THE RELATIONSHIP BETWEEN PARENTING STYLES AND ANTISOCIAL BEHAVIOUR

BY

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DECLARATION

I, Denbi Tesfaye Birbo**,** declare that the dissertation hereby submitted by me in partial fulfilment of the requirements for the degree of Master of Arts in Clinical Psychology at the University of Limpopo is my own work, and it has not been submitted by me for degree purposes at any other university previously. All the material used has been duly acknowledged.

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ABSTRACTS

This study examined the relationship between parenting styles, parental punitiveness and family structure, and antisocial behaviour, as well as the influences of parental educational levels on respondentsø antisocial behaviour. Participants consisted of 227 male and 140 female students from the University of Limpopo, whose ages ranged from 17 to 24 years.

Families were classified into one of four parenting styles (namely, authoritative, authoritarian, indulgent and neglectful) on the basis of respondentsøratings of their parents on two parental dimensions: warmth/acceptance and supervision/control. The respondents were then compared with antisocial behaviour. The results indicated that the difference between the four groups of parenting styles did not reach statistical significance on antisocial behaviour. As well as the relationship between family structures and antisocial behaviour did not reach statistical significance. However, there were significant and positive relationships between parental punitiveness and antisocial behaviour. There were significant relationships between parental educational levels and antisocial behaviour. Parental warmth and supervision were also significantly and negatively related to the respondentsø antisocial behaviour. Finally, the implications and limitations of the study are described.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1   INTRODUCTION

Contemporary and classic works maintain that parents in all cultures are the primary agents of socialization. They are responsible for the transmission of cultural values and norms required for the attainment of cultural standards of adult competence (Sorkhabi, 2005). Evidence from human studies has shown that child-rearing practices play a major role in the development of human behaviours (Bowlby, 1988; Chao, 2000; Denollet, Smolderen, Broek & Pedersen, 2006). One relatively consistent finding has been the relationship between parental-rearing practices and later development of antisocial behaviours (Carter, Sbrocco, Lewis & Friedman, 2001; Dekovic, Wissink & Meijer, 2004).

Parents of physically aggressive or antisocial children use directive, intrusive, punitive, and rejecting parenting techniques. For instance, maternal over-reactivity (i.e., harsh, authoritarian, or coercive parenting) and children's disruptive behaviours are positively associated with correlations as high as 0.69 (Brown, Arnold, Dobbs & Doctoroff, 2006; Sakado, Kawabara, Sato, Uehora, Sakado & Someya, 2000). In contrast, authoritative parents are loving, consistent and demanding, yet respectful of their children's individuality. This, in turn, facilitates communication of parental expectation and helps children to anticipate the consequences of antisocial behaviour. This is substantiated by a study by Lamborn, Mounts, Steinberg and Dornbusch (1991) who found that youngsters raised in authoritative homes score higher on measures of social development, mental health and psychosocial development, and lower on measures of problem behaviour, than youngsters from authoritarian, indulgent or neglectful households.

The observations mentioned refer to individualistic cultures. There is a disagreement with respect to the applicability of Baumrind's authoritative model to cultures that are described as collectivist (e.g., China). Some cross-cultural researchers suggested that

Baumrind's authoritative dimension may not be applicable to cultures like China (Chao, 2000). The beneficial effects of authoritative parenting do not seem to be found among families of Chinese descent, but they are found among families of European descent. In light of the above findings, the present study is designed to assess the relationship between parenting style and antisocial behaviour in a collective African culture.

Home environment is the most significant among other factors that hinders or fosters acceptable behaviour or antisocial behaviour in children. Many researchers indicated that home environment includes such important variables as parenting style, occupations, educational level of the parents, and family structure. Among these elements, the way parents discipline their children plays a considerable role in the development of antisocial behavior or responsible behavior (Liang, Flisher & Lombard, 2007).

Children and adolescents learn to value themselves partially through how others view them. Through inter-personal interaction, particularly with significant others like parents, children acquire information about themselves and others. If the feedback that children receive from significant others, especially from a parent, is persistently negative, negative self-perceptions are likely to form, thus further increasing their vulnerability to antisocial behavior (Liu, 2003).

1.2   STATEMENT OF THE PROBLEM

Researchers such as Sternberg, Lamb, Guterman and Abbott (2006) and Liu (2003) argue that early family experience influences later-life adjustment and wellbeing. Parenting is often considered one of the most important mechanisms of socializing children. Childrearing, occurring within a certain type of family structure, plays a significant role in determining and shaping the way children will interact with others within the family and in the society (Mack, Leiber, Featherstone & Monserud, 2007).

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Studies indicate that different styles of parenting practices can affect positively or negatively the behaviour of the growing child; parents also differ in the way they handle their children. Parents may be loving or rejecting, controlling or indulgent, involved or uninvolved, punishing or non-punishing. It is indicated that this kind of difference in parental handling is likely to be reflected in the personality of children and may contribute to the development of antisocial behaviour.

Most researchers use the typology presented by Baumrind to study parenting. This typology identifies authoritative, authoritarian and permissive parenting as the dimensions of parenting. Yet some commentators note that Baumrind's typology of parenting was developed within the context of middle-class, White parenting values (Weis, 2002). Research conducted among non-White populations tends not to reproduce the results obtained using the Baumrind typology (Chao, 1994; Dwairy & Menshar, 2006; Sorkhabi, 2005). Hence, the generalizability of this model to other communities, especially those that are non-individualistic, is doubtful.

Baumrind's typology has been tested in some non-White, collectivist cultures, and the results were not similar to those found among White, middle-class samples. Chao (2000) did not find the Baumrind typology useful in the context of the Chinese collectivism-oriented culture. It is now necessary to conduct further studies in other non-White communities to see if Chao's claims will be supported. The present study addresses the significant gap in the literature on the relationship between parenting style and antisocial behaviors by testing on African collective culture. Therefore, it is of great interest to get a deep knowledge of the relationship between parenting style and antisocial behaviours.

1.3 AIM OF THE STUDY

1.3.1 The aim of the present study is to examine the relationship between parenting styles and antisocial behaviours in the South African context.

1.4   OBJECTIVES OF THE STUDY

1.4.1   To investigate if there is a relationship between the four parenting styles and antisocial behaviour among African university students.

1.4.2   To investigate if there is a relationship between parental punitiveness and antisocial behaviour among Africa university students.

1.4.3   To investigate if there is a relationship between family structure and antisocial behaviour among African university students.

1.5   SIGNIFICANCE OF THE STUDY

In developmental psychopathology studies, and clinical work, the child's family is frequently considered the most important factor in the etiology of antisocial behaviour (Dekovic et al., 2004). Empirical studies have established that a wide range of parental practices, including parental monitoring, guidance, control, support and the parent-adolescent relationship have a significant impact on the behaviour and emotional development of adolescents and their risk of engaging in antisocial behaviour (Caldwell, Beutler, AnRoss & Silver, 2006).

There is ample evidence showing that parenting style contributes to later development of antisocial behaviour (Caldwell et al., 2006; Darling, 1999; Dekovic et al., 2004). Studies also indicated that parenting style has different outcomes in different cultures. Weis states that õBaumrindøs (1971, 1973, 1991) well-known parenting typology was developed from middle-class, predominantly Caucasian samplesö (Weis, 2002, p. 143). It would seem that comparison of results from middle-class Caucasian parents with those of parents from other socioeconomic background, ethnicities, and cultures, would yield useful information about similarities and differences, and the nature of parenting typology (Weis, 2002). Thus, the present study investigates the relationship between parenting style and antisocial behaviours in an African collective culture.

CHAPTER TWO

THEORETICAL CONCEPTS

2.1 OPERATIONAL DEFINITION OF TERMS

2.1.1 Parenting style: The concept of parenting style is difficult to define across different socio-cultural settings and areas. In the present study, parenting style refers to participantsø rating of parental handling with respect to acceptance/warmth and control/supervision on measures adopted by the researcher.

2.1.2 Authoritative parenting: This refers to parents who have high levels of both responsiveness/warmth and demandingness/supervision. There is open communication between parents and children, and verbal give-and-take is encouraged (Santrock, 2003).

2.1.3 Authoritarian parenting: These are parents who are highly controlling and low in warmth/support and responsiveness. They dictate how their children should behave. They stress obedience to authority and discourage discussion.

2.1.4 Indulgent parenting: This refers to parents who are warm and high in responsiveness but are low in control/demandingness. They do not set limits, and allow children to set their own rules and schedules and activities. They do not demand a high level of behaviour as authoritarian or authoritative parents.

2.1.5 Neglectful parenting: These are parents who have low levels of both responsiveness/support and demandingness/strictness. Such parents are disengaged. They know little about their childrenøs activities and show little interest in their childrenøs experiences at school or with friends. These parents rarely converse with their child.

2.1.6   Antisocial behaviour: Antisocial behaviour is generally defined as an inability to conform to the social norms that ordinarily govern many aspects of a personøs behaviour (Sadock & Sadock, 2003). This includes behaviour that may lead to incarceration or hospitalization. Yet, the present study does not intend to focus on the extreme cases of antisocial behaviour. For the purpose of this study, antisocial behaviour is measured in a non-clinical sample, making it behaviour that does not meet normative standards, yet is not as severe as that defined by the DSM-IV-TR.

2.1.7   Parental punitiveness: Parental punitiveness has been a difficult concept to define across different cultural settings. However, the current study refers to participantsø rating of their mothers and fathersø use of verbal and physical threats and behaviours to discipline them.

2.1.8   Family structure: This term in this study refers to number of persons in a family. That is, whether the participants reside with biological parents, single father/mother, blended family, grandfather/mother or child-led family homes.

2.2   THEORETICAL FRAMEWORK

2.2.1   BEHAVIOURAL THEORY

A number of theoretical frameworks have been used to explain the relationship between parenting style and behavioural outcomes, such as antisocial behaviour (Mack et al., 2007). Such theories include, among others, behavioural theory (Bandura, 1969). This theory is frequently implicated in the relationship between parenting practices and antisocial behaviour. Proponents of behavioural theory argue that antisocial behaviour is learned through the process of social interaction (Kratcoski & Kratcoski, 1996). The characteristics of the group and the environment to which the child belongs play a very important role in development of antisocial behaviour (Trojanowicz & Morash, 1992). This theory emphasises the environmental factors in moulding behaviours (Sue, Sue & Sue, 1994).

The basic assumption of this theory includes the postulation that behaviour is regarded as consisting of connections between stimuli and responses, hence all human behaviour is acquired. In other words, behaviourists are of the opinion that all behaviours, from the simplest to the most complex, are learnt through reinforcement, generalisation, coping and shaping. Generally, the behavioural model explains the causes of antisocial behaviour as essentially the result of the failure to learn necessary adoptive or competences behaviours, such as how to establish satisfying personal relationships, learning ineffective or maladaptive responses (Corey, 1996). Thus, behavioural theory emphasises the child immediate surroundings in determining whether the child develop antisocial or pro-social behaviour later in life. The way in which significant others within the environment respond to the behaviour of the child may result in behaviour problems.

