The religious characteristics that influence risk behaviour in Christian youth.

RACHEL OLUWAYEMISI ODUNTAN

210553329

Supervisor

Professor Graham Lindegger

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ABSTRACT

The purpose of this study was to investigate if the belief and practice of Christianity is associated with alcohol use/abuse behaviour as well as risky sexual behaviour among Christian youth. The religious characteristics of focus were social support from church leaders/elders, social support from church peers, God control beliefs and reported religiosity. The sample selected were Christian youth between the ages of 18 and 21 years from churches in Durban, KwaZulu-Natal.

The need for this research was motivated by the limited amount of research on religion and risk behaviour among young people as well as what religious factors influence these said risk behaviours. Furthermore, available research on religion and risk behaviour have mostly focused on indirect religious influences such as church attendance and involvement in church activities. However, God control beliefs argued to be a more direct religious influence have been less studied. This study sheds light on these direct and indirect characteristics of religion as factors that influence risk behaviour.

A questionnaire comprising demographic information, a measure of reported religiosity, the AGLOC-A scale, the SexGLOC-A scale, the Social Support from Church Peers scale and the Social Support from Church Leaders/elders scale was used to collect the data.

The results found God control beliefs to be the most predictive of alcohol use/abuse behaviour. With risky sexual behaviour, significant negative relationships were found with social support from church peers, social support from church leaders/elders and God control beliefs, however the most significant predictor of risky sexual behaviour was social support from church leaders/elders.

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CHAPTER 1

INTRODUCTION

1.1 Risk behaviour and youth

Excessive consumption of alcohol and unsafe sexual practices are some of the more common risk behaviours that young people engage in. Numerous studies have looked at the causes of such risk behaviour in youth, such as the reasons for early onset of sexual engagement of adolescents as well as the risks thereof (e.g. Paul, Fitzjohn, Eberhart-Phillips, Herbison & Dickson, 2000). Many studies have cited societal pressures, such as: peer pressures as a causal factor to these, but not as much research has been carried out on the factors influencing those adolescents who remain abstinent in the face of these pressures (Regnerus & Elder, 2003). Studying factors that aid some youth to refrain from risk behaviour is important in helping to minimize the engagement in risk behaviour among youth.

1.2 Alcohol use among youth

Over the past 40 years, there has been an increase in how much alcohol young people consume in South Africa, and even in the frequency of its consumption, age of commencement has also decreased over the years such that younger adolescents have started drinking as early as primary school levels (Flisher, Ziervogel, Chalton, Leger & Robertson, 1993). Also, most alcoholics report having started drinking between ages 15 and 19 (Cockroft, 2009).

Flisher et al. (1993) carried out an extensive research on 7340 Cape Peninsula high school students in Cape Town, looking into their alcohol as well as sexual risk taking behaviour together with other risk behaviours. The study showed that of the 7340 participants, 53.2% reported a history of alcohol use; results showed males more often than females, will abuse alcohol and that the incidence increases with age. This is a major cause for concern as the majority of the participants were below the legal age for alcohol consumption in South Africa.

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1.3 Sexual risk among youth

With the increase in teenage pregnancies and high rates of sexually transmitted infections worldwide, it can be noted that sexual behaviour of youth (Creatsas as cited in Timmermans, van Lier & Koot, 2008) should be a cause for concern. In the study of sexual behaviour among Cape Peninsula high school students in Cape Town, South Africa, Flisher et al. (1993) found that 17.4% of the participants reported that they have had heterosexual vaginal intercourse and that some commenced having sex as early as primary school levels.

However, research has shown that in the face of pressures to engage in risk behaviour, some youth are able to refrain from such behaviour (Regnerus & Elder, 2003). Thus, it is important that factors that do promote abstinence from risky behaviours be researched, promoted and encouraged in order that safe behaviours are established in communities and society at large.

1.4 The relationship between alcohol use and sexual risk behaviours

Alcohol use and risky sexual behaviour pose a major concern to society as these behaviours tend to affect health and family life amongst other aspects of life (Sinha, Cnaan & Gelles, 2007). There is evidence that the use and abuse of alcohol is associated with the engagement in risky sexual behaviour. Taylor and Leonard (as cited in Scott-Sheldon, Carey & Carey, 2010) posit that alcoholic intoxication usually leads to restricted ability to process thoughts such that in a sexual situation, cues to protect one's self (e.g. condom use) will be by- passed by the cues for pleasure. In this way, less emphasis is given to preventing risks such as unwanted pregnancy or sexually transmitted infections (McDonald, McDonald, Zanna & Fong as cited in Scott-Sheldon et al., 2010). McDonald et al. (2000) in their study of alcohol use and intentions to use condoms, found that when intoxicated, sexually aroused participants intended to have more unprotected sex than when they were not intoxicated. Evidence suggests that there is indeed a positive correlation between alcohol use and abuse and risky sexual behaviour (Scott-Sheldon et al., 2010).

When a positive correlation between alcohol use and risky sexual behaviour is found, the association can be linked to factors such as the environment that may facilitate these behaviours (Scott-Sheldon et al., 2010). For such reasons, several studies continue to look into alcohol use together with risky sexual behaviour, especially among adolescents and

young adults; not only focusing on the individual's behaviour but also on the individual's context.

Two common risk behaviours (alcohol use and risky sexual behaviour) that tend to co-exist have been chosen as the focus in this study. The purpose is not to investigate a causal relationship, but to explore these two risk behaviours in young Christian youth. This study therefore, sets out to investigate the association between religious characteristics and alcohol use/abuse and risky sexual behaviour in a sample of South African Christian youth. The protective role of religion in preventing engagement in risky behaviour has long been noted especially among adolescents (McNamara, Burns, Johnson & McCorkle, 2010). Religiosity being the involvement and belief in religion is receiving increased attention in scientific research as a variable that has an impact on behaviour. Involvement in religion is believed to be a crucial part of many adolescent lives (McNamara et al., 2010), and for this reason, might influence their behaviour. This means that religious belief may be a facilitator around risk behaviour.

With Christianity chosen as the religion of focus in this study, the research question is whether there is an association between religious belief of Christianity and risk behaviour among youth. The pathways by which religion may influence risk behaviours include: the fear of condemnation by the congregation or social support systems from the church, the norms that one's peers live by, familial/parental influence or upbringing or through the belief that God directly controls decision making. Recent studies have shown that an individual's belief in God directly influencing their decision making can be helpful in controlling alcohol use and abuse (Goggins, Murray, Malcarne, Brown & Wallston, 2007a) and possibly other risk behaviours.

1.5 Aim of the study

There are two aims to the study:

This study first aims to investigate if religious belief of Christianity, is associated with behaviour around alcohol use/abuse as well as risky sexual behaviour with regard to the following religious characteristics i.e. social support in the church from church leaders and/or elders, social support from church peers, the belief that God participates in one's decision making i.e. "God control beliefs" and lastly one's level of reported religiosity.

The study also aims to test which of the religious characteristics is the most predictive of alcohol use/abuse and risky sexual behaviour.

1.6 Significance of the study

Findings in this study will contribute to existing literature on whether and how religious belief is associated with chosen risky behaviour. Also, it will provide information on how to promote positive youth social development through focusing on behaviour change within Christian communities. Further, it will highlight the importance of understanding the perception of adolescents regarding factors that influence their decision making. This study aims to add to the knowledge as well as clarify the role of religious involvement in risky behaviour.

1.7 Structure of the dissertation

Chapter 1 above provides an introduction to the study. **Chapter 2** gives an outline of various approaches to understanding religiosity as an influence on choices around risk behaviour. Also included is a review of the role of religious belief in moderating risk behaviour. **Chapter 3** describes the research design as well as the methodology for data collection and analysis. **Chapter 4** gives the results of the study. **Chapter 5** comprises a discussion of the results obtained and lastly, **Chapter 6** contains conclusions, limitations and recommendations for future studies.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will present literature about the influence of religion on risky behaviour with particular focus on alcohol use and abuse as well as sexual risk behaviour among Christian youth. Social support from church leadership and church members, social support from the church youth peer group (in the form of perceived peer norms), as well as support from God (i.e. God control beliefs) as being influential on Christian youth behaviour will also be explored in detail.

2.2 Definition of concepts

The terms and phrases that are regularly used in this study are defined and discussed as follows:

2.2.1 *Risk behaviour*

A 'risk' refers to exposure to a circumstance where danger or unwanted consequences may ensue. According to Fischoff (as cited in Gruber, Massachusetts Institute of Technology (MIT) & National Bureau of Economic Research (NBER), 2004) 'risk taking' is thus "any action having at least one uncertain outcome" (p. 6). When individuals engage in risk taking behaviour, it involves actions that place them at risk for unwanted consequences. For example, smoking can put one at risk for cancer, unhealthy eating can put one at risk for diabetes etc. Thus, in this study, the 'risk behaviour' of focus will be alcohol use/abuse as well as risky sexual behaviour. These are high risk behaviour which start at a young age (Flisher et al., 1993) and progression and prolonging of such behaviours tend to put people at high risk for unwanted consequences such as alcoholism, unwanted pregnancy, the risk of contracting HIV, sexually transmitted infections and even premature death.

2.2.2 *Religion*

Religion is a multidimensional construct and can be difficult to define. Many definitions of the term tend to be too narrow or are too vague and ambiguous. It is easier to provide a definition of religion as a list of characteristics, than to try and explain it as one entity. Thus, religion can be said to act as a source of social support, social control, individual and group identity, values and, perhaps most importantly as it relates to this study, a key influence on health related behaviours (Wallace, 2008). For example, religion may encourage or prescribe healthy living, good rest and exercise etc. on the other hand, proscriptions of unhealthy behaviour may include prohibitions against the use of alcohol, tobacco or harmful drugs and immoderate activities such as promiscuous sexual activity. Further, a religion that believes in the sanctity of the body may lead its members to avoid certain activities that have a high probability to cause negative health outcomes (Wallace, 2008). However, for the purpose of this study, it will be used to mean the belief and practice of a faith.

2.2.3 *Reported Religiosity*

Religiosity is multidimensional construct and can mean "importance of religion, belief in God, frequency of religious service attendance, frequency of prayer, and/or frequency of meditation" (Cotton et al., 2006, p.472). By this definition, the focus is on how a person is religious. However, contextualising religiosity according to this study, 'religiosity' will deal with and be measured as a response to how religious a person perceives himself or herself to be. Reported religiosity is one of the independent variables of study and when the term is used, the focus will be on Christian youth and their reported level of their belief and practice of Christianity, according to the following: "fanatic", "devout", "moderately religious" and "not religious".

2.2.4 *Youth*

The term youth in this study will be used interchangeable with 'young people or persons' and 'adolescents'. In this study the youth to be studied will be Christian males and females between 18 and 21 years of age.

2.2.5 Religious Characteristics (Christianity)

According to the direction of this study, religious characteristics refer to attributes that are typical of a religion such as having a set of beliefs, practices, membership, fellowship and forming part of a congregation, of particular interest to this study are social support from church leadership, social support from the church youth peer group, support from God (i.e. God control beliefs) (Goggin et al., 2007a) as well as reported religiosity as influential on Christian youth behaviour.

2.3 Risk behaviour and youth in South Africa

Substance use is an issue on the rise in South Africa and is a major health concern. The adolescent stage provides a time of increased independence and a time that risk taking is increased as well as increased morbidity and mortality. The use of substances can negatively impact the life of an adolescent through contributing to addictions and behavioural patterns which may negatively impact an adolescents' health and life opportunities (Brook, Rubenstone, Zhang, Morojele & Brook, 2011). Alcohol use is estimated to be responsible for almost 4% of global mortality (Rehm, Mathers, Popova, Thavorncharoroensap & Teeawattananon, 2009), and 7% of all deaths in South Africa, e.g., due to cancers, cardiovascular diseases, injuries, and violence (Schneider et al., 2007).

