

**DETERMINANTS OF ATTITUDES TOWARDS TERMINATION OF PREGNANCY  
AMONG LEARNERS IN THE MANKWENG AND SESHEGO TOWNSHIPS OF  
POLOKWANE, SOUTH AFRICA**

by

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## DECLARATION

I declare that the Determinants of attitudes towards termination of pregnancy among learners in the Mankweng and Seshego townships of Polokwane, South Africa (mini-dissertation) hereby submitted to the University of Limpopo, for the degree of Master of Arts in Clinical Psychology has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Madiba, M. F. (Miss)

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## **ABSTRACT**

The current study aimed at investigating the relationship between attitudes towards termination of pregnancy (TOP) and family structure and functioning, religiosity, and death anxiety. Participants of this study consisted of 330 school-going, adolescent, female participants aged 12 to 19 years.

The results indicated that no relationship exists between attitudes towards TOP and the type of family structure from which an individual stems. The relationship between attitudes towards TOP and the Family Assessment Device (FAD) general family functioning scale did not reach statistical significance either. When attitudes towards TOP were correlated with the more specific family functioning subscales, the FAD problem-solving subscale was negatively associated with attitudes towards TOP. Additionally, the relationship between attitudes towards TOP and death anxiety was not statistically significant. However, analysis indicated that there is a statistically significant, negative relationship between attitudes towards TOP and intrinsic religiosity among school-going adolescents. Final analysis involved the regression of variables of FAD problem-solving and intrinsic religiosity on attitudes towards TOP. Both intrinsic religiosity and FAD problem-solving scores were predictors of attitudes towards TOP.

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# CHAPTER ONE

## Introduction and Background

### 1.1 Introduction

Sexual risks may impact on the life expectancy of young women, as well as their health. The health consequences could include an early unwanted pregnancy, with the subsequent choice to resort to the termination of the pregnancy (TOP). However, infection with HIV and other sexually transmitted infections remains the most common of the risky sexual behaviours (Falk, Falk, Hanson, & Milsom, 2001; Saito, 1998; Silva, 1998). A study conducted by the World Health Organisation (WHO) estimates that approximately 49 million TOP instances take place every year across the world, of which an estimated 19 million are unsafe (Roelf, 2007).

In another study conducted by the WHO, it was revealed that of 182 million pregnancies that occur in developing countries, 19% are terminated, of which 8% are carried out safely and 11%, unsafely (Law, 2008). This occurs despite government efforts to strive for safe and easily accessible TOPs by providing proper training to service providers, prioritizing the woman's choice, and honouring confidentiality as part of the WHO's standard procedure (Cook, Dickens, & Horga, 2004). Ninety-five percent of unsafe TOPs occur in developing countries (4.2% in Africa), while almost 14% of unsafe TOPs are performed by women under the age of 20 (Åhman & Shah, 2004; Delvaux & Nöstlinger, 2007).

Several factors contribute to attitudes towards TOP. They include fear of death, religiosity, socio-economic status, level of education, age, gender, race, gender preference for sons, as well as family structure and functioning (Benson et al, 2006; Chun & Gupta, 2009). TOP attitudes have been evaluated in various groups. For instance, studies have been conducted to evaluate attitudes towards TOP

among religious believers, politicians, and health workers (Cromer, McCarthy & Welsh, 2001; Mavroforou, 2004; Saito, 1998; Schenker, 2000; Warenius, 2006). However, only a few studies of TOP have been conducted among Limpopo adolescents. The current study aims at augmenting the body of knowledge in this area. This study focuses mainly on the demographic variables of family structure and functioning, religiosity, and fear of death.

## **1.2 Background of the Study**

Under the previous *apartheid* regime of South Africa, TOP service was offered in cases where a pregnancy posed a threat to a woman's or child's mental or physical well-being or when the woman had been raped or subjected to incest (de Pinho, Guttmacher, Kapadia, & Naude, 1998). White women had alternatives to receive TOP services if pregnancies could not be terminated upon request while those of other races did not (de Pinho et al., 1998). Limited access to TOP services exacerbated the morbidity rates.

In 2008, the Choice of Termination of Pregnancy Amendment Act no. 1 of 2008 was promulgated in South Africa. This law determined that any woman of any marital status at any age could terminate a pregnancy during the first 12 weeks of pregnancy; the service was extended to the first 20 weeks of pregnancy under certain conditions (Choice on Termination of Pregnancy Act, 2008).

The legislation relating to TOPs has raised severe criticism in religious circles, namely, that it encourages sexual promiscuity by reducing the potential cost of sex before marriage (Barrett, Da Vanzo, Ellison, & Grammish, 2009; Jelen, 1988), while others regard it as a violation of natural law (Jelen, O'Donnell, & Wilcox, 1993). Nevertheless, numerous people supported easier access to TOPs (de Pinho et al., 1998).

In many industrialized countries, in recent years, adolescent pregnancy and early parenthood have been identified as social and public health problems that need to be addressed (Lawlor, Najman, & Shaw, 2006). Most adolescents do not have the capacity to take care of their children, and are forced to place the burden on their own parents owing to economic reasons. More often than not, adolescents abandon their studies in order to raise their children on their own (Abouzahr, Ferguson, & Olukoya, 2007). A solution to adolescent pregnancies is an important issue of national concern, as it leads to lower educational attainment, lower occupational status, higher rates of poverty, and poorer marital prospects among adolescents (Lawlor et al., 2006; Medoff, 1999). These adolescents frequently resort to TOP, which poses a health hazard when it is unsafely performed and also when the gestational period is above the limited safe period.

Unsafe TOP has substantial detrimental consequences for society. Although technology has reduced TOP deaths dramatically, adolescents take too much time to decide whether they want to terminate their pregnancies or keep their babies, hence after the safe period, the severity of those consequences increases (Abouzahr et al., 2007; Rogo, 2004). Delays result from mixed feelings about TOP or feelings of being less satisfied with the notion. In addition, people may have religious or moral objections to it. Therefore, numerous people favour keeping an unborn baby rather than opting for a TOP (Reardon & Sobie, 2001).

TOP has impacted negatively on women and their families, the public-health system, and ultimately, economic productivity. The WHO estimates that one in eight pregnancy-related deaths results from TOP (Singh, 2006). The health and mortality figures could actually be higher since the problem is often underreported. The social stigma and legal restrictions associated with TOP leads to underreporting, hence restricting the availability of data on the magnitude of the problem in many countries (Singh, 2006).

### 1.3 **Statement of the Problem**

Researchers have indicated that TOP attitudes are influenced by demographic variables such as age, gender, race, educational level, and socio-economic status (Combes, Demongeot, Gaillard, & Pellet, 2004; Lawlor et al., 2006). Other factors could also contribute to attitudes towards TOP, for example, family structure and functioning, religiosity, as well as death anxiety. Although not many studies have been conducted pertaining to the TOP attitudes of adolescents in relation to family structure and functioning, and death anxiety, there is evidence that these variables also play a crucial role in the attitudes of adolescents towards TOP (Benson et al., 2006; Foutoukhis, Kaprinis, Magiria, & Siamouli, 2008; Horne, 2000; Strahan, 2001). Hence, there is a need to investigate the effect of those factors on TOP attitudes.

### 1.4 **Aim**

The aim of this study was to assess how family structure and functioning, intrinsic religiosity and death anxiety are related to attitudes towards TOP among adolescents.

### 1.5 **Objectives**

The objectives of this research were as follows:

- 1.5.1 To investigate the relationship between family structure and attitudes towards TOP.
- 1.5.2 To investigate the relationship between family functioning and attitudes towards TOP.

- 1.5.3 To investigate the relationship between religiosity and attitudes towards TOP.
- 1.5.4 To study the relationship between death anxiety and attitudes towards TOP.
- 1.5.5 To study the combined effects of family structure and functioning, intrinsic religiosity and death anxiety on TOP.

## 1.6 Hypotheses

The hypotheses of this research were as follows:

- 1.6.1 Attitudes towards TOP will be related to the type of family structure from which an individual stem.
- 1.6.2 Attitudes towards TOP will be related to the type of family functioning characterizing the adolescent's family of origin.
- 1.6.3 There will be a statistically significant, negative relationship between attitudes towards TOP and intrinsic religiosity or religious motivation among school going adolescents.
- 1.6.4 There will be a statistically significant, negative relationship between attitudes towards TOP and death anxiety.
- 1.6.5 The combined variables of family structure and functioning, intrinsic religiosity, and death anxiety will predict attitudes towards TOP.

## 1.7 Scope of the study

The study will investigate attitudes towards TOP among adolescents in the Seshego and Mankweng townships of Polokwane.

## 1.8 Significance of the Study

Since TOP was legalized in South Africa in 1996, the number of known TOP cases increased from 1,600 in 1996 to 85,621 in 2005 (Johnston, 2008). The group with the highest TOP incidents are adolescents (Åhman & Shah, 2004; Delvaux & Nöstlinger, 2007). Economic factors, together with high population growth in the low socio-economic areas, may add to the pressure for adolescents to engage in TOP (Renne, 1996). Considering that complications of unsafe TOP could result in psychological and physical problems, even death (Benson et al., 2006; Bradshaw & Slade, 2003; Kolarov, 2008; Koster-Oyekan, 1998; Singh, 2006; Strahan, 2001), it is important to study the phenomenon.

## **CHAPTER TWO**

### **Theoretical Framework**

#### **2.1 Introduction to the Theoretical Framework**

This section presents the theoretical model which was used in this study to explore the relationship between TOP attitudes and religiosity, death anxiety, family structure and functioning. Definitions of terms in accordance with this study are also furnished in this chapter.

#### **2.2 Definitions of Terms**

The following terms are defined in accordance with the context of the current study:

Termination of pregnancy (TOP):

Termination of pregnancy is the process of removing an unwanted foetus from the uterus. Seller (1997) defines this comprehensively as the interruption of a pregnancy.

Attitude:

An attitude is a favourable or unfavourable evaluative reaction toward TOP, exhibited in ones beliefs, the type of family structure from which an individual stem and the type of family functioning characterizing the adolescent's family of origin.

Religiosity:

Religiosity is the term used to refer to the religious beliefs, practices, moral values and attitudes in a faith community.

Family structure:

Family structure, in accordance with this study, refers to the family composition, specifically adolescents living in intact families with their parents; those living in non-intact parent families and those who come from families with neither parent.

Family functioning:

Family functioning refers to the family's functioning as evaluated through dimensions such as family members' capacity to resolve problems, levels of cohesion and communication.

### **2.3 Theoretical basis of the study's variables, with particular reference to social-learning theory**

The present study employs diverse variables, because the concepts are found to be linked in empirical studies, although they are not necessarily derived from the same theoretical basis (Fagan & Talkington, 1997; Kelly, 1992; Renzi, 1975; Sturgeon, 2008). For instance, high levels of religiosity have been found to be related to disagreeableness towards TOP.

However, social learning theory, which has its roots in Albert Bandura's work, may offer some insight into the TOP phenomenon. Therefore, this study attempted to explain the link between TOP attitudes and religiosity, death anxiety, family



structure, and functioning, applying social learning theory. The theory emphasizes the significance of observing, followed by modelling an attitude and behaviour (Bandura, 1977). Behaviour is learned from the environment through the process of observational learning. Individuals who are observed are called models. The continuity of practicing learned or observed behaviour and adopting an attitude are determined by consequences of reward or punishment, serving as positive or negative reinforcement (Bandura, 1977).

Social learning theory assumes that people are social beings in that they pay attention to the environment around them. An important addition to this assumption is that people possess an almost natural propensity to react to events in their surroundings or respond to stimuli in the environment (Triandis, 1971).

