern and kindness for others (Menk, no date) and following the law of the land (Ibn Adam al-Kawthari, 2004; *Sahih Al-Bukhari*, *Vol. 4, Book 52, Number 203*) are all a part of Islam.

Having good relationships with the family is also an important part of Islam. Islam prescribes roles and responsibilities for men and women towards their families (An-Nawawi, *Chaper 38, Number 300.*), commands maintenance of the ties of kinship (*Sahih Al-Bukhari*, *Vol.8 , Book 73, Number 12-21*) and respect to parents (Qur'an, 2:83, 4:36, 6:151,17:23-24, 29:8) particularly for the mother (Qur'an, 31:14, 46:15; *Sahih Al-Bukhari*, *Vol.8 , Book 73, Number 2*) which may explain why family's opinion is so important to Muslims. Thus it is plausible that religion impacted on Muslims' decision making processes.

Social Support

Most Muslims in the current study sought support from same gender friends for both personal (71.8%) and career problems (69.8%). Parents were trusted the most by Muslims to be there when they need them (69.8%). Parents, same gender friends and siblings also had a higher response rate in all other social support categories.

In the current study, professional social supports which were relied upon the most included teachers/educators for support with study problems (71.1%) and doctors for support with health problems (87.9%). However in all other categories, professional supports received a moderate or low response rate. Abbott-Chapman et al.'s (2008b) study reported similar findings with adolescents disinclined to seek professional help for personal problems, although this was because of fear that parents would be informed and disapprove of their activities.

Previous help-seeking studies from Australia and Britain suggest that Muslims' reluctance to seeking professional help may be to avoid being stigmatised within the community (Cinnirella & Loewenthal, 1999; Youssef & Deane, 2006) however because the current study was quantitative, this is not validated.

The current study implies that Muslims rely on same gender friends, parents, siblings and their religious leader for personal problems more than a counsellor; and would rely on parents, same gender friends and siblings for support with career problems more than their boss.

There also appeared to be differences between genders. Both genders had high responses for relying on 'siblings' for support. However in all categories, more females relied on their siblings (33-59.3%) compared to males (19.3-52.6%). Although there was an overall low response rate for reliance on religious leader and other gender

friends as a social support, a higher proportion of males (rel. leader: 22.8-45.6%, other gender friends: 19.3-38.6%) relied on them more in contrast to the proportion of females (rel. leader: 3.3-28.6%, other gender friends: 8.8-28.6%) in all categories.

The current findings that a religious leader is more relied upon by males than females is in contrast to Youssef and Deane's (2006) study of Arabic-speaking Christians and Muslims in Australia, which found that more women were likely to seek and accept counselling from a religious leader than men and fewer men were likely to seek counselling from anyone. Further, the current study also found that males were more likely to seek support from a counsellor for career problems (21.1%) than females (14.3%).

However in support of Youssef and Deane's (2006) findings, more women (28.6%) in the current study were likely to seek support from a professional counsellor than men (17.5%) for personal problems.

These findings suggest that Muslims rely on close family members and same gender friends for social support with personal and career issues and place a lot of trust in them. Abbott-Chapman et al.'s (2008b) findings of adolescents show that friends of both gender were relied upon most for personal problems which was then followed by parents.

Trust in family members is consistent with other help-seeking studies on Muslims in Britain (Cinnirella & Loewenthal, 1999) and Arab-Muslims in Australia (Youssef & Deane, 2006) however the current study adds to the literature by highlighting the importance of same gender friends in seeking support.

It is possible that Muslims may be reluctant to seek support from opposite gender 'friends' because of the Islamic prohibition of mixing with the opposite gender without a valid purpose, which is applied to prevent opportunities for sexual misconduct (Haque, 2004; Hussain, 2011) however this is not validated in the current study.

Muslims' help-seeking from professionals appears to be in regards to their issue relating to the professionals area of expertise. For example, doctors are predominately relied upon for health problems and teachers/educators are mostly relied upon for study problems. This is consistent with Abbott-Chapman et al.'s (2008b) sample of Christian youth.

Parents, siblings and same gender friends may be utilised as "secondary" supports for health and educational issues however for personal and career issues, close family and same gender friends are the most relied upon and are the most trusted by Muslims over professional supports such as a counsellor, doctor, teacher or boss. This is similar to Abbott-Chapman et al.'s (2008b) findings which found that parents, followed by

friends (although of both genders), had higher ratings for personal problems and were most trusted to be there when needed by adolescents.

Lifestyle Values

From the list of lifestyle values presented in Table 3.6, Muslims on average had rated most of these values of high importance (m>2.5). The only exceptions included 'doing what your mates do' (m=2.11, SD=0.92) and 'breaking the rules/testing the limits' (m=2.16, SD=1.16) which are values that reflect dependence and disobedience.

The values that Muslims rated of highest important were 'self-respect' (m=4.74, SD=0.56), 'being responsible for your own actions' (m=4.73, SD=0.46), 'deciding what is right and wrong' (m=4.71, SD=0.51) and 'respecting others' (m=4.71, SD=0.6). These values reflect caring for ones' self, accountability, obeying rules and having a concern for others which are also embedded in Islamic teachings as mentioned previously. Thus it is plausible that Muslims may identify with these values as a part of following their religion.

Muslims also reported that their own home (48.3%) was their favourite place out of a list of eight places provided. This was followed by place of worship (15.4%), beach or river (15.4%) and bush/nature (11.4%). This suggests that most Muslims highly value

their home environment and some also value their spirituality and the outdoors. Favouring the home over all other places provided may be a reflection of Muslims' having strong bonds with close family as discovered in the social support findings.

Muslims were asked about what they thought the best ways were to make decisions for themselves and their lifestyle and could choose any of 16 options as presented in Fig. 3.7. Following rules set by religion was the highest ranked (68.5%) followed by sharing experience with someone more experienced (65.1%), seeking advice from parents (58.4%) and seeking advice from members of their religious community (51.7%). This suggests that Muslims on average have a high regard for their religion and for consulting others with experience, including seeking advice from parents or people in the religious community when making lifestyle decisions.

Abbott-Chapman et al.'s (2008b) study, which the current questionnaire was based on, similarly found that advice from parents and sharing experience with someone more experienced rated high by both adolescents and their parents as approaches to helping young people to make decisions for themselves. However Abbott-Chapman et al.'s (2008b) study also found that "Church advice" and "Church Rules" received the lowest response rate from both parents and adolescents.

This difference may be because a Muslim's religious beliefs are not only spiritual but impact on every aspect of their life (Ozalp, 2004) which may suggest that affiliation

with a particular religion can affect how people make decisions about their lives. Religious beliefs may be considered by Muslims for making any lifestyle decisions in general as well as for risk taking. Future research should consider comparative studies on how lifestyle values affect various religious and non-religious affiliated groups.

CONCLUSION

This research project is the first study to explore behaviours and perceptions of a broad range of risk behaviours amongst the Muslim community in Australia. It also explored social supports, decision making and lifestyle values Australian Muslims and provides baseline data for future research.

