The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents

by

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This dissertation (in article format) is submitted in accordance with the requirements for the degree

MAGISTER ARTIUM

(CLINICAL PSYCHOLOGY)

in the

FACULTY OF THE HUMANITIES

DEPARTMENT OF PSYCHOLOGY

at the

UNIVERSITY OF THE FREE STATE

Supervisor: Dr N. F. Tadi

November 2023

Declaration

I, Siphesihle Mchunu, declare that this dissertation hereby submitted by me for the Magister Artium degree (Clinical Psychology) at the University of the Free State is my own independent work and has not previously been submitted by me to another university/faculty. I furthermore cede copyright of this dissertation in favour of the University of the Free State.

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Siphesihle Mchunu Date

Acknowledgements

I would like to convey my sincere thanks, appreciation, and gratitude to:

- Firstly, I would like to thank God for the strength and perseverance to pursue this journey; had it not been for him, I would not have come this far.
- My parents and family at large for supporting me and my dreams
- My supervisor, Dr N. F. Tadi, for seeing potential in me; even when I almost gave up, she believed that I could do it
- Prof. K. Esterhuyse, for his assistance with the statistical analysis and his patience throughout
- The University of the Free State as a whole for allowing me permission to conduct this study
- Research colleagues, Zamahlase Sibisi and Kananelo Morakile, for always offering a helping hand in carrying out research tasks, especially at the different schools
- The consultants at the Free State Psychiatric Complex Psychology Department for supporting me through this journey
- The Free State Department of Education (FDOE) for granting me permission to embark on this study.
- The various staff members from the schools at which I collected data – principals, admin clerks, teachers, security guards and school counsellors
- My participants and their parents for allowing me to work with them through this process.

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ABSTRACT

Persistent anxiety symptoms during adolescence can lead to debilitation with a possible long-term negative impact in adulthood. Hence, reducing the burden of anxiety symptoms is a crucial public health priority. This quantitative study examined the moderating outcome of gender on the association between perceived parenting and anxiety symptoms among adolescents aged 13 to 17. A non-probability convenience sampling method was employed to select a sample of 153 participants between the ages of 13 and 17, comprising adolescent learners (boys and girls) in Grades 8–11 attending English medium schools. The study applied a quantitative, non-experimental and correlational research design. The results of the current study propose that gender may moderate the impact of parenting styles, in particular the authoritative style, with female adolescents displaying lower levels of anxiety symptoms when they perceive their parents' parenting style as authoritative. By contrast, there would appear to be a slight increase in anxiety symptoms in male adolescents when they perceive their parents as authoritative. This research contributes to an understanding of the nuanced interplay between gender, perceived parenting styles and anxiety symptoms during adolescence, offering insights that may inform targeted interventions for this vulnerable population.

***Keywords*:** gender, perceived parenting styles, anxiety symptoms, adolescent learners

Introduction

The prevalence of anxiety disorders has steadily increased to become a global concern, affecting various population groups, with a high incidence and prevalence among adolescents (Copeland et al., 2014). Adolescents aged between 13 and 17 have a higher lifetime prevalence rate of 7.7% than adults aged between 18 and 64 at 6.6% (Bandelow & Michaelis, 2022). A prevalence rate of 61.2% for anxiety among 515 adolescents from different schools in Bloemfontein, South Africa, aged 16–18 was reported, with the proportion of mild symptoms reported as 29.0%, and the proportion of moderate to severe symptoms as 32.0% (Strydom et al., 2012). A more recent South African Stress and Health (SASH) study, which examined the lifetime prevalence of common mental disorders in Bloemfontein, discovered that anxiety disorders are the most common category of mental disorders in life at 15.8% (Nel et al., 2018). Adolescents experiencing anxiety problems report severe and predominantly durable psychosocial impairment, which makes the adolescence period an important one to explore (Narmandakh et al., 2021).

It is during adolescence that a sense of identity is formed (Blakemore & Mills, 2014). This stage also signifies a point in life where developing a strong sense of gender identity becomes a prominent identity development milestone and a socialising factor (Greene & Patton, 2020). Disjuncture in relationships with parents and the demand to start socialising with different people work together to produce a myriad factors that elicit anxiety (Rath et al., 2020). This is a stage known for the incident of affective disorders (Xie et al., 2021) and most notably the emergence of discrepancies witnessed among different genders with regard to mental health (Steinsbekk et al., 2021). This has led to an understanding that gender contributes to the extent and trajectory of anxiety present in adolescents (Van Droogenbroeck et al., 2018).

Research findings have asserted that women experience heightened anxiety compared to men, especially during the childhood and adolescent stages (Vloo et al., 2021). Girls report

substantially elevated degrees of internalised mental health issues during these stages compared to boys. As regards mental health, the gap in gender escalates together with age during adolescence (Kaye-Tzadok et al., 2017). Anxiety-related problems have been overlooked; this despite the adverse effects of anxiety disorders on adolescents. For example, some of the overarching concerns include below-average scholastic performance and relational problems (on different social levels and contexts) such as unstable friendships and family dynamics (de Lijster et al., 2018; Domoney & Nath, 2018).

Adolescents' perceptions regarding parents' parenting contribute to their psychological and physical development (Ortega et al., 2021). The interaction between parents and their children can have advantages and disadvantages for socialisation. Moreover, among children, psychological well-being is highly influenced by parental behaviours (Ortega et al., 2021). The parental influence on adolescents' development has a clear link to the anxiety outcomes observed in adolescents (Yap & Jorm, 2015). This has led to some studies hypothesising that gendered parenting may elicit different levels of anxiety among boys and girls (Christiansen et al., 2022; Gao et al., 2022; Wood & Eagly, 2012). The gendered parenting hypothesis about anxiety has not been adequately proven (Endendijk et al., 2016) and there is a palpable lack of literature regarding this gendered issue within the fraternity of family studies (Mastrotheodoros et al., 2019). Therefore, it is in line with this background that the present study aims to explore the link between perceived parenting styles and adolescent anxiety symptoms. In addition, it also examines the moderating effects of gender on anxiety symptoms and perceived parenting styles.

Literature Review

Anxiety

Defining Anxiety

According to Poppleton et al (2019), a sense of anxiety is a psychological reaction characterised by fear, and is based on a perceived or experienced threat or uncertain situation. Additionally, anxiety has been found to manifest cognitively, emotionally and behaviourally as responses to events or stimuli that pose a threat. This response is already at work when a person is still an infant and is pivotal for survival.

Classification of Anxiety Disorders

The classification of mental disorders is based on two main systems. In order to classify diseases, the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD) are used. These systems classify anxiety-related disorders in a like manner within the DSM-5 (Roehr, 2013) and ICD-11 (First et al., 2015). Anxiety disorders can be classified into several categories, including selective mutism, specific phobias, separation anxiety disorder, panic disorder, generalised anxiety disorder, social anxiety disorder, agoraphobia, anxiety disorder due to another medical condition, substance/medication-induced anxiety disorder, unspecified anxiety disorder and other specified anxiety disorder (Sadock et al., 2015). Common symptoms of anxiety disorders are indicative of feelings of nervousness, anxiety or feeling edgy, excessive worrying about different things and finding it difficult to relax. Moreover, restlessness, irritability and apprehensive anticipation are also well-known symptoms of anxiety disorders (Rutter & Brown, 2016). These anxiety disorders have an etiological trajectory.

Aetiology of Anxiety Disorders

The origin of anxiety disorders is multifaceted, with an intricate collaboration between biological factors, environmental influences and psychological underpinnings (Schiele & Domschke, 2017). For instance, a myriad of factors should be taken into consideration when attempting to understand anxiety disorders and their pathogenesis. There are several factors to consider in this regard, including pathophysiology, psychobiology, temperament and personality, as well as environmental factors. Pathophysiology, particularly family genetics, has two quintessential approaches – family studies and twin studies. Based on psychobiology, anxiety disorders can be viewed as the result of differences in neural function among individuals. In fear-conditioning experiments, a neural circuit involving the amygdala is involved in learning to fear a stimulus that was previously perceived as neutral/harmless (Kenwood et al., 2022).

Anxiety disorders are strongly associated with vulnerability to temperament and personality traits, for instance neuroticism, behavioural inhibition and trait anxiety. These factors have the propensity to overlap as constructs (Hovenkamp-Hermelink et al., 2021), and are said to be precursor conditions for the manifestation of prototypic anxiety disorders.

Environmental factors are an interesting indicator and aetiology of anxiety disorders, looking particularly at childhood adversities, life events and parenting styles. The epidemiology of anxiety disorders has proven the contribution of adverse childhood experiences (e.g. losing parents, parents divorcing, physical or sexual abuse) to the incidence and perpetuation of anxiety-related disorders (Briggs et al., 2021). Anxiety-related disorders, mood-related disorders, addiction disorders, as well as acting-out disorders are all associated with these adversities (Kaminer et al., 2023). Childhood neglect or abuse has also been strongly associated with psychiatric morbidity (e.g. anxiety disorders, depression, substance abuse disorders) (Gardner et al., 2019). A study by Juruena et al. (2020) established that individuals

who reported having been victims of sexual abuse in childhood were likely to suffer from mood disorders, anxiety disorder, substance use disorder and conduct disorder, as well as display suicidal behaviour. Moreover, a consistent link between childhood sexual violation and a risk to develop mental illness has been found. Regarding specificity, the birth cohort studies yielded findings linking childhood maltreatment and childhood separation events with generalised anxiety disorder including comorbid anxiety disorders (Brühl et al., 2019; Moffitt et al., 2007; Muris et al., 1998).