The traditional, or radical, behavioural perspective emphasizes the interaction or relationship between behaviour and environment responses or events that elicit, maintain, or eliminate certain behaviours. As such, human beings are viewed as

directly affected by their environment in a manner that shapes and determines their reaction to future behaviour (Berms, 1993).

In social (observational) learning theory, learning is hypothesized to take place through the observation and subsequent imitation of direct or symbolic models (Bandura, 1969). Using children in his studies, Bandura demonstrated that by watching another person acting aggressively and obtain desirable rewards, or by learning through personal experience that such behaviour yields rewards, aggression can be learned (Berkowitz, 1993). According to Berkowitz (1993) and Bandura (1969), we imitate from a very early age, we watch our parents and peers and we take note of how others speak, how they say something, how people react to certain situations, and the way in which people do things.

In some instances, children learn behaviour entirely from observation, which can extend to television and movie characters. Although children can learn aggression and other behaviours including antisocial behaviour from the media, parents usually maintain a key role in reinforcing or punishing this newly learned behaviour (Kratcoski & Kratcoski, 1996; Pennell & Browne, 1999).

In contrast to behavioural theory perspective, there is some evidence that indicates that the cause of antisocial behaviour has a biological/genetic component (Sue et al., 1994; William, Elke, Leonard, Thomas, Nancy & David, 1990). These researchers argue that antisocial behaviour is caused by biological factors. Though there has been continuous debate over whether antisocial behaviour itself is one that is inherited or it is a predisposition to antisocial behaviour, much effort has been made to substantiate the role of genetics in antisocial behaviour.

Data supporting the genetic transmission of antisocial behaviour are based on studies that found a 60 percent concordance rate in monozygotic twins and about 30 percent concordance rate in dizygotic twins. Adoption studies show a high rate of antisocial behaviour in the biological relatives of adoptees identified with antisocial behaviour and a high incidence of antisocial behaviour in the adopted-away offspring of those

with antisocial behaviour. The prenatal periods of those who subsequently display antisocial behaviour often are associated with exposure to alcohol and other drugs of abuse (Sadock & Sadock, 2003).

Furthermore, Farrington and Coid (2003) and William et al. (1990) mentioned that environmental influences have been generally adduced to explain these facts for decades, but now genetic interpretations are receiving greater scrutiny. More than 100 twin and adoption studies have been conducted, most within the past decade, in an effort to determine whether or not, and to what extent, genetic factors play a role in the development of antisocial behaviour. Overall, the evidence from this large body of data strongly suggests that antisocial behaviour runs in families, in part due to the transmission of genes that increase the propensity of becoming antisocial (Slutske, 2001).

Slutske (2001) indicates that a quantitative review of 51 such studies suggests that 41 percent of the variation in risk for becoming antisocial is due to genetic factors, 16 percent is due to shared family experiences, and the remainder of the variation in risk (43 percent) is due to experiences specific to an individual. However, current studies suggest that no single factor accounts for an individual's antisocial behaviour, instead, many biopsychosocial factors contribute to the development of such kind of behaviours (LaBrode, 2007; Sadock & Sadock, 2003). Hence, both environmental and biological factors affect the development of antisocial behaviour.

However, the present study did not focus on biological factors in relation to antisocial behaviour. Rather the study examines the relationship between parental practices and antisocial behaviour. Thus, behavioural and attachment theory were applied to explain the relationship between these two variables. In addition to the above mentioned behavioural theory, many studies indicated the role of attachment theory in the relationship between parental practices and antisocial behaviour. The next part will discusses attachment theory in relation to parental practices and antisocial behaviour.

2.2.2   ATTACHMENT THEORY

However, attachment theory argues that antisocial behaviour results when an individualøs attachment to parents is weak or broken (Bowlby, 1978; Inge, 1992). Parental attachment is considered to be the most important because it is parents who provide the initial socialization and so they have an extremely important function of helping in the internalization of norms (Bowlby, 1988). Moreover, proponents of this theory argue further that insecure attachment is theorized to be related to difficulties in relationships and problems in later development like antisocial behaviour. During early childhood, if an individual experiences a high quality of attachment, he or she is likely to see him or herself as worthy of love, and to view the world as dependable, predictable and positive. Children who feel secure believe that attachment figures are available, responsive, and reliable (Buist, Dekovic & Marcel, 2004; Kilmann, Carranza & Vendemia, 2006).

Conversely, if an individualøs internal working models of attachment are low in quality, he or she is more likely to view him or herself as unlovable and to view his or her social environment as untrustworthy, unpredictable or even hostile. Children who do not perceive attachment figures in a secure manner do not develop a sense of õfelt securityö. Most of them engage in problem behaviour including antisocial behaviour later in life. In addition to internal working models of attachment, specific attachment relationships and affectional bonds also keep their influence throughout the life span (Buist et al., 2004; Sadock & Sadock, 2003).

Attachment theory, based on the work of Bowlby (1969/1984, 1973/75, 1978, 1988), holds that early childhood experiences with caregivers are the basis of Internal Working Models (IWM) of self and others that guide subsequent adult relationships. Hence, attachment theory would predict that particular parental characteristics, such as psychological control, coercion, autonomy granting, warmth, distance, absence, and expressions of affection, should have differential effects on child, adolescent, and even adult behaviours (Kilmann et al., 2006). Disruptions in the parent-child relationship function as a vulnerability factor and are associated with less favourable youth outcomes. This theory in contrast to other theories underscore the fact that

parent-child relationship quality is a bipolar variable with the potential for exerting risk as well as protective efforts, depending on which end of the continuum is emphasized.

According to Bowlby, human beings are born with an innate psychobiological system (the attachment behavioural system) that motivates them to seek proximity to significant others (attachment figures) in times of need (Shaver & Mikulincer, 2004). According to Sadock and Sadock (2003), attachment occurs when there is a warm, intimate and continuous relationship with the mother in which both find satisfaction and enjoyment. Mary Ainsworth expanded on Bowlby's observations and found that the interaction between the mother and her child during the attachment period significantly influences the child's current and future behaviour (Inge, 1992). Certainty about the availability of an attachment figure is thought to be important for healthy functioning across the life span (Cassidy & Berlin, 1994). Hence, the attachment theory contends that lack of proper attachment leads to problem behaviour, like lack of pro-social behaviours, psychosocial dwarfism and delinquency (Inge, 1992; Kilmann et al., 2006).

According to Blazei, Iacono and Krueger (2006), studies of antisocial behaviour have examined several different phenotypic expressions of problematic behaviours (e.g., conduct disorder (CD), antisocial personality disorder (ASPD), oppositional defiant disorder (ODD), delinquency, criminality, aggression, and violence), which many researchers refer collectively as antisocial behaviour (Blazei et al., 2006). While each of these phenotypes of antisociality describes different specific behaviours, there is reason to believe that they are nonetheless etiologically related. The present study does not focus on the range of destructive forms of antisocial psychopathology, such as those defined by the DSM-IV-TR (APA, 2000). Rather, the present study is limited to the antisocial behaviour common even in non-clinical populations. The population of this study consisted of undergraduate students at the University of Limpopo, Turfloop Campus. The rational for selecting this population group was because of the researcher's personal judgment that they were representative and also the University has more than 90 percent Black Africa students.

CHAPTER THREE

LITERATURE REVIEW

3.1 THE ASSOCIATION BETWEEN PARENTING AND ANTISOCIAL BEHAVIOUR

Studies show that parental practices influence the development of antisocial behaviour later in life (Baker, 2006; Dekovic et al., 2004; Reitz, Dekovitc & Meijer, 2006). Prospective studies have found that negative parenting, that is, inconsistent and harsh discipline, low monitoring, low warmth, low level of emotional bonding and a high level of conflict, are positively related to antisocial behaviour (Aucoin, Frick & Bodin, 2006). Furthermore, positive reinforcement, acceptance, responsiveness, synchrony, approval and guidance are negatively related to adolescent behaviour problems (Smith, Ireland & Thornberry, 2005). Supportive parenting has also been found to buffer against some known risk factors of poor adjustment, such as single-parent households and low socioeconomic status (SES).

Research findings indicate that a negative or low quality relationship between adolescents and parents is related to higher levels of antisocial behaviour (Dekovic et al., 2004). Moreover, the relationship between antisocial adolescents and their parents appear to be characterized by a lack of intimacy, lack of mutuality, and more blaming, anger, and defensiveness, than in normal families. When the parent-adolescent relationship is characterized by negativity, adolescents are probably less likely to internalize parental values and norms. This results from the fact that parents provide support for conventional behaviours and sanction against conduct problems (Bradford, Barber, Olsen, Maughan, Erickson, Ward & Stolz, 2003; Dekovic et al., 2004). A meta-analysis by Patterson and Stouthamer-Lober (1984) showed that, among the strongest maladaptive parenting predictors of antisocial behaviours in children, were behaviours related to socialization, such as lack of parental involvement with the child and supervision.

Over the years, an extensive amount of research has been done to examine how parents influence the development of children's social competence. Prominent researchers like Baumrind (1966) (cited in Steinberg, 1993) thoroughly analyzed previous research findings. On the basis of her analysis, Baumrind conceptualized parental discipline as being composed of two dimensions, namely: responsiveness/warmth and demandingness/supervision, and finally, based on these dimensions, developed a three-fold typology of parenting styles consisting of authoritative, authoritarian and permissive styles. Since 1967, Baumrind's classification of behaviour patterns has been accepted as a theoretical model for child-rearing practice. However, this model was later modified by Maccoby and Martin (1983) (cited in Steinberg, 1993) from a three-factor to a four-factor model. The four-factor model of Maccoby and Martin is composed of authoritative, authoritarian, indulgent and neglectful.

An important issue regarding the relationship between parenting styles and antisocial behaviour is about the multidimensionality of parenting (Smith et al., 2005). In general, there is an overall agreement that there are two key dimensions of parenting relevant for adolescent problem behaviour, namely, support/responsiveness (i.e., warmth, involvement, attachment) and control/demandingness (i.e., supervision, monitoring, strictness, discipline). Parental support can be seen as an umbrella under which a variety of related phenomena might be grouped together, including responsiveness, warmth, acceptance, support, and nurturance. It has been argued that high levels of attachment, warmth, and family bonding, for instance, are all related to lower levels of externalizing and/or internalizing problems (Caldwell et al., 2005).

According to Mckee, Colletti, Rakow, Jones and Forehand (2008), a number of studies have found a link between low levels of parental warmth and antisocial behaviours. One theoretical model developed to explain this association postulates that parenting characterized by low levels of warmth (e.g., lack of support or involvement) interferes with a child's capacity to modulate and regulate arousal. As a result, a child may be less capable of considering the consequences of his or her actions and refraining from problematic antisocial behaviours.