Alcohol is also involved in about 44% of both traffic injuries and homicides in South Africa (Schneider et al., 2007). Among adolescents, alcohol use is particularly associated with myriad social problems, such as accidents and injury, interpersonal violence, illegal drug use, school failure, and sexual risk behaviour, as well as later alcohol use disorders (Duncan, Alpert, Duncan, & Hops, 1997; Schneider et al. as cited in Brook et al., 2011). Furthermore, adolescents may turn to alcohol in an attempt to temporarily dull the experience of their stressors (Brook et al., 2011).

Sexual risk behaviour is also a cause for concern, despite the rigorous efforts of educational prevention campaigns to influence behaviour of young people in South Africa, there is evidence that there are still high rates of HIV infections (Eaton et al., 2003). While HIV/AIDS is not the focus of this study, sexual behaviour which is, and remains a critical part of an individual's risk of contracting HIV. HIV/AIDS is also a prominent health concern and one of the leading causes of many deaths in South Africa and therefore, one can usually

not discuss one without touching on the other. The spread of HIV/AIDS is largely through high risk behavioural patterns such as unsafe sexual practices. Some factors that contribute to continued unsafe sexual practices that place young people at sexual risk are looked into below as well as factors that have been shown to be protective against risk behaviour in South Africa.

There is evidence that about 50% of young people in South Africa are sexually active by age 16 and probably 80% by the age of 20. Sexual debut is usually sooner for males than it is for females; it was also found that sexually active young people tend to use condoms irregularly, if used at all. There is also evidence that young South Africans put themselves at risk for HIV infections through unprotected sexual encounters starting in their teenage years (Eaton et al., 2003). The National Strategic Plan (NSP) for HIV, STIs and TB released in 2013 provides more recent statistics regarding sexual behaviour of youth. It was reported that the overall incidence of HIV infection rates remain unacceptably high, young people today face a 50% risk of contracting HIV during their lifetimes and that sexual behaviour of South African youths continues to be scrutinised, with the aim of reducing their risk of HIV infection. According to the NSP (2013) the average age of first sexual encounter for females is 17.4 years with 45% reporting condom use at last sex and for males, it is at 16.7 years of age, with 58% of those reporting condom use at last sex. A comparison between statistics from 2003 (e.g. Eaton et al., 2003), and these numbers as presented by the NSP (2013), it appears that risk behaviour of young people remains a cause for concern.

Eaton et al. (2003) discusses reasons why South African youth do not protect themselves and what factors perpetuate unsafe sexual behaviour. Eaton et al. (2003) stated that a perception of low personal risk was one of these factors, when someone believes that they are at low risk, this reduces the incentive for them to take necessary precautions to protect themselves. Unfortunately, many South Africans under-estimate the impact of their risk behaviour for contracting HIV (Eaton et al., 2003). Many misconceptions about sex lead to high sexual behaviour including the idea that fertility can only be proved through the conception of children. Other contributing factors include the belief that young girls need to prove their love by having sex with their partners, thereby placing them under pressure to have sex as well as the belief that condoms are a disadvantage because they "waste sperm" and prevent sexual pleasure (Eaton et al., 2003). These beliefs place young people at greater risk for poor decision-making that leads to unsafe sexual practices.

Furthermore, according to Eaton et al.'s (2003) study, low self-esteem also causes young people to engage in risk behaviour, in that some people tend to rely on others for affirmation, the search for affirmation may lead young people to search for multiple sexual partners and lead them to have multiple sexual encounters. In some cases condoms are seen as offensive to their partners and they may be embarrassed to use them or negotiate their use, the suggestion for condom use could also communicate mistrust in relationships (Eaton et al., 2003). These are further factors that place young people in South Africa at risk for unsafe sexual practices. High levels of poverty in South Africa, also lead to higher levels of adolescent sexual activity, with young women trading sex for economic rewards such as cars, jewellery and even money (Eaton et al., 2003). In other words, young girls will make a living off of the sale of their bodies to older, rich men to make ends meet for themselves and their families.

Normand (2007) provides some insight in the study of resilient attributes of adolescents in a high risk community in South Africa. The study described a high risk community as one where poverty, unemployment, substance use and violence are prevalent. Normand (2007) discussed coping strategies and supportive factors that helped maintain the adolescent's positive lifestyle in the face of a high risk environment. The importance of choosing the right friends was discussed, with the idea that friends can have an influence on them i.e. good friendships were found to be protective against peer pressure.

Adolescents having purpose and a clear vision of their future plans, as well as them realising the importance of education, was reported to be a protective factor for them in maintaining a positive lifestyle. Individual resources such as being able to make friends and being able to turn to said friends in times of need was reported to be helpful for these adolescents. Also, the importance of having positive adult relationships was reported to be helpful for these adolescents, i.e. parents or adult figures serving as good role models to these children (Normand, 2007).

Family resources such as supportive, caring and loving families was a major factor for resilience in the face of risk. Also, the importance of having a home environment where rules and boundaries were set was reported to be effective and supportive for these adolescents in their high risk community. Having parents that were concerned about their children's lifestyle and supportive of their education and had good communication between one another was a protective factor for the adolescents in the study (Normand, 2007). Community resources such as having the knowledge that other people care for them in their environment, served as

a strong social support system for them (Normand, 2007). Most of the adolescents also spoke of the importance of religion, however the authors did not explore this further in their study.

Many studies have shown that the belief and practice of religion influence health related behaviours positively, especially in adults. Fewer studies have been done with adolescents and younger adults. However there is evidence to show that religious characteristics influence younger adults' behaviour as well (Wallace, 2008) (e.g McNamara et al., 2010; Piko & Fitzpatrick (2004), Goggin et al. (2007a) on alcohol use and (Paul et al., 2000) on early sexual engagement reporting characteristics of religion as influential are examples of such studies. The various pathways of religion which have been reported to positively influence risk behaviour among youth are discussed in the following section.

2.4 Pathways by which religion may serves to influence young people's behaviour

Noting the influence of religious belief and practice on risk behaviour, it is important to unpack the specific pathways by which religion might serve to influence choices for positive behaviours or choices against negative behaviour such as the abuse of alcohol and risky sexual behaviour, so as to create comprehensive programs that will have impact and that are useful to people in their respective communities (Fleischer et al., 2006).

Goggin, et al. (2007a) argue that most published studies on religion have looked at religiosity in terms of an individual's religious affiliation and church attendance alone and thus have been unable to tap some specific direct aspects of religiosity that may most likely affect individual's risk behaviour. In an effort to try and understand the pathways by which following a religion might aid in reducing risk behaviour, Smith (2003) developed a coherent interpretation of religion's positive impact on risky behaviour through his paper entitled: Theorizing religious effects among American adolescents.

Nine factors were hypothesized by Smith (2003) as influential and some of these are discussed below

Moral directives
According to Smith (2003) moral directives allow for religious youth to incorporate ideas of what they feel is right or wrong to guide their everyday

choices as well as life choices such that there is a reference point to what is acceptable and what is not. For example, a Christian youth may decide not to drink alcohol as this may mean defiling one's body which is considered the 'temple of God'. Thus, in internalising values about what is correct and/or incorrect may guide choices around risk behaviour.

Role models

Following a religion tends to provide religious youth with adult as well as peer role models, Smith states that members of one's religion may serve as examples of how to live life, examples may also be given of how not to live life through showing examples of those who may have violated the moral order or sinned. Example, may be cited through biblical teachings on the lives of those that were not upright in their living and how this can lead to punishment etc. Also, the relationships a youth member might have with members of his or her religion allows the youth member to place value on these relationships so that he or she will not want to engage in behaviours that may likely jeopardise this valued relationship. Thus, Smith's argument for the idea that religion provides role models is that youth members respect and value these relationships formed as a result of religious involvement and would therefore in this manner not want to damage them. This might lead to the maintenance of good behaviour and attitudes out of respect.

Communication and leadership skills

Practicing a religion gives opportunity for followers to learn certain skills and competencies that help them to be productive members of society or the organisational context of religion e.g. at church. Smith reports that "religious youth are exposed to and have the chance to acquire and practice a series of useful capacities and skills" (p. 23), in so doing, youth are able to be leaders as they conduct activities such as bible studies, youth camps and join various church activities, thus allowing the youth to have and feel a sense of responsibility which may also be useful beyond organisational commitments. Therefore, this may help promote positive behaviour such as responsibility and discipline useful to make or guide choices against negative behaviour etc.

Coping skills

There are certain beliefs and practices that allow religious believers to cope with certain life pressure. For example, praying and believing that a loving and divine power is in control of one's life allows for a feeling of hope that God is listening and gives fortitude even when situations may seem bad (Smith, 2003), in that sense, one is able to count on the belief that there is always help in time of need. Therefore, apart from the support that one's church may provide (i.e. congregational support), comfort from God may come in as an extra way of coping or for some, the most important approach to coping with life's problems. Accordingly, one can also count on the belief that God can assist one in making or taking decisions against engaging in activities that put one at risk.

Social capital

These are social ties that following a particular religion affords, which are being able to mix with individuals across a range of ages. Youth usually spend a great part of their adolescent and teenage lives in school where some of the strongest influence on their lives comes from their peers. In following a religion like Christianity for instance, youth members have more contact with people across all ages through church meetings that are not necessarily structured by age. This is beneficial because youth members are able to mingle with adult members. Youth thus will not only have peer relationships that come with being in school, but are able to meet people across all ages. In essence, "… this creates the possibility for youth to form significant relational network ties that cross age boundaries… generate the potential for relationships… express care for youth… all this helps foster and reinforce positive constructive life choices and behaviour" (p. 25).

Network closure

As with social capital, network closure allows for networks or social ties that are not necessarily part of the immediate family but ties that can still be considered strong and useful. According to Allcott (2007) community size is negatively correlated with pro-social behaviour meaning smaller communities may tend to

display more positive behaviours because people are more connected, people will tend to know each other better. Thus, for example in a church community where sub-groups like youth groups, home cell groups and bible study groups etc. are present, there is an opportunity for closer supervision of youth by older members and relationship between parents. Hence, youth in the church are reinforced in a way that they have increased support not only from their own parents but from parents of their peers as well. Also, parents will tend to support each other which will lead to a stronger influence.

Smith (2003) highlighted that these factors do not function separately but rather as a combination of factors "reinforcing" each other.

2.5 Alcohol use behaviour and religious youth

Studies have tried to understand the justification for the allowance, discouragement and even total disapproval of alcohol consumption in some religions. For example in Christianity, it is understood that some religious groups totally refrain from alcohol use because it is seen as a divine rule to abstain in biblical scripture; some groups, however, do not out rightly disapprove of alcohol but rather discourage it because it is deemed immoral, whilst some are less strict against its use. For some congregations, however, alcohol consumption forms a part of their religious rituals (i.e. Holy Communion) (Michalak, Trocki & Bond, 2007). Strickzke and Butt (as cited in Piko & Fitzpatrick, 2004) found that "among the different motives for not drinking, religious constraints are found to be a key factor for adolescents" (p. 1096). Low levels of alcohol consumption have been found both with religious individuals and groups. Piko and Fitzpatrick (2004) suggest during times of stress and pressure, some youth will tend to turn to alcohol use and abuse, whilst those that are religious may tend to turn to prayer or meditation as a way of coping, to be able maintain a positive behaviour.

The American National Survey (NAS) conducted in the year 2000, looked at factors alongside religiosity that are associated with alcohol consumption. The fear of losing control, alcohol being bad for one's health as well as familial disapproval was a more selected option for participants than saying it was against their religion. This alludes to the idea that although religion does come up as having a significant role against alcohol use and abuse, there has

been evidence for stronger, more immediate or more direct influences against alcohol use and abuse than just the belief and practice of religion, nonetheless these other factors usually exist in religion as well (e.g. the involvement of the family/familial influence/upbringing etc.) (Piko & Fitzpatrick, 2004). In light of this, "Although parents and other family members are typically young people's first and primary source of socialisation into norms and values of the larger society, religion often operates as a key secondary socialization influence that is integral to parents' belief systems and that assists them as they seek to instil their beliefs, values and desired lifestyle patterns into their children" (Wallace, 2008, p. 8). Thus for some, it is difficult to separate religion from family life.

