

Personality traits and gender as predictors of risk-taking behaviour among first-year students at the North-West University

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ABSTRACT

The aim of the study was to examine personality traits and gender as predictors of risk-taking behaviour among university students. A sample of 312 first-year students studying at the North-West University, Mafikeng Campus, were selected to participate in the study. The sample comprised 126 (40.4%) males and 186 (59.6%) females with a mean age of 18.5; SD = .62.

A well-designed and structured self-report paper and pencil questionnaire was used to collect data. The questionnaire was divided into three sections in order to measure variables examined in the study. Section A solicited information about the demographic characteristics of respondents such as age and sex; Section B focused on the big five personality factors (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism); while Section C focused on risk-taking and self-harm inventory for adolescents (RTSHIA).

Two hypotheses were tested in the study. Standard multiple regression analysis and independent samples t-test were performed in order to test the hypotheses. The results showed significant combined influence of personality traits and age on risk-taking behaviour [$R^2 = .12$, $F(6,302) = 6.953$; $p < .001$]. Independently, agreeableness [$\beta = -.148$, $t = -2.402$, $p < .05$], conscientiousness [$\beta = -.279$, $t = -4.405$, $p < .001$] and neuroticism [$\beta = .251$, $t = 4.172$, $p < .001$] significantly predicted risk-taking behaviour. There was no significant influence of sex on risk-taking behaviour ($p > .05$).

It is, therefore, concluded that personality traits contribute to risk-taking behaviour among first year students. There is need for training to increase the level of conscientiousness since the results revealed it is the most protective personality factor against participation in risky behaviour among first year students.

Keywords: Gender, First year students, Personality traits, Risk-taking behaviour

DECLARATION

I, Mmanoko Samuel Moetji, declare that the mini-dissertation titled –Personality traits and gender as predictors of risk-taking behaviour among first-year students, North-West University, has not previously been submitted by me for a degree at this or any other institution. I further declare that this is my own original work in design and execution and that all sources and materials used in the study have been duly acknowledged.



Mmanoko Samuel Moetji

19/10/2020

Date

CERTIFICATION

I certify that this research was carried out by Samuel Moetji (student number 25498479) of the Department of Psychology, North-West University (Mafikeng Campus), South Africa under my supervision.

Supervisor

Date



19/10/2020

Prof Choja Oduaran

DEDICATION

This study is dedicated to my humble self, Mmanoko Samuel Moetji, as indication of the hard-work, motivation, effort and dedication in completing this study, members of my family, for their support and encouragement during my studies, and for being the pillar of my strength.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

Globally, including South Africa, the transition from high school to university is seen as one of the most important stages in the life of an adolescent because during this period, they may experience adjustment stress, peer pressure and other negative social influences, including participation in risky behaviours (Kipping, Campbell, MacArthur, Gunnell & Hickman, 2012; Salameh, Salame, Waked, Barbour, Zeidan & Baldi, 2014).

Although engaging in risks can, and is regarded as an essential part of living, however, irreparable damage may result when a person engages in risky activities that are not associated to any foreseeable long-term benefits to the risk-taker. Jessor (1991) proposes three broad perspectives to the understanding of risk as follows: (i) risk as an action; (ii) risk as a potentiality that is unclear in its outcome; and (iii) risk as a pathway towards achieving a cherished goal, even if this pathway entails possible harm. Broadly, behaviour is deemed risky when there is uncertainty about whether its outcome is going to be good or bad (Crone, van Duijvenvoorde, & Peper, [2016](#)).

However, in the context of the present study, risky behaviours are those associated with greater danger, and are defined as acts that can lead to adverse outcomes on the overall development and well-being of young people (de Guzman & Bosch, 2007). Ilo, Onwunaka and Nwimo (2015), on their part, consider risky behaviours as acts that potentially threaten the integrity and morality of young people and interfere with their route of becoming responsible adults. Similarly, risky behaviours relate to behaviours that a person intentionally performs, which may lead to or harm one's mind and/or body, which does not include completion of suicide (Sadeh & Baskin-Sommers, 2017).

Cross-national studies that included samples selected among South Africans have shown significant increases in the prevalence of risk-taking behaviour among university students, which is suggested to be one of the current social problems among younger persons (Keller, Maddock, Hannover, Thyrian, & Basler, 2008; Ngidi, 2016; Raghibi, 2012; Utpala- Kumar & Deane, 2010; Wordofal & Shiferaw, 2015).

Risky behaviours, such as unprotected sex, alcohol and substance abuse and self- harm, are associated with consequences that can impact negatively on the individual and the larger society. Considering the fact that unhealthy risk-taking behaviours can result in long- term negative consequences, researchers have attempted to identify factors that influence risk-taking behaviours. One stream of research explored whether psychological factors are related to risk-taking behaviour. This may have been influenced by psychological theories which postulate that sensation seeking, which reflects the desire for diverse, new, and complex experiences may encourage an active willingness to undertake social and physical risks (Zuckerman, 1979). Along this line, previous studies that focused on the relationship suggest that personality traits may strongly exert an influence on risk-taking behaviour.