Presently, there seems to be a general agreement that parental control consists of the two components of behavioural and psychological control. An important aspect of behavioural control is parental knowledge of the adolescentøs whereabouts, activities and companions. Various studies indicated that, overall high levels of parental knowledge are related to lower level of antisocial behaviours. For instance, Patterson and Stouthamer-Lober (1984), found in cross sectional study poor monitoring and discipline of adolescents were found to predict engagement in a high number of antisocial acts. Whereas only 10% of the non-delinquents were poorly monitored, 76% of the severe delinquents were poorly monitored. This may appear to suggest that poor parental control and monitoring lead to increase risk of antisocial behaviour.

Parentsø knowledge of adolescentsø whereabouts and activities appears to be predictive of the adolescentsø adjustment, particularly as protective mechanism against engagement in antisocial behaviour (Marshal, Tiltonwaver & Bosdet, 2005). However, restrictive parenting, on the other hand, appears to have a negative effect. High levels of strictness during adolescence do not seem to be appropriate; they seem to have a restrictive effect on their psychosocial development (Reitz et al., 2006).

A second dimension of control, viz., psychological control, refers to control attempts that keep the adolescent emotionally dependent on the parent by intruding or interfering with his/her development of independence or autonomy. In general, higher levels of parental psychological control are related to more internalizing problem behaviours (Reitz et al., 2006; Sakado et al., 2000).

However, generally appropriate parental control helps to shape responsible conformity and self-control in children. The rules and guidelines parents set and enforce teach children about group and societal standards for behaviour. Inadequate parental control, on the other hand, may make it difficult for children to manage effectively in the outside world where behavioural rules and standards of conduct exist (Rothrauff, Cooney & An, 2009).

In combination, therefore, parental support and control are believed to foster childrenøs/adolescentøs emotional, psychological, and behavioural well-being and development. Based on a cross-classification of high and low levels of parental support/warmth and control/supervision, child developmental scholars have developed four typologies of parenting styles (Steinberg, Lamborn, Darling, Mounts, Dornbusch, 1994). These four types of parenting styles and their outcome behaviour are presented in the next section.

3.2 THE ASSOCIATION BETWEEN FOUR PARENTING STYLES AND THEIR OUTCOME BEHAVIOUR

Developmental psychologists have been interested in how parents influence the development of childrenøs social and instrumental competence since at least the 1920s. One of the most robust approaches to this area is the study of what has been called parenting styles (Darling, 1999). Categorizing parents according to whether they are high or low on parental demandingness and responsiveness creates a typology of four parenting styles. Each of them reflects different, naturally occurring patterns of parental values, practices, behaviours and distinct balance of responsiveness and demandingness (Lamborn et al., 1991).

3.2.1 AUTHORITATIVE

Authoritative parents display high levels of both responsiveness and demandingness. Ample evidence shows that authoritative parenting predicts more positive outcomes for children and adolescents than other types of parenting styles. Additionally, according to Rothrauff et al. (2009), in their study of remembered parenting styles and adjustment in middle and late adulthood, adults who remember parenting behaviours classified as authoritative reported greater psychological well-being, fewer depressive symptoms, and less substance abuse than adults who remember parenting behaviours categorized as authoritarian, uninvolved, or indulgent.

Research based on parent interviews, child reports, and parent observations consistently found that children and adolescents whose parents are authoritative are rated, on both subjective and objective measures, as being more socially and instrumentally competent than those whose parents are non-authoritative (Darling, 1999). Authoritative parents are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive. They want their children to be assertive as well as socially responsible, and self-regulated as well as cooperative.

However, the evidence for cross-cultural validity in the associations between parenting styles and adolescent outcomes is unclear. For instance, according to Sorkhabi (2005), there is disagreement with respect to the applicability of authoritative model to cultures that are described as collective. Rather, there is some evidence of positive influence of the authoritarian parenting style among Asian and Arab adolescents (Chao, 2000; Dwairy & Menshar, 2006). It has also been suggested that, for Asians, the authoritarian parenting style is associated with parental concern, caring and love.

3.2.2 AUTHORITARIAN

Authoritarian parents are demanding but not responsive. They show fewer affiliative relationships with their children compared with authoritative parents. Typical of their parenting style is a low level of trust and engagement toward their child and a strict control, which is more adult than child-centred. Moreover, authoritarian families are characterized by a high level of psychological control, which can be described from the adolescent's point of view as a feeling of being controlled, devalued and criticized (Aunola, Stattin & Nurmi, 2000).

Because of the kind of discipline that authoritarian parents imposed on their children, these children tend to rely on external controls rather than self-regulation. These external impositions of authority can increase the likelihood that adolescents will rebel (Pellerin, 2005). However, according to Darling (1999), children and adolescents from authoritarian families tend to perform moderately well in school and

be uninvolved in problem behaviour, but they have poor social skills, lower self-esteem, and higher levels of depression.

3.2.3   INDULGENT

Individuals from indulgent homes, that is, high in responsiveness (warmth and attention) and low in demandingness (minimal discipline, self regulation by the child), are more likely to be involved in problem behaviours and performs less well in school, but they have high self-esteem and better social skills (Darling, 1999). According to Baumrind (1991) (cited in Darling & Steinberg, 1993), indulgent parents are non-traditional and lenient, do not require mature behaviour, allow considerable self-regulation, and avoid confrontation. Adolescents from indulgent parents have high rates of problem behaviour and drug use, but relatively high social competence and self-esteem.

Furthermore, Oyserman, Bybee, Mowbroy and Johonson (2005) indicated that permissive (indulgent) parenting includes low structure, low discipline and a laissez-faire parenting attitude. Mothers may let children decide because they are not sure if they know the right path for their children, whether they can get them to comply, or believe children should decide for themselves or not. Parentsø lack of parental efficacy (confidence) and feelings of incompetence have been linked with a variety of behaviours that have negative outcomes (Oyserman et al., 2005; Pellerin, 2005).

However, in certain societies, indulgent parenting has been associated with the same outcomes of those adolescents found in authoritative parenting. For example, in Mexico, Villalobos, Cruz and Sanchez (2004) study of parenting style and psychosocial development in high school students found no differences between adolescents from authoritative and indulgent parenting on adverse measures of competence and adjustment. It appears that, in that country, high levels of parental affection and acceptance are enough to obtain optimal adolescent adjustment without the use of high levels of strictness or control.

3.2.4 NEGLECTFUL

Neglectful parents are low in both responsiveness and demandingness. Such parents do not communicate with children and display little or no commitment to their role as socializing agents beyond the minimum effort required to maintain the children as a member of the household. According to Pellerin (2005), these parents may be inconsistent in their affection, emotionally unavailable, or unaware of their child's developmental needs, and may neglect discipline altogether or use strict disciplinary practices sporadically. Not surprising, individuals of neglectful parents have the worst outcomes on virtually any measure of social and cognitive competence, academic performance, psychological well-being, or antisocial behaviour.

Santrock (2007) mentioned that neglectful parents are emotionally unsupportive of their children, but will still provide basic needs for them. They are focused on their own needs, more than the needs of their own children. As infants, children have a disturbed attachment with parents that is characterized by confusion because they do not have a consistent way of coping with the neglect. Individuals who remembered their parents as being neglectful develop the sense that other aspects of the parents' lives are more important than they are. These individuals display contradictory behaviours, and are emotionally withdrawn from social situations (Lamborn et al., 1991). This disturbed attachment also impacts relationships later on in life. During adolescence, they may show patterns of truancy and antisocial behaviour. Generally, children of neglectful parents exhibit antisocial behaviour as teenagers, particularly toward friends and family.

Parents who use each of the above-mentioned parenting styles differ in the way they handle and interact with their children. In turn, it is these kinds of differences in parental handling that are likely to be reflected in the personality of the children, and these may contribute to the development of either pro-social or antisocial behaviour.

3.3   PARENTAL PUNITIVENESS AND ANTISOICAL BEHAVIOUR

Physical or Corporal punishment, as an effective form of discipline, is a controversial subject. Defined as the intentional infliction of physical pain with the purpose of deterring unwanted behaviour, both the American Academy of Paediatrics (AAP) and the Royal College of Paediatrics and Child Health (RCPCH) have adopted formal positions unequivocally opposed to all forms of corporal punishment (Litzow & Silverstein, 2008). The AAP has published a formal policy statement in this regard, and RCPCH has, additionally, joined the ‗Children are Unbeatable' alliance, itself opposed all forms of corporal punishment.

Multiple studies have linked physical punishment with subsequent developmental of poor behavioural outcomes. Corporal punishment is associated with domestic violence, and harsh physical punishment is associated with later aggression and antisocial behaviours (Litzow & Silverstein, 2008; Perkins & Jones, 2004). According to Sadock and Sadock (2003), harsh punitive parenting, characterized by severe physical and verbal aggression, is correlated with the development of adolescent's antisocial behaviour. Chaotic home conditions are also associated with maladaptive behaviour. Divorce itself is considered a risk factor, but the persistence of hostility, resentment and bitterness between divorced parents may be the more important contributor to maladaptive behaviour.

Childhood maltreatment has been shown to be a robust predictor of adolescent and adult antisocial behaviour. However, not all children who have been abused go on to display such behavioural problems (Stevenson, 1999). However, a number of potential explanations for this heterogeneity has been proposed, including the differences in the frequency and scope of the maltreatment, and whether it occurred during late childhood, adolescents or both. Moreover, Stevenson (1999) mentions that child abuse has significant adverse effects on the development and adjustment of children, adolescents and adults. The short and long term effects of such kind of experience include internalizing and externalizing behaviour problems.

Despite the above findings, a countervailing opinion exists that some forms of physical punishment in select circumstances are acceptable and physical punishment should not be banned entirely as it has been, for example, in Norway, Finland, Sweden and Austria. Non-abusive spanking has a role in effective discipline (Litzow & Silverstein, 2008).

According to Litzow and Silverstein (2008) and Perkins and Jones (2004), parenting styles and disciplinary methods must be considered within their cultural context, not just as individual experiences and behaviours. From this perspective, the use of corporal punishment may vary from one culture to another. And even more importantly, the cultural context likely influences the long-term behavioural outcomes of corporal punishment. For example, corporal punishment is commonly practised in South-West Ethiopia, with poor parental knowledge of any legal framework protecting children from abuse. A survey of Hong Kong Chinese families revealed that almost 70% of parents use corporal punishment as a form of discipline, and a survey in Jamaica showed corporal punishment to be routine in both the home and school (Litzow & Silverstein, 2008).

In addition to the above-mentioned relationships between parental practices and antisocial behaviour, many researchers indicated the role of family structure in antisocial behaviour. The next part discusses the association between family structure and antisocial behaviour.

3.4 THE COMPARISON BETWEEN FAMILY STRUCTURE AND ANTISOCIAL BEHAVIOUR

What provokes an individual to become delinquent, and what makes the child gravitate so easily toward this life style? Although there are several influential factors, family structure is one of them. The composition of families is one aspect of family life that is consistently associated with antisocial behaviour. For instance, children who live in homes with only one parent or where marital relationships have been disrupted by divorce or separation, are more likely to display a range of behavioural

problems, including antisocial behaviour, than children who are from two-parent families (Black, 2006). A consistent finding in antisocial behaviour research is that youth who reside in õbrokenö homes are at an elevated risk of certain kinds of antisocial behaviour compared to youths whose households remain biological õintactö. Indeed, the prevalence of overall antisocial behaviour seems to be about 10 to 15 percent higher in broken than in intact households (Apel & Kaukinen, 2008).