Bachman, Johnston, O'Malley, & Humphrey (as cited in Piko & Fitzpatrick, 2004) with their focus on Christian youth posit that, adolescents that identify with Christian values and beliefs tend to avoid breaking laws such as traffic laws. For example, identifying with Christian values could impact on alcohol use behaviours such as driving under the influence of alcohol as well as underage drinking. A further explanation could be that moral reasoning guided by Christian principle around alcohol use will tend to guide moral behaviour. For example, Chatters (as cited in Piko & Fitzpatrick, 2004) states that low levels of religiosity has been found to be associated with the onset of substance use. Thus, it is important that factors that reduce engagement in risk behaviour such as religiosity be looked into and understood so as to improve existing frameworks designed to limit involvement of youth in risky activity (Piko & Fitzpatick, 2004).

2.6 Sexual behaviour and religious youth

Risky sexual behaviour is one of the more common risk behaviours that young people engage in (Timmermans, van Lier & Koot, 2008) and is a major concern because of the negative consequences that tend to come with it e.g. unplanned and unwanted pregnancies. Whilst there are high levels of young people that engage in risky sexual behaviour, recent studies are emerging that place focus on studying youth that do refrain from such behaviours that place them at risk for unwanted or unplanned consequences. For example, Paul et al. (2000) conducted a study on sexual abstinence at age 21 in New Zealand with focus on the role of religion, using a cohort of 1020 people from age three years and followed them up to age 21 years with regular assessments of personal, family and educational functioning. Examination of their perceptions of an ideal lifestyle, sexual behaviour and religious involvement, showed

that religiosity was an important factor in decisions to delay sexual intercourse past the age of 20 years, especially for males.

In trying to explore the link between the timing of religiosity in relation to sexual decision-making, participants were grouped and studied specifically at two stages: age 11 and 21 years. The groups consisted of (a) those who had persistent religious involvement over time (at 11 and 21 years), (b) these who were involved at either 11 years or at 21 years and (c) those with little or no involvement in religion at either age. Results showed that those who were attached to religion at both 11 and 21 years were four times more likely to be abstinent than those with little or no attachment at either age (Paul et al., 2000). Lack of religious involvement at 11 years is predictive of sexual intercourse before age 16. The findings on religious involvement of the participants at age 11 and 21 years allowed for the comparison, in that only persistent involvement both at 11 and 21 years was associated with sexual abstinence at age 21. This further points to the fact that the teachings of religion as forming part of upbringing may have contributed to their beliefs and ideas around risky behaviour.

Gold et al. (2010) discussed involvement in religion as a way to influence sexual behaviour and contraception use in young people, although highlighted in the study is the fact that some studies on religiosity and risk behaviour tend to find little or no association between being religious and reduced engagement in risky sexual activity. It is not enough to make generalizations about religion as an influence on individual's lives based on church attendance alone as this is an indirect influence. When a positive correlation is found between lowered engagement in sexual risk and frequent church going, it cannot be absolute that one going to church directly leads to lowered involvement in sexual risk activity because it is an indirect influence. Goggin et al. (2007a) posits that there are more direct influences on behaviour such as the belief that God participates in one's decision making process around sexual behaviour.

2.7 Social support from church leaders/elders and risk behaviour

Attending church services has always been a part of the religious practices of Christians. Involvement in church and attendance is voluntary in that people choose to go to church because it forms part of their identity, values and beliefs as Christians (Edgell, 2006). Continuous church attendance allows for personal spiritual fulfilment as well as allowing

members to fellowship (have social contact) with one another which gives rise to fellowship networks that might be considered supportive. For example, Krause (2007, p. 552) posits that "rich informal social networks tend to flourish in religious institutions and these networks may be especially close and supportive… informal social ties that arise in religious institutions serve a number of important functions, including the provision of emotional support and tangible help".

Support from church leaders and church members tend to influences one's life, also it can be influential on risk behaviour. However "social support" is a multidimensional construct and thus needs to be defined for this study. Social support according to Reich, Lounsbury, Zaid-Muhammed & Rapkin (2010, p. 136) can mean "… network size, received support, satisfaction with support, instrumental support and emotional support….". In this study, when the term social support is used, it will be used to mean the belief that one is cared for in a valued relationship and that they have assistance when needed from these valued relationships.

In the church, social support would be provided by the pastors, elders in the church, senior members and youth members etc. These social support structures of the church may serve as role models, may provide emotional support, practical assistance that tends to promote or encourage positive relationships between members of the church (Smith, 2003), therefore allowing people to place value on the relationships formed and thus individuals may not want to engage in behaviour that may likely damage or disappoint these valued relationships (Smith, 2003).

Churches can be a good source of social support to their members in that there are usually good numbers of people in one church, the same people attend the same church as a weekly ritual and one may find that families remain members of the same church for a number of years or even across generations such that relationships have lasted so long that they can generally be considered strong and reliable, even beyond the church setting.

2.8 Social support from church peers and risk behaviour

The role that peers plays in the life of a youth is crucial as research has shown that youth spend more time with peers than any other group (Santrock as cited in Shefer, 2004). In this sense, the norms that one's peer group live by are likely to influence an individual in

encouraging positive behaviour or in influencing the individual to engage in negative behaviours depending on the type of groups that he or she belongs to. In this way, it can be said that perceived peer norms are supportive for the religious youth. In discussing religious influences on youth, peers relationships in the church can be influential and supportive in that the positive behaviour exhibited by fellow church peers are a reference point to what behaviour are deemed desirable (or not) and this follows through not only in the religious community but in society at large. Stark and Finke (as cited in Krause, 2007, p. 523) state that "interaction with fellow believers exerts an important influence on a wide range of religious beliefs… an individual's confidence in religious explanations is strengthened to the extent that others express their confidence in them". For example, youth outreaches to their community, serving in the church as committed members or even helping the needy and the elderly etc. help to reinforce a sense of responsibility as well as influencing an individual positively. Youth may draw on the influence of their peer group in making decisions even as an alternative to what the family upbringing may have taught or instilled in the life of the youth because of their positioning within the peer group.

Ample research supports the influence of peer norms on adolescent and young adults' behaviour (Kelly et al., 1994; Magura et al., 1989; McKusick, Coates, Morin, Pollack, & Hoff, 1990; Slap, Plotkin, Khalid, Michelman, & Forke, 1991; Stevens, 1994; Stiffman, Dore, Cunningham, & Earls as cited in Sharts-Hopko & Bonas, 1998), such that high risk areas such as drug and alcohol abuse, teenage pregnancy are mostly areas where peer pressure will play a major role (Santrock as cited in Shefer, 2004). The studies by Epstein, Botvin, Diaz, and Schinke (1995), Resnick *et al*. (1997), Shafer and Boyer (1991), Towber-Man and McDonald (as cited in Sharts-Hopko & Bonas, 1998) found that the greatest predictor of sexual activity among students included alcohol and drug use and perceived peer norms, and the greatest predictor of students' use of alcohol is their perception of peer norms about drinking.

Furthermore, many studies have shown the effectiveness of peer education especially in reducing risk-taking behaviour in students, especially for sexual decision making and alcohol use (Ellickson, Bell, & Harrison, 1993; Guthrie et al., 1996; Klepp, Tell, & Vellar, 1993; Nokes, 1996; Remafedi, 1994; Richie & Getty, 1994; Wechsler, DeJong; Shapiro & Lavin, 1992; Wilhelmsen, Laberg, & Klepp, 1994 as cited in Sharts-Hopko, & Bonas, 1998). This can be explained by seeing peers as effective role models to their audience, as they may understand each other better. Thus, peers may be in a better position to provide knowledge

and advice in a way that is dependable (Fisher, Fisher, Williams, & Malloy as cited in Sharts-Hopko & Bonas, 1998) and thus could influence each other's decisions against risk behaviour.

2.9 God control beliefs and risk behaviour

In an attempt to develop a scale that directly measures religion's influence on control cognitions for predicting risky behaviour, Goggin et al. (2007a) argued that an important aspect of religiosity as it helps in the decision to use or not use alcohol is the belief that God directly participates in the decision process. God-control-beliefs is defined as believing that God is actively helping one to make decisions that deter drinking related behaviour.

Goggin et al. (2007a) believe that the best way to measure and understand these control cognitions or control beliefs would be to measure them directly against specific behavioural domains. This means for example, measuring God control beliefs directly in relation to one's drinking behaviour (e.g. does God participate in my decision not to drink?) (Goggin et al., 2007a) or sexual behaviour (e.g. does God participates in my decision to delay sexual contact?) (Goggin, Malcarne, Murray, Metcalf & Wallston, 2007b). Goggin et al. (2007a) further argued that even though there has been an increase in studies on religion and alcohol, as well as sexual behaviour (Goggin et al., 2007b), most of them have looked at religion in relation to indirect influences on alcohol, such as, church attendance and participation in church activities etc. What makes this religious participation indirect is that for example, church attendance may be influenced by many other factors such as parental influence, but direct influences such as the individual's actual personal decision to drink or not has not been clarified. Goggin et al. (2007a) believe that it is possible that "characteristics like religious participation affects drinking behaviour by influencing alcohol-related cognitions (e.g. alcohol related God control-beliefs) and that these beliefs directly influence behaviour and choices related to alcohol use" (Goggin et al., 2007a, p. 113). The authors found that although religious participation may influence risk behaviour, it is an indirect influence. Their studies describe the development of measures i.e AGLOC-A and SexGLOC-A of God control beliefs over alcohol use (Goggin et al., 2007a) and sexual behaviour (Goggin et al., 2007b), providing initial reliability and validity data.

2.10 Conclusion

The chapter has presented an overview of previous research in the area of religion and risk behaviour. Through this review, the rationale for the study has been argued. Alcohol use/abuse behaviour and risky sexual behaviour is a significant problem. The review of literature has explored the important role of religion in moderating these behaviours. The possible influential ability of social support from church leaders/elders, social support from church peers, God control beliefs, as well as one's level of reported religiosity have been discussed, with arguments for some possibly being more influential than others.

Hence, firstly the study aims to study the association between these religious characteristics and alcohol use/abuse behaviour as well as risky sexual behaviour. Secondly the study aims to investigate, which of these characteristics, is the most predictive of alcohol use/abuse as well as risky sexual behaviour.

CHAPTER 3

METHODOLOGY

The methodology used in this study is outlined in this chapter. A quantitative methodology was used in this study. The aims, objectives, research questions and hypotheses of the study as well as the methodology and procedures in terms of sampling, data collection, measuring instruments and data analyses are also presented.

3.1 QUANTITATIVE RESEARCH DESIGN

Quantitative correlational methods were used to identify predictors of risk behaviour. According to Terre Blanche, Durrheim & Painter (2006), quantitative methods make use of set categories that are usually measured by standardised measures and after analysis of the data, it can be put into generalisable information. This is useful to this study in that it will allow the researcher to describe and discuss the distribution of data.

3.1.1 Research questions

- Is there a significant relationship between social support from church leaders and elders and alcohol use/abuse as well as risky sexual behaviour in Christian youth?
- Is there a significant relationship between social support from peers and alcohol use/abuse as well as risky sexual behaviour?
- Is there a significant relationship between God control beliefs and alcohol use/abuse as well as risky sexual behaviour?
- Is there a significant relationship between reported religiosity and involvement in risky alcohol use/abuse and risky sexual behaviour?

3.1.2 Tested hypotheses:

i. There is a significant negative relationship between social support from church leaders and elders and alcohol use/abuse as well as risky sexual behaviour.

ii. There is a significant negative relationship between social support from church peers and alcohol use/abuse as well as risky sexual behaviour.

iii. There is a significant negative relationship between reported religiosity and alcohol use/abuse as well as risky sexual behaviour.

iv. There is a significant negative relationship between God control beliefs and alcohol use/abuse as well as risky sexual behaviour.