It is believed that attitudes are learned as a response to an object or a situation in a consistently favourable or unfavourable manner. Therefore, in an attempt to explain how a response to the process through which the learning of an attitude takes place, social learning theory was employed. The likes of Bandura (1977) (cited in Ugwu, n. d.) proposed that the conditions leading to TOP are caused by and sustained by the social psychological conditions of the individual's life. The social-learning conception of TOP is that the manifestation of these conditions are acquired, maintained and altered in exactly the same manner as those processes of an individual's behaviour that are considered as being normal. The social-learning proponents assume that it is the stimulus condition of the environment which requires responses that are responsible for TOP (Ugwu, n. d.).

Hence Social learning theorists believe that the TOP phenomenon is related to environmental factors (Triandis, 1971). In particular, religion was found to exert an influential moral view regarding TOP. This is so because interactions with people

close to each other are more influential. Therefore people who identify with religions are more likely to oppose TOP (Wilson, n. d.) and are more likely to influence other people to adopt a similar attitudes to TOP.

As in society, children in religious groups are surrounded by many influential models, such as parents within their families. The study conducted by Blumenthal, Gleib, Miller, Moore, Morrison, and Sugland (n. d.) revealed that the assumption of social learning theory is that adolescents learn certain attitudes early in life from adult role models such as parents and other family members. Furthermore, the study carried out by Eaves and Hatemi (2008) revealed that attitudes modelled from parents have a substantial effect in adolescence.

Social-learning theory was applied to the notion of anxiety or fear in an attempt to understand the link between TOP attitudes and death anxiety. Social learning theory assumes that a conditioned response to fear or anxiety arises through either negative or positive reinforcement (Mineka & Zinbarg, 2006). Fear or anxiety can be invoked through a traumatic experience or negative emotions by simply eliciting words that are associated with such situations (Strongman, 1995).

Therefore, this section defined conditioning as the process of developing TOP attitudes in direct response to experience and observation of parents and other members of religious society.

## **CHAPTER THREE**

### **Literature Review**

#### **3.1 Introduction to the Literature Review**

This chapter reviews studies in relation to variables which could have an impact on attitudes towards TOP among adolescents, specifically, impact on family structure and functioning, religiosity and death anxiety.

#### **3.2 Literature Review**

##### **3.2.1 The Relationship between Family Structure and Attitudes towards TOP**

A family is referred to as a family system which is regarded as a group of Individual units acting as one (Bishop, Epstein, Keitner, *Miller*, & Ryann, 2003). The family system is emphasized as the transactional pattern and family structure that shape the behaviour and the cognitive functioning of individuals (Horne, 2000). The impact of family dynamics, namely, structure and functioning, and pregnancy and the decision to engage in TOP are discussed hereunder.

The prevalence of adolescent pregnancy or engaging in early sexual intercourse was found in families with single parents, whereas families with two parents were found to have a lower incidence of adolescent pregnancy (Bauman & Flewelling, 1990; Domenico & Jones, 2007; Henderson, Wight, & Williamson, 2006). Once a pregnancy has occurred, especially early, decision-making sometimes takes place whether to keep it or terminate. According to the study conducted by Sturgeon (2008), there is a small body of research that has investigated pregnancy resolution decisions (i.e., the woman chooses TOP, adoption, or parenthood), or

the factors that are related to the choices of adolescents. Family structure, as Horne (2000) suggests, exerts an influence on attitudes of adolescents towards TOP. Borges, Galano, Hearst, Hudes, Peres, and Rutherford (2008) found that adolescents living with both biological parents were least likely to engage in TOP, while those living with single parents were more likely to engage in sexual activities. Those adolescents living with neither parent were exceptionally more likely to engage in sexual activities. If adolescents who are sexually active had fallen pregnant, the prevalence of TOP was higher amongst those living with neither parent, followed by those living with a single parent; the lowest frequency was found among those living with both parents (Borges et al., 2008). In essence, adolescents from intact families are less likely to terminate a pregnancy than those from non-intact families (Hope, Watt, & Wilder, 2003).

Fathers from intact married families are unlikely to encourage women to terminate a pregnancy compared to fathers from married stepfamilies. Fathers from single divorced-parent families, fathers from cohabiting stepfamilies, and fathers from always-single parent families are twice as likely to encourage women to terminate the pregnancy (Fagan & Talkington, 1997).

Studies conducted by Braverman, Fong, Hutchinson, Jemmott, and Jemmott (2003) and Glasier, Olge, and Riley (2008) reported that adolescent females engage in more direct and frequent communication about sex related issues with their mothers than with their fathers. Baer (1999) and Diiorio, Hockenberry-Eaton, and Kelley (1999) in their study, revealed that mother-adolescent communication is open and contributes greatly to the decrease in sexual risk behaviours of adolescents. This statement appears to challenge the statement made by Domenico and Jones (2007) and Borges et al. (2008) that adolescents in single mother families would lead to either a higher incidence of adolescent pregnancy or they would be more likely to engage in sexual activities when compared to adolescents in families with both parents. More exactly, this implies that both

groups of adolescents from families with a single mother and those from families with both parents exhibit the same sexual behavioural pattern. This implies that the prevalence of engagement of sexual activities could be lower among adolescents in single mother families than adolescents in single father families. Hence, it is an assumption that adolescents from single parent families are more likely to terminate their pregnancies as compared to those living with both parents. The prevalence of TOP is likely to be higher among adolescents from families with neither parent.

### **3.2.2 The Impact of Family Functioning on Attitudes towards TOP**

The McMaster model by Baldwin, Bishop and Epstein (1983) hypothesizes that communication, problem-solving (Vuchinich, 1999); roles, affective responsiveness, affective involvement, behaviour control, and general functioning play a major role in family functioning. Communication was found to lead to openness, nearness, and the strengthening of relationships (Holmberg & Walmsberg, 2000). Open communication among family members and family adaptability were found to influence the quality of the involvement of parents in adolescent decision making. Conversely, adolescents who grow up in families where the communication pattern is closed are neither able to discuss important issues with their parents, especially sexually-related issues (Dubas, Miller, & Petersen, 2003) nor involve their parents in adolescent decision making.

Open communication between adolescents and parents about sexual health issues such as sexual activities, contraceptives, TOP, and STIs was found to delay the early engagement in sexual activities among adolescents (Glasier et al., 2008). The study carried out by Griffin-Carlson and Mackin (1993) reveals that adolescents who disclose TOP decisions tend to describe their family communication as being generally open, while those who do not confide describe

their family communications as closed or open on all subjects except sexual matters. Therefore the researcher expected that communication with parents will influence adolescents to disapprove of TOP.

Family variables such as parenting style, closeness/involvement, support, and monitoring are related to adolescent sexual behaviour (de Leon, Huerta-Franco, & Malacara, 1996). Lack of parent-adolescent communication about sexual behavioural control is associated with a high prevalence of adolescent pregnancy or risky sexual behaviour (Domenico & Jones, 2007). Parent-adolescent communication (the quality and the frequency of parent-adolescent communication) is considered to influence the sexual behaviour of adolescents (Miller, 2002).

Parents also serve as mentors to their adolescents (Braverman et al., 2003). Parents of adolescents who were parents themselves at an early age, bore a child outside of marriage, and cohabited, might encourage adolescents to engage in unsafe sexual behaviour, which could lead to early unplanned pregnancy (Hwang, Monasterio, & Shafer, 2007) and in turn, lead them to resort to TOP. Hence, the researcher anticipates that behavioural control and TOP attitudes will be related.

The study conducted by Griffin-Carlson and Schwanenflugel (1998) indicated that adolescents from adaptive families were able to acquire affective involvement from their parents in terms of TOP decision making. Affective responsiveness and involvement of parents were found to be related to early engagement of sexual relationships (Aspy, Marshal, McLeroy, Oman, Rodine, & Vesely, 2007). Parental rejection, lack of warmth, love, or affection was found to lead adolescents to seek love outside their families to boost their self-esteem and as a result they often fall pregnant. Studies of sexual behaviour of adolescents has emphasized that adolescents who are brought up in a well-functioning family setting (supported,

supervised, and monitored by their parents) are less likely to fall pregnant or engage in premature sexual activities; they would rather engage in sexual activity with the use of contraceptives if they are already sexually active (Buhi & Goodson, 2007; Hwang, et al., 2007). Hence, hypothetically, affective responsiveness and affective involvement influence TOP attitudes of adolescents.

Families that provide emotional support assist adolescents to find it easier to confide in them with regards to decisions relating to TOP (Griffin-Carlson & Mackin, 1993). Most adolescents choose to make decisions about their pregnancies without the knowledge of their parents or spouses (Kwok & Shek, 2009; Reisser, 1994). The reasons for those adolescents who do not disclose their decisions to their parents include a fear of rejection and fear of disappointing them. An investigation of strengths and weakness in family functioning of black South Africans indicate that inadequate relationships can point to the parents' poor involvement and responsiveness to the personal problems of adolescents (Viljoen, 1994 in Macleod, 2011).

In a review of a study on TOP, it was found that parents often tend to place greater pressure on their adolescents to obtain a TOP (Blum, Izquierdo, Lammer, & Mendoz, 1999). Decision making with regards to the future of the pregnancy in families tends to be determined by spouses in particular, while in others, men remain indifferent, or avoid involvement in the decision as to whether to keep the infant or terminate the pregnancy (Liovet & Ramos, 1998). Consequently, most often, the adolescents or other women decide about the future of their pregnancies without the involvement of their partners or families, with the fear that they might be forced to accept their parents or spouse's decision (Blanchard, Cooper, Cullingworth, Dickson, Mavimbela, Van Bogaert, Von Mollendorf & Winikoff, 2005; Gursoy, 1996; Koumantikis, Mavroforou, & Michalodimitrakis, 2004). Hence, it could be predicted that problem solving and decision-making will have an impact on the TOP attitudes of adolescents.

A lack of parental supervision (Rogers, 1999), parents' own dating activities, and having older siblings who engage in sexual intercourse explain why adolescents in some families are at an increased risk of pregnancy (Miller, 2002). Adolescents whose parents were involved in substance abuse are more likely to engage in sexual activities (Borges et al., 2008). Fewer rules or boundaries were related to greater risks of becoming sexually active (Buhi & Goodson, 2007). Parental role as being highly demanding and highly responsive influence the adolescents on sexual intercourse abstinence (Hwang et al., 2007). Presumably, roles, rules or boundaries have an impact on TOP attitudes among adolescents.

### **3.2.3 The Relationship between Family Structure and Functioning and Attitudes towards TOP in the African Context**

Traditional values of black women are related to religious values. Black women value motherhood and childrearing and therefore are against TOP (Staples, 1985). In other African contexts, a pregnancy in wedlock is welcomed and a married couple has no reason to terminate it (Rosier, 2007a). Premarital pregnancy is viewed as being shameful as it contravenes sexual norms.

Baer (1999) mentions that it is important to know that particular family structures may not have the same meaning or serve the same functions as compared to others. Some families consist of the kinship model, which comprises parents, children, siblings, friends, and neighbours who are involved in relationships of reciprocity and co-parenting (Baer, 1999; Varga, 2002). It is culturally adaptive for a kinship to play a role in the family; for instance, it offers protection, nurturing, support (including economic support), and advice (Baer, 1999). The family structures of most Africans are based on kinship (Varga, 2002). The environment of kinship encourages developing impulse control and learning the advantages of postponing childbearing to adulthood (Rossi, 1998). Therefore, hypothetically,



kinship has an impact on the effect of family structure against TOP attitudes among adolescents.

Family structure in the context of African culture could be dramatically altered by social characteristics. For instance, once adolescents who have children out of wedlock are married, family structures change from being headed by women or grandparents to being headed by both parents and extended families of the husbands (Das, Sheikh, & Thakrar, 2008; Staples, 1985).