Personality has been identified as an individual factor that may influence participation in risky behaviours. Psychological research has focused on personality in order to assist in identifying various traits and how they influence individual behaviours (Reid et al., (2012), which could be used in gaining a better understanding regarding various risk-taking behaviours among university students. This notion stems from Vermetten, Lodewijks and Vermunt (2001), who argue that an individual's personality traits influence the development of certain intentional states such as desires, goals and beliefs. Several models of personality have been used to predict and understand why behaviour varies among individuals. However, the Big-Five Personality traits, comprising conscientiousness, agreeableness, extraversion,

neuroticism and openness to experience (Costa & McCrae, 1992) constitute one of the most influential models for assessing personality influence on behaviour, including risky behaviours.

Openness to experience is associated with the need for novel experience and a tolerance for unknown and novel things. More open individuals are curious, non-traditional, and unconventional, and tend to seek out novel experiences and rethinking of authorities, although they do not necessarily lack value systems (Jovanović, Lipovac, Stanojević, & Stanojević, 2011). High scorers on this trait are more aware of their own feelings compared to closed persons. Closed persons exhibit behavioural tendencies that are related to antagonism, egocentrism, manipulation and competition (Jovanović et al., 2011).

Conscientiousness, as a personality trait, is defined as an extent of organisation, persistence and motivation of a goal-directed behaviour. Individuals who score high on this trait scale, are found to be precise, punctual, diligent, reliable, and thoughtful and possess strong feelings of order, duty and self-discipline (Jovanović et al., 2011). In addition, conscientious individuals are able to exercise self-discipline so that they are much more able to control their behaviour (Costa & McCrae, 1992).

Extraversion reflects social relations, the need for stimulation and capacity for positive emotional experience. Extraverts have a high need to socialise and are successful in nurturing social relationships. Also, extraverts tend to score high on related traits such as talkativeness, cheerfulness, optimism, enjoy excitement and stimulation and are full of energy (Jovanović et al., 2011).

Agreeableness is the personality trait that reflects a person's relationship with and attitudes about other people. Those with high scores on agreeableness are described as altruistic,

empathetic and willing to assist others, and believe that others will reciprocate the same behaviour and treatment in return in interpersonal relationship (Fiddick et al., 2016).

This trait has been described as a social trait, thus more agreeable persons are expected to be willing to compromise their interests to secure the approval of the group. They are contrasted with less agreeable individuals who have been described as rigid and less willing to accommodate dissenting views.

Neuroticism relates to an inclination to experience negative emotions and difficulty in dealing with problems. Neurotic individuals are less efficient in their attempt to overcome stress and are prone to irrational thinking (Jovanović et al., 2011). They also have problems in emotional regulation, which tends to diminish their ability to think clearly and logically, make decisions and cope effectively with stress.

Age is an individual factor that may influence involvement in risky behaviour. Previous research suggests that age is negatively related to engagement in risky activities. For instance, Rolison, Hanoch, Wood and Liu (2014) examined age differences in risk-taking in five domains in a cross-sectional study of 18 to 93 years. The findings showed that risk-taking in financial, social, recreational, ethical and health domains respectively reduced significantly with age. It could be deduced from the findings that younger persons have a higher tendency to engage in risky activities compared to older individuals. Similarly, Dohmen, Falk, Golsteyn, Huffman and Sunde (2018) reported inverse relationships between age and economic risk attitudes in a German sample. Contrastingly, some studies have revealed a positive relationship between age and risk-taking; an indication that risk seeking is higher among older adults (Grable, 2000). Research has also revealed that younger and older adults demonstrate comparable levels of risk-taking behaviours (Dror, Katona, & Mungur, 1998).

Besides personality traits and age as likely predictors of risky behaviour among university students, gender is another individual factor that may influence risk-taking behaviour. Gender is a social construct used to describe normative behaviours appropriate for male and female. Gendered behavioural pattern is linked to socialisation differences for both sexes with agentic traits, including competitiveness, aggressiveness and assertiveness modeled for boys, whereas girls are socialised to internalise communal traits, including altruism, cooperation and consideration. Literature suggests that the differential socialisation for boys and girls result in gendered differences in risk-taking propensity. For instance, research suggests that boys have higher activity levels (Edwardson, Gorely, Pearson, & Atkin, 2013) compared to girls, and are likely to behave more impulsively too (Reid, Carpenter, Hook, Garos, Manning, & Gilliland, 2012). In addition, the socialisation process is such that boys are given the opportunity to play alone (Morrongiello & Sedore, 2005), which may increase the tendency to test-out risky behaviours with less supervision. On the basis of these socialisation differentials, one may posit that it may be logical to expect that males will be higher on risky behaviours compared to girls.