Overall the results of this study were in keeping with perceptions in the Muslim community as to risk taking behaviour. However, some of the results suggest important questions for more extensive investigation. The most outstanding findings of this study were the results for males and parents in regards to risk behaviour propensity. Also of significance were the effects of religiosity on risk, personal decision making and help seeking behaviour.

- **Men and parents and risk taking**

In terms of the factors which are associated with the propensity towards these risk activities (2nd aim in the study) this study found that the characteristic with the most risk associations was being a male, which was associated with 17 risk activities. The second most associated characteristic and the most striking was being a parent which was associated with 9 risk activities.

Being a male and being a parent were both independently associated with binge drinking, gambling, sex without a condom, sex with a stranger, smoking cigarettes, smoking marijuana/hash and watching R and X rated movies. Being a parent was also independently associated with shoplifting and being a male was independently associated with drink driving, hitchhiking and injecting illegal drugs.

These findings are concerning as involvement in these risks may not just impact on Muslim men and parents, it can also impact on their families. It is even more concerning for those men and parents who are less religious as low religiosity was related to substance use. It is important for future research to investigate the links between being a male, being a parent and low religiosity with regards to risk behaviours, particularly alcohol, cigarette and marijuana use. It is also important for future research to investigate what underlying causes draw men and especially parents towards engaging in these behaviours.

- **Religiosity**

This study confirms that for Muslims, high religiosity can be protective for binge drinking, body piercing/tattoos, drinking alcohol, gambling, smoking cigarettes, smoking marijuana/hash, snorting cocaine and taking speed/ecstasy.

However it was also found that high religiosity was significantly associated with driving without a license. It was not expected that high religiosity would be a risk factor for any behaviour, particularly for one that is against the law. It could be that driving without a license may have been perceived as a low level offence and may not have been seen to have any direct affect to one's own health and safety. However reasons for this behaviour were not explored.

Future research should also explore the dynamics underlying the protective effects of religion. Further, more studies are needed to explore a variety of religions and cultures, particularly minority groups.

- **Personal decision making based on "rules"**

Most Muslims felt that 'following rules set by religion' was the best way to help a person make decisions for themselves about their own lifestyle. This was followed by 'sharing experience with someone more experienced', 'seeking advice from parents' and 'seeking advice from members of their religious community'.

Additionally Muslims rated 'self-respect', 'being responsible for your own actions', 'deciding what is right and wrong' and 'respecting others' as highly important lifestyle values. These findings reveal that morality, religion, community and family values are important in the lives of Muslims and influence their decision making processes. This study has also validated that most Muslims value their religious beliefs and religiosity can be protective against risk.

Thus it is important that services in the community, particularly those who work with drug, alcohol or pornography addiction and gambling, work with religious leaders and vice versa in order to assist Muslims who may be 'at-risk'.

- **Help seeking behaviour**

This study has revealed that for help seeking behaviour, Muslims relied on same gender friends for personal and career problems. Parents were rated as the most trusted people to be there when needed. Teachers were most relied upon for help with study problems and doctors were most relied upon for health problems. Parents, same gender friends and siblings were consistently relied upon in all categories of social support. Females would rely on their siblings more than males, and more males would rely on their religious leader than females. These social supports reflect the importance of close family and friends in the personal lives of Muslims.

- **Overview**

Overall propensity for risk ranged from low to moderate across the 24 risk behaviours. Of most concern overall for Muslims was having sex without the pill, watching R or X rated movies, sex without a condom and speeding in a car. However Muslims were less likely to have sex without the pill and sex without a condom when they are married or in a secure relationship where pregnancy may be a desired purpose instead of a 'risk' and sexually transmitted infections or diseases are minimised. Watching R or X rated movies however may have moral or spiritual consequences and speeding in a car can be hazardous to the self or others.

The least concerning behaviours for Muslims overall involved manufactured illegal drug use which included sharing needles, taking crystal meth or ice, injecting illegal drugs and snorting cocaine. Sniffing glue or solvents and drink driving were also of low concern.

This study confirms that risk behaviours can have relationships with other risk behaviours as we found that all 24 risk activities had associations with other activities, particularly speed/ecstasy which was associated with 21 other risks.

This study also found that being enrolled in a course of study and being part of a club or society was protective against some risks.

Although this study has found no 'epidemic' of risk overall, it has refined what factors are related to particular risk activities in the Muslim community. It has highlighted some significant areas of concern, particularly for Muslim males and parents. This study confirms that religiosity can protect against risk behaviours and emphasises the importance of religion, family and community in the lives of Muslims and in their decision making processes.

Limitations

This study is the first study to observe a broad range of risk behaviours amongst the Muslim adult community in Australia. However this study has several limitations.

This study was cross-sectional rather than longitudinal and did not account for developmental changes in perception and involvement of risk which may have occurred during different stages of life. However collecting longitudinal data may prove difficult as the same participants need to be identified in order to collect data at different waves or time-points. This may cause participants to feel 'exposed' or ashamed even when confidentiality is reassured and may compromise the honesty of responses. Provision of an anonymous online survey where no identifying information is collected removes this potential threat.

Another limitation was that this study was promoted through Muslim community websites and organisations which would only reach people who have some involvement or interest in the Muslim community. It is possible that people who identify as Muslims may be distant from, or may not know about Muslim community organisations or websites as there was a bias towards being highly religious. It must be acknowledged that there is a possibility of Muslims at-risk who may have 'slipped through the cracks' and were missed in the current study.

Another limitation was that the study was quantitative as opposed to qualitative. Reasons for 'why' Muslims perceive a particular risk behaviour to be higher or lower risk and reasons for risk avoidance or involvement were not explored. Reasons 'why' Muslims valued their religious beliefs and were close to their immediate family members and same gender friends were also not explored.

Questions about cultural background or ethnicity were not asked in the survey. The intention of this study was to look at Muslim Australians as one community. Further, culture or ethnicity can be complex, particularly for a person of mixed race. However culture, ethnicity or generational differences could have also been influential in decision making processes and should be considered for future research.

The study also had a gender bias with a higher proportion of female respondents (61.1%) compared to males (38.3%). Nonetheless, Pearson's correlations found that

statistically, males were significantly more prone to risk behaviours than females, which has also been supported by previous research (Arnett, 1998; Calafat et al., 2009; Dunsire & Baldwin, 1999; McCabe et al., 2005; Patrick et al., 2010; Stack et al., 2004).

There was also a bias towards having a university degree level of education (67.1%), however the conservative Scheffe's test was particularly chosen for the data analysis because of its effectiveness with analysing unequal groups (Holm & Christman, 1985; Ruxton & Beauchamp, 2008). As a result, significant statistical differences were found between people with only a year 12 education compared to those who had an undergraduate degree for two risk activities.