3.1.3 Study population and sampling method

The sample were selected through a convenience method, Terre Blanche et al. (2006) states that convenience sampling involves selection on the basis of availability. The churches in the areas of Westville, New Germany, Pinetown, Clermont and Glenwood were approached by the researcher. This was because these areas are within the vicinity of the researcher's residence, thus making the data collection process less difficult. The sensitive nature of the questionnaire, meant the researcher was aware that participation in the study might prove difficult. To curtail this, the aim was to approach as many churches as possible in the aforementioned areas. The churches that eventually consented to participation are listed as follows: Methodist church (Westville), Baptist church (Westville), Pentecostal church (Pinetown and Glenwood), Jehovah's Witness Kingdom hall (New Germany), Roman Catholic church (Westville), Anglican church (Clermont), Presbyterian church (Westville) as well as those that were non-denominational (Westville), even though religious.

Christian males and females between the ages of 18 and 21 years met the age criteria for participation. This age selection was based on the idea that 18 to 21 year olds are young people who would be able to consent to the study without parental influence.

3.1.4 Scales of measurement

3.1.4.1 Structure of the questionnaire and reliability/validity

A questionnaire consisting of four sections was used to collect data (Appendix 1a). The questionnaire was used in this study to measure if there is an association between the religious characteristics and risk behaviour. **SECTION A** asked about demographic information as well as a measure of reported religiosity, **SECTION B** asked about personal behaviour with regards to alcohol and sexual behaviour, **SECTION C** asked about alcohol and sexual God control beliefs and **SECTION D** asked about social support from church leaders and social support from church peers with regard to choices around alcohol use and sexual behaviour. These subsections are explained in detail as follows:

Section A of the questionnaire asked for the participant's age, gender, church denomination, and also asked that participants rate themselves according to how religious they thought themselves to be. This section summarised the sample and allowed the participant to choose their level of reported religiosity according to the following: Fanatic, devout, moderately religious and non-religious. Reported religiosity was measured as categorical variable.

Section B was constructed by the researcher and consisted of a questionnaire which measured the personal behaviour of the respondents. This section measured respondent's individual behaviour with regards to alcohol use/abuse and risky sexual behaviour. The questionnaire was divided into two sub-sections, measuring two different aspects (or dimensions) of personal behaviour, namely, alcohol use/abuse behaviour and sexual behaviour. The first subsection measured alcohol use/abuse behaviour and consisted of six questions and participants were asked to respond on a Likert type scale. Question one "how often do you drink alcohol?" had the options "Never", "daily", "weekly", "once in two weeks" and "once in a while" as options. If participants answered "never" to question one, then questions two to six were inapplicable to them and they were asked to skip to the next subsection on sexual behaviour. Question two "on average how many drinks do you take a time" had the following choices "one", "two", "three" and "four or more". Question four "at what aged did you start drinking alcohol?" the options were "under 11", "11-14", "15-18" and "over 18". Questions four to six gave participants the same options ranging from "never" "sometimes" "often" to "always". The reliability of the alcohol use/abuse (DV) construct was calculated using Cronbach alpha to have an alpha of 0.91, showing good internal consistency.

The second subsection which measured sexual behaviour consisted of eight questions and again, participants were to respond on a Likert type scale. Question 1 "have you ever had sex?" gave the options "Never", "daily", "weekly", "once in two weeks" and "once in a while" as options. If participants answered "never" to question one, then questions two to six were inapplicable to them and they were asked to skip to section C. Question 2 "at what age was your first sexual experience?" gave the options "under 11", "11-14", "15-18" and "over 18". Question three "How many sexual partners do you have now?" the options were "one", "two", "three" and "more than three". Questions four to eight gave participants the same options which were "never", "sometimes", "often" to "always". The reliability of the sexual behaviour was also calculated using Cronbach alpha and alpha was measured to be 0.86, and thus showed good internal consistency.

Section C measured God control beliefs of the respondents with regards to their alcohol behaviour and sexual behaviour. The section consists of a scale called Alcohol-related God Locus of Control scale for adolescents (AGLOC-A) developed by Goggin et al. (2007a) that measured the "God control belief" construct. In other words, the scale measured the respondents' level of belief in God as participating in their decisions, this is the independent variable. The scale was divided into two subscales measuring two aspects (or dimensions) of God control beliefs; the first subscale measured the "alcohol use/abuse" aspect, that is, the extent to which participants believed that God participates in their decisions around alcohol use/abuse. For all the 12- items, participants were asked to respond on a 4-point Likert type scale, ranging from "strongly disagree" to "strongly agree". The reliability of this subscale was calculated using Cronbach alpha and alpha was 0.90.

Overall, the AGLOC-A has been reported to have demonstrated good psychometric properties showing high internal consistency. With regards to validity, the AGLOC-A has been shown to be consistent with other works on adolescents and in general, independent of control beliefs. This finding supports the contention that God control beliefs are not merely the opposite of internal control beliefs, but rather are orthogonal to these beliefs (Goggin et al., 2007a). Also, AGLOC-A scores were moderately related to scores on a measure of religiosity called the Religious Background and Behaviour questionnaire (RBB) which is a 13-item, self-report questionnaire which assesses religious behaviour according to two domains: God consciousness (GC) and Formal practices (FP). Scores on all items are combined to produce a total score that demonstrated good internal consistency with a

Cronbach alpha coefficient of 0.82 and a strong test-retest reliability ($r = 0.90$). AGLOC-A scores were moderately related to scores on the RBB such that youth who endorsed higher levels of God control beliefs also reported elevated religious involvement. Not surprisingly, youth who believe in God and also participate in formal religious practice are more likely to think that God is exerting control over their behaviour. Importantly, concerns that religious youth may simply be responding in a socially desirable fashion were not supported.

The second scale in section C of the questionnaire is called the Sexual risk behaviour-related God Locus of Control Scale for Adolescents (SexGLOC-A) also developed by Goggin et al. (2007b) that measured the God control belief construct which is the independent variable. In other words, the scale measured the level of the respondent's belief in God as participating in their decisions around sexual behaviour. For all the 12 items, participants were asked to respond a Likert type scale, ranging from "strongly agree" to "strongly disagree". The reliability of the scale was measured using Cronbach alpha and alpha was 0.93, showing high internal consistency. Also, as with the AGLOC-A, the sexGLOC-A scores were moderately related to the scores on the RBB. Youth that endorsed higher levels of God control beliefs also scored higher on the RBB, indicating that elevated levels of God consciousness and formal practices are associated with greater belief in God's control over one's sexual behaviour.

Section D of the questionnaire was created by the researcher by adapting the wording of items from the AGLOC-A and SexGLOC-A to perceived social support from church leaders/elders and church peers. This section asked questions that measured the "Social support" construct which is the independent variable. The scale measured the level of perceived social support by the respondents from both church leaders/elders (Part 1) and church peers (Part 2) with regards to their alcohol use/abuse behaviour and sexual behaviour. These will be discussed as Part 1 and Part 2 respectively:

Part 1: *Social support from church leaders/elders and alcohol use/abuse and sexual behaviour*
The two scales under part 1 which were "social support from church leaders/elders and alcohol use/abuse behaviour" and "social support from church leaders/elders and sexual behaviour" and contained 6 items each; participants were asked to respond on a 4 point Likert type scale, ranging from "strongly disagree" to "strongly agree". The reliability of the scales

was calculated using Cronbach alpha. For "social support from church leaders/elders and alcohol use/abuse behaviour" alpha was 0.85. For "social support from church leaders/elders and sexual behaviour", alpha was .90. Thus, both these scales showed good internal consistency.

Part 2: Social support from church peers and alcohol use/abuse and sexual behaviour

The two scales under part 2 which were "social support from church peers and alcohol use/abuse behaviour" and "social support from church peers and risky sexual behaviour" and contained 6 items each; participants were asked to respond on a 4 point Likert type scale ranging from "strongly agree" to "strongly disagree". The reliability of the scales were calculated using Cronbach alpha, and alpha was calculated to be 0.89 and 0.92 respectively, thus showing high internal consistency. This section measured social support from church leaders and church peers with regards to alcohol use/abuse behaviour and risky sexual behaviour.

3.1.5 Procedure for data collection

For every questionnaire, an empty envelope as well as a questionnaire was provided for the purpose of confidentiality of the collected information. The purpose of the empty envelope was to place the completed questionnaire in, once completed. Participants were advised to ensure confidentiality of the information provided by the participants. The questionnaires were self-administered. Instructions on how to fill in the questionnaires were provided on the questionnaire. Names of the participants were not needed on the questionnaire to ensure confidentiality. Participants were informed that participation was totally voluntary and that they were free to opt out of the study at any time.

The pastors and youth pastors who assisted with the distribution of the questionnaires were also given a bigger envelope into which the completed questionnaires of the participants' smaller sealed envelopes were to be placed. One pastor did not want his youth to participate in the survey because of the sensitive nature of the subjects in the questionnaire. On confirmation that the questionnaires were completed, the large envelopes were collected by the researcher and research assistants. Both the completed and uncompleted questionnaires were collected. One hundred and ten (110) questionnaires were distributed but only 75 were

returned. Four were rejected due to incomplete data, therefore 71 was the final number of participants in this study.

The main goal of the questionnaire items was to obtain information about the religious characteristics that influence Christian youth behaviour.

3.1.6 Analysis of data

<u>i. Descriptive analysis</u>

Quantitative analytical methods were used to calculate correlations and also to identify the predictors of disengagement in risk behaviour. Before analytical work was done, descriptive statistical analysis was done to describe or give a summary of the quantitative data. This entailed measures of central tendency and variability, and frequency and percentage distributions. A frequency table is a summary table in which the data is arranged into conveniently established and numerically ordered class groupings or categories (Berenson & Levine, 1996, p. 62). Alternatively, a frequency table or frequency distribution is an arrangement of data by classes together with the corresponding class frequencies. The advantage of the frequency table is that one obtains a clearer "overall" picture of the data by summarising discrete or continuous data into class intervals, each with corresponding frequencies.

<u>ii. Inferential analysis</u>

Correlation analysis was used to investigate relationships or associations between variables. Care would be taken not to conclude that if variables are associated or have a significant correlation coefficient, it means that one affects or causes the other to change. Correlation analysis, in most cases, is done before regression analysis to inform what should and what should not be included in the regression model. For example, if there is no significant correlation or relationship between the dependent variable and a particular variable, that variable should not be included in the model.

In this study, Pearson correlation coefficient was used to measure correlation. The problem with Pearson correlation coefficient is that it measures only linear relationships. Care

therefore should be taken to investigate that, if a variable is not linearly related with the dependent variable, it does not have any non-linear relationship with the dependent variable as well. Nonlinear relationships were not investigated in this study.

<u>iii. Regression analysis</u>

Regression analysis was used to find out whether and how social support in the church from church leaders/elders, social support from religious peers, God control beliefs and reported religiosity are associated with alcohol use/abuse and risky sexual behaviour in Christian youth. The dependent variables were alcohol use/abuse, and risky sexual behaviour in Christian youth, and the independent variables were: Social support in the church from church leaders/elders, social support from religious peers, and God control beliefs and reported religiosity. The analysis was also to inform which is the most predictive of alcohol use/abuse and risky sexual behaviour.

3.1.7 Social desirability

Religion, sexual behaviour and alcohol use behaviour, are usually topics that are cautiously approached, and can become uncomfortable for people to talk about. This may have had a number of effects. This as well as the self-report nature of the questionnaire may have also meant that participants could have under reported their behaviour, therefore mean rates of these behaviours may be poor estimates of what they really are. Social desirability is the tendency for respondents to answer questions in a manner that will be viewed favourably by others; this meant that social desirability could have been a major confounding variable in this study.

To minimise this effect, participants were urged to answer all questions and to be as truthful as possible, as well as not to leave any question unanswered. They were also urged not to put any identifying information, except for their age and gender and religious affiliation, which could hardly be traced back to any of them. Participants were also given an envelope to place their answered questionnaires into and seal before submitting. In these ways the participants could feel that they could not be personally identified with any answers they gave and the information could not be linked to them.

3.1.8 Ethical approval and consideration

Approval to conduct the study was obtained from the research and ethics committee, Faculty of Humanities, Development and Social Sciences (HDSS), University of KwaZulu-Natal (Ethical clearance approval number HSS/0443/011M).