1.2 PROBLEM STATEMENT

Life as an undergraduate student entails certain levels of psychological, academic and social adjustment challenges for many individuals as the experience tends to overlap with the transition from adolescence to adulthood. As noted by Papier, Ahmed, Lee, and Wiseman (2015), and Salam, Mahadevan, Abdul Rahman, Abdullah, Abd Harith and Shan (2015), leaving significant others and old friends behind, forming new friendships and adjusting to a new but higher academic expectation may combine to make the transition to university particularly stressful for freshmen.

However, an important discovery for most undergraduate students, particularly during the first year at university, is the sudden' realisation of greater autonomy and responsibility than

previously in their lives (Arnett, 2000), which makes them to rely less on an authority figure such as a parent for guidance in most decisions. This sense of greater personal freedom, coupled with peer pressure to conform may significantly influence experimentation with a wide range of behaviours, including risky activities such as tobacco use, alcohol and other drug abuse, risky sexual behaviours, unhealthy dietary behaviours and physical inactivity. Participation in these activities increases the likelihood of premature death, long-term disability and poor mental health (Sadeh & Baskin-Sommers, 2017).

According to the South African National Youth Risk Behaviour Survey 2002, the number of adolescents engaging in risky behaviours rose from 41% to 58%, an increase of 17% (Akinboade & Mokwena, 2010). Follow-up studies since then on risky behaviours among young persons have soared. Most of these studies have focused, individually, on the prevalence of risky behaviours such as risky sexual behaviours, alcohol and drug abuse, unhealthy use of tobacco, violence and self-harm among adolescents, including university students (Abels & Blignaut, 2011; Aboussalam, Naude, Lens, & Esterhuyse, 2016; Jain, Chang, Koto, Geldenhuys, Nichol, & Joubert, 2018; Maughan-Brown, Gavin, Sean, Meredith, Lara, Cherie, David, & Ayesha, 2018).

While it is acknowledged that risky behaviours are becoming alarmingly common among young South Africans, little is known about how personality traits may influence participation in risky behaviours among first year university students, even though peer pressure to conform to unhealthy and risky behaviours may be disproportionately higher among this category of students. Thus, the aim of this study was to examine the predictive impact of personality and age on risky behaviours among a sample of first year students selected at the North-West University, Mafikeng Campus. The study also sought to understand if there were gender differences in risky behaviours among first year students.

There is adequate research on risk-taking behaviour and a great amount of risk-view studies are accessible but limited research exists regarding the relationship between personality traits and engagement in risk-taking behaviour among university students. In this study, the following research questions were asked in this study:

- i. Why does an individual, directed by a strong survival nature and who is conscious of his or her eventual death, purposefully compromise his or her own existence?
- ii. Why do first-year university students engage in risk-taking behaviours?
- iii. Is there a difference between males and females or do they equally engage in risk-taking behaviours?
- iv. Is there a relationship between personality traits (i.e. openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and risk-taking behaviours?

1.3 AIM OF THE STUDY

The aim of the study was to examine the predictive impact of personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and gender on risk-taking behaviours among first year university students. The study also sought to examine the relationship between personality traits and risk-taking behaviours, using a sample of first year university students at the North-West University. Understanding the relationship will assist in documenting and recommending best practices for managing risk-taking behaviours among undergraduate students in general, and first year students in particular.

1.4 OBJECTIVES OF THE STUDY

The objectives of the study were to:

- i. Empirically establish the joint and independent influence of personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and age on risk-taking behaviour among first year students; and

- ii. Understand whether there are significant differences between male and female first year students with regard to risk-taking behaviours.

1.5 HYPOTHESES

- i.** There is a significant independent and joint influence of personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) on risk-taking behaviours among first-year university students.
- ii.** There is a significant difference between male and female first-year students on risk-taking behaviour.

1.6 SCOPE OF THE STUDY

The study focused on the influence of personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) on risk-taking behaviours (risky sexual behaviours, suicidal ideation, substance use, violence and self-harm) among first year students at the North-West University, Mafikeng Campus, South Africa. The institution was selected because of its high incidence of risky behaviours among undergraduate students. The scope of the study was limited to the above stated variables and data collected among first year students in the Faculty of Humanities.

1.7 SIGNIFICANCE OF THE STUDY

The relevance of this present study is appraised from practical, theoretical and methodological perspectives.