Implications & Recommendations

Despite these limitations the current findings have identified what risk behaviours Muslims are more susceptible to and what characteristics are typical of these risks. This study has shown that overall; most Muslims are at low risk of engaging in most of our 24 risk behaviours. This study also provides baseline data for future research. These findings may also be useful in assisting health professionals and religious leaders with intervention strategies. However there are areas of concern that warrant further research.

More research is needed to determine whether Muslims' risk perceptions and behaviours change over time or with life-changing events. Longitudinal methods may be useful to investigate this however studies using longitudinal methods may need to provide an incentive for Muslims to participate and give firm reassurance to participants about their confidentiality.

Further research on Muslim risk behaviours needs to explore whether there is a link between being a male, being a parent and low religiosity. Qualitative methods may be useful in to determining the underlying reasons why Muslim men and parents are more prone to risk behaviours.

Qualitative methods could also be employed in further studies to understand selection and socialisation norms in groups and societies which Muslims get involved in. Qualitative methods may also be useful in investigating what factors hinder Muslims from approaching professional services for their personal problems and further, what factors hinder Muslim females from approaching their religious leaders with their personal problems.

Further research is needed to observe whether cultural background or ethnicity plays a role in risk involvement and whether there are different approaches to risk from cultures of a similar faith. However such a study would need to accommodate for the complexity of culture and ethnicity such as generational differences and people of mixed race.

More research is needed to observe people with no religious affiliation to identify if there is a difference between them and people of faith in regards to risk behaviours, social supports, decision making and lifestyle values.

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Appendix 1: Participant Information Sheet

Faculty of Health Sciences
Cumberland Campus C42
East Street (PO Box 170)
Lidcombe NSW 1825
Telephone: +61 2 9351 9584
Facsimile: +61 2 9351 9400
Email: G.Sitharthan@usyd.edu.au

PARTICIPANT INFORMATION SHEET

High Risk Behaviours Amongst Muslim Adults Living in Australia

(1) What is the study about?

This study aims to explore high risk behaviours and attitudes towards these behaviours among Muslim adults living in Australia.

(2) Who is carrying out the study?

The study is being conducted by Ridwaan Nazir and will form the basis for the Masters of Health Sciences (Ageing and Human Development) at The University of Sydney under the supervision of Dr Gomathi Sitharthan, and Dr Patricia Weerakoon, Faculty of Health Sciences.

(3) What does the study involve?

The study invites participants to complete an anonymous online questionnaire which will take approximately 10-15 minutes to complete. No identifying information or any IP information from the online survey will be collected from the participants.

(4) Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to participate in the study and you can leave questions unanswered if you feel uncomfortable. If you consent to being part of this study, you will be required to click the "SUBMIT" button. If you decide NOT to consent do not click the "SUBMIT" button. You can withdraw any time prior to submitting your completed questionnaire/survey **by closing the window on the web browser.** Once you have submitted your questionnaire/survey anonymously, your responses cannot be withdrawn.

(5) Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential. The survey can be completed privately and discreetly in your own chosen environment (e.g. home, internet café) and no information that could identify you will be collected. A report of the study will be submitted for publication, but individual participants will not be identifiable in such a report.

(6) Will the study benefit me?

Your participation in completing the survey will help to raise your awareness to these issues and also will provide an understanding of such behaviours and attitudes within your community.

(7) Can I tell other people about the study?

We would encourage you to discuss this project with other Muslims in Australia aged 18 and over. Any one who is interested in this project can access the website: http://www.fhs.usyd.edu.au/sexual_health/research/current_research
Please contact: *Ridwaan Nazir, Masters of Health Sciences Student (Ageing and Human Development), University of Sydney; 0401 209 187 or rnaz3854@usyd.edu.au*

(8) What if I require further information?

Once you have read this information, Ridwaan Nazir can discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact: Ridwaan Nazir, Masters of Health Sciences Student (Ageing and Human Development), University of Sydney; rnaz3854@usyd.edu.au or phone 0401 209 187, or *Dr Gomathi Sitharthan, Chief Supervisor, (02) 9351 9584 or G.Sitharthan@usyd.edu.au or Dr. Patricia Weerakoon, Associate Supervisor (02) 9351 9256 or P.Weerakoon@usyd.edu.au*

(9) What if I have a complaint or concerns?

Any person with concerns or complaints about the conduct of a research study can contact the Senior Ethics Officer, Ethics Administration, The University of Sydney on (02) 8627 8175 (Telephone); (02) 8627 8180 (Facsimile) or gbriody@usyd.edu.au (Email).

This information sheet is for you to keep

Appendix 2: Advertisement

The University of Sydney

Graduate Program in Sexual Health

Faculty of Health Sciences
Cumberland Campus C42
East Street (PO Box 170)
Lidcombe NSW 1825
Telephone: +61 2 9351 9584
Facsimile: +61 2 9351 9400
Email: G.Sitharthan@usyd.edu.au

Volunteer Needed

Internet and community magazine advertisement for interested person who wishes to participate in the research project

I am doing a research project in the Graduate Program in Sexual Health at The University of Sydney.

My research topic is "**High Risk Behaviours Amongst Muslim Adults Living in Australia".**

The study aims are to understand high risk behaviours and attitudes towards these behaviours among Muslim adults living in Australia.

You can participate in this survey only if you meet all of the following criteria:

- If you are fluent in English language
- If you have attained minimum 18 years of age
- If you are a Muslim living in Australia

If you wish to participate in Internet base survey, please use: **http://www.zoomerang.com/Survey/?p=WEB229C5QUP2FX** web page address. You will then be taken to the web page survey form.

If you are interested in participating in this study but prefer to complete a paper-based questionnaire, please contact Ridwaan Nazir; 0401 209 187 or rnaz3854@usyd.edu.au who can provide you a data collection package. On completion, you can mail the filled questionnaire to the Researcher in the enclosed self-addressed, Pre-Paid envelope.

Your voluntary participation in this survey will be much appreciated.

If you would like to know more about this research, please use the following website: http://sydney.edu.au/health_sciences//sexual_health/research/online.shtml or feel free to contact: Ridwaan Nazir, Masters of Health Sciences Student (Ageing and Human Development); University of Sydney; 0401 209 187 or rnaz3854@usyd.edu.au or
Dr Gomathi Sitharthan, Chief Supervisor, (02) 9351 9584 or G.Sitharthan@usyd.edu.au or
Dr Patricia Weerakoon Associate Supervisor, (02) 9351 9256 or P.Weerakoon@usyd.edu.au

Appendix 3: Questionnaire

(Paper-based version of online survey)

The Questionnaire is anonymous. Do not write your name on it.
Please read each question carefully and tick whichever response is appropriate.
You will not be identified in any way nor do we want to know who you are.