Other findings emphasise that the impact of adverse childhood events are undoubtedly yet another predictor of anxiety disorders (Miloyan et al., 2018). Additionally, there is evidence that threat events often precede anxiety disorders (Doom et al., 2021; Finlay-Jones & Brown, 1981). Researchers found that parental separation increased the risk for Generalized Anxiety Disorder in female same-sex twins after parental loss before the age of 17 years (Kendler, 1992; van Heijningen et al., 2023).

Parenting styles can determine developmental trajectories and child growth outcomes. According to Olofsdotter et al. (2018), parenting styles are a major source of anxiety among adolescents. According to modern theories about anxiety disorders in childhood like Cognitive Behaviour Therapy (CBT), parenting affects the onset and prevalence of anxiety-related disorders (Yousefi et al., 2021). Studies have depicted an association between parenting styles, development and the maintenance (perpetuation) of anxiety-related problems among adolescents (Erozkan, 2012). Two parenting styles, mainly authoritarian parenting and neglectful parenting, are closely linked to anxiety-related problems (Kuppens & Ceulemans, 2018).

Adolescence Stage

Definition

Adolescence is a stage that signifies a shift from childhood into adulthood (Bonnie et al., 2019). Generally, this period spans from 12–18 years of age, roughly coinciding with pubertal onset. The process of puberty involves hormonal changes and the separation of the guardian from the child, which is considered "adulthood" by many countries (Dahl, 2004). Also associated with adolescence is puberty, a biological process that includes changes to muscles, fat and sex characteristics (Spear, 2000). Increased risk-taking and emotional reactivity occur during this period (Casey et al., 2010). It is a period of temporal confinement but not fixation, more of a transitional developmental stage instead of a fixed period, given its highly variable behaviour and development (Casey et al., 2010). A person's development occurs within the context of behavioural changes induced by external and internal factors. This typically results in changes in response to the environment on the interpersonal and social level. For instance, time spent with parents is reduced as more time is spent with peers, and there is a noticeable sense of independence (Louw & Louw, 2019).

Changes during Adolescence: Physical, Cognitive, Psychosocial

Furthermore, adolescent stage is an essential developmental season that is marked by abrupt changes and new habits. As previously mentioned this is a stage of transition into a period of vulnerability linked to puberty, a complex sequence of neural, hormonal and physical shifts linked to the transition to adulthood (Casey et al, 2008; Spear, 2000). Puberty is linked to changes in fear processes (Spielberg et al., 2014) and proneness to anxiety-related issues (Reardon et al., 2009). In girls, puberty affects fear-related neural systems more than in boys (Bramen et al., 2010).

The emotional aspect of adolescents' development is deemed a complex one, both internally and externally (Guyer et al., 2016). There is a tendency for adolescents to be

hypoactive in their emotional control system, which is indicative of their insufficient cognitive control, as well as their immaturity when it comes to fear conditioning. This reflects ineffective processes for the extinction of fear. Additionally, there is a peak in both the reward system and the stress response system. In response to circumstances that pose a threat, abnormal stress regulation occurs as a result of biased motivational processing. These peculiar characteristics of adolescents' brain function may partly provide an understanding of their susceptibility to anxiety disorders. Psychopathological symptoms of anxiety disorders among adolescents may be influenced by abnormalities in the brain structures related to uncertainty anticipation, fear conditioning, motivational processing, cognitive control and stress regulation (Xie et al., 2020).

An association exists between the formation of a child's temperament, behaviour and anxiety-related disorders (Fox & Pine, 2012). Temperament and parent psychopathology are significant developmental risk factors for anxiety, as well as parent–child relationships (Fox & Pine, 2012), thus reacting to unfamiliar situations by withdrawing and avoiding them, this is called behavioural inhibition. In this respect, a strong relationship has been established between behavioural inhibition in infants and toddlers and the susceptibility to develop anxiety in adolescence (Fox & Pine, 2012).

Adolescents who experience dysfunctional psychosocial interactions with parents and caregivers have a vulnerability factor of developing anxiety-related problems. As a result of maladaptive parenting behaviours, overprotection, criticism, rejection and dysfunctional familial interactions such as marital conflict and hostile sibling relationships, children face challenges (Beesdo et al., 2009). Subsequently, the link between parenting and the risk of developing anxiety-related problems becomes more prevalent in females more than in males (Barton & Kirtley, 2012).

A need to conform to societal attitudes and expectations can also result in adolescents being more susceptible to developing anxiety (Narmandakh et al., 2020). The more pronounced

triggers are found to be sexual development, a quest for self-identity, fear of rejection from others, lack of interpersonal skills, and perceived or real inadequacies regarding psychological well-being. Later in adolescence, the biggest stress factors include academic pursuits and career endeavours (Garcia & O'Neil, 2020).

The essential developmental milestone for adolescents is to consolidate a solid identity while ameliorating role confusion. Moreover, they are faced with the milestone of creating meaningful relationships to ensure a sense of belonging (Chen et al., 2007). Adolescents' ability to achieve identity can be a good indicator of lower expression of psychosomatic and neurotic symptoms (Ragelienė, 2016) and, most importantly, reduced anxiety (Crocetti et al., 2008).

Adolescence and Anxiety

Anxiety is perceived as a normal aspect of childhood development. Children undergo a myriad of experiences such as feeling fearful, nervous, shy and avoiding contexts and events. This will most often continue despite the intervention of parents, caregivers and teachers (Bhatia & Goyal, 2018). Anxiety disorders are among the fast-growing disorders observed in children and adolescents with a prevalence rate between 4 and 20%. In this age bracket, specific phobias, social phobias, generalised anxiety disorders and separation anxiety disorders are most prevalent with prevalence rates between 2.2 and 3.6%. Agoraphobia stands at 1.5%, indicating a lower prevalence, whereas panic disorders are reported to be relatively rare, below 1% (Bhatia & Goyal, 2018).

Gender and Anxiety (Gender Prevalence)

A study was conducted among adolescents (1079 participants), and it was observed that girls were more likely to have an acute or chronic diagnosis of anxiety-related disorder than boys (Lewinsohn et al., 1998). During childhood, there is an evident increase in vulnerability

to heightened anxiety in girls. At around six years of age, girls are already twice as likely to develop anxiety disorders compared to boys, with enduring symptoms extending into adolescence (Muris & Ollendick, 2002). In adolescence, girls testify about being considerably worried about many things and on many occasions, this is especially indicative of separation anxiety (Poulton et al., 2001). A wide array of etiological factors exists that account for these differences in anxiety levels among adolescents according to gender.

Anxiety proneness appears to be influenced by biological factors, particularly genetic factors (Stein et al., 2002). Additionally, other factors of vulnerability include neuroticism. The extent to which anxiety-related susceptibility determinants are heritable is more significant in girls than in boys. Evidence for these findings is based on the premise of individual variability in neuroticism among girls compared to boys (Lake et al., 2000). Biological factors such as hormones and physiological reactivity have a significant etiological base (McLean & Anderson, 2009). The etiological factors of interest in this study will be the influence of gender role socialisation, especially by parents. Parenting is a key socialisation tool that serves to reinforce gender-conforming behaviours. This occurs normally through the encouragement of agency and assertiveness in males and anxious behaviours in females (McLean & Anderson, 2009). According to scientific evidence, parents tolerate withdrawal and inhibitory behaviours in boys less as they get older, whereas in girls it's the opposite. (Stevenson-Hinde & Shouldice, 1993).

Coping Differences and Anxiety: Gender Differences

A study by Eschenbeck et al. (2007), undertaken among adolescents, found that females had higher scores than males when it comes to seeking social support based on gender differences in coping. For example, findings have deduced that women use active coping strategies more often than men (Hampel & Petermann, 2005). By contrast, adolescent boys

have the urge to apply avoidance as a form of coping (Eschenbeck et al., 2007). Studies postulate that females are prone to resort to avoidant coping strategies compared to their male counterparts (Griffith et al., 2000). According to Hampel and Petermann (2005), girls use less distraction/recreation and more aggression to regulate their emotions during adolescence compared to boys. Notably, in response to academic stressors, females more commonly use emotion-focused strategies (Compas et al., 1988). These variations in coping between the different genders may be precursors for anxiety and can have deleterious effects on adolescents (Kelly et al., 2008).

Parenting Styles and Anxiety

The aetiology of anxiety disorders among adolescents is better explained by a myriad of factors that can inform prevention and treatment (Waite & Creswell, 2014). Theoretically, several family factors are implicated, including genes, adverse childhood events, parent psychopathology and parenting behaviour (Creswell et al. 2011; Rapee et al. 2009).