The presence of two parents has also been found to buffer against some known risk factors of poor adjustment such as behaviour problems and delinquency. For the normal socializing of a growing child, the presence of the two parents is considered to be essential (Mack et al., 2007). Many scholars indicated that antisocial behaviour can be prevented if the home is complete and the two parents are present (Dekovic et al., 2004; Fite, Colder, Lochman & Wells, 2006).

However, scholars are not in agreement as to whether single parents are as effective as two parents in their ability to socialize their children (Blazei et al., 2006). There is some evidence that indicates that single-mothers place fewer maturity demands on their children, engage in less monitoring, and use less effective disciplinary strategies than families with two parents. Studies also found that many single parentsø households are, by nature, a social setting that hampers the establishment of bonds to conformity because half of the parental unit is absent and unable to provide proper control, supervision, and socialization of the child (Mack et al., 2007).

According to Kantojarvi, Joukarnaa, Miettunen, Laksy, Herva, Karvonen, et al. (2008), factors such as being raised by single-parents, step-families, young mothers, and financial problems in childhood are considered as risk factors for childrenøs mental health. A current study has found that the most important childhood predictors to adult antisocial personality were convicted parenthood, large family size, low intelligence or attainment and child-rearing factors, including a young mother and a disrupted family (Kantojarvi et al., 2008). Additionally, antisocial behaviour has been found to be associated with the absence of biological father or separation from one or both parents in childhood. In an Australian based longitudinal study, it has been found

that parent's marital instability doubled the risk for a child's antisocial behaviour (Black, 2006; Kantojarvi et al., 2008).

Children in disrupted families witness marital discord and are thus at a greater risk of becoming antisocial. One form of a disrupted family structure is the blended family. In this family type parents of the responding youth may actually be in a second marriage, with children from a previous marriage potentially living in the household, although the responding youth is the biological offspring of the parents (Apel & Kaukinen, 2008; Ginther & Pollak, 2004). Individuals in blended and cohabiting families are significantly more antisocial than their counterparts in nuclear households. The difference between blended and nuclear households is accounted for by a variety of structural and processual factors, the most important of which include disadvantages related to family income and teenage motherhood (Apel & Kaukinen, 2008).

Several studies of family structure have indicated that family size could be one factor that has strong relationship with antisocial behaviour and play a role in the development of antisocial behaviours. Many scholars argue that as family size increases, the likelihood of antisocial behaviour also increases (Tappan, 1949; Trojanowicz & Morash, 1992). These researchers contend that antisocial behaviours occur most often in families where family size tends to be relatively large.

According to these scholars, in a large family, a number of such factors as low income, diminished parental control, foreign-born parenthood and slum neighbourhood play a very important role and are more frequently associated together to produce high rates of antisocial behaviour (Ary, Duncan, Duncan & Hops, 1999; Blazei et al., 2006). When there are many young children in a certain home, discipline and parental supervision tend to be weak, and older children are often left to fend for themselves.

3.5 POTENTIAL MODERATORS OF THE RELATIONSHIP BETWEEN PARENTNG STYLES AND ANTISOCIAL BEHAVIOUR

Most studies indicated that the way parents rear their children has an important impact on the children's development of pro-social and antisocial behaviour. However, there are some important factors, which have contributed to the difference in rearing methods and these variation impact the children outcome behaviour. Parental behaviour and attitudes, in terms of discipline methods and child-rearing practices, tend to vary mainly according to SES of the family. And these variations in patterns of discipline and child-rearing practices, in turn, tend to affect children's outcome behaviours. For example, according to Abolfotouh (1997), the family SES creates a difference on how parents discipline their children. Families in the lower socioeconomic classes were eleven times more likely to have children with behaviour problems than families in the higher socioeconomic classes.

Furthermore, there are considerable substantial evidences in favour of the notion that most of antisocial and aggressive individuals tend to come from socially and economically deprived background families in the lower SES than from middle and upper class families (Dubow & Luster, 1990; Papalia & Olds, 1982). According to Dubow and Luster (1990), living in poverty has been linked to poor cognitive and behaviour outcomes. Other factors that are likely to place a child at risk are maternal education less than 12 years and low maternal age at child birth.

Among the SES factors that have been associated with children's pro-social and antisocial behaviour are, namely, parents' educational level and their income. Study indicates that parents' level of education is part of a large constellation of psychological and sociological variables influencing children behaviour. Research on parenting also has shown that parent education is related to a warm, social climate in the home (Davis-Kean, 2005). Those Parents who obtained higher levels of education may be have access to resources, such as income, time, energy, and community contacts, that allow for greater parental involvement in a child's life.

The literature also suggests that the level of education influences parentsø knowledge, beliefs, values, and goals about child rearing. For example, higher levels of education may enhance parentsø facility at becoming involved in their childrenøs social, educational and psychological needs, and also enable parents to acquire and model social skills and problems-solving strategies. Hence, the likelihood of their childrenøs involvement in antisocial behaviour will be less. Moreover, in Canada, a study of 57 young people in New Brunswick found that boys whose fathers had professional occupations were less likely to commit delinquent acts compared to sons of blue-collar workers. But other studies, including the large LeBlanc survey in Montreal, have found no relationship between antisocial behaviour and parentsø education and occupation (Pickard, GoldDman & Mohr, 2002).

3.6   PARENTING AND ITS OUTCOME IN DIFFERENT CULTURE

õBaumrindøs (1971) parenting style conceptualizations (i.e., authoritative, authoritarian, and permissive) have perhaps been the most extensively cited and researched construct in the study of parentingö (Steinberg, 1993, p. 143). In Baumrindøs early landmark studies, she consistently demonstrated, for European American families, positive relationships between the authoritative parenting style and child outcomes (Steinberg, 1993). Sorkhabi (2005) also suggested that, as general rule, adolescents perform far better when their parents are authoritative, regardless of their racial or social background. This finding has been confirmed in samples from countries around the world that have extreme diversity in their value systems, such as Pakistan, Scotland, Australia, and Argentina (Sorkhabi, 2005).

However, there is a disagreement with respect to the applicability of Baumrindøs parenting typology to cultures that are described as collectivist (e.g., China). Furthermore, the beneficial effects of the authoritative style have consistently been demonstrated for European-Americans, these effects have not always been found for other social background, ethnicities, and cultural groups (Chao, 2000; Dwairy & Menshar, 2006).

Researchers have found that, in some ethnic groups, aspects of the authoritarian style may be associated with more positive child outcomes than Baumrind predicts. Asian-American families often continue aspects of traditional Asian child rearing practice. In some cases, these practices have been described as authoritarian (Santrock, 2007). However, Chao (2000) argues that the style of parenting used by many Asian-American parents is best conceptualized as a type of training in which parents are concerned and involved in their children's lives rather than reflecting strict or authoritarian control. The positive outcomes of the training parenting style in Asian-American families occur in the high academic achievement of Asian-American children (Santrock, 2007).

Other more recent studies (Chao, 2000; Weis, 2002), which involve ethnic minority families, have also demonstrated the differential effects of these parenting styles on child as well as adolescent outcomes. These findings have led researchers to question whether our traditional conceptualizations of parenting style, as originally developed by Baumrind, works as well for other ethnic groups as they do for European Americans.

Results of Dwairy and Menshar's (2006) study of parenting style, individualism and mental health among Egyptian adolescents contradicts reports from the West. Research findings in the West sample associate authoritarian parenting style with disruption of conscience development, aggressiveness, resistance to authority, future addictions, problems with regard to intimate relationship, low-initiative, and difficulty in making decisions in adulthood. However, based on Dwairy and Menshar's results, it seems that the meaning and the effect of authoritarian parenting style with authoritarian, collective culture differs substantially from the meaning and effect within a liberal, individual society (Dwairy & Menshar, 2006). The findings among Egyptians suggesting lack of association between authoritarian parenting style and mental health problems indicate that the effect of authoritarian parenting is not as harmful within an authoritarian culture as it is within a liberal culture.

Peterson, Steinmetz and Wilson (2005) wrote an article on a multi-national study of Inter-Parental Conflict (IPC), parenting and adolescent function; South Africa, Bangladesh, China, India, Bosnia, Germany, Palestine, Colombia and the United States. They compared nine countries for cross-cultural variation and three ethnic groups for cultural comparisons within South Africa. Although substantially different, both overt and covert inter-parental conflict were positively correlated with depression and antisocial behaviour (Peterson et al., 2005).

3.7 AN OVERVIEW OF CHILD REARING PRACTICES IN BLACK AFRICAN FAMILIES

South Africa is a country that has no one single culture because of its highly diverse and varied ethnic groups, hence it has been dubbed the õRainbow Nationö due to its colourful and rich ethnicity. Cultural differences are grouped along ethnic populations, namely: Black, White, Asians (Indians) and Coloured (mixed race). This study focuses on Black students only, hence this section discusses the child rearing practice of Black Africa families, in South Africa. Regarding child rearing practice, no much research has been done. However, there are a few general preliminary studies.

For instance, Black African families value collectively, interdependence and cooperation, group effort for common interest, perseverance in the context of adversity and conformity. According to Morris (1992) (cf. Moremi, 2002), Black African parents are controlling, and they seek obedience and conformity by using coercion. Their emphasis on obedience is regarded as a way of demanding respect from their children.

Kaufman, Gesen, Santa Lucia, Salcedo, Rendina-Gobioff and Gadd (2002) examined the relationship between parenting styles and childrenøs adjustment and found that Black parents scored higher on authoritarian parenting styles than other types of parenting styles. This might be because the authoritarian parenting style involves the parental behaviours that make it possible to achieve the parental goals set in Black

African families. Such goals include internalizing respect to authority, conformity and a sense of sharing. Consequently, effective parenting involves the promotion of interdependence and cooperation in children rather than autonomy (Moremi, 2002). In contrary, studies in Western countries show that parents promote in their children autonomy and independence.

3.8   HYPOTHESIS

3.8.1   There will be a significant, positive relationship between authoritarian, neglectful and indulgent parenting style and antisocial behaviour. Inversely, authoritative parenting style will be significantly, negatively associated to antisocial behaviour.

3.8.2   There will be a positive correlation between parental punitiveness and antisocial behaviour among students who perceived their parents as punitive.

3.8.3   With respect to family structure, it is expected that students from reconfigured families will engage in more antisocial behaviour, and those from intact families will report engaging less in antisocial behaviour.

CHAPTER FOUR

RESEARCH METHODOLOGY

This section presents the design of the study, the variables used in the study, population and sampling, tools and procedures of data collection; and method of data analysis.

4.1   TYPE OF RESEARCH

The present study followed a cross-sectional research design. A cross-sectional research involves the measurement of all variable(s) for all cases within a narrow time span so that measurements may be viewed as contemporaneous. Essentially, data are collected at only one point in time (Breakwell, Hammond & Fite-Schaw, 2000). One advantage of cross-sectional research is that it is more economic in time and cost than other designs. For the participants, there is only one period for data collection, and the researcher is not faced with the difficulty and cost of maintaining contact with participants over long period of time (King, 2001).