Practical relevance of the study

With the alarming increase in the prevalence of risk-taking behaviours among younger South Africans, which has necessitated research aimed at identifying its associated factors in order to curb the phenomenon, the findings of this study will improve understanding of risk-taking behaviours among professionals involved in students' behavioural problems (such as psychologists, clinicians, counsellors, social workers and mental health practitioners). In addition, the study will foster a deeper insight into how each personality trait (openness to

experience, conscientiousness, extraversion, agreeableness and neuroticism) predisposes individuals to engage in risky behaviours.

The findings should provide the much needed understanding with regard to the dynamics and relationships between these variables as necessary for effective intervention to reduce students' involvement in high risk behaviours. The findings should also be useful to university management in designing effective orientation programmes to psychologically empower freshmen to negotiate negative peer pressure without feeling out of place among friends. It is hoped that the study should benefit government (particularly departments of education and health) in formulating effective policies and programmes aimed at reducing risk-taking behaviours among university students. Finally, it is envisaged that the study should be able empower parents/guardians and significant others to provide knowledge-based guidance with higher potentials to reduce involvement in risky activities in their environment.

Theoretical relevance of the study

Theoretically, the findings of the study should be able to further validate basic assumptions of the five-factor model of personality, which posit that personality comprises five factors (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and that these factors influence risk-taking propensities in individuals. In other words, the study should contribute to knowledge by explaining the predictive ability of the five personality traits in understanding susceptibility for risks among younger persons.

Methodological relevance of the study

Methodologically, multiple regression test, which is generally regarded as a robust statistical analysis for performing predictive analysis was used in the study. Standard multiple regression was used to establish the degree to which the five personality traits individually and jointly predict risk-taking behaviours. In addition, the statistical analysis performed in

this study revealed the independent contributions of each personality trait, and also showed the strongest contributors to risk-taking behaviours among university students.

1.8 OPERATIONAL DEFINITION OF TERMS

- i. Personality traits refer to the five general measures of individual differences according to Costa and McCrae. The dimensions are openness to experience, conscientiousness, extraversion, agreeableness and neuroticism.
- ii. Age refers to the actual chronological age of participants measured in years at the time of data collection.
- iii. Gender refers to anatomical differences between the sexes that identify one as either male or female.

SUMMARY

It has globally been reported that transition from high to university has been identified as one of the most important stages for young people, which may lead to different experiences, including adverse experiences such as adjustment stress, peer pressure and other negative social influences. These experiences may lead students into participating in risk-taking behaviours. According to studies, engagement in risk-taking behaviours may lead to adverse outcomes that may potentially impact negatively on the overall development and well-being of the students. Some psychological studies conducted have identified personality as one of the factors that may influence behaviours. They argue that an individual's personality traits influence the development of certain intentional states that such as desires, goals and beliefs, which influence engagement in certain behaviours, including risk-taking behaviours.

Among other personality theories, Costa and McCrae (1992) identified five traits, namely, conscientiousness, agreeableness, extraversion, neuroticism, and openness to experience, which they named the Big-Five Personality Traits, and constitutes one of the most influential models for assessing personality influence on behaviour. Besides personality, studies have identified gender as another individual factor having an influence in risk-taking behaviour, with differences between males and females reported thereof.

Among other countries, South African studies have recorded an increase in numbers of risk-taking behaviours, especially among young people, including university students. While there's an increase in various risk-taking behaviours, little is known on how personality may influence participation in such behaviours. Thus, the aim of this study has been to examine the predictive impact of personality traits (the Big-Five Personality Traits) and gender on risk-taking behaviour among first year university students, among a sample of first year students selected at the North-West University, Mafikeng Campus.

The objectives were, to empirically establish the joint and independence influence of different personality traits among first year students, and understanding whether there are significant differences between males and females regarding their engagement in risk-taking behaviours. The study should provide needed understanding that may assist professionals and the government, as well as students, in devising effective strategies/interventions to reduce young people's or students' involvement in risk-taking behaviours.

CHAPTER TWO

THEORETICAL FRAMEWORKS AND PERSPECTIVES

2.0 INTRODUCTION

This chapter presents the theoretical frameworks and perspectives that guided this study. The biopsychosocial model was reviewed and discussed as framework, while theories including the five-factor personality model and problem behaviour theory were discussed in view of the focus of the study.

2.1 THEORETICAL FRAMEWORK

2.1.1 THE BIOPSYCHOSOCIAL MODEL

The biopsychosocial model is one that is widely accepted in the mental health profession. It was first developed by Dr George Engel (Engel, 1977), a cardiologist. The model was initially developed as a biomedical model, which later evolved into a biopsychosocial model, taking into consideration other factors in relation to human conditions or diseases. Instead of focusing only on medical factors as the basis for human conditions, the biopsychosocial model suggests and considers an integrated view to human diseases and behaviour. This suggests that in the study of risk-taking behaviour among university students, a combination of psychosocial factors need to be explored. The model emphasises the importance of exploring the contributory interlink between biological, psychological and social factors in order to understand the development and maintenance of a particular condition or behaviour. With regard to the current study, this model assists by providing a conceptual framework for risk-taking behaviour and its contributory factors.