Research proposes that focusing on parenting practices during early development may improve mental health in children and adolescents (Colizzi et al., 2020). For adolescents to have the capacity to adjust, improve academically and experience emotional well-being, early-life interventions aimed at encouraging parents to be warm and sensitive, and monitor children appropriately, along with effective and consistent discipline practices, play a vital role (Hagan et al., 2012). A direct correlation has been found between child anxiety and the relationship between the child and the parent (Wood et al., 2003). Parenting style is a tool for caregiving which determines parent–child behaviours and is characterised by patterns of control, punishment, warmth and responsiveness (Erozkan, 2012). This tool is used by parents and responded to by children in different contexts and dimensions.

Since parenting styles play an important role in anxiety disorders, understanding how overprotective parenting exacerbates anxiety symptoms is essential (Baldwin et al., 2007). Potential explanations for this relationship can be found in the theories of Chorpita and Barlow (1998) and Rapee (2001). According to Chorpita and Barlow (1998), authoritarian behaviour and overprotectiveness exhibited by parents can affect children's sense of control and cause them to perceive events to as threatening, resulting in avoidance of situations. According to Rapee (2001), parental overprotection not only increases the risk of anxiety but the risk is largely amplified by behaviours presented by the child, since these behaviours can trigger overprotection from parents, making this link a transactional exchange.

Further, parents struggling with anxiety sensitivity may intervene more often if they witness their children exhibiting symptoms of anxiety, judging these symptoms as problematic. The development of psychopathology may be influenced by parenting marked by overprotection and a parental response characterised by inadequate warmth. Research has shown that early parental interactions, particularly anxiety and anxiety sensitivity, are related to later psychopathology (Barlow, 2002).

As a result, the link between mothers' behaviour and anxiety among children is significant because it suggests that the mother's behaviour directly affects the child's anxiety (Turner et al., 2003). Parents who use anxious parenting behaviours may also reinforce their children's anxiety by modelling and/or reinforcing anxious behaviour as well as control and rejection (Rachman, 1977). The anxiety expressed by parents promotes anxiety-related cognitions, behaviours and symptoms in their children (Askew & Field, 2007; Waters et al. 2012).

Theoretical Framework: Parenting Styles

The types of parental control identified by Baumrind (1966) are authoritarian, authoritative and permissive. In subsequent literature (Baumrind, 1971; Maccoby & Martin,

1983), neglect/rejection was introduced as a fourth type of parental control. Parents' parenting styles are characterised by the attitudes and behaviours they exhibit towards their children, as well as the emotional environment in which they do so (Darling & Steinberg, 1993). The concept of parenting styles was used to conceptualise common behaviours parents put in place for controlling and socialising their children (Baumrind, 1991). Baumrind (1989) and Maccoby and Martin (1983) suggested that two dimensions capture parenting styles, namely, demandingness and responsiveness. Subsequently, four classifications of parenting styles have been developed since Baumrind's three parenting styles. Two types of permissive parenting have been distinguished in the classifications: specifically indulgent, where parents are relatively high on responsiveness but low on demandingness, and neglectful, where parents are low both on responsiveness and demandingness (Steinberg et al., 1991; Steinberg et al., 1994).

Woolfolk (2010) describes authoritarian parents as cold and controlling. Their demands are high and their responsiveness is low (Couchenour & Chrisman, 2014). Parents with an authoritarian approach are oriented to obedience; setting boundaries with expectations for their children to obey them without providing reasons as to why. In many cases, they are expected to obey without question (Callahan, 2005). Children's mental health and/or well-being can be affected by the environment parents create. Researchers found that adolescents with negative perceptions of their parents' behaviour have a higher propensity to develop anxiety challenges (Platt et al., 2015).

In authoritative parents, limits are set, rules are enforced and children's behaviour is expected to be mature (Woolfolk, 2010). Their children's concerns are heard, rules are explained and democratic decision-making is followed. In addition to being highly responsive, authoritative parents are also highly demanding (Couchenour & Chrisman, 2014). The authoritative parenting style fosters individuality and independence within limits and allows children more freedom with responsibility when compared to the authoritarian parenting style

(Robbins, 2012, p. 226). Furthermore, they strive to develop assertiveness, social responsibility, self-regulation and cooperativeness in their children (Baumrind, 1991). A child with authoritative parents has fewer behavioural problems than a child with an authoritarian or a neglectful parent (Crosser, 2005; Garcia & Gracia, 2009; Querido et al., 2002)

Permissive parents tend to interact less with their children than authoritative parents, and when they do, they tend to let their children control the conversation (Baumrind, 1989, 1991). This communication style is characterised by inadequate demands and expectations for the child which may result in poor social bonds between the parent and the child. On the one hand, permissive parenting is renowned for the provision of emotional support, promotion of independence in decision-making, self-emotional regulation and less imposition of strict rules, while on the other hand, it is characterised by avoidance of discipline and confrontation (Baumrind, 1991). Two types of permissive parenting have been identified – a permissive-indulgent and a permissive-indifferent/neglectful parenting style (Maccoby & Martin, 1983).

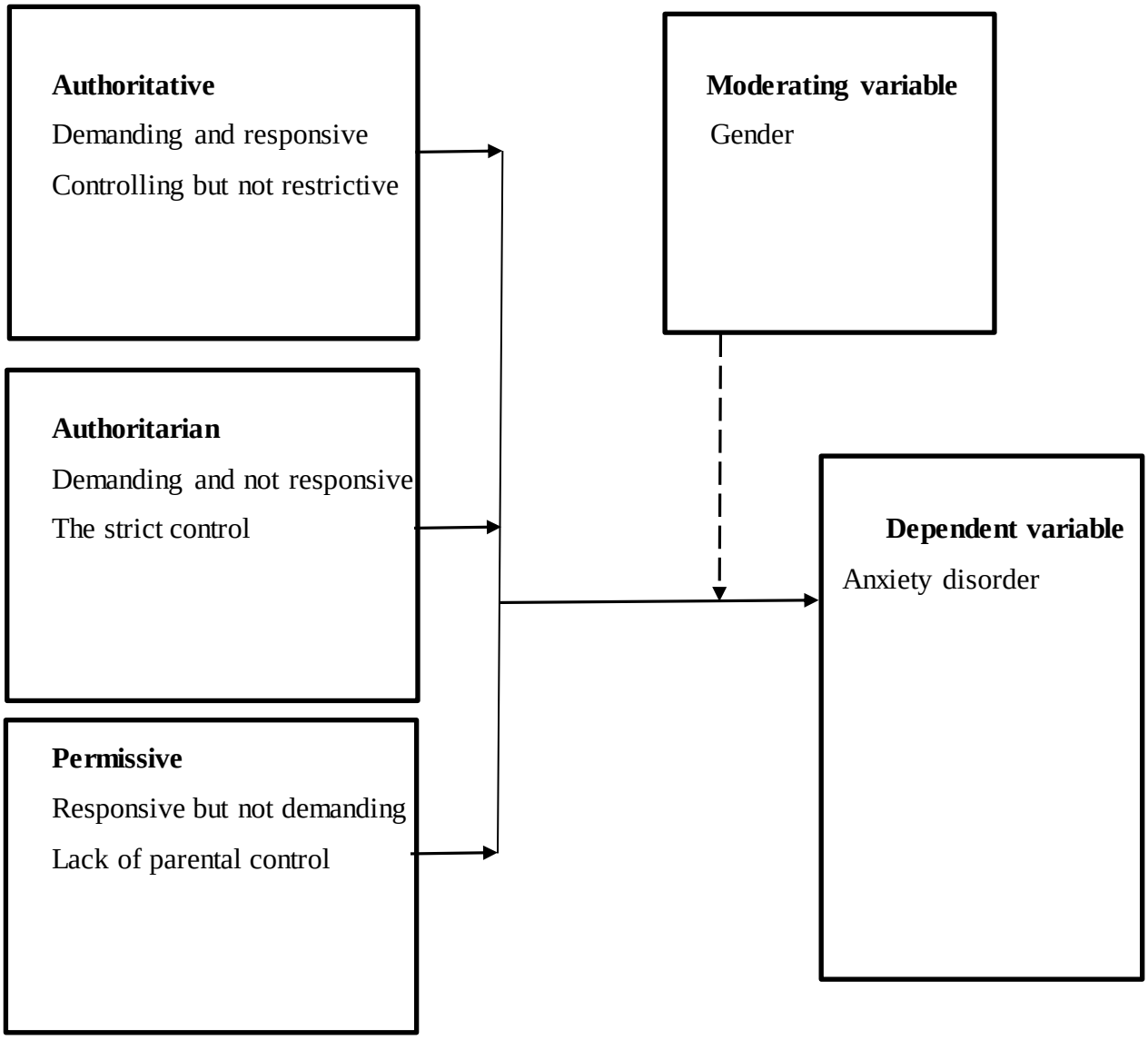
Indulgent parenting exhibits less control but leans more on child-centredness, warmth and responsiveness (Crosser, 2005). This style of parenting is also known a permissive parenting style (Pressley & McCormick, 2007). Children reared by indulgent parents are at the disposal of their warmth and nurturance to the extent of exemption from rules and repercussions when rules are broken (Woolfolk, 2010). Their indulgence entails accepting and fulfilling their children's desires and impulses (Lichtman, 2011). Consequently, these children display aggression and temper tantrums when they do not get their own way, progressing to hostility, selfishness and rebelliousness in adolescence (Crosser, 2005).