4.2   RESEARCH VARIABLES

The variables included in the study are as fallows:

A.   Independent variable: the major independent variable considered in the present study is parenting style.

B.   Dependent variable: the dependent variable in this study is antisocial behaviour.

4.3   POPULATION

The population of this study consisted of undergraduate students at the University of Limpopo (Turfloop Campus).

4.4   SAMPLING

The sampling technique that was used in this study is convenience sampling. The selection of units from the population was based on availability and/or accessibility, because of the researchers personal judgement that they were representative. The total number of students that participated in the present study was 367 students. This study is limited to the undergraduate students of the University of Limpopo, Turfloop Campus. The university is located in Limpopo Province of South Africa, which has more than 90 percent Black African students.

4.5   MEASURES

4.5.1   DEMOGRAPHIC INFORMATION

In the demographics questionnaire, students were asked to provide information on their background and current family situation. All respondents indicated their gender, age, place of birth, list of properties their parents have in their household, family structure (whether they live with two natural parents, single parent, step parents, and other), and levels of education completed by each parent residing with them.

4.5.2   PARENTING STYLE SCALE

The parenting style scale that was used in this study contains 19 items on parenting practices. The items of the scale were taken and adapted from existing measures by Lamborn et al. (1991).

The items required the participants to rate their parents in terms of the two parenting dimensions of õacceptance or warmthö (10 items) and õcontrol or supervisionö (9 items). The acceptance subscale assesses the extent to which each participant perceives his/her parents as loving, responsive and involved. Items such as *"he/she keeps pushing me to do my best whatever I do"* and *"my parent spend time just talking with me"* are some of the items whose responses are either a õtrueö or a õfalseö format, while others are Likert scaled on a three and four point scale. The õcontrol/supervisionö subscale consists of items that assess the degree of parental monitoring and supervision. It includes such items as *"my parents know exactly where I am most afternoons after school"* and *"my parents try to know where I go at night"*. The items are also arranged and scored along the same lines as the acceptance subscale.

These subscales were administered to father and mother separately afterward the combination of the two scores was taken for analysis. In the present study, the reliability coefficients obtained for the scales were 0.81 and 0.77 for father and mother acceptance/involvement subscales respectively. For control/supervision, subscale 0.84 and 0.83 for father and mother subscales respectively. These were comparable to alpha reliability scores of 0.72 and 0.76 for acceptance/involvement and strictness/supervision subscales, respectively, obtained by Lamborn et al. (1991).

4.5.3 PARENTAL PUNITIVENESS SCALE

Parental punitiveness was measured by 14 items that tap into the respondentsø perceptions that mothers and fathers' use verbal and physical threats and behaviours. The items were taken from existing measures by Ingoldsby, Schvaneveldt, Supple & Bush (2003) in their study of the relationship between parenting behaviours and adolescent outcomes. Items such as *"Hits me when he/she thinks I am doing something wrong"* were scored on a four-point Likert scale (ranging from õstrongly disagreeö to õstrongly agreeö). The scaleøs reliability ranged from 0.91 to 0.93 in Ingoldsby et al.øs (2003) study. In this study the reliability coefficient obtained for the scale was 0.82.

4.5.4   ANTISOCIAL BEHAVIOUR SCALE

Antisocial behaviours were measured with the self-report, primary and secondary psychopathy scales developed by Levenson, Kiehl and Fitzpatrick (1995). The primary psychopathy items assess a selfish, uncaring, and manipulative posture towards others, and the secondary psychopathy items focus on impulsivity and self-defeating life style.

Each item was measured on a four-point scale with seven reversed items to control for responses sets. Endorsement options were õdisagree strongly,ö õdisagree somewhat,ö õagree somewhat,ö and õagree stronglyö. The scale has been administered and its reliability has been found to be acceptable. The reliability coefficients of primary and secondary psychopathy obtained by Levenson et al. (1995) were 0.82 and 0.63, respectively. In the present study, the reliability of primary and secondary psychopathy scales were 0.71 and 0.55, respectively.

4.5.5   SOCIAL DESIRABILITY SCALE

Strahan and Gerbasiøs (1972) scale was used to measure socially desirable responding in this study. The response options for all of the items are in a õtrueö and õfalseö format. The scale has 0.54 reliability coefficient in the present study.

4.6   DATA COLLECTION PROCUDERS

The researcher obtained appropriate approval from the University of Limpopoøs Ethics Committee prior to conducting the research. All participants were asked to indicate their consent or dissent for participating in the project. Furthermore, the researcher took into consideration ethical issues like confidentiality and voluntary participation. The participants were not expected to write their name in any of the questionnaire pages for the sake of confidentiality.

The parenting style scales, parental punitiveness scale, antisocial behaviour scales, social desirability scale and demographic information questionnaires were administered to the 367 participants. The questionnaires were administered to the respondents in their respective lecture halls with the help of some lecturers. However, some of the participants were approached in their residences on campus. The researcher first explained to the participants the purpose of the study, and how the questionnaires were to be completed. Two trained research assistants participated in the administration of the questionnaires. The researcher was also available at each stage of data collection to clarify the purpose of the study and to answer any questions that may be raised by the respondents.

4.7   METHOD OF DATA ANALYSIS

Basically, data analysis was done using the Statistical Package for Social Sciences (SPSS) software. Descriptive statistics (mean, standard deviation and percentage) were computed and presented to provide an overall picture of the data obtained. Following this, analysis of variance (ANOVA) was employed to compare antisocial behaviour scores across the four parenting styles (authoritative, authoritarian, indulgent, and neglectful). A correlation matrix was also conducted to investigate the association among the variables.

CHAPTER FIVE

RESULTS

5.1   PLAN FOR ANALYZING THE DATA

This chapter presents the results and interpretation of the data relevant to the present study. The data analysis was conducted using the Statistical Package for Social Sciences (SPSS) programme. First of all, the reliability coefficient (i.e., internal consistency) of all of the instruments used in this study was tested, and it turned out that all of the instruments had a high reliability coefficient. In order to describe the data, preliminary explanatory statistical procedures, such as percentages, means and standard deviations, were computed.

To examine the relationship between parenting styles and antisocial behaviours, the first step was to identify the parenting styles. To do this, scores on each of the parenting styles scales (viz., parental acceptance/involvement and supervision/control subscales) were dichotomized as high and low by using median. Then, the families of the participants were classified into one of the four groups on the basis of respondentsø ratings of their parents on two dimensions of parenting subscales. Analysis of Variance (ANOVA) and correlational matrix were also conducted to understand the associations among the variables.

5.2 PRELIMINARY ANALYSIS

5.2.1 DEMOGRAPHIC CHARACTERISTIC OF THE SAMPLE

The table below describes the total demographic characteristic of the participants, number of observations, percentage, mean and standard deviation.

Table 1: Socio-demographic characteristics of the respondents (N = 367)

Demographic characteristics		N	Percentage	Mean	Standard deviation
Gender	Male	227	61.9		
	Female	140	38.1		
Age	17-19	106	28.8		
	20-22	206	56.1	20.57	1.594
	23-24	55	15		
Pace of birth	Urban	76	20.7		
	Rural	291	79.3		
Participantsø family type	Single mother	120	32.7		
	Single father	16	4.4		
	Both Biological	193	52.6		
	Blended family	9	2.5		
	Grandparent-led family	13	3.5		
	Child-led family	16	4.4		
How many people live in the house	0-4	54	14.7		
	5-10	294	80.1	6.66	2.276
	11-15	19	5.2		
Parents educational levels	No schooling	23	6.3		
	Grades 1-6	36	9.8		
	Grades 7-12	117	31.9		
	Diploma/Degree	120	32.7		
	Honours/Masters	71	19.4		
Number of possessions 0-17 properties	Low (0-5)	43	11.7		
	Middle (6-10)	145	39.5	10.34	4.091
	High (11-17)	179	48.8		

As shown in the above table, almost two-third of the participants were male 227 (61.9%) and the remaining 140 (38.9%) were female. The respondentsø age ranged from 17 to 24 years with a mean age of 20.57 and standard deviation of 1.594. In relation to their place of birth 76 (20.7%) reported their place of birth to be urban and about 291 (79.1%) reported their place of birth to be rural.

Regarding the family type of the respondents, almost half of them, i.e., 193 (52.6%), reported that they were staying with both biological parents, 120 (32.7%) indicated that they were staying in single-mother households. Again 16 (4.4%) reported that they were staying in single-father households. Nine (2.5%) of the respondents were staying in blended family household and the remaining 13 (3.5%) and 16 (4.4%) respondents reported that they were staying in a Grandparent led-family and Child led-family household, respectively.

With regard to family size, the number of people staying in the respondentsø house ranged from 0 to 15 (mean = 6.66; S.D. = 2.276). Fifty-four (14.7%) participants reported that there were 0 to 4 people in their house, 294 (80.1%) reported that there were 5 to 10 people in their house, while 19 (5.2%) indicated that there were 11 to 15 people in their house. In terms of the highest education achieved by the participantsø parent, 23 (6.3%) of the respondentsø parent did not go to school, 36 (9.8%) of the participantsø parent completed between Grades 1 and 6, 117 (31.9%) of the participantsø parent completed between Grades 7 and 12 while 120 (32.7%) and 71 (19.4%) of the respondentsø parent completed a diploma/degree and an honours or masters programme, respectively.

According to the collected data, 43 (11.7%) of the respondents indicated that their parents have 0 to 5 properties out of seventeen items, 145 (39.5%) of the participants mentioned that their parents have 6 to 10 properties out of seventeen items and the remaining 179 (48.8%) of the respondents reported that their parents have 11 to 17 properties out of seventeen items.

5.2.2 GENDER DIFFERENCES

Before the main analyses commenced, *t*-test analyses were conducted to establish if there were gender differences between the variables of the study. This was done so as to determine if analysis should proceed by gender or not. The results of *t*-test analyses indicated that there are no statistically significant differences between the mean scores of male and female participants in the primary psychopathy scale, secondary psychopathy scale, and the social desirability scale (*p's* > .05). However, there are significant mean differences between the two genders on the acceptance subscale of parenting (*t* = -2.161, df = 365, *p* = 0.025), control/strictness subscale (t = -4.581, df = 365, *p* = .000) and parental punitiveness scale (*t* = 2.129, df = 365, *p* = 0.034). Since there are no significant differences between the two genders on all of the dependent variables (antisocial behaviour scales), then the researcher continued the analysis without considering the gender differences.

5.3 THE RELATIONSHIP AMONG THE VARIABLES IN THE STUDY

To determine whether the respondents responded in a socially desirable manner or not, as well as to examine the relationship between the two dimensions of parenting subscales and antisocial behaviour scales a correlational analysis was conducted. In the table below, the correlation matrix between the variables is presented.