It is widely accepted that risk-taking behaviour among university students is the outcome of interplay between various aetiological factors (Campbell & Rohrbaugh, 2013). This section

explains how biology, psychology and social factors (though not the focus of this study, will only be explained for the sake of clarification) influence human behaviour or conditions.

The biological perspective of this model explains factors such as neurotransmitters, genes and gender as influential elements of human behaviour (Sadock & Sadock, 2007). Some reports indicate the occurrence of risk-taking behaviours in some families, especially in families where there is history of risk-taking behaviours. For example, in families that have had cases of risky substance use or abuse, risky use of substances and other risk-taking behaviours are more common than in families without previous history of risky substance use. However, Sadock, Sadock and Ruiz (2015) state that there is an overlap in genetic and social explanations with this finding, as both factors (genes or socialisation) come into play in the influence of risk-taking behaviours.

Although can be explained as a social and psychological concept, for the purpose of this study, it is discussed as a biological concept. Studies have indicated differences in risk-taking behaviours between males and females due to differences in their psychological characteristics, such as cognition, motivation, emotion and sexuality (Faria, Gandolfi & Moura, 2014; Ilo, Onwunaka, & Nwimo, 2015; Wordofa & Shiferaw, 2015).

MacArthur, Smith, Melotti, Heron, Macleod, Hickman, and Lewis (2012) state that various risk-taking behaviours prevail in both genders during adolescence, but there is a difference in the manner in which the behaviours are carried out between boys and girls. According to Fantasia, Sutherland and Weeder (2012), research indicates high tendencies to engage in risk-taking behaviours among males from an early age (e.g. 3 years old) compared to females, and that males are less likely to believe that they will get hurt when taking risks and more likely to see injury as a product of bad luck rather than a result of controllable behaviours. Boys and girls were said to engage in a similar number of behaviours but antisocial and criminal

behaviours, use of cannabis and vehicle- related risk behaviours were most common among boys, while self-mutilation and physical inactivity were more prevalent among girls (MacArthur et al., 2012).

The psychological perspectives of this model emphasise that personality traits have an influence on how individuals view and interact with their environment (Campbell & Rohrbaugh, 2013). This clarifies the point that risk-taking behaviour can be influenced by an individual's personality make-up, such as their temperament, cognitions, emotional patterns and personal preferences/lifestyle. Cognitive approaches to risk-taking behaviour have indicated that learned helplessness, hopelessness, cognitive distortions about self-esteem; abilities and the environment, combined with pathological processing of organising and interpreting experiences, are implicated in risk-taking behaviour (Sefat, Rostami, Younesi, & Fathi, 2017). According to Pollock and Williams (1998), individuals who exhibit tendencies for risk-taking behaviour have been found to have impaired problem- solving capacity, an indication that these individuals do not have adequate ability to inhibit their impulses towards risk-taking behaviour. Their use of resources to make up resilience and inhibitions towards risk-taking behaviours are poor and dysfunctional.

From the social aspect, this model explains individual's behaviour in relation to their social environment. This includes influential factors such as family dynamics, peer relations, academic environment and culture (Campbell & Rohrbaugh, 2013). Most first-year university students are at a developmental period marked by rapid physiological change, increased independence, a change in family relationships that is more interdependent, identity formation, prioritising peer affiliations, initiation of intimate relationships, and increased awareness of morals and values (Ilo, Onwunaka, & Nwimo, 2015). These social factors, interplay with other factors such as the biological and psychological components, in the

influence of an individual's behaviour. With the presence of so many predisposing factors and as well as the changes taking place, university student are more likely to engage in risk-taking behaviours (Ilo, Onwunaka, & Nwimo, 2015). Thus, any intervention to be formulated must integrate the biological, psychological and social factors to be effective. For the purpose of this study, risk-taking behaviours are investigated in relation to personality traits (psychological component) and gender (biological component) as highlighted by the biopsychosocial model.

2.2 THEORETICAL PERSPECTIVES

2.2.1 THE FIVE-FACTOR MODEL OF PERSONALITY

The five-factor model of personality (abbreviated FFM) comprises five broad trait domains often referred to as the – “Big Five” (Costa & McCrae, 1992). The Big Five describes personality using a set of five personality dimensions: openness to experience; conscientiousness; extraversion; agreeableness; and neuroticism. The Big Five are widely used as a general taxonomy of personality traits and have been used to explain and understand individual differences in reaction to situations in their environment, including risk-taking behaviours. By associating distinct personality attributes to risk-taking propensities, the theory provides a framework for predicting how each personality trait can influence risk-taking behaviours.