Neglectful parenting is found to be adult-centred, unresponsive and with an interaction that is characterised by low control (Berg-Cross, 2001; Crosser, 2005; Kay, 2006). At the core of neglectful parenting is a parent-centred lifestyle, where priority is given to the parent's personal needs instead of the children's (Bornstein & Zlotnick, 2009). Parents who are not

engaged in the upbringing of their children can have detrimental effects on their children such as a lack of responsibility and purpose in life, low confidence and low self-image. Moreover, these children will experience mood problems, impulsivity, and be defiant and oppositional towards authority (Sclafani, 2004). Problems such as substance abuse, conduct disorder, and a tendency to become gang members and juvenile delinquents may manifest in adolescence (Harmening, 2010).

Conceptual framework

Independent variable



Conceptual Framework

Conceptual frameworks explain how independent and dependent variables are related. In this study, four categories of parenting styles were the independent variables: authoritative parenting, authoritarian parenting, permissive parenting, and neglectful parenting. Anxiety among adolescents in secondary schools was the dependent variable. Adolescent gender is hypothesised to influence the link between the independent variable and the dependent variable.

Most studies examining the relationship between parental authority and anxiety in youth have been conducted in Western regions (Pereira et al., 2014) and few studies have been conducted to examine this relationship among children in South Africa (Howard et al., 2016). This relationship has also been understudied in terms of the moderating effects of gender (Gorostiaga et al., 2019). To bridge this gap, the aim of this study was to examine the influence of perceived parenting styles on anxiety symptoms among adolescents, looking particularly at the moderating effect of gender. These factors led to the formulation of the research problem and objectives.

Research Problem and Objectives

This study aimed to explore the relationship between perceived parenting styles and adolescent anxiety symptoms. In addition, it examined the moderating effect of gender in adolescence on anxiety symptoms and perceived parenting styles. In helping to achieve these aims, the following research objectives were identified:

Research Objective 1

To examine the relationship between adolescents' perceived parenting styles and self-reported anxiety symptoms.

Research Objective 2

To explore the moderating effect of gender on the relationship between parenting styles and anxiety symptoms of adolescents.

Research Questions

The following research questions were formulated to assist in achieving these objectives:

1. What is the relationship between perceived parenting styles and anxiety symptoms?
2. Does gender moderate the relationship between parenting styles and anxiety symptoms?

Research Design and Methodology

To address the above research objectives and research questions, a quantitative approach with a non-experimental and cross-sectional survey-type research design was applied (Stangor, 2015). A quantitative research method is a scientific approach that permits the statistical, systematic and objective collection of data (Stangor, 2015). It allows for a study using a large sample group whereby results can be generalised and used to make predictions (Brent & Kraska, 2010). Non-experimental research does not control, manipulate or interfere with the variables of the study (Brent & Kraska, 2010; De Vos et al., 2011; Gravetter & Forzano, 2003). In addition, a correlational research design was used since it determines the strength and direction of relationships between variables (Stangor, 2011).

Participants and Sampling Procedure

A sample of 153 adolescent learners in Grades 8–11, attending English-medium public schools in Mangaung Motheo District, was obtained. Participants were selected using a non-probability convenience sampling method. This means that participants were not selected randomly from a population, but rather on the basis of convenience, that is, their availability

(Martínez-Mesa et al., 2016). The inclusion criteria consisted of adolescents aged 13–17, predominantly from the middle-class community in Motheo district, central Bloemfontein. Participants younger than 13 years and older than 17 were excluded from the study. The participants further included all genders and all races.

Ethical Considerations and Data Collection

Permission to collect the data was granted by the Ethics committee of the Faculty of Humanities (GHREC) at the University of the Free State (UFS-HSD2021/1600/22), the Department of Education in the Free State Province and the principals of the schools. The signed parental consent forms and signed assent forms from the learners were obtained prior to the commencement of data collection. Ethical principles considered included voluntary participation, anonymity, confidentiality, justice, beneficence, non-maleficence and withdrawal (National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1979; Varkey, 2021).

A letter elucidating the nature and aim of the study, including the risks, was issued to the parents and the participants. Data were collected using standardised questionnaires, which were administered to adolescents attending English medium schools in Motheo district, central Bloemfontein, during break times, free periods and hall periods. The participants were given the opportunity to ask questions regarding the study. According to the Health Professions Council of South Africa (2016), participating in a research study is voluntary and individuals should be allowed to withdraw at any point during the study. Parents were informed that they had the right to decline permission for their children to participate. In like manner, the participants were informed that they had the right to withdraw at any point. Once parental permission for children to participate in the study had been received, the participants were asked to provide written assent.

The participants' anonymity was respected throughout the process by ensuring that no personal information such as names and surnames was documented throughout the research project. Moreover, the names of the schools were not recorded in the questionnaire. The self-administered questionnaires were in English and made available to the participants in paper-based form. The questionnaires took approximately 30 minutes to complete. The researcher was available to clarify and answer any enquiries from participants.

Participants were informed that any identifiable information would be held in strictest confidence and that hard copies of their responses would be stored by the researcher in a locked cabinet in the Department of Psychology for future academic purposes for a period of five years. In addition, participants were informed that the electronic information would be stored in a password-protected computer and an encrypted MSWord file. Moreover, the fundamental principles that are relevant to the ethics of research involving human participants, such as the principles of beneficence, respect for individuals and justice, were upheld. In this regard, participants took part in the research study voluntarily and were given sufficient information regarding the study. The research study was conducted in such a way that no physical, psychological, social and economic harm was caused to the participants. To ensure participants' well-being they were informed that counselling and support services would be available for participants who experienced any emotional distress during the study; they could contact the South African Depression and Anxiety Group (SADAG) at 0800212323, which is a toll-free number for accessing psychological intervention/counselling. Finally, the ethical principle of justice relates to treating participants objectively, fairly and without bias (Varkey, 2021). This principle was upheld by ensuring that all potential participants had an equal chance of being chosen to participate in the study.

Characteristics of the Sample

The sample consisted of 153 learners in Grades 8–11 attending English medium schools in the Mangaung Motheo District. A non-probability, convenience sampling method was used (Etikan et al., 2016). The biographical variables involved in the study were home language, ethnic group, gender, age and the primary caregiver. These biographical variables were measured on a nominal scale and their frequencies are presented in Table 1.

Table 1.

Frequency Distribution of Biographical Variables

Biographical variables	N	%
Home Language:		
English	17	11.1
Afrikaans	4	2.6
IsiXhosa	13	8.5
IsiZulu	5	3.3
Sepedi	1	.7
Sesotho	79	51.6
Siswati	1	.7
Tshivenda	1	.7
Xitsonga	1	.7
Setswana	29	19.0
Other	2	1.3
Ethnic group:		
Asian	1	.7

Black/African	136	88.9
Indian	14	9.2
White	1	.7
Other	1	.7
Gender:		
Male	51	33.3
Female	100	65.4
Non-binary	1	.7
Other	1	.7
Age:		
13–14	93	60.8
15–16	58	37.9
17	2	1.3
Primary caregiver:		
Both parents	83	54.2
Mother	53	34.6
Father	2	1.3
Grandparents	11	7.2
Others	4	2.6

In the total group, the following languages were represented: English (11.1%), Afrikaans (2.6%), isiXhosa (8.5%), IsiZulu (3.3%), Sepedi (.7%), Sesotho (51.6%), Siswati (.7%), Tshivenda (.7%), Xitsonga (.7%), Setswana (19.0%), and other (1.3%). In addition, the following ethic groups were represented by the following percentage proportions: Asian (.7%), Black/African (88.9%), Indian (9.2%), White (.7%), and Other (.7%). Moreover, of the total

group, 65.4% consisted of females, 33.3% of males and .7% were non-binary. With regard to age, 15–16 years was the predominant age at 37.9% followed by 60.8% between the age of 13 and 14, and 1.3% aged 17 years. Lastly, most of the sample had both parents as their primary caregivers at 54.2%, followed by the mother at 34.6%, fathers at 1.3%, grandparents at 7.2%, and others at 2.6%.

Measuring Instruments

The measuring instruments used to measure the aforementioned variables will now be discussed.