Permission to distribute the questionnaire was obtained from the senior pastor of each church. Participants were fairly selected as stated in the sampling method section. Each participant was informed of the procedure through an information sheet written in an accessible and non-academic language in order to facilitate understanding. Consent was obtained from each participating member by allowing them to put their signature on the consent form if they agreed to participate. Confidentiality of the data was maintained and none of the participants were identified in anyway, in the results as they did not need to include any identifying information apart from their age, gender and religious affiliation. Each subject was informed that participation was totally voluntary and were free to withdraw from the study if they wished to do so. All questionnaires and record sheets were stored away safely in a secured locker for the duration of the study and will be shredded after the research. The electronic versions of the data are password protected in the computer and will be deleted after the study.

Contact details of the researcher and the supervisor were provided in the event of any issues or questions arising due to the content of the study.

CHAPTER 4

RESULTS

This chapter presents the research results, presenting the findings made in relation to each of the research aims and hypotheses for the quantitative aspect of the study. Firstly descriptive data relating to the demographic information will be presented. This chapter will then be organised by the four major hypotheses of consideration in the research.

4.1 Descriptive statistical analysis

Analysis of the data revealed that in the sample of 71 church youth in the various churches around Durban, all respondents ages ranged from 18 to 21 years. The mean age of the participants was 19.56 years old. Of the 71 participants, 28 were male and 43 were female. The number (N) of participants from the different denominations were represented as follows: Methodist (19), Baptist (10), Pentecostal (14), Jehovah's Witness (3), Roman Catholic (11), Anglican (8), Presbyterian (1) and non-denominational (even though religious) (5). In terms of reported level of religiosity, 12 reported being 'fanatical', 22 stated they were 'devout', 26 indicated that they were 'moderately religious' and lastly, 11 reported being 'not religious'. Tables 1 to 4 depict this more clearly.

4.1.1 Age (in years)

According to Table 1, respondents were between 18 (26.8%) and 21 (29.6%) years of age.

Table 1: Age distributions of the respondents, number (N) and percentages.

Age (years)	(N)	Percent
18.00	19	26.8
19.00	13	18.3
20.00	18	25.4
21.00	21	29.6
Total	71	100.0

4.1.2. Gender

The majority of respondents were females (60.6%). See Table 2.

Table 2: Gender distributions of the respondents, number (N) and percentages.

Gender	(N)	Percent
Male	28	39.4
Female	43	60.6
Total	71	100

4.1.3. Church denomination

Table 3 shows the distribution of church denomination. It is indicated that a large number of respondents were from the Methodist church (26.8%) and Pentecostal church (19.7%). Only one respondent came from the Presbyterian Church (1.4%). Figure 3 illustrates this more clearly.

Table 3: Church denomination distribution, number (N) and percentages

Church denominations	(N)	Percent
Methodist	19	26.8
Baptist	10	14.1
Non-denominational	5	7.0
Pentecostal	14	19.7
Jehovah's witness	3	4.2
Roman catholic	11	15.5
Anglican	8	11.3
Presbyterian	1	1.4
Total	71	100

4.1.4 Reported religiosity

Table 4 indicates that the majority of the respondents were moderately religious (36.6%) and devoted (31.0%). About 16 % of the respondents were not religious (even though they were church members).

Table 4: Reported religiosity distributions, frequencies and percentages

Reported religiosity	Frequency	Percent
Fanatical	12	16.9
Devout	22	31.0
Moderately religious	26	36.6
Not Religious	11	15.5
Total	71	100.0

Table 5: Descriptive statistics for the dependent and independent variables

Variable	No of obs.	Minimum	Maximum	Mean	Standard deviation
Alcohol use/abuse behaviour	71	1.00	3.00	1.4108	0.55711
Risky sexual behaviour	71	1.00	4.00	1.4401	0.58047
God control belief and Alcohol use/abuse	71	1.00	4.00	2.9085	0.79622
God control belief and risky sexual behaviour	71	1.00	4.00	2.6092	0.92695
Social support from church leaders/elders and alcohol use/abuse behaviour	71	1.00	4.00	2.9859	0.73665
Social support from church peers and alcohol use/abuse behaviour	71	1.00	4.00	2.6502	0.87340
Social support from church leaders/elders and risky sexual behaviour	71	1.00	4.00	3.0235	0.83680
Social support from church peers and risky sexual behaviour	71	1.00	4.00	2.8143	0.88762

As shown in Table 5, the scores of all the variables (except alcohol use/abuse) ranged from 1 to 4. The table shows that the overall mean values of alcohol use/abuse (1.4108) and risky sexual behaviour (1.4401) are less than 2, which imply that, on average, the levels of alcohol use/abuse and risky sexual behaviour of the respondents was low.

For the remaining variables which were 'God control beliefs and alcohol use/abuse behaviour', 'God control beliefs and risky sexual behaviour', 'Social support from church leaders/elders and alcohol use/abuse behaviour', 'social support from church leaders/elders and risky sexual behaviour', 'social support from church peers and alcohol use/abuse behaviour' and lastly 'social support from peers and risky sexual behaviour'. Overall mean scores are all greater than 2, which implies that, on average, the respondents agreed with the statements that God participates in their decisions around alcohol use/abuse and their

decisions around risky sexual behaviour around. Also, that they received good social support from church leaders/elders and church peers regarding their alcohol use/abuse behaviour as well as risky sexual behaviour.

4.2 Inferential statistical analysis

4.2.1 Correlations

In this study, the questions to be answered were:

i. Is there a significant relationship between social support from church leaders and elders and alcohol use/abuse as well as risky sexual behaviour?
ii. Is there a significant relationship between social support from church peers and alcohol use/abuse as well as risky sexual behaviour?
iii. Is there a significant relationship between God control beliefs and alcohol use/abuse as well as around risky sexual behaviour?
iv. Is there a significant relationship between one's level of reported religiosity and alcohol use/abuse as well as risky behaviour?

Tested hypotheses were:

  i.   There is a significant negative relationship between support from church leaders/elders and alcohol use/abuse as well as risky sexual behaviour.
 ii.   There is a significant negative relationship between social support from church peers and alcohol use/abuse as well as risky sexual behaviour.
iii.   There is a significant negative relationship between God control beliefs and alcohol use/abuse and risky sexual behaviour.
 iv.   There is a significant negative relationship between one's level of reported religiosity and alcohol use/abuse as well as around risky sexual behaviour.

Table 6 shows the correlations among the variables.

Table 6: Correlation matrix for religious characteristics and alcohol use/abuse and risky sexual behaviour.

	Alcohol use/abuse	Risky sexual behaviour	God control belief and Alcohol use and abuse	Belief in God and risky sexual behaviour	Social support from church leaders/elders and alcohol use/abuse	Social support from church leaders and risky sexual behaviour
Alcohol use/abuse	1					
Risky sexual behaviour		1				
God control beliefs and Alcohol use/abuse	-.354** (.002)		1			
God control beliefs and risky sexual behaviour		-.250* (.035)		1		
Social support from church leaders/elders and alcohol use/abuse	-.222 (.063)		.287 (.015)	.	1	
Social support from church peers and alcohol use/abuse	-.014 (.908)		.133 (.268)		.481** (.000)	
Social support from church leaders/elders and risky sexual behaviour		-.379** (.001)		.251 (.234)		1
Social support from church peers and sexual behaviour		-.264* (.027)		.209 (.082)		.816** (.000)

Note: The figures in the brackets are the significance levels or probability values associated with the correlation coefficients.

4.3.1 Interpretive data for correlations

This section presents findings related to the correlations between variables as in Table 6. It will do so, by finding out whether the following hypotheses are true or false.

4.3.1.1 Correlation between social support from church leaders/elders and alcohol use/abuse and risky sexual behaviour

The correlation between social support from church leaders/elders and alcohol use/abuse was computed with a Pearson product-moment correlation coefficient. The results in Table 6 indicate the relationship between social support from church leaders/elders and alcohol use and abuse is not significant, $r = -0.222$ (p-value = 0.063). The hypothesis is false and hence rejected.

Also, the correlation between social support from church leaders/elders and risky sexual behaviour was computed with a Pearson product-moment correlation coefficient. There was a negative correlation between these two variables, $r = -0.379$ (p-value = 0.001) suggesting that an increase in social support from church leaders/elders was associated with decreases in risky sexual behaviour. There was a significant negative relationship hence the hypothesis is true and is accepted.

4.3.1.2 Correlation between social support from church peers and alcohol use/abuse and risky sexual behaviour

A Pearson product-moment correlation was used to compute the relationship between social support from church peers and alcohol use/abuse. The results in Table 6 indicate that the relationship between social support from church peers and alcohol use/abuse is not significant, $r = -0.014$ (p-value = 0.908). The hypothesis is false and hence rejected.

Also, for social support from church peers and risky sexual behaviour, a Pearson product-moment was computed. There was a significant negative correlation between the two variables, $r = -0.264$ (p-value = 0.027) suggesting that an increase in social support from peers was associated with decreases in risky sexual behaviour. The hypothesis is true and hence accepted.

4.3.1.3 Correlation between God control beliefs and alcohol use/abuse and risky sexual behaviour

A Pearson product-moment correlation coefficient was computed to assess the relationship between God control beliefs and alcohol use/abuse. There was a significant negative correlation between the two variables, $r = - 0.354$ (p-value = 0.002) suggesting that an increase in God control beliefs were associated with decreases in alcohol use/abuse behaviour. The hypothesis is true and hence accepted.

Also for God control beliefs and risky sexual behaviour, a Pearson product-moment correlation showed a significant negative correlation between the two variables, $r = - 0.250$, (p-value = 0.035). Again, increases in God control beliefs were associated with decreases in risky sexual behaviour. The hypothesis is true and hence accepted.

4.3.1.4 Reported religiosity and alcohol use/abuse and risky sexual behaviour

Reported religiosity and alcohol use and abuse, as well as reported religiosity and risky sexual behaviour were variables transformed from ratio to ordinal variables and thus, the Chi-square test was used to investigate them. All values of alcohol use/abuse less or equal to 1 were changed to "low" level of alcohol use and abuse and all values greater than 1 were converted to "high" level of alcohol use/abuse. Similarly, all values of risky sexual behaviour less or equal to 1 were changed to "low" level of risky sexual behaviour and all values greater than 1 were converted to "high" level of risky sexual behaviour.

The results for reported religiosity were as follows:

Table 7: Alcohol use/abuse, and reported religiosity contingency table

Reported level of religiosity	Alcohol use and abuse		Total
	1	2	
1	9	3	12
2	7	15	22
3	13	13	26
4	6	5	11
Total	35	36	71

The Pearson Chi-square value of 5.987 (*p*- value = 0.112) was not significant at the 5 percent level of significance. Therefore, the null hypothesis was true and not rejected. This means that there was no relationship between reported religiosity and the use/abuse of alcohol.

Table 8: Risky sexual behaviour and reported religiosity contingency table

Reported level of religiosity	Risky Sexual behaviour		Total
	1	2	
1	6	6	12
2	16	6	22
3	10	16	26
4	8	3	11
Total	40	31	71

The Pearson Chi-square value of 7.177 (*p*-value = 0.066) was not significant at the 5 percent level of significance. Therefore, the null hypothesis was true and hence, not rejected. Thus, conclusions are that there is no significant relationship between risky sexual behaviour and reported religiosity.

4.4 Graphical representations of correlation analyses

Before a multiple regression model was fitted for alcohol use/abuse and risky sexual behaviour as dependent variables, and social support from church peers, social support from church leaders/elders, God control beliefs and reported religiosity as independent variables, graphical representations of the potential relationships between the dependent variables and independent variables were drawn. These are the results:

Figure 1 shows the relationship between social support from church peers and alcohol use/abuse
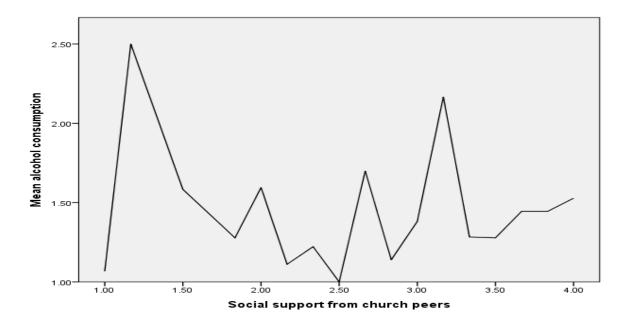

Figure 1: Relationship between alcohol use/abuse and social support from church

peer

The figure indicates that alcohol use/abuse is not related to social support from church peers.