Table 2: Zero-order correlations among variables in the study (N = 367)

	Scales	1	2	3	4	5
1.	Social desirability	1				
2.	Primary psychopathy	.309**	1			
3.	Secondary psychopathy	.353**	.245**	1		
4.	Parental warmth	-.080	-.148**	-.170**	1	
5.	Parental supervision	-.101	-.134*	-.114*	.522**	1

Note: * = $p < 0.05$; ** = $p < 0.01$

The results of the analysis revealed that the social desirability scale correlated significantly and positively with both primary and secondary psychopathy scales ($p <$ .01; refer to table 2). This suggested that there was a possibility that respondents responded to the scales in a socially desirable manner. However, the social desirability scale does not have a significant relationship with parental warmth and supervision scales ($p >$ .05). Parental warmth correlated significantly and negatively with both primary and secondary psychopathy scales ($p <$ .01). Again, parental supervision correlated significantly and negatively with both psychopathy scales ($p <$ .05). The relationship between parental warmth and supervision of the respondents and primary and secondary psychopathy scale is significant. These suggest that as parental warmth and supervision increase, the respondentsø involvement in antisocial behaviour decreased.

5.4 CLASSIFICATION OF THE PARTICIPANTS BY PARENTING STYLES

Table 3 below presents the distribution of the participants according to four parenting styles. As shown in Table 3, authoritative and neglectful parenting styles were high in proportion than authoritarian and indulgent parenting styles in this sample. Using the median split procedure/technique similar to the approach used by other researchers (Lamborn et al., 1991; Rothrauff et al., 2009) families were assigned into one of the four categories of parenting. The median split procedure was conducted using the SPSS programme. The researcher used the median split on the two parenting dimension scales to establish low and high levels of parental acceptance (warmth) and low and high levels of control (supervision). Then, the researcher developed four parenting style categories based on distinct combinations of the levels of parental acceptance (warmth) and control (supervision).

For example, authoritative families (N = 129) were those who scored high in both acceptance and supervision subscales; authoritarian families (N = 54) were low in acceptance and high in supervision; indulgent families (N = 55) were high in acceptance and low in supervision; whereas neglectful families (N = 129) were low in

both acceptance and supervision subscales. The authoritative families comprised 129 (35.1%) of the participants, the authoritarian families composed of 54 (14.7%) of the participants; and 55 (15%) and 129 (35.1%) of the participants were from the indulgent and neglectful families, respectively (see Table 3 below).

Table 3: Distribution of the participants according to parenting styles

Parenting styles	Frequencies (N)	Percentage (%)
Authoritative	129	35.1
Authoritarian	54	14.7
Indulgent	55	15
Neglectful	129	35.1
Total	367	100

5.4.1 Hypothesis 1: The Association between Parenting Styles and Antisocial Behaviour

This section examines the association between parenting styles and antisocial behaviour. Table 4 below shows a comparison of four parenting styles by primary and secondary psychopathy scales.

Table 4: Parenting styles by primary and secondary psychopathy scales

	Authoritative	Authoritarian	Indulgent	Neglectful		
Antisocial behaviour	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	**F**	***p***
Primary psychopathy	35.18 (7.494)	37.61 (7.527)	36.44 (6.616)	36.25 (8.081)	1.400	.243
Secondary psychopathy	18.77 (4.094)	19.63 (4.422)	19.31 (4.225)	19.72 (4.543)	1.164	.323

The above table shows a mean comparison of the four groups of parenting styles on both primary and secondary psychopathy scales. The results of the examination indicate that there are no statistical significant differences between the mean scores of the four groups of parenting styles (viz., authoritative, authoritarian, indulgent, and neglectful) in both the primary and secondary psychopathy scales ($p > .05$). Based on these results, Hypothesis 1 is rejected.

Furthermore, regression analysis was to be done to examine whether parenting styles predict antisocial behaviour. However, regression analysis was not conducted since the initial analysis found no significant relationship between parenting styles and antisocial behaviours.

5.4.2 Hypothesis 2: The Association between Parental Punitiveness and Respondents' Antisocial Behaviour

In order to examine the relationship of parental punitiveness with primary and secondary psychopathy scales, Pearson product-moment correlation was computed. Table 5 shows the relationship between parental punitiveness and antisocial behaviour.

Table 5: Correlation between parental punitiveness and antisocial behaviour (N = 367)

Antisocial behaviour	Parental punitiveness
Primary psychopathy	.211**
Secondary psychopathy	.102*

Note: * = $p < 0.05$; ** = $p < 0.01$

The results reveal that there are significant and positive relationships between the two variables. This indicated that as respondentsø perception of parental punitiveness increases, their involvement in antisocial behaviour becomes higher and higher. However, this applies mostly to primary psychopathy where the magnitude of the coefficient is relatively large (r = .211). The magnitude of the correlation for secondary psychopathy is rather small (r = .102), thus making it difficult to overemphasize its importance. Hypothesis 2 is accepted.

5.4.3 Hypothesis 3: The Comparison between Family Structures and Respondents' Antisocial Behaviour

A comparison between family structure and antisocial behaviour scales was also conducted. The data are summarized in Table 6 below.

Table 6: A comparison between family structures by primary and secondary psychopathy scales

	Single mother	Single father	Both parents	Blended family	Grandparents-led	Child-led family		
Antisocial behaviour	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	**F**	**_p_**
Primary psychopathy	35.65 (7.319)	36.44 (9.121)	36.47 (7.602)	38.22 (11.476)	31.00 (5.859)	37.69 (5.770)	1.644	.148
Secondary psychopathy	19.40 (4.691)	20.50 (3.742)	19.22 (4.059)	17.33 (5.099)	20.23 (4.438)	18.94 (4.781)	.785	.561

Using ANOVA, the above table shows the relationship between family types and antisocial behaviour scales. The results reveal that there were no differences between the means of the different groups of family types on the primary and secondary psychopathy scales ($p > .05$).

Additionally, independent-samples t-test analysis was conducted to examine whether or not there are mean differences between single-mother and both biological parents family types on the primary and secondary psychopathy scales. This test was done due to the fact that single mother and both biological parent family types have a large number of participants than other groups of family types. However, the results of t-test analyses showed that there are no differences between the means of the two groups on the primary and secondary psychopathy scales ($p > .05$). An attempt was also made to assess the relationship between family size and respondentsø antisocial behaviour. The results of the analysis using ANOVA indicate that there are no significant differences ($p > .05$) among the different groups of family size on the primary and secondary psychopathy scales.

Results of ANOVA assessing the relationship between family structure and antisocial behaviour did not reach statistical significance ($p > .05$). Thus, the third hypothesis is rejected. In the present study, there is no significant statistical association between family types and antisocial behaviour.

5.5   THE COMPARISON BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS AND ANTISOCIAL BEHAVIOUR

An attempt was made to determine whether there is an association between parentsø educational levels and respondentsø antisocial behaviour. The data are summarized in Table 7 below.

Table 7: Parental educational levels by primary and secondary psychopathy scales

	No schooling	Grades 1-6	Grades 7-12	Diploma/Degree	Honours/Masters		
Antisocial behaviour	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	**F**	***p***
Primary psychopathy	34.65 (6.978)	36.92 (6.913)	37.57 (7.349)	35.38 (7.523)	34.31 (8.313)	2.530	0.04*
Secondary psychopathy	20.83 (5.245)	19.03 (4.259)	19.77 (4.387)	19.04 (3.888)	18.66 (4.570)	1.598	.174

Note: * = $p < 0.05$

Table 7 indicates the comparison between respondentsø parentsø educational levels and the respondentsø antisocial behaviour. The parentsø educational level ranged from no schooling to a Masters degree level. The analysis suggests that there is a significant association between parentsø educational level and primary psychopathy scale (F = 2.530; $p < .05$). However, there are no statistical significant differences between the mean scores of parentsø educational levels in the secondary psychopathy scale.

To further analyse the relationship between respondentsø parent educational levels and primary psychopathy scale, a Scheffe Post Hoc analysis was conducted. The results show that those respondentsø whose parents have an Honours or Masters degree educational level scored low involvement in primary psychopathy scale than other groups. The results also show that, as parental educational level increases, the respondentsø involvement in antisocial behaviour decreased.

A comparison was also conducted between the respondentsø family possessions of different properties and antisocial behaviour scales by applying ANOVA, the results reveal that there are no statistical significant differences between family possessions of different properties and primary and secondary psychopathy scales ($p > .05$).

CHAPTER SIX

DISCUSSION

In an attempt to investigate the relationship among parenting styles, parental punitiveness and family structure and, respondentsø antisocial behaviour, some hypotheses were posed in the current study. This section discusses the results and examines whether they are consistent or not with the findings of previous research.

6.1   THE ASSOCIATION BETWEEN PARENTING STYLES AND ANTISOCIAL BEHAVIOUR

Before examination of the relationship between parenting styles and antisocial behaviour, classification of the participants into four parenting styles was conducted. The examination of the association between the four groups of parenting styles and antisocial behaviour was computed. Findings of this study indicated that the mean differences among the four parenting styles did not reach statistically significant levels on both primary and secondary psychopathy scales. However, previous researchers demonstrated that the authoritative parenting style (i.e., both responsive and demanding) predicts many positive outcomes for children, adolescents, and adults when compared to the authoritarian, indulgent, and neglectful parenting styles (Lamborn et al., 1991; Rothrauff et al., 2009; Shucksmith, Hendry & Glendinning, 1995). These researchers also found that individuals who described their parents as neglectful (i.e., neither responsive nor demanding) scored the highest on measures of psychological and behavioural dysfunction, including antisocial behaviour.

The findings of this study on the relationship between parenting styles and antisocial behaviour are not consistent with the above findings. However, the evidence for cross-cultural validity in the associations between parenting styles and adolescent behavioural outcomes is unclear (Martinez & Garcia, 2008). For instance, in contrast to Baumrindøs parenting model, there is some evidence of positive influence of the

authoritarian parenting style among Asian and Arab adolescents (Chao, 2000; Dwairy & Menshar, 2006).

Dwairy and Menshar (2006) pronounced on the basis of their results that, it seems that the meaning and effect of the authoritarian parenting styles within an authoritarian, collective culture differs substantially from the meaning and effect within a liberal, individualistic society. Chao (1994) mentioned that for Asians the authoritarian style is associated with parental concern, caring, and love. Chao further indicated that the beneficial effects of authoritative parenting do not seem to be found among families of Chinese descent, but they are found among families of European descent. On the other hand, in certain culture contexts (Mexico) research found no differences between adolescents from authoritative and indulgent parenting on diverse measures of competence and adjustment (Villalobos, Cruz & Sanchez, 2004).

All of the participants in this study were from an African collective culture. Thus, the researcher contemplates that lack of differences among the four groups of parenting styles on antisocial behaviour might be due to lack of cross-cultural validity of the scales. However, further studies need to be conducted to investigate the relationship between parenting styles and antisocial behaviours by considering other sampling groups than students to assert the findings of this study. Additionally, lack of differences among the four groups of parenting styles on antisocial behaviour might be due to the fact that most of the respondents, when answering the antisocial behaviour scales responded in a socially desirable manner. This was observed by the high significant relationship between the social desirability scale (Strahan & Gerbasi, 1972) and antisocial behaviour scales.