Please give us some Background Information

1. Are you male or female?

   Male ☐ Female ☐

2. What is your age?

   Under 18 ☐ 18-19 ☐ 20-25 ☐ 26-30 ☐ 31-49 ☐ 50or older ☐

3. Which state/territory do you live in?

   NSW ☐ VIC ☐ WA ☐ QLD ☐ SA ☐ ACT ☐
   TAS ☐ NT ☐ Other region (please specify) ☐
   _____

4. What is your current employment status?

   Employed full-time (paid work) ☐ Not in the workforce/ Not working for pay ☐
   Employed part-time/casual (paid work) ☐

5. Are you currently a student? (Part-time or Full-time)

   Yes ☐ No ☐

6. Are you:

   Single & not in a committed relationship (go to question 8) ☐
   In a committed relationship/de-facto ☐
   Engaged ☐
   Married ☐
   Other relationship (please specify) ☐
   _____

7. Do you currently live in the same residence as your partner/fiancé/fiancée?

   Yes ☐ No ☐

8. Do you have children?

   Yes ☐ No ☐

9. Do you live in a suburban, city or rural area?

   Suburban/city ☐ Rural ☐

10. Were you born in Australia?

    Yes ☐ No ☐

This questionnaire is totally anonymous. You will not be identified in any way.

11. What is your current level of education?

Under year 12	☐	Diploma	☐
Completed year 12	☐	Undergraduate Degree	☐
Certificate (I, II, III, IV)	☐	Post-graduate Degree	☐

Please continue to next page

This questionnaire is totally anonymous. You will not be identified in any way.

Please tell us about the groups and communities of which you are a member.

12. Do you belong to any clubs or societies?

Yes ☐
No ☐ (Go to Question 15) Not now but in past ☐ (Go to Question 15)

13. Please tell us what sort of club or society you belong to: (Tick all which apply)

Sports club or team ☐
Music (include choir/band etc) ☐
Hobby or Interest club or group ☐
Volunteer for a community service/group ☐
Other ☐

14. How important are these clubs/groups to you?

Very Important ☐ Important ☐ Not very important ☐ Not important ☐

15. Do you have any religious beliefs?

Yes ☐ Not sure ☐ Not now but previously held religious beliefs ☐
No, Never have ☐

16. Do you regularly attend a place of worship or any worship services?

Often ☐ Sometimes ☐ Hardly ever ☐ Never ☐

Please tell us your reactions to different sorts of risk taking behaviour

17. Tell us how **risky** or **dangerous** you think the following sorts of behaviour are **on a scale of 1 to 7** Please tick the box which applies. **(These are listed in alphabetical order only)**

		1 Not Risky						**7 Very Risky**	**Don't Know**
a)	**Binge drinking/getting drunk:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
b)	**Body piercing/tattoos:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
c)	**Drinking alcohol:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
d)	**Drink driving:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
e)	**Driving without a licence:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
f)	**Gambling:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
g)	**Hitchhiking:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
h)	**Injecting illegal drugs:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
i)	**Sex without a condom:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
j)	**Sex without self or partner being on the pill:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
k)	**Sex with someone you don't know very well:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
l)	**Sharing needles:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐

This questionnaire is totally anonymous. You will not be identified in any way.

17 (cont'd). Tell us how **risky** or **dangerous** you think the following sorts of behaviour are **on a scale of 1 to 7** Please tick the box which applies. **(These are listed in alphabetical order only)**

		Not 1 Risky						**Very Risky 7**	**Don't Know**
m)	**Shoplifting:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
n)	**Smoking cigarettes:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
o)	**Smoking marijuana/hash:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
p)	**Sniffing glue or solvents:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
q)	**Snorting cocaine:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
r)	**Speeding in a car:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
s)	**Starving to get slim (eating disorder):**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
t)	**Sunbaking without sunscreen:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
u)	**Taking Crystal Meth or "ice":**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
v)	**Taking speed/ecstasy:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
w)	**Watching pornography on the Internet:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐
x)	**Watching R or X rated videos/movies:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐

18. Have you ever done any of the following? If so please indicate whether once, occasionally or regularly**.**
(Remember this questionnaire is TOTALLY ANNONYMOUS – we do not want to know who you are).

		No never	**Yes once**	**Yes occasionally**	**Yes regularly**
a)	**Been Drunk/Excessively intoxicated**	☐1	☐2	☐3	☐4
b)	**Had a tattoo/body piercing**	☐1	☐2	☐3	☐4
c)	**Drank Alcohol**	☐1	☐2	☐3	☐4
d)	**Driven while drunk**	☐1	☐2	☐3	☐4
e)	**Driven without a licence**	☐1	☐2	☐3	☐4
f)	**Gambled**	☐1	☐2	☐3	☐4
g)	**Hitch hiked**	☐1	☐2	☐3	☐4
h)	**Injected illegal drugs**	☐1	☐2	☐3	☐4
i)	**Had Sex without a condom**	☐1	☐2	☐3	☐4
j)	**Had sex without you/partner being on the pill**	☐1	☐2	☐3	☐4
k)	**Had sex with someone you don't know very well**	☐1	☐2	☐3	☐4
l)	**Shared needles**	☐1	☐2	☐3	☐4
m)	**Shoplifted**	☐1	☐2	☐3	☐4
n)	**Smoked cigarettes**	☐1	☐2	☐3	☐4
o)	**Smoked marijuana/hash**	☐1	☐2	☐3	☐4
p)	**Sniffed glue or solvents**	☐1	☐2	☐3	☐4
q)	**Snorted cocaine**	☐1	☐2	☐3	☐4
r)	**Driven dangerously (speeding)**	☐1	☐2	☐3	☐4

This questionnaire is totally anonymous. You will not be identified in any way.

18 (cont'd). Have you ever done any of the following? If so please indicate whether once, occasionally or regularly. **(Remember this questionnaire is TOTALLY ANNONYMOUS – we do not want to know who you are).**

		No never	Yes once	Yes occasionally	Yes regularly
s)	**Had an eating disorder**	☐1	☐2	☐3	☐4
t)	**Sunbaked without sunscreen**	☐1	☐2	☐3	☐4
u)	**Taken Crystal Meth or "ice":**	☐1	☐2	☐3	☐4
v)	**Taken speed/ecstasy**	☐1	☐2	☐3	☐4
w)	**Watched pornography on the Internet**	☐1	☐2	☐3	☐4
x)	**Watched X or R rated videos/movies**	☐1	☐2	☐3	☐4

Please rate questions 19-24 on a scale of 1 to 7.
If you don't know if it applies, tick "Don't Know" instead.

19. When deciding whether or not to do risky things how **important** to you is fun and excitement?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

20. When deciding whether or not to do risky things how **important** is knowing whether it is legal or illegal? .

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

21. When deciding whether or not to do risky things how **important** are feelings about what is right and wrong?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

22. When deciding whether or not to do risky things how **important** is knowing how dangerous it is to your health and wellbeing or the health and wellbeing of others?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

23. When deciding whether or not to do risky things how **important** is what your friends think about it?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

24. When deciding whether or not to do risky things how **important** is what your family think about it?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

25. If friends suggest doing something risky or dangerous how easy is it to say "no" you don't want to do it?

Very easy ☐1 Easy ☐2 Not so easy ☐3 Difficult ☐4 Very difficult ☐5 Don't Know ☐

26. How strongly are you influenced by what you see on TV or the movies?

Not at all ☐1 Not much ☐2 Strongly ☐3 Very strongly ☐4 Don't Know ☐

27. Have you participated in the following activities or, given the opportunity, would you like to, or are you not interested?