Family variables such as communication, decision making and roles play a role in African families. Communication about sexually related issues in families is close with regard to subjects such as sexually related issues (Rosier, 2007a). TOP is condemned as it is shameful, and conflicts with social values (Browder, 2008). Therefore, it is very difficult for an adolescent to discuss decisions pertaining to a pregnancy with the family or even with close relatives (Rosier, 2007b). Hence, there is still a lower prevalence of TOPs among black adolescents because of the traditional values that limit their options in life (Staples, 1985).

A study of women's sexual and reproductive rights has revealed how family roles influence women's decision making (Balasubramanian & Ravindran, 2004). Many studies have emphasized that men, in-laws, or parents are the ones who play the decision making role in the family, and also on the women's sexual and reproductive lives, while their decisions are seldom questioned by those women (Bödtker, Broen, Ekeberg, & Moum, 2005; Ganatra & Hirve, 2002; Ingham, Matthews, Phil, & Puri, 2007; Peterman, 1998). At times, being ruled by their partners or husbands leads women and adolescent females to depend on men for decisions regarding their sexual and reproductive lives (Balasubramanian & Ravindran, 2004). Presumably, adolescent attitudes towards TOP are influenced by the culture from which the adolescents stem. Culture tends to encourage

certain family types and functions, which in turn will determine whether TOP will be common or not.

### **3.2.4 The Investigation of the Effect of Religiosity on Attitudes towards TOP**

Religiosity is divided into intrinsic and extrinsic religiosity. Intrinsic religiosity (IR) refers to living one's religion with sincerity and intentionality and extrinsic religiosity (ER) is using religion for instrumental purposes, either personally or socially (Gorsuch & McPherson, 1989). Extrinsic religiosity is further divided into social and personal spheres (Gorsuch & McPherson, 1989). Some researchers are of the view that the distinctive difference between intrinsic religiosity and extrinsic religiosity can be measured by the frequency of church attendance and prayer behaviour (Chambers, Cohen, Gorvine, Koenig, Meade, & Pierce, 2005).

Religiosity was found to be a strong predictor of TOP attitudes (Echevaria, Ellison, & Smith, 2005; Renzi, 1975). Where religion played an important role in the lives of adolescents, they tended to be less supportive of TOP (as well as premarital sex, cohabitation, and divorce) than were their peers who said that religion was less important to them (Fagan & Talkington, 1997). Several studies have found that people who are regular church attendees, regular prayers, and are involved in church activities (intrinsic religiosity orientated), tend to be pro-life, while those who are irregular attendees of church services or are not affiliated to any church (extrinsic religiosity orientated) are mostly pro-choice (Adamczyk, 2008; Alston, Alston, & McIntosh, 1979; Buga, 2002; Fehring & Ohlendorf, 2003; Hoffmann & Johnson, 2005; Johns & Patel, 2009; Mchango & Rule, 2008; Modi, 2002; Newport & Saad, 2006; Varga, 2002). Individuals who report higher intrinsic religiosity orientations tend to oppose elective TOP (terminating a pregnancy for traumatic reasons) and selective TOP relative to those who report higher extrinsic religiosity (Abar, Carter, & Winsler, 2009; Gau & Wiecko, 2008).

The study conducted by Kearl (1999) revealed that there are denominational affiliations which are completely pro-choice. In some cultures, most traditional religionists present a more pragmatic orientation towards TOP and use sex selective TOP because of the preference for sons, while others support TOP for traumatic reasons (Yu & Zhai, 2007). Sex selective TOP occurs when parents prefer male or female children and therefore choose to terminate a foetus of a non-preferable gender. TOP occurs for traumatic reasons when the foetus is physically or mentally defective or when the pregnancy occurred as a result of rape or incest.

The impact of religiosity on attitudes towards TOP has fluctuated over the years. It has been found that added value systems such as self-determination, socio-economic status and responsibility for others have reduced the influence of intrinsic religiosity on TOP attitudes (Harris & Mills 1985). In addition, religious unmarried women may decide to terminate their pregnancies to prevent discovery of sexual indiscretions since pregnancy would be an evidence of having violated religious precepts. Some women who want to attain education are also more likely to approve TOP (Adamczyk, 2008; Johnson-Hanks, 2002; Schuster, 2005).

### **3.2.5 The Influence of Death Anxiety on Attitudes towards TOP**

The concept of death anxiety is difficult to define. It is questionable whether death anxiety is conscious or unconscious, or a multifaceted concept, encompassing such distinctive reactions as fear of eternal punishment, and fear of experiencing the painful death of oneself or another. It may be asked if the absence of death anxiety is synonymous with acceptance, and if the concept itself is multi-dimensional (Neimeyer & Wass, 1995). Death anxiety could be multi-dimensional since people fear life after death (eternal punishment), others fear the dying event

(pain and loss of dignity), and the fear of ceasing to exist (extinction and loss of activities that make up life).

The fear of death has been found to be perpetuated by individuals' concerns about life after death, loss of control, decomposition, pain, and isolation. Other contributing factors that perpetuate death anxiety are low self-esteem; fear of being forgotten after death, and fear of dying alone. Human behaviour towards death anxiety is also aggravated by the pursuit of self-esteem, ego integrity, psychological and physical problems (Greenberg, Pyszczynski, & Solomon, 1999; Neimeyer, 2004).

Control variables such as age and gender are discussed in the study conducted by Neimeyer and Wass (1995). The death anxiety scale (DAS) indicates that females experience death anxiety more than males do. The interpretation of the difference is that males are more defensive in their death thoughts than females and also that males attempt to avoid the thought of death and dying. The study also revealed that age affects the experience of death anxiety (Neimeyer, 1999). Mudau, Moripe, and Mashegoane (2011) showed that even in the South African context death anxiety decreases with age and is more intensely experienced by young people than the aged.

Ethnic differences in relation to death anxiety is reported to be another control variable. American whites have reported greater fear of a prolonged and painful dying process, whereas African Americans tend to be more fearful about life after death itself, including fears of bodily deterioration, of being buried alive, and the fate of their souls in an afterlife (Neimeyer, 2004).

Insufficient studies have been conducted on attitudes towards TOP in relation to death anxiety in particular, and mental health in general. There are researchers

who have found that TOP is among incidents that contribute to a high rate of maternal death (Benson et al., 2006; Singh, 2006; Strahan, 2001). The mortality and morbidity caused by TOP decrease dramatically in clear association between the legality of TOP and women's health (Faundes & Rao, 2006).

Studies conducted by Russo and Steinberg (2008) and Blum, Charles, Polis, and Sridhara (2008) found no significant difference between anxiety and TOP and anxiety and pregnancy at term. The study carried out by Blum et al. (2008) reviewed available research studies, which investigated the relationship between the two variables and found that the hypothesis that TOP results in long-term mental health problems was not supported. Blum et al. (2008) recommend that further studies be carried out regarding the relationship between TOP and mental health outcomes. The said study further recommends that studies should investigate the impact of defence mechanisms that most women use, which could lead to pathological forms of worry.

Women who have terminated their pregnancies have been found to be at a higher risk of experiencing mental disorders, including anxiety (Boden, Fergusson, & Horwood, 2008; Coleman, Coyle, Rue, & Shuping, 2009; Coleman, Coyle, & Rue, 2009; Fergusson, Horwood, & Ridder, 2006; Emerson, Hirsch, & Zabin, 1989). The study conducted by Coleman, Cogle, and Reardon (2005) revealed subsequent social anxiety disorders and post-traumatic stress disorders among women who terminated their pregnancies. Casey's (2008) study revealed that the above mentioned mental health problems could have been caused by a lack of education about the causal link between TOP and subsequent mental health problems.

A study by Cameron (2010) which reviewed studies about anxiety and TOP revealed that the contributing factors to anxiety are unintentional TOP and increased rate of complications resulting from continuing with the pregnancy. The

authors pointed out that TOP as a result of foetal anomaly is different from TOP for an unplanned pregnancy, since this often occurred later in life and in the context of an originally planned and wanted pregnancy (Cameron, 2010). Thus, the study by Cameron (2010) concluded that women who opt for a TOP because of foetal anomaly are more likely to experience anxiety than those delivering a healthy child.

In another study, fear of death was found to exist among women who carried an unwanted pregnancy to term. Their reasons for carrying their pregnancy to term were that they feared the consequences of TOP, for example, death and physical complications (Koster-Oyekan, 1998).

Therefore, hypothetically, death anxiety would be experienced by women who possess knowledge of TOP sequelae. The fear of death in relation to TOP would be experienced more or less in a similar manner to the fear of death in relation to any circumstances.

### **3.2.6 TOP Attitudes among Adolescents: Effects of Family Structure and Functioning, Religiosity and Death Anxiety**

Studies by Fagan and Talkington (1997); Kelly (1992); Renzi (1975); and Sturgeon (2008) found a joint relationship between family size, religiosity and TOP attitudes. The collaboration arises because of the effect that the TOP attitudes depend on the degree to which the other variables present (Harris & Mills 1985). For instance, increasing support for TOP represent unwillingness to reject TOP if the pregnancy leads to larger family size (family structure) and also increasing the responsibility for others (the roles in family functioning). On the other hand, the implications of high church attendance cause people to oppose TOP for variables (Harris & Mills 1985).

Family functioning has been found to be strongly adapted directly from religiosity in a number of ways (Alston et al., 1979; Burdette, Ellison, & Hill, 2009; Davison & Woodrum, 1992; Newman & Pargament, 1990). For example, religiosity was found to be the predictor of behavioural control and TOP attitudes (Alston, et al., 1979).

Studies conducted by Braverman et al. (2003), Chambers et al. (2005), Foutoulkis et al. (2008), Gorsuch, Hood, Hunsberger, and Spilka (1996), Mudau et al. (2011) and Scott and Wink (2005) found a relationship between religiosity and death anxiety. Cameron (2010) and Henry and Thomas (1985) managed to find the joint effect of anxiety and religiosity on TOP attitudes.

To summarise, a number of variables influences TOP, including demographic variables. The family dynamics of functioning and structure also impact on TOP. These have been examined in this chapter, as has the impact of religiosity, which includes death anxiety, on TOP attitudes. Unfortunately, little research has been conducted in Limpopo regarding these relationships. This study aims to contribute to the body of knowledge in this regard by adding the Limpopo dimension to the literature.

## **CHAPTER FOUR**

### **Research Methodology**

#### **4.1 Research Design**

A cross sectional research design was employed for this study. The participants were drawn from secondary schools, and data were collected from them at a single session, and no follow-up was carried out.

#### **4.2 Research Variables**

The following variables were considered in the current study:

- Independent variables: family structure and functioning, religiosity, and death anxiety.
- Dependent variable: TOP attitudes.

#### **4.3 Participants**

Convenience sampling, a non-probability sampling method, was employed to recruit participants for the study. Permission to conduct the study was approved by the University of Limpopo ethics committee. Thereafter, the provincial Department of Basic Education in Limpopo was approached and requested to grant permission for conducting the study in their schools. School principals granted permission for their respective schools, and pupils themselves consented as individuals to take part in the study (see appendices). All principles relating to ethical conduct of research using human subjects were observed. For instance, participation in the study was voluntary, and participants were made aware that they were free to



withdraw from the study anytime they wished to do so. The final sample of learners who consented to take part consisted of 330 female secondary school pupils aged 12 to 19 years. Their mean age was 17 years (SD = 4.57). They were drawn from identified schools in Seshego and Mankweng, townships of Polokwane, Limpopo Province. They were all Sepedi speaking.

According to Table 1, most participants were in grade 10 (33.9%) and grade 11 (33.6%). Most of them (86.1%) reported their religious affiliation as Christianity. Just over 45% of the fathers of the participants had never been educated in formal schools, and 33.3% of them possessed a tertiary qualification. However, 39% of the learners' mothers had never been educated, and 40.9% of their mothers possessed a tertiary qualification (see Table 1).