Hare (1991) and Haycock (2003) also indicated that, when collecting such kind of sensitive personal information (particularly antisocial behaviours), considering interviews would give more reliable information in addition to self report. Hence, these factors could be the possible causes not to have a significant relationship between parenting styles and antisocial behaviour in the current study.

6.2 THE ASSOCIATION BETWEEN PARENTAL PUNITIVENESS AND ANTISOCIAL BEHAVIOUR

In this study, there was a relationship between parental punitiveness and respondentsø antisocial behaviour. Higher levels of punitive/coercive discipline were related to greater involvement in antisocial behaviour. This finding is consistent with findings of previous studies (Hindelong, Dwyer & Leeming 2001; Litzow & Silverstein, 2008). Researchers contend that families of antisocial/delinquent individuals tend to exhibit more coercive interactions than families of non-antisocial individuals. Additionally, higher rates of defensive styles of interactions and lower rates of supportive or affectionate interactions have been linked to households with antisocial adolescents.

This study also revealed that those students who indicated that their parents use verbal and physical threats and behaviours scored high in antisocial behaviour scales. These findings indicate that those parents who prefer to use this way of parenting to handle their childrenøs problem behaviours would lead them more into antisocial behaviours later in life. In line with this, Perkins and Jones (2004) showed that parentsø use of physical punishment has been found to have significant adverse effects on the development and adjustment of children, adolescents, and adults. Moreover, according to Litzow and Silverstein (2008), externalizing behaviour and the precise type of precipitating misbehaviour (lying, talking back and being disrespectful) are known to be associated with physical punishment.

Furthermore, according to Ingoldsby et al. (2003) and Shucksmith et al. (1995), adolescents reared by parents using a high level of support, warmth, monitoring and low level of punitiveness are all associated with positive developmental outcomes than antisocial behaviour. Thus, the findings of this study indicate that parentsø use of supportive rather than coercive ways of discipline make their children to have positive behavioural outcomes.

6.3   THE COMPARISON BETWEEN FAMILY STRUCTURES AND RESPONDENTS' ANTISOCIAL BEHAVIOUR

The relationship between family structure and the respondents' antisocial behaviour is another dimension that was investigated in this study. Previous studies indicated that individuals from broken families engaged more in antisocial behaviour than their counterparts from intact families (Apel & Kaukinen, 2008; Blazei et al., 2006; Tanaka, 2006). They further mentioned that growing up in broken households in childhood has been considered as a risk factor for the children's mental health. More specifically, Kantojarvi et al. (2008) found that disruptions in family composition during childhood (e.g., being raised by a single parent) is associated with an increased risk for antisocial behaviour. Surprisingly, in the present study, there were no differences between the scores of respondents from intact and broken/reconfigured families on antisocial behaviour scales. This was the case for both primary and secondary psychopathy scales. This means that, in this study, students from intact and broken families do not differ in their engagement in antisocial behaviour.

This can be explained according to Haan and Olson (2000), who found that family functioning, rather than family structure, plays a determinative role. Although antisocial behaviour was once thought to be a product of reconfigured and single-parent family structure, family interaction styles (i.e., supportive relationships where parental monitoring of behaviour is present) have been found to predict antisocial behaviour more powerfully than family structure.

Additionally, a widely heralded study by Hetherington (1999) indicated that 75 percent to 80 percent of children of divorce are functioning well, with little long-term damage. Hetherington tracked nearly 1400 families and more than 2500 children, some for three decades. Among the findings of the study is that within two years of their parents' divorce, the vast majority of children were beginning to function reasonably well again. Moreover, some women and girls turned out to be more competent than if they had stayed in unhappy family situations.

6.4 PARENTAL EDUCATIONAL LEVEL BY PRIMARY AND SECONDARY PSYCHOPATHY SCALES

This study's findings indicate that there is a significant difference between various categories of respondents' parents' educational levels and the primary psychopathy scale. But there is no significant difference between parental educational levels and secondary psychopathy scale. The current study's findings also suggest that respondents whose parents have an Honours or Masters educational level scored low on the primary psychopathy scale than other groups. This study's findings are consistent with previous studies (Barylnik, 2003; Isir, Tokdemir, Kucuker & Dulger, 2006; Ki-Young, 1990). According to Ki-Young (1990), children whose father had a level of education lower than middle school level were marked by high problem behaviour on antisocial behaviour measures.

A recent study by Ingoldsby et al. (2003) explained that the level of parents' education is taken as a proxy indicator of the economic status of the family of the respondents. In this study, as parents' education level increases, respondents' scores on the primary psychopathy scale decreased. Isir et al. (2003) mentioned in line with this finding that the educational level of parents in social life is vitally important when raising children. In their study, a critical finding was that 63% of the mothers and 24% of the fathers of the adolescents who got involved in antisocial behaviour were illiterate. Similarly, parental educational level moderates the relationship between parenting styles and respondents' antisocial behaviour in the current study.

6.5 THE RELATIONSHIP AMONG THE VARIABLES IN THE STUDY

The relationship among the variables was assessed in this study; the findings of this study indicate that social desirability scale has a significant and positive relationship with primary and secondary psychopathy scales. These findings reveal that respondents in these scales responded in a socially desirable manner. The researcher took into consideration that this could be one of the reasons why there is no significant relationship between parenting styles and antisocial behaviour scale.

The present study's findings indicate that parental warmth/support and parental control/supervision have a significant and negative relationship with primary and secondary psychopathy scales. The findings also show that as parental warmth/responsiveness and parental control/demandingness increase, the respondent's involvement in antisocial behaviour decreased. The current study's findings are in congruent with the previous research (Darling & Steinberg, 1993; Mckee et al., 2008; Pellerin, 2005).

A number of studies found that low levels of parental warmth and control have been associated with adolescent antisocial behaviour, whereas high levels of parental warmth and behaviour control have acted as buffers against adolescent disruptive behaviour. Baumrind, (1978/1991) cited in Pellerin (2005), identified two parenting dimensions, namely, responsiveness and demandingness, which are associated with positive child outcomes. Children whose parents were both responsive and demanding scored best on behaviours such as social responsibility. Thus, the present study findings confirmed the above-mentioned researchers' findings.

6.6   CONCLUSION

The findings of this study showed that there is no significant difference among the four parenting styles on both primary and secondary psychopathy scales. One of the reasons for lack of significant relationship between these two variables could be due to the fact that the respondents responded in a socially desirable manner on antisocial behaviour scales. Hence, the present study failed to provide evidence on the relationship between parenting styles, as a model developed by Baumrind, and antisocial behaviour among African university students, specifically at the University of Limpopo, Turfloop Campus.

In this study, a significant association was found between parental punitiveness and antisocial behaviour. Those students who perceived their parents as punitive or using verbal and physical threat and behaviour scored high on antisocial behaviour.

Respondents from the intact and broken or disengaged families are not different in their engagement in antisocial behaviour. That is, family structure has no significant relationship with antisocial behaviour in the present study.

This study has provided evidence that respondentsø parentsø educational levels moderate the relationship between parenting styles and antisocial behaviour. Those respondents whose parentsø have an Honours or Masters educational level scored low on primary psychopathy scales. Finally, the findings of this study also indicate that parental support/warmth and supervision have a significant and negative relationship with antisocial behaviour. These clearly show that parental practice early in life has an influence in an individualøs life later on.

6.7   LIMITATIONS OF THE STUDY

This study has a few limitations. One of the limitations is that, since the study was conducted among students only, the interpretation of the results was limited only to this group. Therefore, the results may not be generalized beyond the student population of the University of Limpopo. Due to time and financial constraints, the populations samples used in this study are limited only to this area and population. The other limitation of this study is that, even if the researcher outlined to the respondents the purpose and ethical considerations of the research, the respondents responded in a socially desirable manner on antisocial behaviour scales, which affected the examination of the relationship between parenting styles and antisocial behaviour. Hence, this should be kept in mind when one reads the findings of the present study.

6.8   IMPLICATIONS OF THE STUDY

By looking at the findings of the study, the current study found no significant relationship between four parenting styles and family structure and antisocial behaviour. However, readers need to take into consideration the limitations of the study when they make reference to its findings. Additionally, there is a cross-cultural

validity uncertainty in the relationship between parenting styles and adolescent behavioural outcomes such as antisocial behaviour in an individualistic and collective culture. Thus, readers need to take this into consideration.

However, the present study found a significant relationship between parentsø use of physical punishment or threat and antisocial behaviour. Thus, this finding adds to the literature or previous research on African context that parentsø use of physical punishment has an influence in an individualøs psychological well-being. Regarding parental educational levels, this study indicates that parental educational level has a role to play in the child-rearing practice in the development of either pro-social or antisocial behaviour. Hence, one needs to look at an individualøs family situation when they try to deal with this kind of situations.

6.9   RECOMMENDATIONS

Based on the above results, the following recommendations are made:

- Since the present study is cross-sectional, it is advisable to study the relationship between parenting styles and/or family structure and antisocial behaviour through a longitudinal approach or follow up. Additionally, future researchers should have to consider, in their sampling population, other geographical areas and ethnic groups. Furthermore, when future researchers collect such kind of sensitive personal information (antisocial behaviour), considering to include interviews in their methodology, together with self report, may give them more reliable information;

- When parentsø disciplinary method is supportive and controlling, rather than punitive, their children are more likely to develop a strong responsible behaviour. On the other hand, when parents punish their children too often and show them little affection, they are more likely to produce individuals who lack a sense of adequacy that is considered important for the development of normal behaviour; and

- Most researchers in developmental studies indicate that the variable SES moderates the relationship between parenting styles and development of antisocial behaviour. Future researchers need to give much more attention to this area.

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APPENDIXES

APPENDIX ONE: LETTER TO THE RESPONDENTS

Discipline of Psychology
School of Social Sciences
Faculty of Humanities
University of Limpopo (Turfloop Campus)
University Road
Mankweng Township, 0727

Dear Respondent.

My name is Tesfaye Denbi. I am a student of psychology at the University of Limpopo (Turfloop Campus). Currently, I am conducting a study to complete my post graduate studies. The purpose of this study is to generate information on the relationship between parental experiences of individuals and their personality. Your answers to the following questions will help psychologists and other professionals gain a better understanding of the issues studied here. So, please be honest in your answers. Besides, your answers are anonymous, and no one will know how you have responded. All questions in the questionnaire are very important. I would really appreciate it if you can respond to each and every one of them.

Regarding confidentiality, I must repeat: you are not expected to write your name in any of the questionnaire pages. I request you to kindly fill in this questionnaire as accurately and carefully as you possibly can.

Thank you in advance for your cooperation!!!

---

1.   Are you willing to participate in this study?   No ☐   Yes ☐

If you answered NO to question 1, please do not proceed answering the questionnaire. Thank you very much for giving me your time.

If you answered YES to question 1, please proceed with the questions that follow below. Once more, please answer all questions.