		Have Experienced	Would like to Experience	Not Interested
a)	Bungee jumping	☐	☐	☐
b)	Canyoning	☐	☐	☐
c)	Caving	☐	☐	☐
d)	Outdoor rock/Mountain climbing	☐	☐	☐
e)	Parasailing or parachuting/skydiving	☐	☐	☐

We would like to know about your access to support and your feelings about the future.

28. If you had **personal** problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parent/s	☐	Friends (same gender)	☐	Teacher/Educator	☐	Boss	☐
Counsellors	☐	Friends (other gender)	☐	Religious leader	☐	Doctor	☐
Sibling/s	☐	Grandparents/other family	☐	Other	☐	No one	☐

29. If you had study problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parent/s	☐	Friends (same gender)	☐	Teacher/Educator	☐	Boss	☐
Counsellors	☐	Friends (other gender)	☐	Religious leader	☐	Doctor	☐
Sibling/s	☐	Grandparents/other family	☐	Other	☐	No one	☐

30. If you had career problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parent/s	☐	Friends (same gender)	☐	Teacher/Educator	☐	Boss	☐
Counsellors	☐	Friends (other gender)	☐	Religious leader	☐	Doctor	☐
Sibling/s	☐	Grandparents/other family	☐	Other	☐	No one	☐

31. If you had **health** problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parent/s	☐	Friends (same gender)	☐	Teacher/Educator	☐	Boss	☐
Counsellors	☐	Friends (other gender)	☐	Religious leader	☐	Doctor	☐
Sibling/s	☐	Grandparents/other family	☐	Other	☐	No one	☐

This questionnaire is totally anonymous. You will not be identified in any way.

32. Who do you most trust to be there when you need them?
(Please tick all that apply)

Parent/s	☐	Friends (same gender)	☐	Teacher/Educator	☐	Boss	☐
Counsellors	☐	Friends (other gender)	☐	Religious leader	☐	Doctor	☐
Sibling/s	☐	Grandparents/other family	☐	Other	☐	No one	☐

33. Do you feel **positive** about your future?

Yes ☐ No ☐ Sometimes ☐ Unsure ☐

34. **For those who are not currently students, go to question 38**

Do you **enjoy** University/College/TAFE?

Yes ☐ No ☐ Sometimes ☐ Unsure ☐

Please rate questions 35-37 are on a scale of 1 to 7.
If you don't know if it applies, tick "Don't Know" instead.

35. How **important** is continuing <u>your education/training</u> to you?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

36. How **successful** do you think you will be in <u>your future education/training</u>?

Not Successful< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Successful**

Don't Know ☐

37. How much **influence** do you <u>think</u> you will have in making this happen?

No Influence< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>a lot of Influence**

Don't Know ☐

38. **For those who are not in the workforce or working for pay, go to question 42**

. Do you **enjoy** your job?

Yes ☐ No ☐ Sometimes ☐ Unsure ☐

Please rate questions 39-41 are on a scale of 1 to 7.
If you don't know if it applies, tick "Don't Know" instead.

39. How **important** is developing your career to you?

Not Important< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Important**

Don't Know ☐

This questionnaire is totally anonymous. You will not be identified in any way.

40. How **successful** do you think you will be in your career?

Not Successful< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>Very Successful**

Don't Know ☐

41. How much **influence** do you think you will have in making this happen?

No Influence< ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **>a lot of Influence**

Don't Know ☐

Please tell us more about your lifestyle values and how you view the world.

42. In your own opinion, how **important** do you rate the following: Not at all important, Not very important, Neutral, Important or Very Important? (This list is random and not in order of importance)

	Not at All Imp.	Not Very Imp.	Neutral	Important	Very Imp.
a) Your health and feeling fit and well	☐1	☐2	☐3	☐4	☐5
b) Looking good	☐1	☐2	☐3	☐4	☐5
c) Making good decisions	☐1	☐2	☐3	☐4	☐5
d) Being responsible for your own actions	☐1	☐2	☐3	☐4	☐5
e) Feeling in control of your life	☐1	☐2	☐3	☐4	☐5
f) Thinking about things before you do them	☐1	☐2	☐3	☐4	☐5
g) Thinking about the welfare of others	☐1	☐2	☐3	☐4	☐5
h) Helping your mates	☐1	☐2	☐3	☐4	☐5
i) Doing what your mates do	☐1	☐2	☐3	☐4	☐5
j) Thinking for yourself	☐1	☐2	☐3	☐4	☐5
k) Deciding what is right or wrong for you	☐1	☐2	☐3	☐4	☐5
l) Having fun, finding excitement	☐1	☐2	☐3	☐4	☐5
m) Breaking the rules/testing the limits	☐1	☐2	☐3	☐4	☐5
n) Experimenting with new experiences	☐1	☐2	☐3	☐4	☐5
o) Respecting others	☐1	☐2	☐3	☐4	☐5
p) Respecting yourself	☐1	☐2	☐3	☐4	☐5
q) Religious beliefs	☐1	☐2	☐3	☐4	☐5
r) Family values	☐1	☐2	☐3	☐4	☐5
s) Doing things on the spur of the moment	☐1	☐2	☐3	☐4	☐5
t) Participating in sports	☐1	☐2	☐3	☐4	☐5

43. Would you describe yourself as mostly:

Shy/Modest ☐ In-between ☐ Outgoing/Open ☐ Don't Know ☐

This questionnaire is totally anonymous. You will not be identified in any way.

44. Would you describe yourself as mostly:

Optimistic ☐ In-between ☐ Pessimistic ☐ Don't Know ☐

45. How easily do you get bored?

Never ☐ Rarely ☐ Not so easily ☐ Easily ☐ Very easily ☐

Don't Know ☐

46. Do you often take "time out" from stressful events and/or lifestyle?

No, never ☐ Sometimes ☐ Yes, always ☐ Don't Know ☐

47. Where is your **favourite** place? (Please choose only **one**)

Own home	☐	Beach/River	☐
Other family/Friend's place	☐	Shopping centres/marketplace	☐
Place of worship	☐	Bush/Nature	☐
Sports events/places	☐	Interstate	☐

48. What do you think are the best ways that can help a person to make decisions for themselves about their own lifestyle? (Tick **all** that apply)

☐ Adventure and wilderness programs which test initiative
☐ Seeking advice from Parents
☐ Seeking advice from Grandparents/Elders
☐ Seeking advice from Boss
☐ Seeking advice from Teachers/Educators/Lecturers
☐ Seeking advice from members of your religious community
☐ Through seeing a counsellor/therapist
☐ Participating in education programs /seminars
☐ Following an example of someone you admire
☐ Watching graphic videos/TV ads showing what can happen when things go wrong
☐ Seeking information from the Internet.
☐ Following rules set by religion
☐ Following rules set by parents/family
☐ Following rules set by one's boss
☐ Sharing experience with someone more experienced and setting out options
☐ Trusting people to make their own independent decisions.