**Table 1: Frequencies and percentages of demographic information**

	Frequency	%
<u>Age level</u>		
14	5	1.5
15	33	10.0
16	76	23.0
17	80	24.2
18	78	23.6
19	58	17.6
<u>Participants' educational level</u>		
Grade 8	2	0.6
Grade 9	37	11.2
Grade 10	112	33.9
Grade 11	111	33.6
Grade 12	68	20.6

**Table 1: Frequencies and percentages of demographic information**

	Frequency	%
<u>Religious affiliation:</u>		
Islam	2	0.6
Christianity	284	86.1
Other	44	13.3
<u>Father's highest level of education:</u>		
No education	150	45.5
Primary	69	20.9
Secondary	1	0.3
Tertiary	110	33.3
<u>Mother's highest level of education:</u>		
No education	131	39.7
Primary	63	19.1
Secondary	1	0.3
Tertiary	135	40.9

## 4.4 Instruments

### 4.4.1 Abortion Attitude Scale (Berne, 1983)

This study used Berne's (1983) 14-item abortion attitudes scale to measure attitudes towards TOP. Responses to the items were structured on a five-point Likert-type response scale; with responses ranging from "strongly agree" (1) to "strongly disagree" (5). Higher scores were awarded for pro-abortion attitudes, ranging to the lowest scores being awarded for pro-life attitudes. The scale included items such as "Abortion is a good way of solving an unwanted pregnancy" and "A mother should feel obligated to bear a child she has conceived".

The abortion attitude scale was previously used by Berne (1983) among rural and urban high school learners, college students and abortion clinic employees. The total estimate of reliability in Berne's study (1983) was reported to be 0.92. However, in the current study, the total estimate of reliability was found to be 0.370. Most items recorded particularly low item-total correlations. However, removal of any of these items from the said abortion attitudes scale would not improve the internal consistency. Thus, the scale was used in its original form, even though this means that the results are doubtful due to the low level of reliability of a key scale.

### 4.4.2 Family Structure

This study used 3 items to measure family structure. The first two items were questions structured in an open-ended format, and the last question offered twelve alternative responses. The scale included items such as "The number of members in your family, including yourself", and "Where in the family are you? Are you the first, second, third born and so on?" They also stated members in the family.

Therefore, measurement of family structure covered family size, sibling hierarchy, a member in authority (whether they live with two natural parents, single parent, step parents, or other family authority figure).

#### **4.4.3 Family Assessment Device (FAD) (Baldwin, Bishop & Epstein, 1983)**

The study used four subscales of the family assessment device (FAD), namely, the problem-solving, communication, and behavioural control subscales to measure specific aspects, and the FAD general family functioning subscale to measure overall family functioning (Baldwin et al., 1983). A five-point Likert-type response scale was utilised for the responses ranging from “strongly agree” (1) to “strongly disagree” (5). The overall scale included items such as “We usually act on our decisions regarding problems” and “When someone is upset the others know why”. When aspects of family functioning were analysed in the original study (Baldwin et al., 1983), the following results were found: problem-solving  $\alpha = 0.74$ , communication  $\alpha = 0.75$ , behaviour control  $\alpha = 0.72$  and general family functioning  $\alpha = 0.92$ .

In the current study, the total estimate of reliability of the Family Assessment Device (FAD) was found to be  $\alpha = 0.625$ . When aspects of family functioning were analysed in this study the following results were found: problem-solving  $\alpha = 0.526$ , communication  $\alpha = 0.242$ , behavioural control  $\alpha = 0.604$  and general family functioning  $\alpha = 0.920$ . Since the communication scale had a low reliability, the scale was excluded from further analysis.

#### **4.4.4 The Intrinsic/Extrinsic Revised Scale (I/E-R) (Gorsuch & McPherson, 1989)**

This study used the Intrinsic/Extrinsic Revised Scale (I/E-R; Gorsuch & McPherson, 1989) to measure religious orientation. Responses to the items were set on a five-point Likert-type response scale, with responses ranging from “strongly agree” (1) to “strongly disagree” (5), with the higher scores being awarded for intrinsic religiosity. Responses to the last item range from “more than once a week” (5) and “a few times a year” (1).

Following Allport and Ross (1967), Gorsuch and McPherson (1989) identified two dimensions of religiosity, namely intrinsic and extrinsic religious orientations or motivations. There is general support for the divisions (Lewis & Maltby, 1996). The same orientations were also used in the construction of the religious orientation scale (Lewis & Maltby, 1996). The revised version of the scale by Gorsuch and McPherson (1989) measured intrinsic and extrinsic religiosity separately.

The extrinsic religiosity (E) subscale was further divided into personally extrinsic (Ep) (items number 2, 4, and 15) and socially extrinsic (Es) (items number 3, 14, and 20) orientations. Reliability estimates were found to be  $\alpha = 0.58$  for Es,  $\alpha = 0.57$  for Ep,  $\alpha = 0.65$  for combined Es and Ep, and  $\alpha = 0.83$  for I (Gorsuch & McPherson, 1989).

#### **4.4.5 Collett-Lester Fear of Death and Dying Scale (Collett & Lester, 1969)**

The Collett-Lester fear of death and dying scale (Collett & Lester, 1969) consists of four subscales measuring the fear of death of self and dying of self and the fear of death of others and dying of others. This study used “fear of dying of self” and

“fear of death of self” subscales to measure death anxiety. Responses to the items were measured on a five-point Likert-type response scale, with responses ranging from “strongly agree” (1) to “strongly disagree” (5), with the higher scores being awarded for high death anxiety levels. The scale includes items such as “The physical degeneration involved” and “The total isolation of death”. Reliability in the current study was found to be  $\alpha = 0.658$  for the “fear of dying of self” subscale and  $\alpha = 0.691$  for the “fear of death of self” subscale.

#### **4.4.6 Death Anxiety Scale (Templer, 1970)**

This study also used a 15-item scale measuring the Death Anxiety Scale (Templer, 1970) to measure death anxiety. Responses to the items were measured on a true or false response scale. The scale includes items such as “I am very much afraid to die” and “The thought of death seldom enters my mind”. The reliability of this scale was found to be  $\alpha = 0.79$ . In the present study, the total estimate of reliability was found to be  $\alpha = 0.265$ . Since the scale had a low reliability, the scale was excluded from the analysis.

#### **4.5 Data Collection Procedure**

The study was approved by the University of Limpopo Ethics Committee and the education authorities in the district under study. The principals of participating schools gave the final approval for their learners to participate in the survey. The objectives and aims of the study were explained to all the participants and the principals. The participants were assured of confidentiality, privacy and that the research would pose no physical, emotional, intellectual, or social harm. Instructions were explained to them and they were also encouraged to complete questionnaires voluntarily with honesty. The participants were encouraged to ask for clarity when necessary, at any time.

Information was collected by means of a questionnaire. (See section 4 above for scale descriptions). The questionnaire comprised of the following areas: demographic variables (see appendix); family structure; abortion attitudes scale, family functioning, which was measured by means of the Family Assessment Device (FAD); subscales of the Collett-Lester fear of death and dying scale; Templer's death anxiety scale; and the intrinsic/extrinsic revised scale. It took the participants an average of 45 minutes to complete the questionnaires. The data were collected over a period of five days. Approximately 100 participants were drawn from each of the three schools used for the data collection (one school from Makweng Township, Polokwane and two schools from Seshego Township, Polokwane). The questionnaires were administered only to 35 participants per time. At the two schools, the researcher managed to administer two groups on the same day, while at another school the administration took two days. At one of the schools, the researcher was given time to collect the data after school hours. Most the participants lost interest in completing the questionnaire because they were tired. Some had to catch arranged or special transport to their homes consequently.



## CHAPTER FIVE

### RESULTS

#### 5.1 Plan for Analysing Data

Data was captured and analysed using the SPSS-17.0 program (Stern, 2009). Firstly, a descriptive analysis of demographic variables was performed. A TOP attitude was correlated with each of the independent variables: intrinsic religiosity, family functioning, and death anxiety. Regression analysis was carried out between TOP attitudes and FAD problem-solving and intrinsic religious orientation. Another assessment using ANOVA to measure the difference between the means of family structure and TOP attitudes was also performed.

#### 5.2 Initial Analysis

In the sample of the study, 17 (5.2%) students reported that they had previously undergone a TOP. This group was contrasted with the rest (94.8%) who said they had never had a TOP, based on major variables of the study. The students who had had a TOP and those who had not, differed on the FAD general functioning subscale ( $t = -3.326$ ,  $df. = 328$ ,  $p < 0.001$ ), with the latter reporting relatively higher FAD general functioning scores. However, there were no differences between the two groups with regards to attitudes towards TOP, intrinsic religious motivations, the FAD problem-solving subscale, and the FAD behaviour control subscale ( $ps > 0.05$ ). Because the two groups differed on only one subscale, it was decided that further analysis would not differentiate between them. The following results were based on all the participants.

### 5.3 Hypotheses Testing

#### 5.3.1 Hypothesis 1

The first hypothesis stated that attitudes towards TOP are related to the type of family structure from which an adolescent comes. Although the students stemmed from many types of family structures, certain types of structures did not attract many respondents. Seventy-five percent ( $n = 248$ ) of the students belonged to either the mother-only ( $n = 113/34\%$ ), or father-only ( $n = 135/41\%$ ) type of family structure. The blended type and the grandparent-led types of family structures were reported by an average of seven percent for each.

An ANOVA was conducted in order to compare students from four of the family structures or types, namely, traditional, biological parents, mother-led, blended and grandparent-led types. Although the last two types were named by a small number of students, they were included in the analysis because the percentages were relatively high compared to the other smaller groups. The results of the ANOVA revealed that there was no relationship between attitudes towards TOP and family structure ( $F = 0.258$ ,  $df. = 3$ ,  $p > 0.05$ ). Because the last two types had low endorsements, the analysis was repeated excluding them, to see if the results would be different. Once more, there was no relationship between the attitudes towards TOP and family structure ( $t = -0.896$ ,  $df. = 246$ ,  $p > 0.05$ ).

#### 5.3.2 Hypothesis 2

The second hypothesis stated that attitudes towards TOP are related to the type of family functioning characterizing the individual's family of origin. The results of correlation analysis found that there was no relationship between attitudes towards TOP and the FAD general family functioning scale (Table 2;  $p > 0.05$ ). The FAD

general functioning subscale is a wide-ranging measure assessing the overall functioning of the family. When attitudes towards TOP were correlated with the more specific family functioning subscales, the FAD problem-solving subscale was negatively associated with attitudes towards TOP, and the association was statistically significant ( $r = -0.206$ ,  $p = 0.000$ ) explaining just over 4% of the shared variance (see table 2). The FAD behaviour control subscale did not have any relationship with the variable ( $p > 0.05$ ).

**Table 2: Correlation between attitudes towards TOP and variables of religiosity, death anxiety and family functioning**

		<i>r</i>	<i>p</i>	<i>r</i> <sup>2</sup>
1.	Intrinsic religiosity	-0.161	0.003	0.026
2.	“Your Own Dying” subscale	-0.050	<i>ns.</i>	0.003
3.	“The Dying of Others” subscale	-0.048	<i>ns.</i>	0.002
4.	FAD general functioning subscale	-0.022	<i>ns.</i>	0.001
5.	FAD problem-solving subscale	-0.206	0.000	0.043
6.	FAD behaviour control subscale	-0.091	<i>ns.</i>	0.008

Note: FAD = Family Assessment Device

### 5.3.3 Hypothesis 3

The third hypothesis stated that there is a statistically significant, negative relationship between attitudes towards TOP and intrinsic religiosity among school going adolescents. The results of the study were in accordance with the hypothesis (see Table 2;  $r = -0.16$ ,  $p = 0.003$ ,  $r^2 = 0.03$ ).