The Parental Authority Questionnaire (PAQ)

This measuring instrument, which was developed by Buri (1991), was used to measure the participants' perceived parenting styles. It consists of three subscales: permissive (P: items 1, 6, 10, 13, 14, 17, 19, 21, 24 and 28); authoritarian (A: items 2, 3, 7, 9, 12, 16, 18, 25, 26 and 29); and authoritative (A: items 4, 5, 8, 11, 15, 20, 22, 23, 27, and 30). The instrument comprises 30 items which are rated using a five-point Likert scale (ranging from 1 to 5) where 1 denotes agree, 2 strongly agree, 3 neutral, 4 disagree and 5 strongly disagree information is given by the child (Buri, 1991). The highest score on the authoritarian parenting style subscale indicates the greatest perceived authority of a parent or guardian, while the lowest score indicates the lowest perceived presence of the parent or guardian by the adolescent (Buri, 1989). The highest score on authoritative parenting style means that the adolescent perceives their guardian as both controlling and sensitive (Ditsela & Van Dyk, 2011). A low score in authoritative parenting style means adolescents perceive their guardians as more controlling and demanding (Buri, 1991). A high score in permissive parenting style means that adolescents perceive their parents as highly responsive and less controlling, while a low score means that adolescents perceive

their parents as controlling (Buri, 1991). South African research by Kritzas and Grobler (2005) with adolescents in Bloemfontein, using the Parenting Authority Questionnaire (PAQ), reported a Cronbach's alpha of .74. Similarly, a recent South African study found Cronbach's alpha values of .80, .73, and .63 for authoritative, authoritarian, and permissive styles respectively (Ditsela & Van Dyk, 2011).

The Generalised Anxiety Disorder 7 item (GAD-7)

Anxiety symptoms were measured using the seven-item self-report Generalized Anxiety Disorder Scale (GAD-7) (Spitzer et al., 2006). Generalised Anxiety Disorder-7 items are rated on a four-point Likert scale, ranging from 0 (not at all) to 3 (nearly always). The seven items are summed to generate a total score that ranges between 0 and 21. The range of symptom categories include the following, together with their scores: 0–4 minimal symptoms; 5–9 mild symptoms; 10–14 moderate symptoms; and 15–21 severe symptoms of anxiety. South African research by Kigozi (2021) among adult patients newly diagnosed with drug-susceptible TB reported a Cronbach's alpha for the full GAD-7 scale as 0.86. The GAD-7 demonstrated sound psychometric properties and moderate discriminant accuracy among adolescents in Ghana (Adjorlo, 2019).

A demographic questionnaire was included. This will be useful in the identification of gender.

The reliability coefficients of the respective measuring instruments were calculated using Cronbach's α coefficients and the omega coefficient. This is displayed in Table 2.

Table 2

Reliability of the Measuring Instruments

Measurement scale	α-coefficient
Parental Authority Questionnaire	
Permissive	.657
Authoritarian	.795
Flexible	.711
Anxiety	.823

Reliability coefficients of 0.7 or higher are deemed acceptable in studies within the social sciences context (Lance et al., 2006). From Table 2 it is clear that with the exception of the permissive parenting style, all the scales have acceptable reliability indices above .7. However, the researcher decided to keep the permissive parenting scale in the statistical analyses that follow.

Data Analysis Procedure

The Statistical Package for the Social Sciences (SPSS) version 29 (IBM Corporation, 2022) was employed to analyse the results of the study. Pearson product-moment correlation coefficients were used to investigate the first research objective, while multiple hierarchical regression analyses were performed to investigate the second research objective, specifically the possible moderator role that gender may play in the relationship between parenting styles and the anxiety levels of adolescents. A moderator variable influences the direction and/or strength of the relationship between the predictor and the criterion variables (Baron & Kenny, 1986; Field, 2013).

To determine whether the intervening variable(s) appear as a moderator in the relationship between the independent and dependent variables, multiple hierarchical regression procedures were performed. In the first step, the analysis of single variables is handled. One of the parenting style variables is firstly added to the regression equation to

determine its unique contribution to anxiety. During step two, both the independent and intervening variables (gender) are added to the equation. In this way, each of the predictor variables' significant proportional contribution to the prediction of the criterion variable (anxiety) is determined. In the third step, the product term (the correlation value between one of the parenting scales scores and gender) is entered into the equation. If the calculated beta coefficient of the product term (step 3, in this case, between parenting style and gender) is significant, it can be deduced that there is a significant interaction, which is then indicative of a moderator effect (Howell, 2013).

Both the 1%- as well as 5%-level of significance were used. To determine a significant interaction effect, a lessened p-value of 0.1 was applied (Aiken et al., 1991).

Results

In this section the results obtained in the study will be presented and discussed. Firstly, the distribution of data for the relevant variables will presented. Table 3 provides more detail on the distribution of data by means of descriptive statistics (means, standard deviations, skewness and kurtosis) for the variables that were used in the analyses.

Table 3

Means, Standard Deviations, Skewness and Kurtoses for the Variables

Variable	Mean	Sd*	Skewness	Kurtosis
PAQ				
Permissive	24.70	5.33	-.077	-.652
Authoritarian	35.25	7.67	-.300	-.397
Flexible	33.67	6.69	-.353	-.259
GAD-7 Anxiety	10.87	5.50	-.101	-.905

Note: *standard deviation

According to Peat et al. (2008), a range between -1 and +1 indicates slight skewness, while values between -2 and +2 indicate moderate skewness. For kurtosis, a normal distribution is between -3 and +3 (Brown, 1997). From Table 2 it is clear that for all the relevant variables the skewness as well as kurtosis values fall within the normal limits and can therefore be used to investigate the formulated research objectives.

Research Objective 1

To investigate the first research question, Pearson's product moment correlation coefficients were utilised to analyse the relationship between perceived parenting styles and anxiety symptoms in adolescent learners. The correlation coefficients are presented in Table 4 for the total group.

Table 4

Correlations between Perceived Parenting Style Scores and Anxiety Scores for the Total Group (N = 153)

Variable	1	2	3	4
Permissive (1)	-	-.36**	.35**	-.21**
Authoritarian (2)		-	-.42**	.14
Authoritative (3)			-	.-.27**
Anxiety (4)				-

** $p \leq .01$; * $p \leq .05$

A significant negative correlation (on the 1% level) was found between permissive parenting style scores and anxiety symptoms scores, as well as between the authoritative parenting style and anxiety scores for the adolescents. According to Cohen (as cited in Aron et al., 2013), correlation coefficients of .10 and above hold a small effect size, .30 and above a medium effect size, and .50 and above a large effect size. The statistically significant relationships tend to show medium effect sizes and are therefore

of medium practical significance for the correlation. To answer the first research objective, results depict that the more adolescents perceive their parents to possess permissive and authoritative parenting styles the less they experience anxiety symptoms. On the other hand, the more they perceive their parents to possess authoritarian parenting style, the more they experience anxiety symptoms.

Research Objective 2

To investigate the second research objective, multiple hierarchical regression analyses were conducted to determine the possible moderator role of gender on the relationship between perceived parenting styles and anxiety symptoms in adolescent learners. The results are presented in Table 5.

Table 5

Regression Analysis Predicting Anxiety with Parenting Styles as Independent Variables and Gender as Intervening Variable

Variables	**Step 1**	**Step 2**	**Step 3**
	Anxiety Symptoms		
+Permissive	-.205	-.076	-.284
+Gender		.421**	.138
+Permissive x Gender			.300
Model R^2	.042	.202	.205
Model ΔR^2	.042	.160	.003
	Anxiety Symptoms		
+Authoritarian	.129	.130	.072
+Gender		.444**	.373
+Authoritarian x Gender			.093
Model R^2	.017	.214	.214
Model ΔR^2	.017	.197	.000
	Anxiety Symptoms		
+Authoritative	-.272	-.237	.493

+Gender		.425**	.1.426*
+Authoritative x Gender			-1.201*
Model R^2	.074	.253	.282
Model ΔR^2	.074	.179	.029

** $p \leq 0.01$ * $p \leq 0.05$

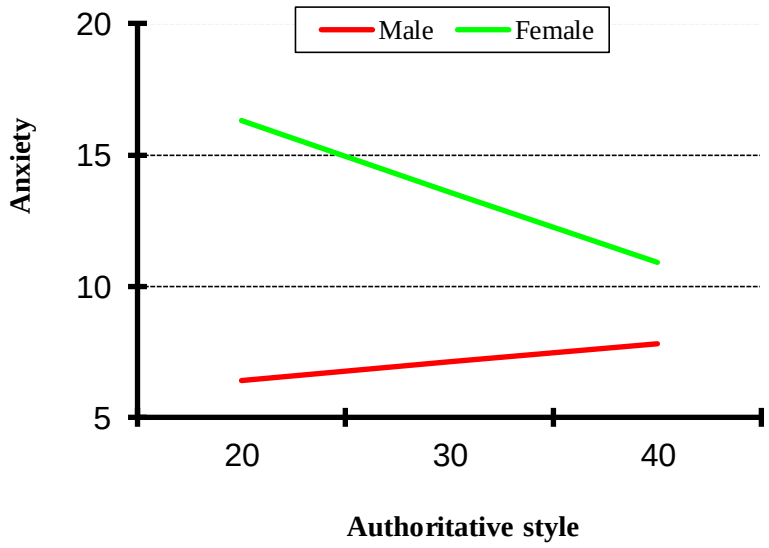
+ Standardised beta coefficients are indicated

The result in Table 5 indicates that a statistically significant interaction [R^2 = .282] effect was found at the 5% level [β = -1.201; t = -2.431; p = .016]. It can therefore be concluded that gender does indeed moderate the relationship between authoritative parenting style and anxiety symptoms in adolescent learners.