This questionnaire is totally anonymous. You will not be identified in any way.

THANK YOU FOR YOUR PARTICIPATION

Appendix 4: Questionnaire Survey for Year 11 and Year 12 students.

Students' attitudes to risk taking behaviour

(Abbott-Chapman and Denholm, 2001)

The University of Tasmania

Questionnaire Survey for Year 11 and Year 12 students.
Students' attitudes to risk taking behaviour

The Questionnaire is anonymous. Do not write your name on it.
Please read each question carefully and tick whichever response is appropriate.

When you have completed the questionnaire please hand it to the student nominated for each year or class, who will place it an envelope with all the others from your class and will seal it, to keep it private. The questionnaires will be analysed by the Youth Education Studies Centre at the University and will be treated as strictly confidential.

No teachers or students from the school will see your replies.

Please give us some Background Information

1. Are you a: Student in Year 11 ☐1 Student in Year 12 ☐2

2. What type of school /college do you attend? Ind. Non Catholic ☐1 Catholic ☐2 Govt. ☐3

3. What is your age ? 16 or under ☐1 17 years ☐2 18 or over ☐3

4. Are you male or female ? Male ☐1 Female ☐2

5. Do you live in town or country? Town ☐1 Country ☐2

6. How far do you want to go with your education/training?
   - Not complete Year 12 ☐1
   - Complete Year 12 ☐2
   - TAFE/Apprenticeship ☐3
   - University ☐4
   - Other Tertiary Educ./Training ☐5

Please tell us about the groups and communities of which you are a member.

7. Do you belong to any clubs or societies either inside and outside school or college?
   Yes ☐1 (Go to Question 8)
   No ☐2 (Go to Question 10) Not now but in past ☐3 (Go to Question 10)

8. Please tell us what sort of club or society you belong to: (Tick all which apply)
   - Sports club or team ☐1
   - Music (include choir/band etc) ☐2
   - Hobby or Interest club or group ☐3
   - Church group (all kinds) ☐4
   - Youth club (include Rural Youth) ☐5
   - Community group or community service group ☐6
   - Educational/training group ☐7
   - Other ☐8

9. How important are these clubs/groups to you?
   Very imp. ☐1 Important ☐2 Not very important ☐3 Not important ☐4

10. Do you have any religious beliefs?
Yes ☐1 Not sure ☐2 No ☐3 Used to ☐4

11. Do you ever attend Church or other worship services (either Christian or Non Christian)?
Often ☐1 Sometimes ☐2 Hardly ever ☐3 Never ☐3

Please tell us your reactions to different sorts of risk taking behaviour

12. Tell us how **risky** or **dangerous** you think the following sorts of behaviour are **on a scale of 1 to 7** Please tick the box which applies. **(These are listed in alphabetical order only)**

		Not 1 Risky						Very Risky7	Don't Know8
a)	**Binge drinking/getting drunk:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
b)	**Body piercing/tattoos:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
c)	**Drinking alcohol:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
d)	**Drink driving:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
e)	**Driving without a licence:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
f)	**Dropping out of school:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
g)	**Gambling:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
h)	**Hitchhiking:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
i)	**Injecting Heroin:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
j)	**Leaving home:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
k)	**Sex without a condom:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
l)	**Sex without self or partner being on the pill:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
m)	**Sex with someone you don't know very well:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
n)	**Sharing needles:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
o)	**Shoplifting:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
p)	**Smoking cigarettes:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
q)	**Smoking marijuana/hash:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
r)	**Sniffing glue or solvents:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
s)	**Snorting cocaine:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
t)	**Speeding in a car:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
u)	**Starving to get slim (eating disorder):**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
v)	**Sunbaking without sunscreen:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
w)	**Taking speed/ecstasy:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
x)	**Wagging classes:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
y)	**Watching pornography on the Internet:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8
z)	**Watching R or X rated videos/movies:**	☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8

13. Have you ever done any of the following? If so please indicate whether once, occasionally or regularly.**(Remember this is totally anonymous – we do not want to know who you are).**

		No never	Yes once	Yes occas'ly	Yes regularly
a)	**Got Blind Drunk**	☐1	☐2	☐3	☐4
b)	**Had a tattoo/body piercing**	☐1	☐2	☐3	☐4
c)	**Drunk Alcohol**	☐1	☐2	☐3	☐4
d)	**Driven while drunk**	☐1	☐2	☐3	☐4
e)	**Driven without a licence**	☐1	☐2	☐3	☐4
f)	**Thought about dropping out of school**	☐1	☐2	☐3	☐4
g)	**Gambled**	☐1	☐2	☐3	☐4
h)	**Hitch hiked**	☐1	☐2	☐3	☐4
i)	**Injected heroin**	☐1	☐2	☐3	☐4
j)	**Left home (even temporarily)**	☐1	☐2	☐3	☐4
k)	**Had Sex without a condom**	☐1	☐2	☐3	☐4
l)	**Had sex without you/partner being on the pill**	☐1	☐2	☐3	☐4
m)	**Had sex with someone you don't know very well**	☐1	☐2	☐3	☐4
n)	**Shared needles**	☐1	☐2	☐3	☐4
o)	**Shoplifted**	☐1	☐2	☐3	☐4
p)	**Smoked cigarettes**	☐1	☐2	☐3	☐4
q)	**Smoked marijuana/hash**	☐1	☐2	☐3	☐4
r)	**Sniffed glue or solvents**	☐1	☐2	☐3	☐4
s)	**Snorted cocaine**	☐1	☐2	☐3	☐4
t)	**Driven dangerously (speeding)**	☐1	☐2	☐3	☐4
u)	**Had an eating disorder**	☐1	☐2	☐3	☐4
v)	**Sunbaked without sunscreen**	☐1	☐2	☐3	☐4
w)	**Taken speed/ecstasy**	☐1	☐2	☐3	☐4
x)	**Wagged classes**	☐1	☐2	☐3	☐4
y)	**Watched pornography on the Internet**	☐1	☐2	☐3	☐4
z)	**Watched X or R rated videos/movies**	☐1	☐2	☐3	☐4

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14. When deciding whether or not to do risky things how **important** to you is <u>fun and excitement</u>?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

15. When deciding whether or not to do risky things how **important** is <u>knowing whether it is legal or illegal</u>? (including legal for 18 and over only).