Figure 2 shows the relationship between risky sexual behaviour and social support from church peers
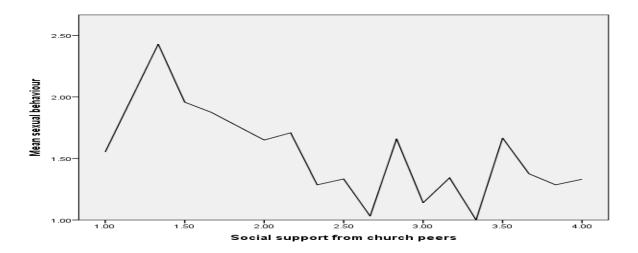

Figure 2: Relationship between risky sexual behaviour and social support from church peers

The figure indicates that there is a declining trend of risky sexual behaviour with social support form church peers. This implies that, on average, social support from church peers might be influencing risky sexual behaviour positively.

Figure 3 shows the relationship between alcohol use/abuse and social support from church leaders.
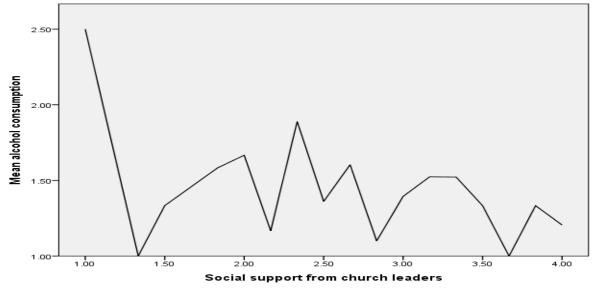

Figure 3: Relationship between alcohol use/abuse and social support from church leaders

Figure 3 indicates a slight declining trend of alcohol use/abuse with social support from church leaders. This implies that, on average, social support from church leaders might be influencing alcohol use/abuse positively.

Figure 4 shows the relationship between risky sexual behaviour and social support from church leaders.
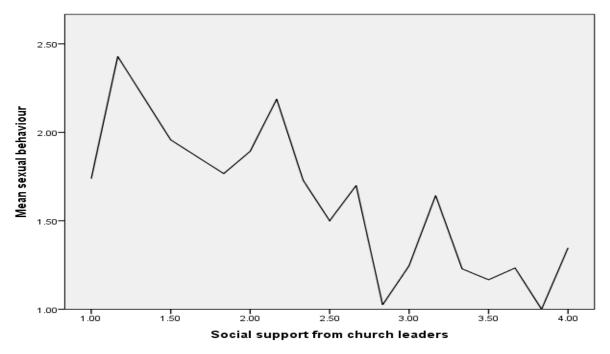

Figure 4: Relationship between risky sexual behaviour and social support from church leaders.

The figure shows a clear declining trend of risky sexual behaviour with social support from church leaders. This implies that, on average, social support from church leaders might be influencing sexual behaviour positively.

Figure 5 shows the relationship between alcohol use/abuse and God control beliefs.
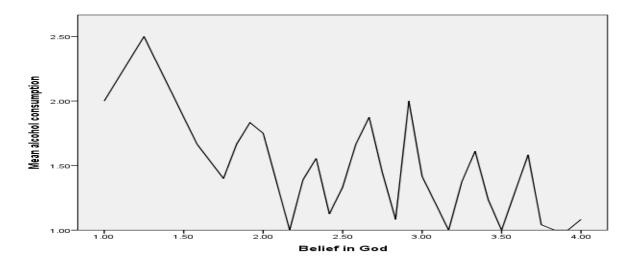

Figure 5: Relationship between alcohol use/abuse and God control beliefs.

Figure 5 shows a clear declining trend of alcohol use/abuse and God control beliefs. This might imply that on average, God control beliefs influences alcohol consumption positively.

Figure 6 shows the relationship between risky sexual behaviour and God control beliefs
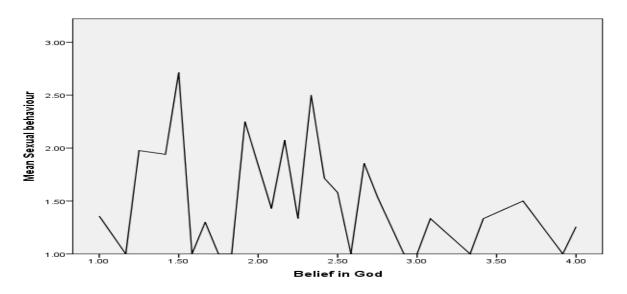

Figure 6: Relationship between risky sexual behaviour and God control beliefs.

According to the figure 6, there is no trend and so no relationship between sexual behaviour and God control beliefs.

Figure 7 shows the relationship between alcohol use/abuse and reported religiosity. The figure indicates that there is no relationship between alcohol use/abuse and reported religiosity.
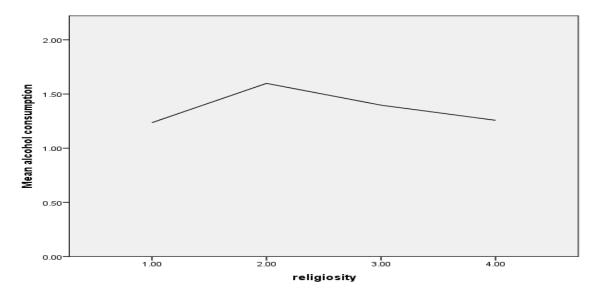

Figure 7: Relationship between alcohol use/abuse and reported religiosity

Figure 8 shows the relationship between risky sexual behaviour and reported religiosity. The figure indicates that there is no relationship between risky sexual behaviour and reported religiosity.

Figure 8: Relationship between risky sexual behaviour and reported religiosity

4.5 The regression model of alcohol use/abuse

The ANOVA table indicates that the regression model of alcohol use/abuse, which includes religiosity, social support from church peers, social support from church leaders/elders and God control beliefs as independent variables, is statistically significant. Reported religiosity was used as a categorical variable (with dummy variables) and the other variables as continuous variables.

Table 9: ANOVA summary table

Model	Sum of Squares	Df	Mean Square	F	p-value
Regression	4.761	6	0.794	2.993	0.012
Residual	16.965	64	0.265		
Total	21.726	70			

Table 10: Coefficients table

Model	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error	Beta		
Constant	2.157	0.348		6.196	0.000
Fanatic	0.046	0.217	0.031	0.213	0.832
Devout	0.373	0.190	0.312	1.961	0.054
Moderately Religious	0.119	0.186	0.104	0.641	0.524
God control beliefs	- 0.228	0.081	- 0.326	-2.809	0.007
Social support from church leaders	- 0.138	0.099	- 0.182	-1.394	0.168
Social support from church peers	0.061	0.081	0.096	0.751	0.455

Multiple regression analysis was used to test if social support from church peers, social support from church leaders/elders, God control beliefs and reported religiosity significantly predicted participant's alcohol use/abuse behaviour and risky sexual behaviour. Adjusted R-square was .146. This means that the model explains 14.6 percent of the variation of alcohol use/abuse.

The results indicate that religiosity (Devout) (p-value = 0.054) and God control beliefs (p-value = 0.007) are significant factors or predictors of alcohol use/abuse at the 5 and 1 percent levels of significance respectively. According to the standardised coefficients, God control beliefs is the most important predictor of alcohol consumption. Social support from church leaders (p-value = 0.168) and social support from church peers (p-value = 0.455) do not influence alcohol use/abuse according to the data used in this study. The results mean that if a non-religious person becomes a devoted religious person, his/her alcohol use/abuse behaviour will change by 0.373 units – holding other factors constant. They also mean that if

God control beliefs increases by one unit, alcohol use/abuse on average will decrease by 0.228 units – holding other factors constant.

With the stepwise regression procedure, the following results were obtained:

Table 11: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.354	0.125	0.112	0.52486
2	0.436	0.190	0.166	0.50878

Table 12: ANOVA summary table

Model		Sum of Squares	df	Mean Square	F	p-value
1	Regression	2.718	1	2.718	9.866	0.002
	Residual	19.008	69	0.275		
	Total	21.726	70			
2	Regression	4.124	2	2.062	7.965	0.001
	Residual	17.603	68	0.259		
	Total	21.726	70			

Table 13: Coefficients table

Model		Unstandardized Coefficients		Standardized Coefficients	T	p-value
		B	Std. Error	Beta		
1	(Constant)	2.131	0.237		8.972	0.000
	God control beliefs	- 0.247	0.079	- 0.354	-3.141	0.002
2	(Constant)	2.075	0.231		8.964	0.000
	God control beliefs	- 0.261	0.077	- 0.373	-3.405	0.001
	Devout	0.305	0.131	0.255	2.330	0.023

Table 14 : Excluded variables table

	Model	Beta In	T	*p*-value	Partial Correlation	Collinearity Statistics
						Tolerance
1	Fanatic	- 0.114	-1.005	0.319	- 0.121	0.993
	Devoted	0.255	2.330	0.023	0.272	0.994
	Moderately religious	- 0.066	- 0.576	0.567	- 0.070	0.983
	Social support from church leaders	- 0.131	-1.119	0.267	- 0.134	0.918
	Social support from church peers	0.034	0.295	0.769	0.036	0.982
2	Fanatic	- 0.038	- 0.327	0.744	- 0.040	0.897
	Moderately religious	0.086	0.670	0.505	0.082	0.732
	Social support from church leaders	- 0.139	-1.221	0.226	- 0.148	0.917
	Social support from church peers	0.007	0.065	0.948	0.008	0.972

Adjusted R-square was 0.166. This means that the model explains 16.6 percent of the variation of alcohol consumption.

Again, according to model number 2, the results indicate that God control beliefs (*p*-value = 0.001) and reported religiosity (Devout) (*p*-value = 0.023) are the only significant predictors of alcohol consumption at the 1 and 5 percent levels of significance respectively. On average, if the score on God control beliefs increases by one unit, alcohol use/abuse will decrease by 0.261 units – holding other factors constant. Also, if someone who is not religious became a devoted religious person, alcohol use/abuse will decrease by 0.305 units –

holding other factors constant. According to the standardised coefficients, again God control beliefs are the most important predictor of alcohol use/abuse. The results indicate once again that social support from church leaders (p-value = 0.168) and social support from church peers (p-value = 0.455) do not predict alcohol use/abuse significantly according to this study.

The final regression model is:

Alcohol use/abuse = 2.075 - 0.261 God control belief + 0.305 Devout + Random error

4.5. Regression model of risky sexual behaviour

When the regression model of risky sexual behaviour was fitted, the following results were obtained.

Table 15: ANOVA summary table

Model	Sum of Squares	Df	Mean Square	F	p-value
Regression	3.499	6	0.583	1.939	0.088
Residual	18.947	63	0.301		
Total	22.446	69			

Table 16: Coefficients table

Model	Unstandardized Coefficients		Standardized Coefficients	T	*p*-value
	B	Std. Error	Beta		
(Constant)	2.205	0.351		6.276	0.000
Fanatic	0.111	0.237	0.074	0.470	0.640
Devoted	- 0.048	0.210	- 0.039	- 0.227	0.821
Moderately religious	0.127	0.207	0.108	0.614	0.541
God control beliefs	- 0.090	0.076	- 0.145	-1.187	0.239
Social support leader/elders	- 0.220	0.146	- 0.310	-1.504	0.138
Social support church peer	0.027	0.131	0.041	0.203	0.840

Though the ANOVA table indicates that the regression is statistically significant, none of the independent variables is statistically significant. This might be due to the collinearity problem as shown by the correlation table in table 6. The collinearity problem happens when a researcher includes in the model, independent variables that are highly inter-correlated. For example, social support from church leaders/elders and social support from church peers were highly correlated, and so, they might be causing the collinearity problem. What this problem does is to inflate the standard error of the test statistics in the model, which in turn causes the test statistics to be significant.