### 5.3.4 Hypothesis 4

The fourth hypothesis stated that there is a statistically significant, negative relationship between attitudes towards TOP and death anxiety. The relationship between attitudes towards TOP and death anxiety was investigated by means of a correlation analysis (Table 2). In this study, there was no relationship between attitudes towards TOP and death anxiety. The Collett and Lester (1969) subscales of “Your Own Dying” and “The Dying of Others” were not associated with attitudes towards TOP ( $ps > 0.05$ ).

### 5.3.5 Hypothesis 5

To investigate the fifth hypothesis of the study, a regression hypothesis was conducted. The variables of intrinsic religiosity and FAD problem-solving were entered simultaneously in order to predict attitudes towards TOP. Both intrinsic religiosity and FAD problem-solving scores were predictors of attitudes towards TOP ( $ps < 0.01$ ; see Table 3). The standardised regression coefficients for both variables were negative values, meaning that each of the two independent variables predicted lower scores for attitudes towards TOP.

**Table 3: Intrinsic religiosity and FAD problem-solving as predictors of attitudes towards TOP**

Predictors	B	SeB	$\beta$	T	$p$	$f^2$
						0.067
Intrinsic religiosity	0.129	0.049	0.144	2.651	0.008	
FAD Problem-solving	0.260	0.078	0.181	3.322	0.001	

Note: B = unstandardized regression coefficient; seB = standard error of B;  $\beta$  = standardized regression coefficient.

## **CHAPTER SIX**

### **Discussion**

#### **6.1 Introduction**

The current chapter discusses the findings of the study. The researcher explores the relation of family structure and functioning, religiosity, and death anxiety to TOP attitudes among adolescents. The chapter also includes a discussion of the limitations of the study and recommendations.

#### **6.2 The Relationship between Family Structure and Attitudes towards TOP**

The current study assessed how family structure is related to TOP attitudes among adolescents. Previous studies indicate that adolescents living with both biological parents are least likely to terminate their pregnancies, while those living with a single parent were more likely to do so (Borges et al., 2008; Fagan, 2011; Hope et al., 2003). Those adolescents living with neither parent are even more likely to terminate their pregnancies. Furthermore, the study conducted by Fagan and Talkington (1997) revealed that adolescents are less likely to be encouraged by fathers from intact families to terminate their pregnancies while adolescent whose fathers are from intact cohabiting families, single parent families.

The current study did not find a relationship between family structure and TOP attitudes of adolescents as compared to studies carried out by Renzi (1975) and Fagan and Talkington (1997). Renzi (1975) found that family size could indirectly assist in predicting TOP attitudes. Fathers who grew up in broken families were

more likely to encourage TOP compared to fathers from intact families (Fagan & Talkington, 1997).

The current study found no differences between the scores of adolescents from families with both parents and single parent families on the TOP attitudes scale. This implies that family structure does not affect TOP attitudes in the context of the present study. Therefore TOP attitudes of adolescents who are from families with a single parent, both parents and neither parent will not differ with regard to TOP attitudes in this particular group of students.

Sturgeon (2008), who composed a systematic summary of the social science literature linking adolescent sexual outcomes to variations in family structure, emphasized that the most common method of measurement of family structure (whose variant was also used in this study) was the self-report of adolescents regarding their living arrangements at a specific age.

However, this method fails to capture their living arrangements throughout the rest of their adolescence, the reasons being that the duration of the living arrangements of their family structure and the number of family structure transitions that an adolescent had experienced, were not captured. This is noted because each of those family structures exhibits a unique and interactive effect on the sexual outcome of adolescents, which cannot be captured by simply comparing adolescents from intact families and those from non-intact families. Therefore similar criteria were adopted with regards to the data collection in the current study. The findings of the current study concur with those of the study conducted by Sturgeon (2008).



### **6.3 The Impact of Family Functioning on Attitude towards TOP**

The current study investigated the relationship between family functioning and TOP attitudes among adolescents. The results reveal that the FAD problem-solving dimension is the only family variable that is associated with TOP attitudes. The FAD problem-solving subscale was negatively associated with attitudes towards TOP. The studies by Blanchard et al. (2004) and Blum, et al. (1999) showed lack of support for the findings of the current study. Those studies found that problem solving was positively associated with TOP attitudes.

In this instance, the advantage of studying FAD problem solving is that much of it occurs through communication (Bishop et al., 2003). In this respect, FAD problem solving opens a window into the very core of a family. Even though examining problem solving focuses on certain features of family life, they are linked to more global family characteristics (Vuchinich, 1999). Vuchinich (1999) emphasizes that problem solving governs essential parts of family behaviour, communication, cognitive skills and affective patterns that characterize how families come to terms with their circumstances. Such patterns are clearly related to more global family concepts such as adaptability. Therefore, the families of the adolescents in the current study are able to adapt and be flexible concerning the circumstances such as sexually related issues. This is supported by the finding in this study that open communication, highly affective responsiveness and involvement, which were assessed by examining the effectiveness of problem-solving skills, are characteristics of the families of the adolescents. Bishop et al. (2003) emphasize that effective problem solving results from open communication.

Interestingly, there were observations that South African Black families are typically not involved in the sexual issues of their adolescent children (Viljoen,

1994 in Macleod, 2011). Also, the practice in Black culture could have contributed to the social problem of adolescent pregnancy (Macleod, 2011). Studies conducted by Rosier (2007a) and Staples (1985) found that, in other cultures, communicating to solve sexually related matters conflicts with the social norms. In this regard, adolescents fear disappointing their parents and rejection by their families (such as in TOP). Hence, according to Bishop et al. (2003), close communication leads to unsuccessful family functioning and ineffective problem solving.

The findings of this study also indicate that other specific family functioning variables, namely, FAD general family functioning and FAD behavioural control, are not related to TOP attitudes among adolescents. The study conducted by *Miller* (2002) does not corroborate these findings. *Miller's* study found that parent–child sexual risk communication was associated with more responsible behaviours. *Rogers* (1999) found that adolescents who have parents who monitor them strictly (behavioural control) are more likely to minimise sexual risks than adolescents who have parents who monitor them less strictly.

The investigation of the effect of family functioning on TOP attitudes among adolescents was based exclusively on self-reports by the adolescents; this may have introduced bias to the under- or over-reporting effect of family functioning on TOP attitudes, as in the study carried out by *Browder* (2008). However, the key scale of the current study, that is, the abortion attitude scale (*Berne*, 1983), could have been the cause of the results not reaching the required significant levels of FAD general family functioning and FAD behavioural control on account of its low level of reliability.

#### **6.4 The Investigation of the Effect of Intrinsic Religiosity**

The results of the current study indicate that the third hypothesis can be accepted. It states that there is a statistically significant, negative relationship between attitudes towards TOP and intrinsic religious beliefs among school-going adolescents. According to Jelen et al. (1993) and Adamczyk (2008), this can be explained by the fact that TOP attitudes are influenced by inculcated pro-life attitudes among church members. Again, most of the participants delay sexual engagement because of their intrinsic religiosity-orientation. This finding serves to confirm the consistent pattern of studies that indicate that intrinsic religiosity affects the TOP attitudes of adolescents (Alston et al., 1979; Jelen et al., 1993; Newport & Saad, 2006; Varga, 2002; Yu & Zhai, 2007).

While Fehring and Ohlendorf (2003) found that a relationship exists between TOP attitudes and religiosity, the use of the TOP variable could not have been a true reflection of TOP attitudes because of the speculation that women who are more religious might be more reluctant to report a TOP. However, Adamczyk (2008) did not find any relationship between religiosity and TOP, which is inconsistent with the findings of the current study. The reason for the results of the study by Adamczyk (2008) was that the focus fell on the importance of academic aspirations of young women who are unwed.

Of interest is that the value of religiosity with regards to TOP attitudes decreases with years; women perceive the high cost of having a child, especially when they are academics (Adamczyk, 2008; Gau & Wiecko, 2008; Harris & Mills, 1985; Johnson-Hanks, 2002). Another pressure under which adolescents from families who are orientated towards intrinsic religiosity could find themselves terminating pregnancies is the shame associated with pregnancies that occur out of wedlock. Such instances imply a violation of their religious norms (Schuster, 2005), while it

also reflects their sexual indiscretion. There is evidence that religious beliefs among U.S. women frequently manage fertility by terminating a pregnancy (Fehring & Ohlendorf, 2003).

Individuals who are intrinsic-religiosity orientated are limited in communicating about TOP since this is also morally and socially unacceptable in this sphere (Varga, 2002). As a result of the limitation of communication regarding TOP and the possible impact of religious values over TOP attitudes, the participants of the current study would not have been honest about their TOP attitudes. This could, in turn, have resulted in the under-reporting of TOP attitudes, because adolescents have also been known to provide inaccurate reports of their sexual behaviours (especially pregnancies and TOP) given the sensitive nature of the information (Sturgeon, 2008). However, a higher percentage of TOPs among adolescents still remains (Roelf, 2007).

## **6.5 The Influence of Death Anxiety on TOP Attitude**

The current study failed to indicate a relationship between death anxiety and TOP attitudes. This finding is corroborated by Blum et al. (2008) and Cameron (2010), whose studies composed a systematic summary of the social science literatures linking the relationship between anxiety and sex-related behaviours. These studies advanced reasons for the lack of relationship between anxiety and TOP. Firstly, other studies did not have appropriate comparative groups (for instance, those who terminated and those who did not terminate their pregnancies; and whether those terminations of pregnancies were intentional or unintentional). Secondly, other studies did not gather the psychological history of the participants. This could have led to over- or under-estimation of the effect of anxiety on TOP, because there could be participants who had presented an anxiety disorder before the TOP.

Thirdly, possibly there was a lack of a relationship between TOP and anxiety because inadequate mental health instruments were used.

The finding of the current study can be contrasted with Boden et al. (2008), Fergusson et al. (2006) and Russo and Steinberg (2008), who found that other psychological anxiety symptoms rather than death anxiety, play a determinative role in TOP attitudes. General statements about the relation of TOP to mental health are not sufficiently informative to inform clinical practice though, because the study includes the inability to define a clinically diagnosed anxiety disorder (Russo& Steinberg, 2008).

The current study did not find a relationship between both death anxiety and religiosity and TOP attitudes. Almost all the participants in the current study are intrinsic religiosity orientated, which highly reduces or completely removes death anxiety (Burdette et al., 2009; Chambers et al., 2005), thereby limiting the effect of death anxiety on TOP attitudes. However, the abortion attitudes scale, which is the key scale in the current study, could have affected the results due to its low level of reliability.

## **6.6 TOP Attitudes among Adolescents: The Combined Effects of Family Functioning and Intrinsic Religiosity**

It was anticipated that family functioning and intrinsic religiosity would have a joint effect on the adolescents' attitudes towards TOP. Both intrinsic religiosity and FAD problem solving were found to be predictors of TOP attitudes among adolescents in this study. The study conducted by Kelly (1992) emphasized that family members who are religiously orientated hold negative attitudes towards TOP. In the current study, it appears that adolescents are rooted in their family's religion (86.1% of adolescents reported to be Christians, and are likely to be following their

family's religion). It can be argued that adolescents from families who are religiously orientated always refer to religious principles with regards to TOP before they attempt to solve a problem. Newman and Pargament (1990) further explain that evaluation of one's ability to solve a problem through religious means may serve as a self-maintenance function. That is, the individual may draw emotional support through appraising the problem as solvable with God's help. This tallies with the fact that intrinsic religiosity disagrees with both elective and selective TOP (Abar et al., 2009; Gau & Wiecko, 2008).