Openness to experience describes the intellectual and aesthetic capacities of a person as well as his or her attraction to new experiences (Mondak, 2010). More open individuals are significantly more creative, curious, imaginative, original, nonconforming and value intellectual matters (McCrae & Costa, 2003; Mondak & Halperin, 2008). They also have preference for novelty and alternative lifestyles, which may increase their susceptibility for risk-taking.

Conscientiousness relates to impulse control that conforms to socially prescribed levels for order and certainty (Schoen, 2007). Highly conscientious persons are characterised as organised, productive, thorough, ambitious, dutiful, responsible, reliable and more comfortable with structure (Gerber, Huber, Doherty, Dowling, Raso, & Ha, 2011; McCrae & Costa, 2003; Mondak, 2010). Conversely, low scorers on this trait are less organised, careless and lack self-discipline. It is expected that these attributes generally would increase their tendency to participate in risky behaviours.

Extraverted individuals are generally outgoing, talkative and sociable (Mondak, 2010; Mondak & Halperin, 2008). Such individuals are assertive and have a need for stimulation and capacity for positive emotional experience. High levels of stimulation may increase the probability for extraverts to be involved in risky behaviours.

Agreeableness describes the quality to easily get along with others. Agreeable persons are said to be trustful, warm, compassionate, and kind, avoid conflict and are eager to cooperate (Gerber et al., 2011; McCrae & Costa, 2003). On the contrary, less agreeable persons antagonise others, are less trustful and more likely to violate social rules. Given these characteristics, less agreeable persons are likely to easily engage in risky behaviours.

Neurotic individuals easily become anxious, nervous, or troubled (Mondak, 2010). They are generally regarded as —emotionally reactive because they respond strongly to emotions. In addition, they show a strong inclination to negative emotional experiences (Jovanović et al., 2011). High scorers on this trait may be more likely to engage in risky behaviours as a way to cope with aversive mood states.

2.2.2 PROBLEM BEHAVIOUR THEORY (PBT)

The Problem Behavior theory, which explains problematic behaviours, was developed by Richard Jessor and colleagues in the 1960s. They found that the youth were part of the

lifespan in which change was the principal characteristic, and that rapid change was not unusual. The researchers also acknowledged the significance for a far-reaching understanding of young people and of youthful development (Zamboanga, Gustavo & Raffaelli, 2004).

In his Problem Behaviour Theory, Jessor (1991) classifies psychosocial variables as the perceived social environment system (e.g., parental and peer influences), the personality system (e.g., expectations, attitudes, values, beliefs and orientations toward self and society) and the behaviour system (e.g., problem and conventional behaviors). Zamboanga et al., (2004) add that all consisting psychosocial variables in the above categories might be risky or protective factors in young people or the youth, including university students.

This theory further explains that young people typically engage in more than one form of problem behaviour, leading to a problem behaviour syndrome ((Jessor, 1991; Møller & Gregersen, 2008). Other studies that have focused on the concept of problem behaviour approach, have revealed that risky behaviour among university students is highly related to other problem behaviours such as alcohol misuse, cigarette use, drug abuse, bullying behaviour, poor academic performance and emotional difficulties (Bingham & Shope, 2004; Møller & Gregersen, 2008). University students use problem behaviours, which also involves risk-taking behaviours, as a way of gaining acceptance and respect from peers (Diclemente, Hansen, & Panton, 1996). Such risk-taking behaviours also contribute to them acquiring independence from their parents, their ability to cope with stress, and eliminating or reducing negativity and pressure (Diclemente et al., 1996). For the purpose of this study, this theory explains the interconnectedness of risk-taking behaviours and psychosocial factors among university students.

2.2.3 ELKIND'S THEORY OF ADOLESCENT EGOCENTRISM

Elkind's theory of adolescent egocentrism proposes the imaginary audience and the personal fable, which are distinct but related (Alberts, Elkind, & Ginsberg, 2007). The imaginary audience is explained as the adolescent's assumptions that everyone else shares into their (adolescent's) preoccupations with their personal appearance and behaviour. The personal fable, which is corollary to the imaginary audience, is explained as an adolescent's tendency of thinking of himself or herself as the centre of attraction, accompanied by a belief that they are special and unique compared to others (Alberts et al., 2007). The authors state that from the personal fable, an adolescent develops a belief that he or she possesses feelings and emotions that are more intense, excruciating and different from those of other people. This belief gives rise to adolescents' tendencies to engage in risk-taking behaviours due to their sense of invulnerability and specialty (Greene, Krcmar, Walters, Rubin, & Hale, 2000). For example, an adolescent's assumption may be that everyone else will get hooked on drugs but not him or her. This egocentrism is regarded as the basis for risk-taking behaviours among adolescents (Greene et al., 2000). The findings support the notion of vulnerability among young university students towards risk-taking behaviours due to their egocentric characteristics.