So, the stepwise regression was used to try and sort out this problem by excluding some highly correlated independent variables from the model. The following were obtained:

Table 17: ANOVA summary table

Model	Sum of Squares	Df	Mean Square	F	*p*-value
Regression	2.551	1	2.551	8.720	0.004
Residual	19.895	68	0.293		
Total	22.446	69			

The model is now highly significant but with one of the significant independent variables, that is social support from church leaders/elders. All the other independent variables were excluded.

Table 18: Coefficients table

Model	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error	Beta		
(Constant)	2.153	0.255		8.448	0.000
Social support from church leaders	- 0.238	0.081	- 0.337	-2.953	0.004

Table 19: Excluded variables table

Model	Beta In	T	p-value	Partial Correlation	Collinearity Statistics
					Tolerance
Fanatic	0.024	0.205	0.838	0.025	1.000
Devoted	- 0.129	-1.111	0.271	- 0.135	0.968
Moderately religious	0.132	1.132	0.262	0.137	0.950
God control beliefs	- 0.156	-1.339	0.185	- 0.161	0.955
Social support from church peers	0.033	0.166	0.869	0.020	0.334

The Adjusted R-square was 0.101, meaning that the model explains about 10 percent of the variation in risky sexual behaviour.

The regression model is:

Risky sexual behaviour = 2.153 - 0.238 Social support from church leaders + Random error

The implication of these results is that, on average, if the social support from church leaders/elders increases by one unit, the risky sexual behaviour will decrease by 0.238 units – holding other factors constant.

In conclusion, God control beliefs is the most important predictor of alcohol consumption, whereas, social support from church leaders is, in the case of sexual behaviour.

CHAPTER 5

DISCUSSION OF RESULTS

This chapter discusses the results provided in chapter four. The findings will be discussed within the context of previous research within this field. This chapter will also revisit the aims and rationale of this research. To this effect, the findings of this research will be discussed in a way that both explains and attempts to understand the phenomena under study; also provides a platform for future research and development initiatives in this field. This chapter also highlights limitations of the study and recommendations for future research.

5.1 Social support from church peers and risk behaviour

Hypothesis 1 stated that there is a significant relationship between social support from church peers and alcohol use/abuse behaviour and secondly that there is a significant relationship between social support from church peers and risky sexual behaviour in Christian youth.

The results of this study showed that there was no relationship between social support from church peers and the use/abuse of alcohol. However, it was assumed that Christian youth who perceived their friends were supportive, would likely draw on this influence in displaying positive behavioural outcomes, considering the amount of time youth spend together. Social support from church peers was statistically insignificant in whether the Christian youth would engage in alcohol use/abuse behaviour or not.

Although, there was no significant relationship confirmed in this study, many studies have found the influence of peers to be a significant moderator of behaviour. For example, Sanchez et al. (2011) found that young people who had weekly involvement in religious youth groups had a circle of friends that were religious and who shared similar ideas on their religion. In essence, the supportive peer relationship afforded to youth as a result of the belief and practice of a religion was a decisive factor in how youth make decisions around alcohol use behaviour (Sanchez et al., 2011).

The insignificant association in the case of this study could be due to maturity in experiencing religious faith. Maturity in the sense that, the mean age of participants in this study which was 19.56 years. It is not hard to imagine that for some people at this age, they are mature enough to directly experience religious faith, that is, to understand it or make sense of it without needing to be encouraged or rely on indirect influences such as by peers' opinions. The results are also not surprising when one considers that the mean age in the AGLOC-A scale for which the "social support from peers scale" 15 years of age. By this reasoning, questions like "my peers participate in my decision not to drink" may not necessarily be their first line of thought in making decisions around alcohol use. It could be that the measure could not adequately capture this especially when one considers this age factor. More research in this area that focuses on qualitative responses of young people, may give a richer insight into this phenomenon under study.

With regards to social support from peers and alcohol risky behaviour, the findings of this study show that there is a significant negative relationship between social support and church peers and risky sexual behaviour. Therefore, part two of the hypothesis was confirmed; this means that youth who reported higher levels of social support from church peers were likely to have lower levels of risky sexual behaviour. The idea is that religious influence is positive and helps youth to develop friendships among like-minded peers to help one another abide by conventional values of that system (Muller & Ellison as cited in Regnerus, 2003). At the outset of this research, it was hypothesized that the youth risk behaviour with regards to risky sexual behaviour and alcohol use/abuse would likely be influenced by the social support from peers in their church. The findings in this study have shown that there was no influence on alcohol use/abuse behaviour, however, with regard to sexual behaviour, there was a significant relationship.

5.2 Social support from church leaders/elders and risk behaviour

Hypothesis 2 stated that there is a significant relationship between social support from church leaders/elders and alcohol use/abuse behaviour and also that there is a significant relationship between social support from church leaders/elders and risky sexual behaviour. The findings indicated that there is no significant relationship between social support from church leaders and alcohol use /abuse. The hypothesis was not confirmed. The idea was that youth that reported higher levels of social support from church leaders/elders would likely

have lowers levels of engagement in alcohol use/abuse as well as risky sexual behaviour. However, the hypotheses was confirmed for risky sexual behaviour. For many young people in the church, their leadership serve as role models to them in how they live their own personal lives and through what they teach (Smith, 2003). Messages that teach abstinence and fidelity for example, are common in some religious services, even though there might be variations in how much this is done in different sermons (Jenkins as cited in Trinitapoli, 2009). Trinitapoli (2009) posits that religious leaders are highly esteemed and are among the most influential in communities and frequently have contacts with church members. In light of this, they are thus influential in conveying messages and doctrines that can shape the way youth perceive what is good and what is unacceptable, hence these may include messages that influence alcohol use/abuse behaviour and risky sexual behaviour that youth may likely adhere to.

When one considers the discrepancy in findings regarding the impact of social support from church peers and social support from church leaders and their insignificance on alcohol use/abuse behaviour, but on risky sexual behaviour, it can be argued that one behaviour may be considered more acceptable/damaging behaviour than the other. That is, risky sexual behaviour is more damaging or alcohol use behaviour being more acceptable. By way of explanation when it comes to alcohol use/abuse, Sanchez et al. (2011) posits that for many religious youth, the lack of a clear position on the use of alcohol in Christianity make it easier for the youth to get information and/or be influenced by other sources other than religion as a source of information, such as the media. Also, the legal age for alcohol consumption in South Africa being 18 years old (bearing in mind the mean age of participants in study was 19.56 years), this may mean that for some Christian youth by the age of 18, whether one's immediate church peers are consuming alcohol or not, public and/or popular opinion on the consumption of alcohol is that it is acceptable. Sanchez et al. (2011) argued that the motivation for the use of substances has a psychosocial context more than it does a religious one, especially when there is a lack of consensus on the tolerance of alcohol consumption. Some of the more popular religious teachings and ideas around alcohol that state for instance, "drink but do not get drunk", may further make room for more allowance or acceptability of drinking behaviour, than it would for a more biblically clear idea that states sexual activity before marriage is considered as a sin. Thus it may be that reasons for consumption of alcohol or not, are not likely to be significantly impacted by the perception of church peers and/or church leaders/elders on it.

5.3 God control beliefs and risk behaviours

Hypothesis 3 stated that there is a significant relationship between God control beliefs and alcohol use/abuse behaviour and secondly that there is a significant relationship between risky sexual behaviour in Christian youth.

As hypothesized, the findings with regard to God control beliefs and alcohol use/abuse as well as risky sexual behaviour showed that there is a significant negative relationship, the hypotheses are thus confirmed. The idea was that God control beliefs would likely be inversely related to alcohol use/abuse behaviour and risky sexual behaviour with stronger levels of God control beliefs indicating less alcohol use/abuse behaviour and lower levels of risky sexual behaviour. In this study, God control beliefs were used to mean collaboration with God in taking decisions around risky behaviour. The idea was that an individual may feel empowered to make adaptive decisions around alcohol use/abuse behaviour as well as risky sexual behaviour when they perceived something greater than themselves was involved (Goggin et al., 2007a). Little attention has been given to the investigation of young people and the idea that God participates in decision making and studies have called for God control to be directly assessed specific to youth alcohol behaviour and sexual behaviour (Goggin et al, 2007a) e.g. "does God participate in your decision not to drink?". Findings from this study, have confirmed the significant relationship between God control beliefs and these two behaviours of study.

5.4 Reported religiosity

Hypothesis 4 stated that there would be a significant relationship between one's reported level of religiosity and alcohol use/abuse behaviour as well as risky sexual behaviour.

Findings in this study show that there was no relationship between one's level of reported religiosity and alcohol use/abuse behaviour as well as risky sexual behaviour. Although no relationship was found here, what was expected to be found was that the more participants believed themselves to be religious, the less likely their alcohol use/abuse behaviour and risky sexual behaviour. Studies have found that youth who regard religion as very important to them in the sense that they participate in religious activities and have good church attendance etc, may be more likely to understand that certain behaviours such as the

use/abuse of alcohol would mean the distinction between an individual who is devout and someone who is less devout (Regnerus et al., 2003).

Also with regards to risky sexual behaviour, there was no relationship between one's level of reported religiosity and risky sexual behaviour, although it was expected that this would be the case. However, Gold et al. (2010) reported that many previous studies have also found little or no association between one's level or reported religiosity and risky sexual behaviour. The authors went on further to state that where one's level of perceived religiosity has been found to have a relationship with decisions around sexual behaviour, the direction of its effect is not one that is clear, such that some studies finding higher levels of perceived religiosity resulted in more risky behaviour behaviours such as less frequent use of condoms.

Taking a closer look at how religiosity is defined and measured, this could be due in part by how religiosity was measured in this study and has often been measured. Some researchers have mostly focused on extrinsic religiosity (such as attendance of church etc.) whereas intrinsic religiosity (individual's personal spiritual beliefs and personal relationship with God etc.) is seldom the focus as a more direct influence. Here, direct is taken to mean religion is more consciously experienced as a result of the process of maturity (Sanchez et al., 2011) and thus religious experience is unlikely to be fully influenced by external factors such as the opinions of parents or peers. It is believed that there needs to be a focus on tools that directly measure the relationship between religious attributes and decisions around sexual behaviour (Gold et al., 2010) and especially more on intrinsic religiosity that is usually understudied as influential on risk behaviours

To support their suggestion, God control beliefs as one of the variable of measure in this study, is an example of intrinsic religiosity, in that its focus is on an individual's personal belief that God participates in their decision making. This study measured God control beliefs in relation to alcohol use/abuse behaviour and sexual behaviour. As was hypothesized, when the relationship was tested for both alcohol use and sexual behaviour, there was a very strong relationship between God control beliefs and alcohol use/abuse behaviour and risky sexual behaviour that was not found with either social support from church leaders/elders or church peers or reported religiosity.

5.5 Significant predictors of alcohol use/abuse and risky sexual behaviour

This study also set out to test how the predictive variables of study, impacted alcohol use/abuse and risky sexual behaviour. Based on the findings, God control beliefs are the most significant predictor of alcohol use/abuse. Kang and Romo (2010) suggest that personal spirituality mediated the relationship between factors like church attendance and adolescent outcomes. Their idea was that attending church, having church members that were supportive, was not necessarily what caused positive adolescent outcomes, but rather that church attendance and positive support made allowance for such outcomes. It is believed that church attendance allows a place for the growth of personal spirituality which in turn is more internalised than public practice of religion, and as a result has a stronger influence on young people's decisions. Thus, it is not surprising that God control beliefs came out as the most significant predictor of alcohol use/abuse.

For risky sexual behaviour, it was found that social support from church leaders/elders was most significant predictor. Although it is biblically clear that sex before marriage is sinful, this study did not only focus on abstinence before marriage, it also focused on issues of contraception which is not clearly defined in the bible. As a result, youth interpretation on this may be based on Christian interpretations, sometimes from those who are more spiritually marture (e.g. pastors, elders etc), or those who are married that serve as examples to young people.