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

16. When deciding whether or not to do risky things how **important** are <u>feelings about what is right and wrong</u>?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

17. When deciding whether or not to do risky things how **important** is knowing how dangerous it is to your health and wellbeing or the health and wellbeing of others?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

18. When deciding whether or not to do risky things how **important** is what your friends think about it?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

19. When deciding whether or not to do risky things how **important** is what your parents/family think about it?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

20. If friends suggest doing something risky or dangerous how easy is it to say "no" you don't want to do it?

Very easy ☐1 Easy ☐2 Not so easy ☐3 Difficult ☐4 Very difficult ☐5
Don't Know ☐6

21. How strongly are you influenced by what you see on TV or the movies?

Not at all ☐1 Not much ☐2 Strongly ☐3 Very strongly ☐4
Don't Know ☐5

22. Have you participated in the following activities or, given the opportunity, would you like to, or are you not interested?

		Have Experienced	Would like to Experience	Not Interested
a)	bunjee jumping	☐1	☐2	☐3
b)	canyoning	☐1	☐2	☐3
c)	caving	☐1	☐2	☐3
d)	parasailing/parachuting	☐1	☐2	☐3
e)	rock/mountain climbing	☐1	☐2	☐3

We would like to know about your access to support and your feelings about the future.

23. If you had **personal** problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parents ☐1 Friends (same sex) ☐1 Teachers ☐1 Priest/Minister ☐1
Counsellors ☐1 Friends (other sex) ☐1 Doctor ☐1 Other Adults ☐1 No-one ☐1

24. If you had **study** problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parents ☐1 Friends (same sex) ☐1 Teachers ☐1 Priest/Minister ☐1
Counsellors ☐1 Friends (other sex) ☐1 Doctor ☐1 Other Adults ☐1 No-one ☐1

25. If you had **health** problems of any kind who would you talk to or seek advice from?
(Please tick all that apply)

Parents ☐1 Friends (same sex) ☐1 Teachers ☐1 Priest/Minister ☐1
Counsellors ☐1 Friends (other sex) ☐1 Doctor ☐1 Other Adults ☐1 No-one ☐1

26. Who do you most trust to be there when you need them?
(Please tick all that apply)

Parents ☐1 Friends (same sex) ☐1 Teachers ☐1 Priest/Minister ☐1
Counsellors ☐1 Friends (other sex) ☐1 Doctor ☐1 Other Adults ☐1 No-one ☐1

27. Do you feel **positive** about your future?

Yes ☐1 No ☐2 Sometimes ☐3 Unsure ☐4

28. Do you feel you have **control** over your future?

Yes ☐1 No ☐2 Sometimes ☐3 Unsure ☐4

29. Do you **enjoy** school/college?

Yes ☐1 No ☐2 Sometimes ☐3 Unsure ☐4

30. How **important** is continuing your education/training to you?

Not Imp. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Imp.** **Don't Know** ☐8

31. How **successful** do you think you will be in your future education/training?

Not Succ. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **Very Succ.** **Don't Know** ☐8

32. How much **influence** do you think you will have in making this happen?

No Infl. ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 **A lot of Infl.** **Don't Know** ☐8

Please will you tell us a more about your lifestyle values and how you view the world.

33. In your own opinion, how **important** do you rate the following: Not at all important, Not very important, Neutral, Important or Very Important? (This list is random and not in order of importance)

		Not at All Imp.	Not Very Imp.	Neutral	Imp.	Very Imp.
a)	**Your health and feeling fit and well**	☐1	☐2	☐3	☐4	☐5
b)	**Looking good**	☐1	☐2	☐3	☐4	☐5
c)	**Making good decisions**	☐1	☐2	☐3	☐4	☐5
d)	**Being responsible for your own actions**	☐1	☐2	☐3	☐4	☐5
e)	**Feeling in control of your life**	☐1	☐2	☐3	☐4	☐5
f)	**Thinking about things before you do them**	☐1	☐2	☐3	☐4	☐5
g)	**Thinking about the welfare of others**	☐1	☐2	☐3	☐4	☐5
h)	**Helping your mates**	☐1	☐2	☐3	☐4	☐5
i)	**Doing what your mates do**	☐1	☐2	☐3	☐4	☐5
j)	**Thinking for yourself**	☐1	☐2	☐3	☐4	☐5
k)	**Deciding what is right or wrong for you**	☐1	☐2	☐3	☐4	☐5
l)	**Having fun, finding excitement**	☐1	☐2	☐3	☐4	☐5
m)	**Breaking the rules/testing the limits**	☐1	☐2	☐3	☐4	☐5
n)	**Experimenting with new experiences**	☐1	☐2	☐3	☐4	☐5
o)	**Respecting others**	☐1	☐2	☐3	☐4	☐5
p)	**Respecting yourself**	☐1	☐2	☐3	☐4	☐5
q)	**Religious beliefs**	☐1	☐2	☐3	☐4	☐5
r)	**Family beliefs**	☐1	☐2	☐3	☐4	☐5
s)	**Doing things on the spur of the moment**	☐1	☐2	☐3	☐4	☐5
t)	**Participating in sports**	☐1	☐2	☐3	☐4	☐5

34. Would you describe yourself as mostly:

Shy ☐1 In between ☐2 Outgoing ☐3 Don't Know ☐4

35 Would you describe yourself as mostly:

Optimistic ☐1 In between ☐2 Pessimistic ☐3 Don't Know ☐4

36. How easily do you get bored?

Never ☐1 Rarely ☐2 Not so easily ☐3 Easily ☐4 Very easily ☐5 Don't Know ☐6

37. Do you like taking "time out" from things and people that bother you?

No, never ☐1 Sometimes ☐2 Yes, always ☐3 Don't Know ☐4

38. In your **social life and friendships** if you were planning for something to happen, how long would the following seem to you in minutes or hours or days or weeks or months or years (put number in one box only for each line)?

a) Now = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

b) Soon = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

c) In a while = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

d) In the near future = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

e) In the distant future = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

39. For your **study/work career** if you were planning for something to happen, how long would the following seem to you in minutes or hours or days or weeks or months or years (put number in one box only for each line)?

a) Now = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

b) Soon = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

c) In a while = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

d) In the near future = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

e) In the distant future = ☐ Mins. ☐ Hours ☐ Days ☐ Weeks ☐ Months ☐ Years

40. What is your **favourite** place? (Please choose only **one**)

Own home ☐1 Own bedroom ☐2 Friend's place ☐3 Bush/Nature ☐4
Beach/River ☐5 Town facils./shops ☐6 Sports events/places ☐7 Interstate ☐8

41. What do you think are the best ways in which young people can be helped to make decisions for themselves about their own lifestyle? (Tick **all** that apply)

☐1 Adventure and wilderness programs which test initiative
☐1 Advice from parents/teachers
☐1 Advice from Church members
☐1 Career programs – talks from experienced people
☐1 Education programs – talks in schools
☐1 Example of someone you admire
☐1 Graphic videos/TV ads showing what can happen when things go wrong
☐1 Health programs – talks in schools
☐1 Internet information
☐1 Rules set by Church
☐1 Rules set by parents/teachers
☐1 Sharing experience of someone a bit older and setting out options
☐1 Trusting young people to make their own decisions
☐1 Youth drug free events, such as Rock Eisteddford