2.2.4 DIFFERENTIAL SUSCEPTIBILITY HYPOTHESIS

Differential susceptibility hypothesis was established by Belsky (1997), who described it as a theory which explains the degree to which individuals are influenced by the experiences or qualities of the environment they encounter. Some individuals are more vulnerable to the effects of their experiences than others. In this study, gender differences among students are investigated in terms of personality traits and risk-taking behaviours. Gender differences have been found to influence some students into engaging in risk-taking behaviours. Some studies have revealed a high prevalence of substance abuse among males than females. Ilo, Onwunaka and Nwimo (2015) assert that a comparison between male and female users of

alcohol revealed males outnumbered females and that a greater predominance of heavy alcohol consumption was found among males as compared to females. The researchers further report on findings about at-risk drinkers among university students and maintain one out of three males is at risk, compared to about one out of five females.

According to the differential susceptibility hypothesis theory, the route to risk-taking behaviours varies among males and females (Gilchrist, Magee, Smith, & Jones, 2012; Debebe & Solomon, 2015). It was, therefore, important to examine the role of gender differences among university students and how they view events that occur in their lives. A study by Debebe and Solomon (2015) revealed the likelihood of male students scoring high on certain risk-taking behaviours, such as the tendency in having multiple sexual partners compared to female students. The theory on differential susceptibility hypothesis highlights the influence of gender differences on various risk-taking behaviours among university students.

CHAPTER THREE

LITERATURE REVIEW

3.0 INTRODUCTION

This chapter presents the review of related empirical studies that focuses on risk-taking behaviours, as well as the relationship with gender, and personality traits. The literature review is a process of searching the existing literature in order to develop theoretical and conceptual perspectives for a study and to integrate the current findings with the existing literature.

3.1 PERSONALITY TRAITS AND RISK-TAKING BEHAVIOUR

Personality characteristics are said to be fixed traits, which have an influence on how people adapt to their environments, thus influencing their behaviour (Carlson, Oshri, & Kwon, 2015). Jovanović et al., (2011) consider personality traits as dimensions of people's differences. These traits comprise patterns of feelings, thoughts and behaviours that are consistent over time. The basic foundation for individuals' emergence of certain intentional concepts such as beliefs, desires, and goals are said to be formed from personality traits such as the Big-Five personality factors. The Big-Five personality factors are identified as: Openness to experience; conscientiousness; extraversion; agreeableness; and neuroticism (Fiddick et al., 2016).

3.1.1 Openness to experience and risk-taking behaviour

Openness to experience is associated with the need for novel experience and tolerance for unfamiliar and new things. Those who possess personality traits relating to openness to experience, are uncustomary, non-traditional, and full of curiosity, and tend to pursue unfamiliar experiences and rethinking of rules, although they do not really lack value systems (Jovanović et al., 2011).

In their study on personality traits and driving behaviour, Jovanović et al., (2011) found an association between the dimensions of openness to experience and aggressive driving. The study revealed that openness to experience and certain behaviours related to aggressive driving had a high probability for prediction of aggressive driving. Furthermore, a positive correlation was found between openness to experience and collisions resulting from aggressive drivers. Research conducted on correlation between non-suicide self-injuries and the Big-Five Personality traits revealed a significantly high correlation between non-suicide self-injuries and openness to experience (You, Lin, Xu, & Hu, 2016; Brown, 2009).

3.1.2 Conscientiousness and risk-taking behaviour

Conscientiousness, as a personality trait, comprises a person's tendency to adhere to social norms, engage in goal-directed behaviours, and conduct themselves in a more pro- social manner (Jackson, Wood, Bogg, Walton, Harms, & Roberts, 2010). The authors further suggest that conscientiousness could be one of the traits counteracting the vulnerability to risky behaviours as a result of dampened emotional responsivity found in people who have high callous/unemotional traits; an indication that high callous/unemotional youth with a personality-embedded predisposition to responsible, prosocial behaviours may manage to divert their behaviour away from engaging in risky behaviours, better than high callous/unemotional youth who are without conscientiousness characteristics. With regard to whether different individuals, as characterised by their personality traits, tend to either follow or break social rules or laws, Fiddick et al., (2016) state that individuals with low conscientiousness might intentionally break social laws, but they, most often, presumably would accidentally do so, due to their tendency of not being concerned about following rules.

A study that included conscientiousness in connection with driving behaviour revealed a negative correlation between conscientiousness traits and aggressive risky driving and self-reported collisions. Conscientiousness was found to be the only personality trait that

predicted lack of traffic accidents compared to the other Big-Five personality traits (Jovanović et al., 2011). According to Hong and Paunonen (2009), conscientiousness is regarded as the single most significant trait implicated in both risk-taking behaviours and health effects. This trait was found to have a negative association with various risk-taking behaviours. The authors found that people with low conscientiousness have an increased likelihood of engaging in substance use, unhealthy sexual behaviours and reckless driving.