Chapter 6

CONCLUSIONS, LIMITATIONS, THEORETICAL AND PRACTICAL IMPLICATIONS

This study set out to explore Christian youth and risk behaviour through focusing on religious characteristics and their association with alcohol use/abuse and risky sexual behaviour. The study, also set out to test which of these: social support from church leaders/elders, social support from church peer, God control beliefs and reported religiosity is the most significant predictor of the dependent variables. With regards to alcohol use/abuse, only one significant relationship was found, which was with God control beliefs. God control beliefs were consequently, also most predictive of alcohol use/abuse behaviour.

For risky sexual behaviour, significant relationships were found with social support from church peers, social support from church leaders/elders and God control beliefs. However, social support from church leaders/elders was found to be the most significant predictor of risky sexual behaviour.

6.1 Suggestions for future research

It is important that scales that adequately measure religious concepts are developed. This need has been shown to be important for instance, in how religious belief and practice is measured. Religious belief and practice is commonly measured by asking questions around church attendance for example. However, there is a need for measures that focus on personal spirituality as they tend to be better representations of religious influence. It has been argued that factors like church attendance are not directly influential but merely enable the development of personal spirituality, and thus a move towards the exploration and understanding of more direct influences will be beneficial for literature on religion. This study made use of a measure of personal spirituality, which was God control beliefs, it was found to be the most predictive of alcohol use/abuse behaviour.

Also, studying religion and risk behaviour qualitatively together with quantitative methods will provide richer and more descriptive research, for better clarity on the subject.

6.2 Limitations of the study

The main limitation of this study is that the scales (SexGLOC-A and AGLOC-A) used were originally normed on individuals between the ages of 13 and 19 years. However, the ages of participants in this present study ranged from 18 to 21 years and the mean was 19.56 years. Thus, the results in this study could have been more generalisable if the participant's in this study also fell within the age group of the originally normed group.

Another limitation was the impact of social desirability. The sensitive nature of the study may have meant that some participants may not have given a true reflections especially in reporting their personal behaviour. Furthermore, the similarity between scales was also a limitation in that some participants may have marked similar answers with the idea that different sections of the questionnaire were measuring the same things, even though they were not. The impact is thus that the study may not be giving a clear picture of what was being measured. It has been argued that the difficulty in studying religion is due in part to the lack of adequate measures that can measure the multidimensional construct. For this study, this meant using the wording of SexGLOC and AGLOC-A in formulating items for the other measured constructs. (*see Appendix A*)

6.3 Theoretical and practical implications

In light of the aim of this study, it has been found that one cannot simply place the focus of understanding religious influence on factors like church attendance alone, but rather for a move towards understanding religion to be how such factors mediate an individual's life or behavioural choices. For instance, the very belief in God, rather than support from church members or belonging to church peer groups was found to be most predictive of alcohol use/abuse behaviour in this study. Some people make use of religion to find solace, security or even group identity, but for others, it involves personal spirituality that involves an individual's belief in God that leads to transformation in one's way of life.

Religious organisations tend to exist everywhere and have a good effect on the lives of young people and thus deserves special attention in scientific research. Religious organisations should encourage the development of personal spirituality by encouraging religious activities that tend to lead the way for it. Many transformations occur in the adolescent to early adulthood years, the implication of personal spirituality for social interventions is that it

assists in promoting the idea that young people should take care of themselves with regards to behaviours such as alcohol use/abuse behaviour and sexual behaviour, albeit through the belief that God assists in this regard. This path is directly linked to the creation of certain lifestyles in young people, which are positive throughout life.

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QUESTIONAIRE ON CHRISTIAN RELIGION AND CHOICES AROUND RISK BEHAVIOUR

Dear Participants,

Thank you for agreeing to participate in this study. The aim of this study is to explore whether and how Christian religious belief and practice help people to protect themselves from risks to their health.

Please do not write your name anywhere on the questionnaire, as this is a confidential and anonymous survey. In this way the answers you give will be kept private.

Answer the questions based on what you <u>really do</u> or how you really feel. Completing the questionnaire is voluntary; if you are not comfortable in answering any question, please, leave it blank. Following are statements with which you may agree or disagree.

The questions about your background will be used only to describe the types of people completing this questionnaire. You will not be identified in any way based on the information you provide. Thank you for your participation in this study.

There are four sections in the questionnaire, please complete all sections. If you have any query/ies, please, feel free to contact me or my supervisor (Please, see details below).

Rachel Oduntan (Clinical psychology student)

Email: oduntanrachel@gmail.com

Phone: 0764372612

Prof Graham Lindegger (PhD) Research Supervisor

Email: Lindegger@ukzn.ac.za

Phone: 033 260 5335

I (you, the participant) voluntarily agree to participate in this study

_____   _____

Signature   Date

SECTION A: DEMOGRAPHIC INFORMATION

(Please tick the appropriate block or fill in the correct information)

Age (in years) [   ] [   ] Gender: M **[   ]** F **[   ]**

Church denomination: …………………..........................

Please, mark X for the question below to describe your degree of religiosity.

How religious do you think you are? Fanatic [   ] Devout [   ] moderately religious [   ] Not religious [   ]

SECTION B: PERSONAL BEHAVIOUR

(Please tick the appropriate block or fill in the correct information)

Alcohol consumption

1. How often do you drink alcohol? Never [   ] daily [   ] weekly [   ] once in a while [   ]

2. On average how many drinks do you take at a time?   Zero [   ] one [   ] two [   ] three or more [   ]

3. At what age (years) did you start drinking alcohol? Never [   ] under 11 [   ] 11-14 [   ] $\geq$15 [ ]

4. Do you ever feel that you drink too much? Never [   ] Sometimes [   ] Often [   ] Always [   ]

5. How often do you get drunk after drinking? Never [   ] Sometimes [   ] Often [   ] Always [   ]

6. Has anyone ever suggested you drink too much? Never? [   ] Sometime [   ] Often [   ] Always [   ]

Sexual activity

NOTE: If you answer **never** or **none** in Question **1** to **4**, then Question **5** to **8** would be inapplicable to you, please cross [X] **not applicable** for each question (no.5 to 8) and move on to SECTION C.

1. Have you ever had sex? Never [   ] daily [   ] weekly [   ] once in a while [   ]
2. At what age (years) was your first sexual experience? Never [   ] under 11 [   ] 11-14 [   ] $\geq$15 [ ]
3. How many sexual partners do you have now? None [   ] One **[   ]** Two **[   ]** More than two **[   ]**

4.   Do you use (female) or encourage (male) preventive measures against pregnancy?   Never [   ] Sometimes [   ] Often [   ] Always [   ] Not applicable [   ]

5. Do you use protective measures against sexually transmitted diseases? Never [   ] Sometimes [   ] Often [   ] Always [   ] Not applicable [   ]

6. Do you use condoms with your regular sexual partner?

Never [ ] Sometimes [ ] Often [ ] Always [ ] Not applicable [   ]

7. Do you use condoms with casual sexual partners? Never [ ] Sometimes [ ] Often [ ] Always [ ] Not applicable [   ]

8. Do you ever drink alcohol before having sex? Never [ ] Sometimes [ ] Often [ ] Always [ ] Not applicable [   ]

SECTION C: BELIEF IN GOD

1. Alcohol and belief in God

Tick the appropriate question, For example: if you strongly agree that God helps you in question 1, then you would have ticked the last box as shown.

		Strongly disagree	Slightly disagree	Slightly agree	Strongly agree
	Example: God protects me form danger				✓
1	God participates in my decision not to drink				
2	God would play a role in whether my alcohol use increases or not				
3	God plays a role in whether I drink or not				
4	If someone asked me to try alcohol, God would keep me from trying it				
5	God helps me handle my problems so that I don't need to drink				
6	God helps me to keep from drinking when I have a lot of problems				
7	When there are too many problems in my life, God keeps me from drinking				
8	Most things that affect whether I drink or not happen because of God				
9	God controls how much I drink				`
10	God helps me say 'no' when others pressure me to try alcohol				
11	God helps me resist pressures from others to try alcohol				
12	If I start to drink, God plays a role in whether I slow down or quit				

2. Sexual behaviour and belief in God

Tick the appropriate question, For example: if you strongly agree that God helps you in question 1, then you would have ticked the last box as shown.

		Strongly Disagree	Slightly disagree	Slightly agree	Strongly agree
	Example: God protects me from Danger				√
1	God helps me handle my problems so that I don't need to have sex				
2	Without God's help, I cannot control how much I have sex				
3	If I start having sex, whether I do it again or not is up to God				
4	God helps me to keep from having sex when I have a lot of problems				
5	God plays a role in how much sex I have				
6	God determines whether I want to have sex or not				
7	When there are too many problems in my life, God keeps me from having sex				
8	It is up to God whether my sexual behaviour increases or not				
9	God determines whether or not I try sex				
10	If I try sex, God determines whether I become addicted or not				
11	God keeps me from having sex too much				
12	God helps me take my mind off my problems so I don't need to have sex				

SECTION D: Social support

1. Alcohol use behaviour and social support

		Strongly disagree	Slightly disagree	Slightly agree	Strongly Agree
1	My church leaders and elders are people I can really count on to influence my choices around alcohol use				
2	My church leaders and elders are people I can really count on to help guide my choices when I am under pressure under pressure to drink				
3	My church leaders and elders are the most influential with regards to my opinions around alcohol and my behaviour around alcohol use				
4	I can count on my church leaders and elders to talk to me In a thoughtful manner about alcohol use				
5	I could count on my church leaders and elders to give me useful advice that will help me avoid mistakes around alcohol use behaviour				
6	I can talk frankly to my church leaders and elders about my opinion, choices and behaviour around alcohol having to watch what I say				
		Strongly disagree	Slightly disagree	Slightly agree	Strongly Agree
1	My church peers are people are people who I can or would really count on to influence my choices around alcohol use				
2	My church peers are people who I would really count on to help guide my choices when I am under pressure to drink				
3	My church peers are people who are most influential with regards to my opinions around alcohol and my behaviour around alcohol use				
4	My church peers are people I can really count on to talk to me in thoughtful manner about alcohol				
5	My church peers are people who I can count on to give me useful advice that will help me avoid mistakes around alcohol use behaviour (E.g drunken driving, excessive use and abuse of alcohol)				
6	My church peers are people who I can talk with frankly about my opinions around alcohol without having to watch what I say				

2. Sexual behaviour and social support

		Strongly disagree	Slightly disagree	Slightly agree	Strongly Agree
1	My church leaders and elders are people I can really count on to influence my choices around sexual behaviour				
2	My church leaders and elders are people I can really count on to help guide my choices when I am under pressure under pressure to have sex				
3	My church leaders and elders are the most influential with regards to my opinions around alcohol and my behaviour around premarital sex				
4	I can count on my church leaders and elders to talk to me In a thoughtful manner about sexual abstinence before marriage				
5	I could count on my church leaders and elders to give me useful advice that will help me avoid mistakes around sexual behaviour (e.g. unplanned pregnancy, sexually transmitted infections etc.)				
6	I can talk frankly to my church leaders and elders about my opinion, choices and behaviour around sex without having to watch what I say				

		Strongly disagree	Slightly disagree	Slightly agree	Strongly Agree
1	My church peers are people are people who I can or would really count on to influence my choices around sexual behaviour				
2	My church peers are people who I would really count on to help guide my choices when I am under pressure to have sex				
3	My church peers are people who are most influential with regards to my opinions around alcohol and my behaviour around premarital sex				
4	My church peers are people I can really count on to talk to me in thoughtful manner about sexual abstinence				
5	My church peers are people who I can count on to give me useful advice that will help me avoid mistakes around sexual behaviour (e.g unplanned pregnancy, sexually transmitted infections etc.)				
6	My church peers are people who I can talk with frankly about my opinions, choices and behaviour around sex without having to watch what I say				

Thank you very much for your participation in the study