THANK YOU FOR YOUR HELP

Appendix 5: Risk Activity by Personal Risk Assessment Groups by Risk Activity Raw Scores

Risk Activity by Personal Risk Assessment Groups by Risk Activity Raw Scores

	1.00 P0HR		2.00 P0LR		3.00 P1HR	
Risk Activity	N	%	N	%	N	%
Bingedrinking/gettingdrunk	103	69.1	2	1.3	17	11.4
Bodypiercing/tattoos	70	47.0	39	26.2	12	8.1
Drinking alcohol	72	48.3	7	4.7	27	18.1
Drink driving	133	89.3	1	.7	8	5.4
Driving without a licence	88	59.1	16	10.7	15	10.1
Gambling	98	65.8	6	4.0	28	18.8
Hitchhiking	114	76.5	13	8.7	11	7.4
Injecting illegal drugs	143	96.0	2	1.3	2	1.3
Sex without a condom	67	45.0	7	4.7	10	6.7
Sex without self or partner being on the pill	59	39.6	18	12.1	6	4.0
Sex with someone you don't know very well	112	75.2	7	4.7	10	6.7
Sharing needles	144	96.6	4	2.7	0	0.0
Shoplifting	112	75.2	5	3.4	22	14.8
Smoking cigarettes	60	40.3	6	4.0	32	21.5
Smoking marijuana/hash	99	66.4	8	5.4	18	12.1
Sniffing glue or solvents	130	87.2	9	6.0	6	4.0
Snorting cocaine	138	92.6	3	2.0	5	3.4
Speeding in a car	57	38.3	5	3.4	32	21.5
Starving to get slim/eatingdisorder	101	67.8	15	10.1	12	8.1
Sunbaking without sunscreen	64	43.0	9	6.0	17	11.4
Taking Crystal Meth or ice	139	93.3	8	5.4	1	.7
Taking speed/ecstasy	126	84.6	6	4.0	10	6.7
Watching pornography on the Internet	65	43.6	9	6.0	19	12.8
Watching R or X rated videos/movies	50	33.6	13	8.7	26	17.4

	4.00 P1LR		5.00 PSHR		6.00 PSLR	
Risk Activity	N	%	N	%	N	%
Bingedrinking/gettingdrunk	1	.7	19	12.8	7	4.7
Bodypiercing/tattoos	13	8.7	0	0.0	15	10.1
Drinking alcohol	2	1.3	21	14.1	20	13.4
Drink driving	0	0	7	4.7	0	0.0
Driving without a licence	6	4.0	11	7.4	13	8.7
Gambling	3	2.0	11	7.4	3	2.0
Hitchhiking	5	3.4	2	1.3	4	2.7
Injecting illegal drugs	0	0.0	1	.7	1	.7
Sex without a condom	1	.7	44	29.5	20	13.4
Sex without self or partner being on the pill	0	0.0	31	20.8	35	23.5
Sex with someone you don't know very well	1	.7	11	7.4	8	5.4
Sharing needles	0	0	1	.7	0	0.0
Shoplifting	6	4.0	3	2.0	1	.7
Smoking cigarettes	7	4.7	20	13.4	24	16.1
Smoking marijuana/hash	2	1.3	9	6.0	13	8.7
Sniffing glue or solvents	1	.7	2	1.3	1	.7
Snorting cocaine	1	.7	1	.7	1	.7
Speeding in a car	6	4.0	33	22.1	16	10.7
Starving to get slim/eatingdisorder	5	3.4	12	8.1	4	2.7
Sunbaking without sunscreen	8	5.4	31	20.8	20	13.4
Taking Crystal Meth or ice	0	0.0	1	.7	0	0.0
Taking speed/ecstasy	1	.7	4	2.7	2	1.3
Watching pornography on the Internet	13	8.7	15	10.1	28	18.8
Watching R or X rated videos/movies	16	10.7	15	10.1	29	19.5

Appendix 6: Social Support Percentages by Gender

Social Support Percentages by Gender

Support Category	Personal problems			Study problems			Career problems		
	Male (N=57)	Female (N=91)	Total (N=149)	Male (N=57)	Female (N=91)	Total (N=149)	Male (N=57)	Female (N=91)	Total (N=149)
Parents	42.1%	47.3%	45.0%	35.1%	38.5%	36.9%	43.9%	56.0%	51.0%
Counsellors	17.5%	28.6%	24.8%	22.8%	24.2%	24.2%	21.1%	14.3%	17.4%
Sibling/s	29.8%	51.6%	43.0%	28.1%	39.6%	34.9%	33.3%	50.5%	43.6%
Friends, same gender	70.2%	72.5%	71.8%	66.7%	71.4%	69.8%	71.9%	68.1%	69.8%
Friends, other gender	35.1%	22.0%	26.8%	33.3%	27.5%	30.2%	38.6%	28.6%	32.9%
Grandparents/other family	8.8%	11.0%	10.1%	7.0%	3.3%	4.7%	10.5%	9.9%	10.7%
Teacher/Educator	5.3%	4.4%	4.7%	77.2%	67.0%	71.1%	21.1%	19.8%	20.1%
Religious leader	45.6%	28.6%	34.9%	26.3%	3.3%	12.1%	22.8%	5.5%	12.1%
Boss	1.8%	3.3%	2.7%	7.0%	2.2%	4.0%	43.9%	38.5%	40.9%
Doctor	24.6%	25.3%	24.8%	7.0%	4.4%	5.4%	5.3%	2.2%	3.4%
No one	7.0%	14.3%	11.4%	7.0%	6.6%	6.7%	3.5%	6.6%	5.4%
Other	10.5%	15.4%	13.4%	7.0%	12.1%	10.1%	21.1%	18.7%	19.5%

Support Category	Health problems			Trust to be there		
	Male (N=57)	Female (N=91)	Total (N=149)	Male (N=57)	Female (N=91)	Total (N=149)
Parents	43.9%	45.1%	44.3%	75.4%	65.9%	69.8%
Counsellors	12.3%	12.1%	12.1%	1.8%	3.3%	2.7%
Sibling/s	19.3%	33.0%	27.5%	52.6%	59.3%	56.4%
Friends, same gender	38.6%	39.6%	38.9%	45.6%	41.8%	43.6%
Friends, other gender	21.1%	8.8%	13.4%	19.3%	8.8%	12.8%
Grandparents/other family	10.5%	8.8%	9.4%	19.3%	16.5%	17.4%
Teacher/Educator	10.5%	2.2%	5.4%	3.5%	2.2%	2.7%
Religious leader	22.8%	6.6%	12.8%	33.3%	14.3%	21.5%
Boss	5.3%	1.1%	2.7%	0.0%	1.1%	0.7%
Doctor	89.5%	86.8%	87.9%	7.0%	4.4%	5.4%
No one	0.0%	4.4%	2.7%	5.3%	14.3%	10.7%
Other	8.8%	12.1%	10.7%	17.5%	15.4%	16.1%