Other studies found a relationship between family functioning, religiosity and anxiety (Alston et al., 1979; Burdette et al., 2009; Chambers et al., 2005; Davison & Woolrum, 1992; Henry & Thomas, 1985; Renzi, 1975). Aston et al. (1979) and Davison and Woolrum (1992) found that religiosity is a predictor of FAD behavioural control and TOP attitudes. The effects of family functioning and religion on the enhancement of personal well-being were found to be similar. Extrinsic religiosity is positively associated with anxiety (Henry & Thomas, 1985), while anxiety correlates negatively with intrinsic religiosity (Burdette et al., 2009; Chambers et al., 2005). Adolescents who belong to a cultural group (such as religious groups) consider TOP to be wrong, and are placed at a higher risk of negative psychological responses such as anxiety if they chose to terminate their pregnancies (Cameron, 2010). Hence sinful behaviours are associated with a low self-esteem, feelings of guilt and worry, and a decreased feeling of mastery (Burdette et al., 2009).

## **6.7 Conclusion**

The current study indicates that FAD problem solving and intrinsic religiosity variables are the predominant reason for the high percentage of negative TOP attitudes among adolescents despite the limitations of the study. Both intrinsic

religiosity and the FAD problem solving are good predictors of TOP attitudes. While the investigations strongly indicate the high rate of negative TOP attitudes among adolescents, the question still stands as to what causes the high rate of TOPs among adolescents.

TOP is a controversial issue in many societies worldwide. It is important that studies be carried out to determine the attitudes that people hold so that those who are affected are given the necessary help and support.

## **6.8 Limitations**

The most important limitation was a key scale (abortion attitudes scale) with a low level of reliability which may have caused doubtful results. The sample was limited, therefore the findings cannot be generalised for Limpopo Province. The participants were drawn from the urban and suburban townships of Polokwane, in black communities. The study was specifically limited to adolescent female groups who were at high schools and almost all of the participants reported that they had neither terminated their pregnancies nor fallen pregnant. Furthermore, the current study was limited to studying the family functioning as a contributing factor towards TOP attitudes among adolescents, exclusively based on their self-reports, which may have introduced bias related to an under- or over reporting effect of family functioning on TOP attitudes.

## **6.9 Recommendations**

Most importantly, the research design of a future study should be longitudinal so that most psychologically disturbed women after TOP are followed up. Also, this should be based on a large sample size. An investigation of the relationship

between TOP attitudes and death anxiety, family structure, extrinsic religiosity and other subscales of family functioning among adolescents from different cultures could be conducted to further contribute to the body of knowledge regarding TOP, since the current study investigated mostly Sepedi speaking adolescents. This field of study should also be investigated in rural areas.

It is suggested that most people who have terminated their pregnancies have positive TOP attitudes. Adolescents in high schools, tertiary and hospital institutions, who have either terminated or did not terminate their pregnancies (intentionally or unintentionally) would have been a reliable source to identify determinants of TOP attitudes. The investigation of the effect of family functioning on TOP attitudes among adolescents would be much more significant if it is based on adolescents as well as their parents. Future research should also look into exploring different religious groups and other belief systems outside of religion that could contribute to TOP attitudes among adolescents.



## REFERENCES

- Abar, B., Carter, K. L., & Winsler, A. (2009). The effects of maternal parenting style and religious commitment on self-regulation, academic achievement and risk behaviour among African-American parochial college students. *Journal of Adolescence*, 32, 259-273.
- Abouzahr, C., Ferguson, B. J., & Olukoya, A. A. (2007). Unsafe abortion in adolescents. *International Journal of Gynaecology & Obstetrics*, 75, 137-147.
- Adamczyk, A. (2008). The effects of religious contextual norms, structural constraints, the personal religiosity on abortion decisions. *Social Science Research*, 37, 657-672.
- Åhman, E. & Shah, I. (2004). Age patterns of unsafe abortion in developing country regions. *Reproductive Health Matters*, 12, 9-17.
- Allport, G. W. & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality & Social Psychology*, 5, 432 – 443.
- Alston, J. P., Alston, L. T., & McIntosh, W. A. (1979). The differential impact of religious preference and church attendance on attitudes toward abortion. *Review of Religious Research*, 20, 195-213.
- Aspy, C., Marshal, L., McLeroy, K., Oman, R. F., Rodine, S., & Vesely, S. K. (2007). Parental communication and youth sexual behaviour. *Journal of Adolescence*, 30, 449-466.
- Baer, J. (1999). The effect of family structure on SES family processes in family processes. *Journal of Adolescence*, 22, 341-354.

- Balasubramanian, P. & Ravindran, T. K. S. (2004). "Yes" to abortion but "no" to sexual rights: The paradoxical reality of married women in rural Tamil Nadu, India. *Reproductive Health Matters*, 12, 88–99.
- Baldwin, L. M., Bishop, D. S., & Epstein, N. B. (1983). The McMaster Family Assessment Device. *Journal of Marital & Family Therapy*, 9, 171-180.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall
- Barrett, J. B., Da Vanzo, J., Ellison, C. G., & Grammish, C. (2009). Religion and attitudes towards abortion among U. S. adults. *Population Association of America*, [Date accessed: 31 Mar 2011]. [www.politicalscience.uncc.edu/.../...](http://www.politicalscience.uncc.edu/.../...) - [United States](#).
- Bauman, K. E. & Flewelling, R. L. (1990). Family structure as a predictor of initial substance use and sexual intercourse in early adolescence. *Journal of Marriage and Family*, 52, 171-181.
- Benson, J., Ganatra, B., Grimes, D. A., Shah, I. H., Singh, S., Okonofua, F. E., & Romero, M. (2006). Unsafe abortion: The preventable pandemic. *Lancet*, 368, 1908-1919.
- Berne, L. A. S. (1983). Abortion Attitudes Scale. In Davis, C. M. (1998). *Handbook of sexual related measures*. New York: Sage.
- Bishop, D. S., Epstein, N. B., Keitner, G. I., Miller, I. W., & Ryann, C. E. (2003). *Normal family functioning: McMaster model*. New York: Guilford.
- Blanchard, K., Cooper, D., Cullingworth, L., Dickson, K., Mavimbela, N., Van Bogaert, L., (2005). Medical abortion: The possibilities for introduction in the public sector in South Africa. *Reproductive Health Matters*, 13, 35-45.

- Blum, R. W. M., Izquierdo, A. R., Lammer, C., & Mendoz, J. P. (1999). Abortion among adolescents in Cuba. *Journal of Adolescent Health, 24*, 59-62.
- Blum, R. W., Charles, V. E., Polis, C. B., & Sridhara, S. K. (2008). Abortion and long term mental health outcomes: A systemic review of the evidence. *Contraception, 78*, 436-450.
- Blumenthal, C. Glej, D. A., Miller, B. C., Moore, K. A., Morrison, D. R., Sugland, B. W. (n. d.). Beginning too soon: Adolescent sexual behaviour, pregnancy, and parenthood: A review of research and intervention. [Date accessed: 19 Oct 2012]. <http://aspe.hhs.gov/hsp/cyp/xsteesex.htm>.
- Boden, J. M., Fergusson, D. M., & Horwood, J. (2008). Abortion and mental health disorders: Evidence from a 30-year longitudinal study. *The British Journal of Psychiatry, 193*, 444-451.
- Bödtker, A. S., Broen, A. N., Ekeberg, O., & Moum, T. (2005). Reasons for induced abortion and their relation to women's emotional distress: A prospective, two-year follow-up study. *General Hospital Psychiatry, 27*, 36-46.
- Borges, G., Galano, E., Hearst, N., Hudes, E. S., Peres, C. A., & Rutherford, G. (2008). Family structure and adolescents' sexual behaviour in a poor area of Sao Paulo, Brazil. *Journal of Adolescent Health, 42*, 177-183.
- Bradshaw, Z. & Slade, P. (2003). The effects of induced abortion on emotional experiences and relationships: A critical review of the literature. *Clinical Psychology Review, 23*, 929-958.
- Braverman, P., Fong, G. T., Hutchinson, M. K., Jemmott, J. B., & Jemmott, L. S. (2003). The role of mother–daughter sexual risk communication in reducing sexual risk

- behaviours among urban adolescent females: A prospective study. *Journal of Adolescent Health*, 33, 98-107.
- Browder, S. (2008). Family influence on risky sexual behaviour, pregnancy and abortion decision in Swiss adolescents. Auburn University theses and dissertations. [Date accessed: 31 Mar 2011]. <http://etd.auburn.edu/etd/handle/10425/1206>.
- Buga, G. A. B. (2002). Attitudes of medical students to induced abortion. *East African Medical Journal*, 79, 259-262.
- Buhi, E. R. & Goodson, P. (2007). Predictors of adolescent sexual behaviours and intention: A theory of guided-systemic review. *Journal of Adolescent Health*, 40, 4-21.
- Burdette, A. M., Ellison, C. G., & Hill, T. D. (2009). Blessed assurance: Religion, anxiety, and tranquility among US adults. *Social Science Research*, 38, 656-667.
- Cameron, S. (2010). Induced abortion and psychological sequelae. *Best Practise & Research Clinical Obstetrics & Gynaecology*, 24, 657-665.
- Casey, P. (2008). Post abortion psychiatric disorder: Clinical and training implications. *The British Journal of Psychiatry*, 193, 452-454.
- Chambers, J., Cohen, A. B., Gorvine, B. J., Koenig, H. G., Meade, R., & Pierce, J. D. (2005). Intrinsic and extrinsic religiosity, belief in the afterlife, death anxiety, and life satisfaction in young Catholics and Protestants. *Journal of Research in Personality*, 39, 307-324.
- Choice on Termination of Pregnancy Amendment Act, 512 RSA. 30790 (2008).

- Chun, H. & Gupta, M. D. (2009). Gender discrimination in sex selective and its transition in South Korea. *Women's Studies International Forum*, 32, 89-97.
- Coleman, P. K., Cogle, J. R., & Reardon, D. C. (2005). Generalized anxiety following unintended pregnancies resolved through childbirth and abortion: A cohort study of the 1995 national survey of family growth. *Journal of Anxiety Disorders*, 19, 137-142.
- Coleman, P. K., Coyle, C .T, Rue, V. M., & Shuping, M. (2009). Induced abortion and anxiety, mood, substance abuse disorders: Isolating the effect of abortion in the national comorbidity survey. *Journal of Psychiatric Research*, 43, 770-776.
- Coleman, P. K., Coyle, C. T., & Rue, V. M. (2009). Induced abortion and intimate relationship quality in Chicago health and social life survey. *Public Health*, 123, 331-338.
- Collett, L. D. & Lester, D. (1969).The fear of death and the fear of dying. *Journal of Psychology*, 72, 179–181.
- Combes, P., Demongeot, J., Gaillard, M., & Pellet, J. (2004). A score for measurement of the role social vulnerability in decision on abortion. *European Journal of Obstetrics & Gynaecology & Reproductive Biology*, 117, 93-101.
- Cook, R. J., Dickens, B. M., & Horga, M. (2004). Safe abortion: WHO technical and policy guidance. *International Journal of Gynaecology & Obstetrics*, 86, 79-84.
- Cromer, B., McCarthy, M., & Welsh, P. (2001). Abortion in adolescence: A four-country comparison. *Women's Health*, 11, 73-79.
- Das, R., Sheikh, A., & Thakrar, D. (2008). *Caring for Hindu patients*. Abingdon: Radcliffe.