APPENDIX TWO: QUESTIONNAIRES

PART ONE: BACKGROUND INFORMATION

1. Sex: Male ☐   Female ☐

2. Age: ------------- years.

3. Place of birth: Urban ☐   Rural ☐

4. Current residential place   Urban ☐   Rural ☐

5. What is the marital status of your parents?

Married ☐	Divorced ☐	Widowed ☐
Stepparent ☐	Single ☐	

Other (Specify): _____

6. Who are the people who live in your household for the better part of the year? Please mark with a cross all the individuals who live in your household for the better part of the year?

☐ Biological Mother   ☐ Step-Mother   ☐ Maternal Grandmother   ☐ Paternal Grandmother

☐ Biological Father   ☐ Step-Father   ☐ Maternal Grandfather   ☐ Paternal Grandfather

☐ Sisters   ☐ Brothers   ☐ Uncles   ☐ Aunts

☐ Lodgers

7. How many people belong to your household?
Number of persons in the household: _____ persons.

8. Father's educational level

No schooling	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Degree/ Diploma	Honours	Masters

9. Mother's educational level

No schooling	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Degree/ Diploma	Honours	Masters

10. Please indicate by putting an "X" mark on the list of properties your parents have in your household.

Refrigerator	Floor cleaner	Television	Video cassette recorder	Radio	Microwave	Washing machine
Telephone	Running water in the home	Kitchen sink	Flush toilet	Automobile	Domestic servant	Stove/ Hotplate
Shopping at a supermarket	Bank account or credit card	Having an account at a retail store				

PART TWO: ITEMS FOR PARENTING STYLE SCALES

[Please note that only the abbreviated forms of parenting style scales are presented here. However, this study used complete scales, consisting of nineteen items for both parental warmth and control/supervision dimensions of parenting. The items inquired about the father and mother separately.]

SECTION A

Direction: Below you are given a list of statements that describe parents' behaviour. Under each statement, ratings for "father" and "mother" are provided. Therefore, put an "X" mark under your responses or circle. Please note, if someone substituted as your mother or father, please rate the scale according to how you experienced that person as your parent.

Parental warmth items

What do you think is usually true or usually false about your **father (stepfather, male guardian) and mother (stepmother, female guardian)**?

1. I can count on him/her to help me out, if I have some kind of problem.
1. Usually true   2. Usually false

2. He/she keeps pushing me to do my best in whatever I do.
1. Usually true   2. Usually false

3. He/she keeps pushing me to think independently.
1. Usually true   2. Usually false

4. When he/she wants me to do something, he explains why.
1. Usually true   2. Usually false

5. When you get a poor grade in school, how often does your father or mother
   encourage you to try harder?
1. Never   2. Sometimes   3. Usually

Parental control/supervision items

1. How much do your parents **TRY to know** where you go at night?
          1. Don¢t try   2. Try a little   3. Try a lot

2. How much do your parents **TRY to know** what you do with your free time?
          1. Don¢t try   2. Try a little   3. Try a lot

3. How much do your parents **REALLY know** where you are most afternoons
   after school?
          1. Don¢t know   2. Know a little   3. Know a lot

4. How much do your parents **REALLY know** what you do with your free time?
          1. Don¢t know   2. Know a little   3. Know a lot

5. In a typical week, what is the latest you can stay out on **FRIDAY OR**

   SATURDAY NIGHT? (Select one box only from the nine choices given below)

Not allowed out ☐   Before 9:00 ☐   9:00 to 9:59 ☐   10:00 to 10:59 ☐

                                                                  After 2:00 ☐

11:00 to 11:59 ☐   12:00 to 12:59 ☐   1:00 to 1:59 ☐

                                                       As late as I want ☐

SECTION B: ITEMS FOR PARENTAL PUNITIVENESS SCALE

[Please note that only the abbreviated form of parental punitiveness scale is presented here. However, this study used a complete scale, consisting of fourteen items.]

Instruction: Below you are given a list of statements that describe parentsø behaviour. On the right hand side of each statement, ratings for your õfatherö and/or õmotherö are provided. Therefore, put an õXö mark under your responses.

1 = Disagree strongly   3 = Agree somewhat
2 = Disagree somewhat   4 = Agree strongly

1.	Hits me when he/she thinks I am doing something wrong.	1	2	3	4
2.	Does not give me any peace until I do what he/she says.	1	2	3	4
3.	Punishes me by not letting me do things that I really enjoy.	1	2	3	4
4.	Yells at me a lot without a good reason.	1	2	3	4
5.	Tells me someday I will be punished for my behaviour.	1	2	3	4
6.	Punishes me by sending me out of the room.	1	2	3	4
7.	Tells me about all the things he/she has done for me.	1	2	3	4
8.	This parent avoids looking at me when I have disappointed him/her.	1	2	3	4

PART THREE: ITEMS FOR ANTISOCIAL BEHAVIOUR SCALE

Primary psychopathy items

[Please note that only the abbreviated form of primary psychopathy scale is presented here. However, this study used a complete scale, consisting of sixteen items.]

Instruction: Please answer the following questions using the scale provided below:

1 = Disagree strongly   3 = Agree somewhat
2 = Disagree somewhat   4 = Agree strongly

1.	Success is based on survival of the fittest; I am not concerned about the losers.	1	2	3	4
2.	Making a lot of money is my most important goal.	1	2	3	4
3.	People who are stupid enough to get ripped off usually deserve it.	1	2	3	4
4.	Looking out for myself is my top priority.	1	2	3	4
5.	I would be upset if my success came at someone else's expense.	1	2	3	4
6.	I make a point of trying not to hurt others in pursuit of my goals.	1	2	3	4
7.	I enjoy manipulating other people's feeling.	1	2	3	4
8.	I feel bad if my words or actions cause someone else to feel emotional pain.	1	2	3	4
9.	Even if I were trying very hard to sell something, I wouldn't lie about it.	1	2	3	4
10	Cheating is not justified because it is unfair to others.	1	2	3	4

Secondary psychopathy items

[Please note that only the abbreviated form of secondary psychopathy scale is presented here. However, this study used a complete scale, consisting of ten items.]

Instruction: Please answer the following questions using the scale provided below:

1 = Disagree strongly   3 = Agree somewhat
2 = Disagree somewhat   4 = Agree strongly

1.	I find myself in the same kinds of trouble, time after time.	1	2	3	4
2.	I find that I am able to pursue one goal for a long time.	1	2	3	4
3.	I don't plan anything very far in advance.	1	2	3	4
4.	Most of my problems are due to the fact that other people just don't understand me.	1	2	3	4
5.	Before I do anything, I carefully consider the possible consequences.	1	2	3	4
6.	I have been in a lot of shouting matches with other people.	1	2	3	4

PART FOUR: SOCIAL DESIRABILITY SCALE

[Please note that only the abbreviated form of social desirability scale is presented here. However, this study used a complete scale, consisting of ten items.]

The following questions require a TRUE or FALSE answer. Please tick the appropriate box

1.	There have been occasions when I took advantage of someone.	True	False
2.	Iøm always willing to admit it when I make a mistake.	True	False
3.	I always try practice what I preach.	True	False
4.	There have been occasions when I felt like smashing things.	True	False
5.	I have never been irked (disturbed) when people expressed ideas very different from my own.	True	False
6.	I have never deliberately said something to hurt someoneøs feelings	True	False

THANK YOU AGAIN FOR YOUR COOPERATION!!!

APPENDIX THREE: APPLICATION FOR HUMAN EXPERIMENTATION

UNIVERSITY OF LIMPOPO
ETHICS COMMITTEE

APPLICATION FOR HUMAN EXPERIMENTATION

PROJECT TITLE: THE RELATIONSHIP BETWEEN PARENTING STYLES AND ANTISOCIAL BEHAVIOUR

PROJECT LEADER: DENBI T.B.

I, the signatory, hereby apply for approval to execute the experiments described in the attached protocol and declare that:

1. I am fully aware of the contents of the Guidelines on Ethics for Medical Research, Revised Edition (1993) and that I will abide by the guidelines as set out in that document; and

2. I undertake to provide every person who participates in any of the experiments with the information in Par II. Every participant will be requested to sign Part III.

Name of Researcher: DENBI T.B.

Signature:

Date:

For official use by the Ethics Committee

Approved/Not Approved
Remarks:

Signature of Chairperson:
Date:

PROJECT TITLE: **THE RELATIONSHIP BETWEEN PARENTING STYLES**
AND ANTISOCIAL BEHAVIOUR

PROJECT LEADER: DENBI T.B.

APPLICATION FOR HUMAN EXPERIMENTATION: PART II

Protocol for the execution of experiments involving humans

1.   Department:

2.   Title of project

3.   Full name, surname and qualifications of project leader:

4.   List the name(s) of all persons (Researchers and Technical Stuff) involved
        with the project and identify their role (s) in the conduct of the experiment.

      Name: Qualifications: Responsible for:

5.   Name and address of supervising physician:

6.   Procedures to be followed:

7.   Nature of discomfort

8.   Description of the advantages that may be expected from the results of the
        experiment:

      The advantage that is expected from the result of the study will first and
        foremost shed light on the relationship between parenting style and antisocial
        behaviour in African context.

Signature of Project Leader:

Date:

PROJECT TITLE: THE RELATIONSHIP BETWEEN PARENTING STYLES AND ANTISOCIAL BEHAVIOUR

PROJECT LEADER: DENBI T.B.

APPLICATION FOR HUMAN EXPERIMENTATION: PART II

INFORMATION FOR PARTICIPANTS

1.   You are invited to participate in the following research project/experiment:
      The relationship between parenting styles and antisocial behaviour

2.   Participation in the project is completely voluntary and you are free to withdraw from the project/experiment (without providing any reasons) at any time.

3.   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.

4.   You are encouraged to ask any questions that you might have in connection with this project at any stage. The project leader and his/her staff will gladly answer your question. They will also discuss the project/experiment in detail with you.

5.   Your involvement in the project.

      Your involvement in this project is to agree to be a research participant in the proposed study and to give honest answers when completing the questionnaire.

UNIVERSITY OF LIMPOPO
ETHICS COMMITTEE

PROJECT TITLE: THE RELATIONSHIP BETWEEN PARENTING STYLES AND ANTISOCIAL BEHAVIOUR

PROJECT LEADER: DENBI TB

CONSENT FORM

I, _____ hereby voluntarily consent to participate in the following project: The relationship between parenting styles and antisocial behaviour.

I realize that:

1.   The study deals with_____ (The relationship between parenting styles and antisocial behaviour).

2.   The procedure or treatment envisaged may hold some risk for me that cannot be foreseen at this stage;

3.   The Ethics Committee has approved that individuals may be approached to participate in the study.

4.   The experimental protocol, i.e., the extent, aims and methods of research, has been explained to me;

5.   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 researcher and alternative procedures that may be to my advantage;

6.   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 matter, 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. 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.

SIGNATURE OF THE RESEARCHED PERSON   SIGNATURE OF WITNESS

_____   _____

SIGNATURE OF PERSON THAT INFORMED
THE RESEARCHED PERSON

_____

Signed at _____this _____day of _____2007