The nature of this moderator effect (gender) was investigated by calculating the strength and direction of the relationship between authoritative style and anxiety symptoms in both male and female adolescent learners. The regression lines for these two gender groups are represented in Figure 1. [Note: the frequencies for non-binary and other were too low and thus were not included in the analysis.]

Figure 1

Regression Lines for the Male and Female Adolescents Respectively, with Authoritative Parenting Style as a Predictor of Anxiety Symptoms



For the female adolescents, their levels of anxiety symptoms decreased significantly when they perceived their parents parenting style to be authoritative. A significant negative correlation (r = -.366; p = .001) was identified for the female adolescents between authoritative parenting style scores and their anxiety symptoms scores. However, for the male adolescents a very slight increase in anxiety was identified with an increase in their perception of a parenting style which is authoritative. In this case, no statistical significant relationship (r = .091; p = .531) was identified. Thus, only in the case of female adolescents does it appear that an increase in authoritative parenting style will tend to decrease their levels of anxiety symptoms.

Discussion

The overarching aim of this study was to explore the relationship between perceived parenting styles and adolescent anxiety symptoms. Further, the aim was to explore the moderating effects of adolescent gender on anxiety symptoms elicited by perceived parenting styles.

Perceived parenting styles as the predictor variable, anxiety symptoms as the outcome variable, and gender as the moderating variable were measured by means of the Parental Authority Questionnaire (PAQ) (Buri, 1991) and the Generalized Anxiety Disorder 7-Item scale (GAD-7) (Spitzer et al., 2006). The reliability score (internal consistency) for these scales and subscales has been proven to be acceptable in studies conducted within a social science context (refer to Table 2) (Lance et al., 2006). Moreover, all variables, skewness and kurtosis (see Table 3) values fell within normal limits.

To address the first objective, in the present study correlations were calculated between the various variables in order to ascertain whether a relationship exists between parenting styles as perceived by adolescents and self-reported anxiety symptoms (see

Table 4). As hypothesised, the results indicated that a perceived authoritarian parenting style showed a significantly positive relationship with anxiety symptoms. In other words, the more adolescent learners perceive parents as possessing an authoritarian parenting style, the more likely they are to experience anxiety symptoms. Likewise, the more adolescent learners perceive their parents as possessing a permissive or authoritative parenting style, the less likely they are to experience anxiety symptoms. The results concur with a study by Romero-Acosta et al. (2021) which discovered that an authoritarian parenting style positively correlated with anxiety symptoms, whereas authoritative and permissive parenting styles correlated negatively with anxiety symptoms. In an attempt to elucidate these results, we look at Scharf et al. (2016) who asserted that moderately high levels of internalising symptoms (e.g. anxiety and withdrawal) are linked to a parenting style that is characterised by harshness. In this regard, harshness is said to be one of the main characteristics of an authoritarian parenting style, along with scolding, shouting and shaming (Smetana, 2017). Therefore, being exposed to parental verbal aggression has been linked to increased levels of anxiety symptoms (Kuppens & Ceulemans, 2018; Polcari et al., 2014). By contrast, authoritative parenting has been linked to decreased levels of anxiety symptoms due to its characteristics of warmth and responsiveness (Erozkan, 2012; Kuppens & Ceulemans, 2018).

To address the second objective, this study sought to explore the possible effect of gender on the relationship between parenting style and anxiety symptoms in adolescents. The findings were significant, as a significant negative correlation was identified for the female adolescents between authoritative parenting style scores and their anxiety symptoms scores (see Table 5). Conversely, for the male adolescents, only a very slight increase in anxiety was identified with an increase in their perception of a parenting

style that is authoritative. In this case, no statistical significant relationship was identified. The findings resonate with Romero-Acosta et al.'s (2021) study where males reported higher anxiety compared to their female counterparts based on the parenting style, particularly authoritative parenting. Gender biased parenting could better explain these results since parents have varying gender based socialization goals (Chao, 2020). Girls mostly perceive their parents to be treating them with warmth, nurturance and responsiveness (authoritative parenting). These are naturally elicited by girls by virtue of their nurturing and warm nature as child bearers, primary sources of attachment and nurturers. This perception is further perpetuated by the socialization and societal expectations. Thus less anxiety would be expected from girls who perceive their parents as authoritative since this is a normal (mainly elicited by girls themselves) way of raising a girl child. On the other hand, boys normally perceive their parents to be treating them with harshness, discipline and less responsiveness (authoritarian parenting). This is normally a way of cultivating manhood and protectiveness in boy children. This is also further perpetuated by socialization and societal expectations. It can then be asserted that when boys experience parents as authoritative, it could elicit an unfamiliar response, in this case increased anxiety because it would be in contrary with the normal or expected way of parenting a boy child (Vyas et al., 2016; Lungarini, 2015).

Limitations of the Study

The study was shown to have somewhat achieved the aims; however, there were some limitations which will be indicated. The following limitations were identified:

Firstly, the sample size of the study was limiting in terms of meeting the full extent of the research objectives. Accordingly, the results of the study are not generalisable to the larger population of South Africa.

Secondly, a non-probability, convenience sampling method was applied, thus not allowing an equal chance for everyone in the population to be selected.

Thirdly, this research comprised a quantitative, correlational study and causality could not be determined. Because the temporality of association is a strong criterion for causality, cross-sectional studies do not prove causality; however, they do assist in generating causal hypotheses (Makhubela, 2020).

Fourthly, all variables were measured using self-report questionnaires completed by the participants, which may have introduced the possibility of bias in the results, given the inherent intentions of the participants. The researcher tried to mitigate this effect by assisting the participants by answering questions together with an assistant who was familiar with the languages used by the participants.

Fifthly, participants may have made socially conforming statements that may not actually have reflected their perceived parenting styles and anxiety symptoms, even though attempts were made to rule this out.

Recommendations for Future Research

To address the limitations, it is suggested that a larger sample size could yield robust findings that could be generalised to a larger population within the South African context. A larger sample size in a study provides results that are stronger and more reliable because they have smaller margins of error and lower standard deviations. Additionally, larger sample sizes allow for controlling the risk of reporting false negative or false positive findings. Thus, the precision of the results can be ensured by making sample sizes larger. Moreover, a mixed method approach that includes qualitative interviews and the analysis thereof could yield an in-depth experience of the perceived parenting styles and anxiety symptoms. Finally, longitudinal research studies could be

included to explore the lifetime/long-term effects of perceived parenting styles and anxiety symptoms. By measuring and analysing changes in variables over time, impactful results may be obtained.

Contributions of this Study

Despite the abovementioned limitations, this study contributes to the existing knowledge base concerning perceived parenting styles and anxiety symptoms among adolescents and the impact of gender on these variables. This research could assist in forming a better understanding of the implications that parenting styles may have for anxiety symptoms. It may also contribute to practice and policy in the following manner:

Provide informed interventions. Such interventions should address specific patterns in how anxiety symptoms are influenced by perceived parenting styles. This information can guide the development of more targeted and effective interventions for individuals based on their gender-related vulnerabilities.

Tailored parenting programmes. Such programmes should provide insights for designing parenting programmes that are tailored to the needs of both genders. Understanding how parenting styles affect anxiety differently in boys and girls can inform educational initiatives for parents, promoting more adaptive parenting practices.

Clinical strategies. Such strategies should inform mental health practitioners about gender-specific considerations in treating anxiety symptoms. Tailored therapeutic approaches that recognise the role of parenting styles can enhance the effectiveness of interventions.

Educational policies. Educational policies should emphasise the integration of gender-sensitive mental health education in school curricula. This could raise awareness among students, teachers and parents on mental health, fostering a supportive environment.

Parenting support programmes. These programmes should advocate for the development of parenting support programmes within the community. Policy initiatives should provide resources and guidance for parents, considering the nuanced relationship between gender, parenting styles and anxiety symptoms can contribute to healthier family dynamics.

Overall, this study bridges the gap between research and real-world applications. By providing practical insights and evidence-based recommendations, it has the potential to positively influence parenting practices, mental health interventions and policy decisions that influence the wellbeing of individuals, especially adolescents.

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APPENDIX A

The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescent learners

Supervisor: Dr N. F. Tadi

Researcher: Siphesihle Mchunu

UNIVERSITY OF THE FREE STATE

Contents:

Biographical Questionnaire

Today's date:_____

Participant number: _____

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: Please check ✓ one of the boxes which apply to you.