- Davison, L. B. & Woolrum, E. (1992). Re-examination of religious influence on abortion attitudes. *Review of Religious Research*, 33, 229-243.
- de Leon, G. D., Huerta-Franco, R., & Malacara, J. M. (1996). Knowledge and attitudes toward sexuality in adolescents and their association with the family and other factors. *Adolescence*, 1-5.
- Delvaux, T. & Nöstlinger, C. (2007). Reproductive choice for women and men living with HIV: Contraception, abortion and fertility. *Reproductive Health Matters*, 15, 46-66.
- de-Pinho, H., Guttmacher, S., Kapadia, F., & Naude, J. T. W. (December, 1998). Abortion reform in South Africa: A case study of the 1996 Choice on Termination of Pregnancy Act. *International Family Planning Perspectives*, 24(4). [Date accessed: 04 December 2010]. <http://www.guttmacher.org/pubs/journals/2419198.html>.
- Diiorio, C., Hockenberry-Eaton, M., & Kelley, M. (1999). Communication about sexual issues: Mothers, fathers, and friends. *Journal of Adolescent Health*, 24, 181-189.
- Domenico, D. M. & Jones, K. H. (2007). Adolescent's pregnancy in America: Causes and responses. *The Journal for Vocational Special Needs Education*, 30, 1-12.
- Dubas, J. S., Miller, K., & Petersen, A. C. (2003). The study of adolescence during the 20th century. *History of the Family*, 8, 375-397.
- Eaves, L. J. & Hatemi, E. P. K. (2008). Transmission of attitudes toward abortion and gay rights: effects of genes, social learning and mate selection. *Behavioural Genetic*, 38, 247-256.

- Echevaria, S., Ellison, G. C., & Smith, B. (2005). Religion and abortion attitudes among U. S. Hispanics: Finding from the 1990 Latino National Political Survey. *Social Science Quarterly*, 86, 192-208.
- Emerson, M. R., Hirsch, M. B., & Zabin, L. S. (1989). When urban adolescents choose abortion: Effects on education, psychological status and subsequent pregnancy. *Family Planning Perspectives*, 21, 248-255.
- Falk, G., Falk, L., Hanson, U., & Milsom, I. (2001). Young women requesting emergency contraception are, despite contraceptive counselling, a high risk group for new unintended pregnancies. *Contraception*, 64, 23–27.
- Fagan, P. F. (2011). Woman who abort first pregnancy. *Marriage & Religion Research Institute*. [Date accessed: 16 Mar 2012]. <http://downloads.frc.org/EF/EF101.25>.
- Fagan, P. F. & Talkington, S. (1997). Fathers who have ever encouraged an abortion by current religious attendance and structure of family of origin. *Marriage & Religion Research Institute*. [Date accessed: 01 Jan 2012]. [www.mappingamerica.org/project1997](http://www.mappingamerica.org/project1997)
- Faundes, A. & Rao, K. A. (2006). Access to safe abortion within the limit of law. *Best Practise & Research Clinic Obstetrics & Gynaecology*, 20, 421-432.
- Fehring, R. J. & Ohlendorf, J. (2003). The influence of religiosity on contraceptive use and abortion in the United States. [Date accessed: 20 Jan 2011]. [http://www.lifeissues.net/writers/feh/feh\\_25religiosityabortion1.html](http://www.lifeissues.net/writers/feh/feh_25religiosityabortion1.html).
- Fergusson, D. M., Horwood, L. J., & Ridder, E. M. (2006). Abortion in young women and subsequent mental health. *Journal of Child Psychology & Psychiatry*, 47, 16–24.

- Foutoukhis, K. N., Kaprinis, G., Magiria, S., & Siamouli, M. (2008). Late life depression, religiosity, cerebrovascular disease, cognitive impairment, and attitudes towards death in the elderly: Interpreting the data. *Medical Hypothesis*, 70, 493-496.
- Ganatra, B. & Hirve, S. (2002). Induced abortion among adolescent women in rural Maharashtra, India. *Reproductive Health Matters*, 10, 76-85.
- Gau, J. M. & Wiecko, F. M. (2008). Every life is sacred, kind of, uncovering the sources of seemingly contradictory public attitudes toward abortion and the death penalty. *Social Science Journal*, 45, 546-564.
- Glasier, A., Olge, S., & Riley, S. C. (2008). Communication between parents and their children about sexual health. *Contraception*, 77, 28-288.
- Gorsuch, R. L., Hood, R. W., Hunsberger, B., & Spilka, B. (1996). *The psychology of religion: An empirical approach* (2<sup>nd</sup> ed.). New York: Guilford.
- Gorsuch, R. L. & McPherson, S. E. (1989). Intrinsic/extrinsic measurement: I/E revised and single item scales. *Journal for the Scientific Study*, 28, 348-354.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1999). A dual-process model of defence against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review*, 106, 835-845.
- Griffin-Carlson, M. S. & Mackin, K. J. (1993). Parental consent: Factors influencing adolescent disclosure regarding abortion. *Adolescence*, 28(109), [Date accessed: 16 Mar 2011]. [findarticles.com/p/articles/mi\\_m2248/is\\_n109.../ai\\_13885812/](http://findarticles.com/p/articles/mi_m2248/is_n109.../ai_13885812/).
- Griffin-Carlson, M.S., & Schwanenflugel, P. J. (1998). Adolescent abortion and parental notification: Evidence for the importance of family functioning on the perceived



- quality of parental involvement in U.S. families. *Journal of Child Psychology & Psychiatry*, 39, 543-553, (Abstract).
- Gursoy, A. (1996). Abortion in Turkey: A matter of state, family or individual decision. *Social Science Medicine*, 42, 531-542.
- Harris, R. J., & Mills, E. W. (1985). Religion, values and attitudes toward abortion. *Journal for the Scientific Study of Religion*, 24, 137-154.
- Henderson, M., Wight, D., & Williamson, L. (2006). Parental influences on young people's sexual behaviour: A longitudinal analysis. *Journal of Adolescence*, 29, 473-494.
- Henry, G. C. & Thomas, D. L. (1985). The religion and family connection: Increasing dialogue in social science. *The Journal of Marriage & Family*. 47, 311-321.
- Hoffmann, J. P. & Johnson, M. S. (2005). Attitudes toward abortion among religious traditions in the United States: Change or continuity? *Sociology of Religion*. [Date accessed: 12 Apr 2009]. [http://findarticles.com/p/articles/mi\\_m0SOR/is\\_2\\_66/ai\\_n14817990/pg\\_18/](http://findarticles.com/p/articles/mi_m0SOR/is_2_66/ai_n14817990/pg_18/).
- Holmberg, L. I. & Walmborg, V. (2000). The process of decision making on abortion: A grounded theory study of young men in Sweden. *Journal of Adolescent Health*, 26, 130-134.
- Hope, T. L., Watt, T. T., & Wilder, E. I. (2003). The Relationships among adolescent pregnancy, pregnancy resolution, and juvenile delinquency. *The Sociological Quarterly*, 44, 555-576.
- Horne, A. M. (2000). *Family counselling and therapy*. 3<sup>rd</sup>ed. New York: Brook/Cole. Belmont.

- Hwang, L. Y., Monasterio, E., & Shafer, M. (2007). Adolescent sexual health. *Current Problems in Paediatric & Adolescent Health Care*, 37, 302-325.
- Ingham, R., Matthews, Z., Phil, D., & Puri, M. (2007). Factors affecting abortion decisions among young couples in Nepal. *Journal of Adolescent Health*, 40, 535-542.
- Jelen, T. J. (1988). Changes in the attitudinal correlation opposition to abortion, 1977-1988. *Journal for the Scientific Study of Religion*, 27, 211-228.
- Jelen, T. J., O'Donnell, J., & Wilcox, C. (1993). A contextual analysis of Catholicism and attitudes towards abortion in Western Europe. *Sociology of Religion*, 54, 375-383.
- Johns, L. & Patel, C. J. (2009). Gender role attitudes and attitudes to abortion: Are there gender differences? *The Social Science Journal*, 46, 493-505.
- Johnston, R. (2008). Historical abortion statistics, South Africa: Abortion statistics and other data Johnston's Archive. [Date accessed: 17 May 2009]. <http://www.johnstonsarchive.net/policy/abortion/ab-southafrica.html>.
- Johnson-Hanks, J. (2002). The lesser shame: Abortion among educated women in Southern Cameroon. *Social Science & Medicine*, 55, 1337-1349.
- Kearl, M. C. (1999). *Endings: Sociology of death and dying*. Oxford: Oxford University Press.
- Kelly, E. W. (1992). Religion in Family Therapy Journal: A review analysis. In L. A. Burton (1992). *Religion and the family: When God helps*. New York: Haworth Pastoral.

- Kolarov, H. A. (2008). Secrets of society: Young women choose self-induced abortions rather than break taboo. [Date accessed: 01 Jul 2009]. [http://www.kuwaittimes.net/read\\_news.php?newsid=MTA1MzcyMTUwMg](http://www.kuwaittimes.net/read_news.php?newsid=MTA1MzcyMTUwMg).
- Koster-Oyekan, W. (1998). Why resort to illegal abortion in Zambia? Findings of a community-based study in Western Province. *Social Science & Medicine*, 46, 1303-1312.
- Koumantikis, E., Mavroforou, A., & Michalodimitrakis, E. (2004). Adolescence and abortion in Greece: Women's profile and perceptions. *Journal of Paediatric & Adolescent Gynecology*, 17, 321-326.
- Kwok, S. Y. C. L. & Shek, D. K. L. (2009). Social problem-solving, family functioning and suicidal ideation among Chinese adolescents in Hong Kong. *Family Therapy*, 36, 1-13.
- Law, A. (2008). Facts on induced abortion worldwide. Advancing sexual and reproductive health worldwide through research, policy analysis and public education. [Date accessed: 13 Feb 2009]. [http://www.guttmacher.org/pubs/fb\\_IAW.html](http://www.guttmacher.org/pubs/fb_IAW.html).
- Lawlor, D. A., Najman, J. M., & Shaw, M. (2006). Teenage children of teenage mothers: Psychological, behavioural and health outcomes from an Australian prospective longitudinal study. *Social Science & Medicine*, 62, 2526-2539.
- Lewis, C. A. & Maltby, J. (1996). Measuring extrinsic and intrinsic orientation toward religion: Amendment for its use among religious and non-religious samples. *Personality & Individual Differences*, 21, 937-946.

- Liovet, J. J. & Ramos, S. (1998). Induced abortion in Latin America: Strategies for future and social research. *Reproductive Health Matters*, 6, 55-65.
- Macleod, C. (2011). *“Adolescence”, pregnancy and abortion: Constructing threads and degeneration*. New York: Taylor& Francis.
- Mavroforou, A. (2004). Adolescence and abortion in Greece: Women's profile and perceptions. *Journal of Paediatric & Adolescent Gynaecology*, 17, 321-326.
- Mchango, B. & Rule. (2008). South Africans against abortion. *Human Sciences Research Council*, 6. [Date accessed: 22 Jul 2009]. [www.hsrc.ac.za/HSRC\\_Review\\_Article-83.phtml](http://www.hsrc.ac.za/HSRC_Review_Article-83.phtml).
- Medoff, M. H. (1999). An estimate of teenage abortion demand. *Journal of Socio-Economics*, 28, 175-184.
- Miller, B. C. (2002). Family influencing on adolescent sexual and contraceptive behaviour. *Journal of Sex & Research*. [Date accessed: 22 Apr 2011]. [www.ncbi.nlm.nih.gov/pubmed/12476252](http://www.ncbi.nlm.nih.gov/pubmed/12476252).
- Mineka, S. & Zinbarg, R. (2006). A contemporary learning theory perspective on the anxiety disorder: It's not what you thought it was, *APA*. 62, 9-257 (Abstract).
- Mudau, T., Moripe, S., & Mashegoane, S. (2011). Religiosity and demographic correlates of death anxiety in Thulamela, South Africa. *Theologia Viatorum: Journal of Theology & Religion in Africa*, 35, 231-250.
- Modi, D. (2002). Factors influencing women's attitudes towards abortion at the University of Pennsylvania. *Perspectives in Psychology*, 1, 42-49.