1. **What is your home language?**

English		Sesotho	
Afrikaans		Swati	
isiNdebele		Tshivenda	
isiXhosa		Xitsonga	
isiZulu		Setswana	
Sepedi		Other (Please Specify):	

2. **Which ethnic group are you?**

Asian		Indian	
Black/African		White/Caucasian	
Coloured		Other (please specify):	

3. **Which gender are you?**

Male			
Female			
Non-binary			
Other (Please Specify):			

4. **My age is_____**

Parental Authority Questionnaire

Today's date:_____

Participant number: _____

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

Instructions: For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver. A primary caregiver is the person who takes responsibility for you and take care of you, provides a home for you and takes the role of a parent in the home. It may be your mother, father, grandmother, grandfather, or any other family member or person who you live with.

Try to read and think about each statement as it applies to you and your primary caregiver during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

A. Please circle or state in the space provide who is your primary caregiver.		1. Mother 2. Father 3. Grandmother 4. Grandfather 5. Other and specify e.g. aunt/uncle/brother/sister: _____			
For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver.	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree nor disagree (3)**	**Agree (4)**	**Strongly agree (5)**
1. While I was growing up my primary caregiver felt that in a well-run home the children should have their way in the family as often as the parents do.					
2. Even if the children didn't agree, my primary caregiver felt that it was for our own good if we were forced to conform to what he/she thought was right.					
3. Whenever my primary caregiver told me to do something as I was growing up, he/she expected me to do it immediately without asking any questions.					
4. As I was growing up, once family policy had been established, my primary caregiver discussed the reasoning behind the policy with the children in the family.					
5. My primary caregiver has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.					

For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver.	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree nor disagree (3)**	**Agree (4)**	**Strongly agree (5)**
6. My primary caregiver has always felt that what the children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.					
7. As I was growing up my primary caregiver did not allow me to question any decision he/she had made.					
8. As I was growing up my primary caregiver directed the activities and decisions of the children in the family through reasoning and discipline.					
9. My primary caregiver has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.					
10. As I was growing up my primary caregiver did *not* feel that I needed to obey rules and regulations of behaviour simply because someone in authority had established them.					
11. Growing up I knew what my primary caregiver expected of me in our family, but I also felt free to discuss those expectations with my primary caregiver when I felt that he/she were unreasonable.					

For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver.	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree nor disagree (3)**	**Agree (4)**	**Strongly agree (5)**
12. My primary caregiver felt that wise parents should teach their children early just who is boss in the family.					
13. As I was growing up, my primary caregiver seldom gave me expectations and guidelines for my behaviour.					
14. Most of the time as I was growing up my primary caregiver did what the children in the family wanted when making family decisions.					
15. As the children in my family were growing up, my primary caregiver consistently gave us direction and guidance in rational and objective ways.					
16. As I was growing up my primary caregiver would get very upset if I tried to disagree with him/her.					
17. My primary caregiver feels that most problems in society would be solved if parents would *not* restrict their children's activities, decisions and desires as they are growing up.					
18. As I was growing up my primary caregiver let me know what behaviour he/she expected of me, and if I didn't meet those expectations, he/she punished me.					

For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver.	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree nor disagree (3)**	**Agree (4)**	**Strongly agree (5)**
19. As I was growing up my primary caregiver allowed me to decide most things for myself without a lot of direction from him/her.					
20. As I was growing up my primary caregiver took the children's opinions into consideration when making family decisions, but he/she would not decide for something simply because the children wanted it.					
21. My primary caregiver did not view himself/herself as responsible for directing and guiding my behaviour as I was growing up.					
22. My primary caregiver had clear standards of behaviour for the children in our home as I was growing up, but he/she was willing to adjust those standards to the needs of each of the individual children in the family.					
23. My primary caregiver gave me direction for my behaviour and activities as I was growing up and he/she expected me to follow their direction, but they were always willing to listen to my concerns and to discuss that direction with me.					
24. As I was growing up my primary caregiver allowed me to form my own point of view on family matters and he/she generally allowed me to decide for myself what I was going to do.					

For each of the following statements, tick in the space relevant/applicable to you. The number of the 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) that best describes how that statement applies to you and your primary caregiver.	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree nor disagree (3)**	**Agree (4)**	**Strongly agree (5)**
25. My primary caregiver has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.					
26. As I was growing up my primary caregiver often told me exactly what he/she wanted me to do and how he/she expected me to do it.					
27. As I was growing up my primary caregiver gave me clear direction for my behaviours and activities, but he/she also understood when I disagreed with him/her.					
28. As I was growing up my primary caregiver did not direct the behaviours, activities, and desires of the children in the family.					
29. As I was growing up I knew what my primary caregiver expected of me in the family and he/she insisted that I conform to those expectations simply out of respect for him/her authority.					
30. As I was growing up, if my primary caregiver made a decision in the family that hurt me, he/she was willing to discuss that decision with me and to admit it if he/she had made a mistake.					

Generalized Anxiety Disorder - 7

Today's date:_____

Participant number: _____

Thank you for agreeing to participate in this research study. Your data will be treated confidentially at all times. You may withdraw from this study at any given moment during the completion of the questionnaire. The results of the study may be published.

INSTRUCTIONS: For each of the following statements, circle the number of the 4-point scale (0 = *Not at all, 1=several days, 2 more than half the days or* 3 = *nearly every day*).

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3

Column totals _____ + _____ + _____ + _____ =

Total score _____

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very difficult Extremely difficult

APPENDIX B

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

RESEARCH STUDY INFORMATION LEAFLET AND PARENTAL CONSENT FORM

DATE

2022–2023

TITLE OF THE RESEARCH PROJECT

The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents.

RESEARCHER'S NAME(S) AND CONTACT NUMBER:

Siphesihle Mchunu: 078 049 4426

FACULTY AND DEPARTMENT:

Faculty of Humanities

Department of Psychology

STUDY LEADER(S) NAME AND CONTACT NUMBER:

Dr Ntsoaki Florence Tadi

051 401 9313

WHAT IS THIS RESEARCH PROJECT ALL ABOUT?

The high rate of anxiety among adolescents has prompted the need to identify possible causes. Hence, this study aims to identify whether there is any relationship between perceived parenting styles and anxiety. It also seeks to discover whether gender plays a role in this relationship.

WHY HAS YOUR CHILD BEEN INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

Your child has been invited to take part in this study because he/she is among the teenagers (adolescents), ages 13 to 17 in Grades 8–11 attending a public school in the Motheo District.

WHO IS DOING THE RESEARCH?

Siphesihle Mchunu, registered for a Master's in Clinical Psychology at the University of the Free State. I am attempting to complete a dissertation with the Department of Psychology Bloemfontein campus under the supervision of Dr Ntsoaki Florence Tadi who is a lecturer in the Department of Psychology.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has not yet received approval from the Research Ethics Committee of UFS. A copy of the approval letter will be obtainable from the researcher once clearance has been granted.

WHAT WILL HAPPEN TO YOUR CHILD IN THIS STUDY?

When participating in the study, your teenager (adolescent) will complete the following questionnaires:

- The Parenting Authority Questionnaire (PAQ), which will be used to measure different parenting styles
- The 7-item Generalised Anxiety Disorder Questionnaire (GAD-7), which will be used to assess anxiety symptoms

Participation consist of a single appointment and is expected to take roughly 30 to 40 minutes. The primary risk in taking part is the possibility of emotional discomfort. Your

child may tell you, the teacher and the person leading the study if they are not feeling well during the course of the study.

CAN ANYTHING BAD HAPPEN TO YOUR CHILD?

There are minimal risks associated with the research. It is possible that information your child provides in this study might be seen by unauthorised personnel, however this will be prevented by keeping answers stored in a secure network drive operated by the University. A special number will be used for identification, rather than names. Your child might feel some strong emotions when asked about mental health. You and your child may also withdraw from the study at any time. Further, when opting to withdraw from, any information obtained up to that point will be immediately destroyed.

CAN ANYTHING GOOD HAPPEN TO YOUR CHILD?

We cannot promise any benefits to your child from taking part in this research. However, possible benefits include increased knowledge about the outcomes of various parenting styles within the South African population. Additionally, the results of the study may provide insight into anxiety risk factors within the family context.

WILL ANYONE KNOW YOUR CHILD IS PART OF THE STUDY?

The information/data will be locked in a cupboard/filing cabinet at the Department of Psychology for future research or academic purposes; electronic information will be stored on a password-protected computer and in an encrypted Word file. Future use of the stored data will be subject to further research ethics review and approval if applicable. After five years, the electronic data will be destroyed and the completed questionnaires will be shredded and burnt.

WHOM CAN YOU TALK TO ABOUT THE STUDY?

Additional information about the study can be obtained from Mr Siphesihle Mchunu on mchunusiphesihlepp@gmail.com. For any further information or details on any part of this study and how it will be conducted contact Dr Ntsoaki Florence Tadi on tadinf@ufs.ac.za. Should you have any worries or any ethical queries Ms Charné Vercueil can be contacted on VercueilCC@UFS.ac.za/ 051 4017083.

WHAT IF YOU DO NOT WANT YOUR CHILD TO DO THIS?

If you, the parent or guardian, does not want your teenager (adolescent) to participate in the research study, you will not be forced to let their teenager (adolescent) do so. If the teenager does not want to participate he or she can refuse to take part, even if you have agreed to their participation. They can also withdraw from the study at any time without getting into trouble. It is important to note that no financial or other compensation will be offered in return for your teenager's (adolescent's) participation. There will also be no costs for your teenager (adolescent) to cover during this study.

PLEASE RETURN

Name of child: _____

Name of Parent: _____

- Do you understand this research study and are you willing?

  to let your child take part in it? Yes ☐ No ☐

- Has the researcher answered all your questions? Yes ☐ No ☐

- Do you understand that you can withdraw from the study at any time? Yes ☐ No ☐

- I give the researcher permission to make use of the data gathered from my child's participation Yes ☐ No ☐

_____ **Signature of parent**

_____ **Date**

I, the undersigned parent, further confirm that

1. The researcher has explained the nature, procedure, potential benefits and anticipated inconvenience of my child's participation in the study.
2. I have read (or had explained to me) and understood the study as explained in the attached information sheet.
3. I have had sufficient opportunity to ask questions and am prepared to let my child participate in the study.
4. I understand that my child's participation in the study is entirely voluntary and that I am free to withdraw at any time without penalty (if applicable).
5. I voluntarily provide the University of the Free State (UFS) and the researcher with my child's personal information and consent to the UFS and the researcher collecting, disclosing, and processing my child's personal information in order to conduct the study and any related activities in relation thereto.
6. I hereby acknowledge and confirm that I understand the purpose for which the UFS and the researcher may collect, store, use, delete, destroy, outsource, transfer or otherwise process, as the context and circumstances may require and as contemplated in terms of POPIA, my child's personal information as set out herein.
7. I am aware that the findings of the study will be anonymously processed into a research report, journal publications and/or conference proceedings and that my personal information will be aggregated and identified at such stage.
8. I also give the UFS permission to share, without notification, the collected data with other researchers at the UFS or other higher education institutions. This

permission is dependent on the same principles of ethical research practices, anonymity/confidentiality, safekeeping of information, and other issues listed above applying.

I, the parent, agree to the completion of the questionnaire.

Full name of participant: _____

Signature of participant: _____

Date: _____

Full name(s) of researcher(s): Siphesihle Mchunu

Signature of researcher:  _____

Date: _____

APPENDIX C

Approval from the General Human Research Ethics Committee

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

11-Aug-2022

Dear Mr Siphesihle Mchunu

Application Approved

Research Project Title:
The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents

Ethical Clearance number:
UFS-HSD2021/1600/22

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr Adri Du Plessis
Chairperson: General/Human Research Ethics Committee

Dr Adri du Plessis
Digitally signed by Dr Adri du Plessis
Date: 2022.08.11 12:26:02 +02'00'

205 Nelson Mandela Drive
Park West
Bloemfontein 9301
South Africa

P.O. Box 339
Bloemfontein 9300
Tel: +27 (0)51 401 9337
duplessisA@ufs.ac.za
www.ufs.ac.za

APPENDIX D

Approval from the Free State Department of Education

Enquiries: M.Z. Thango
Ref: Permission for Research Extension: S.P.P. Mchunu
Tel. 051 404 8808
Email: MZ.Thango@fseducation.gov.za

education
Department of Education
FREE STATE PROVINCE

Complex No. 2405
Loch Logan Park
Nelson Mandela Drive
Bloemfontein
9301

Dear Mr. S.P.P. Mchunu

PERMISSION FOR EXTENSION TO CONDUCT RESEARCH IN THE FREE STATE DEPARTMENT OF EDUCATION: MOTHEO DISTRICT

This letter serves to inform you that you have been granted permission for extension to conduct research in the Free State Department of Education within the Motheo Education District. The details in relation to your research project with the University of the Free State are as follows:

Topic: The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents.

1. **List of schools involved:** Brebner High School, Bloem High School, Calculus High School, CBC High School and Navalsig High School.
2. **Target Population:** Four hundred learners doing grade 8 to 11 at the selected schools.
3. **Period of research**: From the date of signature of this letter until 30 September 2023. Please note that the department does not allow any research to be conducted during the fourth term (quarter) of the academic year. Should you fall behind your schedule by three months to complete your research project in the approved period, you will need to apply for an extension. The researcher is expected to request permission from the school principals to conduct research at schools.
4. The approval is subject to the following conditions:
   - 4.1 The collection of data should not interfere with the normal tuition time or teaching process.
   - 4.2 A bound copy of the research document should be submitted to the Free State Department of Education, Room 101, 1st Floor, Thuto House, St. Andrew Street, Bloemfontein or can be emailed to the above-mentioned email address.
   - 4.3 You will be expected, on completion of your research study to make a presentation to the relevant stakeholders in the Department.
   - 4.4 The ethics documents must be adhered to in the discourse of your study in our department.
5. Please note that costs relating to all the conditions mentioned above are your own responsibility.

Yours Sincerely,

Mr. MZAMO W. JACOBS
DIRECTOR: QUALITY ASSURANCE, M&E AND STRATEGIC PLANNING

DATE: 07/08/2023

Enquiries: M.Z. Thango
Ref: Notification of Research Extension- S.P.P. Mchunu
Tel. 051 404 8808
Email: MZ.Thango@fseducation.gov.za

Education
Department of Education
FREE STATE PROVINCE

District Director
Motheo District

Dear Mr. Moloi

NOTIFICATION OF RESEARCH EXTENSION: PERMISSION TO CONDUCT RESEARCH PROJECT IN MOTHEO DISTRICT

This letter serves to inform you that Mr. S.P.P. Mchunu has been granted permission for extension to conduct research in the Motheo District under the auspices of the University of the Free State. The details in relation to the research project are as follows:

Topic: The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents.

1. **List of schools involved:** Brebner High School, Bloem High School, Calculus High School, CBC High School and Navalsig High School.

2. **Target Population:** Four hundred learners doing grade 8 to 11 at the selected schools.

3. **Period of research**: From the date of signature of this letter until 30 September 2023. Please note the department does not allow any research to be conducted during the fourth term (quarter) of the academic year nor during normal school hours. The researcher is expected to request permission from the school principals to conduct research at schools.

4. **Research benefits:** This research could aid in a better understanding of the implication that parenting styles may have on anxiety. Hopefully, this can contribute to acquiring additional insight into the etiology of anxiety primarily amongst adolescents, especially from a systemic perspective. Also, to obtain insight into the impact of gender differences in rearing children and how this variation further adds to anxiety symptoms.

5. Strategic Planning, Policy and Research Directorate will make the necessary arrangements for the researchers to present the findings and recommendations to the relevant officials in the Department.

Yours Sincerely,

Mr. MZAMO W. JACOBS
DIRECTOR: QUALITY ASSURANCE, M&E AND STRATEGIC PLANNING

DATE: 07/08/2023

APPENDIX E

Proof of Language and APA Editing

Alexa Barnby

Language Specialist

Editing, copywriting, formatting, translation

BA Hons Translation Studies; APEd (SATI) Accredited Professional Text Editor, SATI

Mobile: 071 872 1334 alexabarnby@gmail.com

13 December 2023

DECLARATION OF PROFESSIONAL EDIT

THE MODERATING EFFECT OF GENDER: PERCEIVED PARENTING STYLES AND ANXIETY SYMPTOMS AMONG ADOLESCENTS

by

Mchunu Siphesihle Phakamani Praisegod

I declare that I have edited the above master's dissertation, submitted in fulfilment of the requirements for the degree Magister Artium (Clinical Psychology), ensuring that the work follows the conventions of grammar and syntax, correcting misspelling and incorrect punctuation, changing any misused words and querying if the word used is what is intended, ensuring consistency in terms of spelling, punctuation, capitalisation and other aspects of style, as well as checking referencing style.

The onus is on the author, however, to make the changes and address the comments made.

A K BARNBY

SATI
SOUTH AFRICAN TRANSLATORS' INSTITUTE

APPENDIX F

Turnitin Report

Siphe_NFT_Final Thesis Trunit in submission 2 12_12_2023.docx

ORIGINALITY REPORT

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APPENDIX G

Supervisor Consent

N.F Tadi PhD
Bloemfontein,
13 December 2023

University of the Free State
Bloemfontein, SA

To whom it may concern

Submission of Masters dissertation: Mr Siphesihle Phakamani Mchunu (2015090745)

I hereby give my support that **Mr Siphesihle Phakamani Mchunu (2015090745)** may submit his Masters dissertation, whose development I supervised. With my consent, Mr Mchunu submits his dissertation entitled: **"The moderating effect of gender: Perceived parenting styles and anxiety symptoms among adolescents."**, for examination. It is in partial fulfilment of the requirements for Master of Social Science in Clinical Psychology in the Department of Psychology at the University of the Free State. The dissertation is the original work of Siphesihle Phakamani Mchunu and has not been submitted for examination before.

Notes: Supervisor = N.F Tadi, PhD

Kind regards,

Florence Tadi
N.F Tadi, PhD (UFS, 2010)
Clinical Psychologist