- Neimeyer, R. A. (2004). Construction of death and loss: Evolution of a research program. *Personal Construct Theory & Practise*, 1, 8-22.
- Neimeyer, R. A. (1999). *Death anxiety handbook*. New York: Taylor & Francis.
- Neimeyer, R. A. & Wass, H. (1995). *Dying: Face the fact*. New York: Taylor & Francis.
- Newman, S. J. & Pargament, K. I. (1990). The role of religion in the problem-solving process. *Review of Religious Research*, 31, 390-404.
- Newport, F. & Saad, L. (2006). Religion, politics inform Americans' views on abortion. [Date accessed: 22 Apr 2007]. <http://www.gallup.com/poll/22222/religion-politics-inform-americans-views-abortion.aspx>.
- Peterman, J. (1998). Marison's story: Culture, family, self and the decision to make an abortion. *Applied Behavioural Science Review*, 6, 167-177.
- Reisser, M. S. T. (1994). The effects of abortion on marriage and other committed relationships. Association for Inter disciplinary Research in Values and Social Change, 6. [Date accessed: 15 Feb 2011]. [www.lifeissues.net](http://www.lifeissues.net).
- Reardon, D. C. & Sobie, A. R. (2001). Detrimental effects of adolescent abortion. *Post Abortion Review*. [Date accessed: 12 Jan 2009]. [www.afterabortion.org](http://www.afterabortion.org).
- Renne, E. P. (1996). The pregnancy that doesn't stay: The practise and perception of abortion by Ekiti Yoruba women. *Social Science & Medicine*, 42, 483-494.
- Renzi, M. (1975). Ideal family size as an intervening variable between religion and attitudes towards abortion. *Journal for Scientific Study of Religion*, 14, 23-27.

- Roelf, W. (2007). SA teenagers still battle for access to abortion. *Mail & Guardian online*. [Date accessed: 22 Jul 2009]. [www.mg.co.za/article/2006-06-13-sa-teenagers-still-battle-for-access-to-abortion](http://www.mg.co.za/article/2006-06-13-sa-teenagers-still-battle-for-access-to-abortion).
- Rogers, K. B. (1999). Parenting processes related to sexual risk taking-behaviours of adolescent males and females. *Journal of Marriage & Family*, 61, 99-109.
- Rogo, K. (2004). Improving technologies to reduce abortion related morbidity and mortality. *International Journal of Obstetrics & Gynaecologists*, 84, 78-82.
- Rosier, C. (2007a). Attitudes towards abortion in rural and urban Burkina Faso. *Demographic Research*, 17, 23-58.
- Rosier, C. (2007b). Abortion: An open secret? Abortion and social network involvement in Burkina Faso. *Reproductive Health Matters*, 30, 230-238.
- Rossi, A. S. (1998). The impact of family structure and social change on adolescent sexual behaviour. *Children and Youth Services Review*, 19, 369-400.
- Russo, N. F. & Steinberg, J. R. (2008). Abortion and anxiety: What's the relationship? *Social Science & Medicine*, 67, 238-252.
- Saito, M. I. (1998). Sex education in school: Preventing unwanted pregnancy in adolescents. *International Journal of Gynaecology & Obstetrics*, 63, 157-160.
- Schenker, J. G. (2000). Women's reproductive health: Monotheistic religious perspectives. *International Journal of Gynaecology & Obstetrics*, 70, 77-86.
- Schuster, S. (2005). Abortion in the moral world of the Cameroon grassfield. *Reproductive Health Matters*, 13, 130-138.

- Scott, J. & Wink, P. (2005). Does religiousness buffer against the fear of death and dying in late adulthood? Findings from a longitudinal study. *Journals of Gerontology Series b: Psychological Sciences & Social Sciences* 60, 207-214.
- Sellers, P. M. (1997). *Midwifery*, vol. 2. Pretoria: Juta.
- Silva, J. L. P. (1998). Pregnancy during adolescence: Wanted vs. unwanted. *International Journal of Gynaecology & Obstetrics*, 63, 151-156.
- Singh, S. (2006). Hospital admissions resulting from unsafe abortion: Estimates from 13 developing countries. *Lancet*, 368, 1887-1892.
- Staples, R. (1985). Changes in black family structure: The conflict between family ideology and structural conditions. *Journal of Marriage & the Family*, 47, 1005-1013.
- Stern, L. (2009). *A visual approach to SPSS for windows. A guide to SPSS 17.0* (2<sup>nd</sup> ed.). Washington: Allyn & Bacon.
- Strahan, T. (2001). *Detrimental effects of abortion: An annotated bibliography with commentary*. Acorn Books, Springfield, IL. [Date accessed: 01 Jul 2009]. <http://www.afterabortion.org/Resources/DEAflyer.htm>.
- Strongman, K. T. (1995). Theories of anxiety. *Journal of Psychology*. 24, 1-10.
- Sturgeon, (2008). The Relationship between family structure and adolescent sexual activity. *The Heritage Foundation*. [Date accessed: 01 Jan 2012]. [www.familyfacts.org](http://www.familyfacts.org).

- Templer, D. I. (1970). The construction and validation of a death anxiety scale. *Journal of General Psychology*, 82, 165–177.
- Triandis, H. C. (1971). *Attitudes and attitude change*. New York: John Wiley & Sons.
- Tucke, J. (2010). An exploratory study of sex-selective abortion among Indian immigrants in the United States. The University of Texas at Arlington. (M.A. Social Work), The University of Texas at Arlington. [Date accessed: 09 Oct 2012]. [http://dspace.uta.edu/bitstream/handle/10106/5128/Tucker\\_uta\\_2502M\\_10742.pdf?sequence=1](http://dspace.uta.edu/bitstream/handle/10106/5128/Tucker_uta_2502M_10742.pdf?sequence=1).
- Ugwu, C. (n. d.). Religious status and affiliation as factors on attitudes on abortion. Nigeria. [Date accessed: 09 Oct 2012] [http://www.academicexcellencesociety.com/religious\\_status\\_and\\_affiliation\\_as\\_factors\\_on\\_attitudes\\_on\\_abortion.html](http://www.academicexcellencesociety.com/religious_status_and_affiliation_as_factors_on_attitudes_on_abortion.html).
- Warenus, L. U. (2006). Nurse-midwives' attitudes towards adolescent sexual and reproductive health needs in Kenya and Zambia. *Reproductive Health Matters*, 14,119-128.
- Wilson, (n. d.). How do religious views impact abortion views. Tennessee Technological University. [Date accessed: 17 Oct 2012] [http://www.tntech.edu/files/sociology/Final\\_Project\\_1Susan\\_Wilson\\_.pdf](http://www.tntech.edu/files/sociology/Final_Project_1Susan_Wilson_.pdf).
- Varga, C. A. (2002). Pregnancy termination among South African adolescents. *Studies in Family Planning*, 33, 283-298.
- Vuchinich, S. (1999). *Problem-solving in families: Research and practises*. Thousand Oaks, California: Sage.



Yu, W. & Zhai, J. E. (2007). *Impact of religion on the attitudes toward abortion and contraception use in the contemporary*. [Date accessed: 08 Aug 2009]. <http://paa2007.princeton.edu/download.aspx?submissionId=71954>.

## APPENDICES

### A. Letter to the Respondents



Makgabo F Madiba  
Discipline of Psychology  
School of Social Sciences  
University of Limpopo (Turfloop Campus)

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Dear Sir/Madam

This is a social psychology survey and the following questions are designed to assess feelings about death, religiosity, and family relationships, and your views about termination of pregnancy. Obviously, there are many differences of opinions about the things we are studying here. We would like to know your thoughts about these things. There are no right or wrong answers; we are only interested in what you as an individual are thinking about them. It is important for you to answer every question.

Do not worry about other people knowing what you have said. The information you provide will be treated confidentially. Your answers will be known only by you. The results are going to be reported for the whole group. So, no one will know what you as an individual might have said. Furthermore, to make sure no one knows what you have said; please do not sign your name on the questionnaire.

## B. Questionnaire

The questionnaire will take not more than an hour of your time. However, you do not have to spend a lot of time on any question. The first answer that comes to your mind is probably the best answer. We hope you will enjoy answering this questionnaire.

### 1 Demographic variable

A. Please tick your gender

Male

Female

B Age.....years old

C Please tick your marital status

Single

Married

Separated

Divorced

Widowed

Cohabiting

D. Home language.....

E Place of birth.....

F Area of residence (e.g., urban, rural) .....

G Grade that you are studying for.....

H Please tick your religion, which you have been raised in

Muslim

Islam

Buddhism

Christianity

Other

I If you have chosen "other" in the above choices, please specify  
.....

J. What is your current religious affiliation? .....

K. What is the highest level of education of your parents?

Father's highest educational level  
.....

Mother's highest educational level  
.....

I. Have you done an abortion before?  Yes  No

M. If the above answer is yes, how many times have you done an .....times  
abortion?

2. Family members

a. The number of family members, including  
yourself.....

b. Where in the birth order are you? Are you first, second, third born, and so on?

.....

c. Who do you live with at home? Please tick in the box in line with your choice.

Mother and father       Mother only       Father only

Stepmother and father       Stepfather & mother       Foster parents

Legal guardian       Partner       Grandparents

Mother, father, & grandparents       Sister/s       Brother/s

### C. INFORMATION FOR THE PARTICIPANTS

1. You are invited to participate in the following research project: **Determinants of attitudes towards termination of pregnancy among learners in the Mankweng and Seshego townships of Polokwane, South Africa.**
2. Participation in the project is completely voluntary and you are free to withdraw from the project (without providing any reasons) at any time.
1. It is possible that you might not personally experience any advantages during the project, although the knowledge that may be accumulated through the project might prove advantageous to others.
2. You are encouraged to ask any questions that you might have in connection with this project at any stage. The project leader and her/his staff will gladly answer your questions. They will also discuss the project/experiment in detail with you.
3. Your involvement in the project will be to explain the details of the questionnaires and answer any question on the part of the participants.



**UNIVERSITY OF LIMPOPO**  
**CONSENT FORM**

**PROJECT TITLE:** DETERMINANTS OF ATTITUDES TOWARDS TERMINATION OF PREGNANCY AMONG LEARNERS IN THE MANKWENG AND SESHEGO TOWNSHIPS OF POLOKWANE, SOUTH AFRICA

**PROJECT LEADER:** Madiba M. F

I, hereby voluntarily consent to participate in the following project: Determinants of attitudes towards termination of pregnancy among learners in the Mankweng and Seshego townships of Polokwane, South Africa. I realise that:

1. The study deals with factors influencing attitudes and beliefs towards termination of pregnancy.
2. The ethics committee has approved that individuals may be approached to participate in this study;
3. The collection of data protocol, that is the extent, aims and methods of the research, has been explained to me;
4. The protocol sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the

anticipated advantages for myself or others that are reasonably expected from the research and alternative procedures that may be to my advantage;

5. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation;
7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research;
8. Any questions that I may have regarding the research, or related matters, will be answered by the researchers;
9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact a member of the research team;
10. Participation in this research is voluntary and I can withdraw my participation at any stage;
11. If any scientific problem is identified at any stage during the research, or when I am vetted for participation, such condition will be discussed with me in confidence by a qualified person and/or I will be referred to my doctor;
12. I indemnify the University of Limpopo and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the part of the mentioned persons.

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Signature of researched person

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Signature of witness

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Signature of person that informed the researched person



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Signature of parent/guardian

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DATE SIGNED