3.1.3 Extraversion and risk-taking behaviour

Extraversion is described as a trait that indicates an individual's need for stimulation, a desire for social relationships and the potential for positive emotional experience. Characteristics of individuals with high scores of this trait include activeness, talkativeness, cheerfulness and optimism. Such people also enjoy stimulation and excitement, and are usually very energetic. Jovanović et al., (2011) found that extraversion has a positive correlation with risky driving. The authors also found a connection between extraversion and violation of road-traffic laws while driving under the influence of substances, motor vehicle collisions and traffic deaths. Reid, Carpenter, Hook, Garos, Manning, & Gilliland (2012) also found a relationship between higher extraversion and increased desire for dyadic sexual engagement, while a decreased level of extraversion was found to be related to increased solitary sexual desire.

3.1.4 Agreeableness and risk-taking behaviour

Agreeableness is defined as a personality trait reflecting a person's relationship with other people and his/her attitudes regarding others. Those who score high on agreeableness are said to show altruism, empathy and willingness to assist other people, as they believe that others will display the same behaviour and attitude in return (Fiddick et al., 2016). Agreeableness has been identified as another Big-five personality trait that could further understanding of individual differences in risk-taking behaviours. Research suggests that individuals with low scores on agreeableness traits have an increased likelihood of engaging in risky behaviours

such as risky sexual activities, risky driving and substance use/abuse (Caspi, Begg, Dickson, Harrington, Langley, Moffitt, & Silva, 1997; Hong & Paunonen, 2009).

3.1.5 Neuroticism and risk-taking behaviour

Neuroticism, as a personality trait, involves the propensity for negative emotional experience and lack of capacity in problem-solving. Neurotic individuals are efficient in their attempt to deal with stressful events and are inclined to irrational thought patterns (Jovanović et al., 2011). Such individuals are often tense, anxious, lack patience and are easily irritable. In their study of personality traits and aggressive driving, Jovanović et al., (2011) found a correlation between neuroticism, aggressive and risky driving. They also reported the relationship between neuroticism and reactive aggression, which occurs in provocative situations.

A positive correlation was reported between neuroticism and hypersexual behaviour (Rettenberger, Klein and Briken, 2016). Similarly, in a study by Reid et al., (2012), based on the relationship between various aspects of neuroticism, such as anxiety, depression, vulnerability, and hyper-sexuality behaviour, the authors found a significantly higher correlation between neuroticism and hypersexual behaviour.

A study on the relationship between the Big-Five personality traits and nonsuicide self-injuries (NSSI) revealed that nonsuicide self-injury is frequently positively associated with neuroticism (You et al., 2016). The authors posit that individuals with a high score on neuroticism are likely to have negative emotional experiences, which lead them to poor responses to stress and to view ordinary events and occurrences as threatening, resulting in self-injury behaviours.

3.2 GENDER AND RISK-TAKING BEHAVIOUR

Gender differences in risky behaviours have been explained on the basis of varying cultural conditions in the risk and benefit perception, rather than by risk attitudes' differences among students. This means that students' risky behaviour can be viewed as an outcome of a comparison between the expected reward of their options and the perceived risk of the options. If the expected reward is perceived to be greater, it will likely make the option more attractive and, therefore, students will more likely be inclined to take part in the opted behaviour, while the perception of greater risk of an option will deem it less appealing, discouraging students' engagement, thus leading to greater avoidance towards an option (Figner & Weber, 2011). Research has confirmed the existence of gender differences in risky behaviours, but mostly, this was in favour of men in most of the risky behaviours and attitudes explored.

A study by Faria, Gandolfi and Moura (2014) revealed that alcohol consumption, violent and aggressive behaviours, involvement in fights and suicide attempts were more prevalent among females. Another study revealed that female Australian students reported alcohol consumption beyond recommended levels compared to males (Gilchrist et al., 2012). This is contrary the findings obtained by Ilo, Onwunaka, & Nwimo (2015), who reported that males consume more alcohol compared to females. Their findings further revealed that one out of three males was at high risk compared to one out of five females. Alcohol drinking was found to be a predictor for having multiple sexual partners, and men reported that with increased frequency of binge drinking, they had an increased likelihood of having multiple sexual partners (Wordofa & Shiferaw, 2015).

3.3 RISK-TAKING BEHAVIOUR AMONG STUDENTS

Several studies have been conducted around the world on risk-taking behaviours among university students, with most recent ones focusing on comprehension, control and monitoring of behaviours such as use of tobacco, alcohol and other drugs, violence against

self and other, inactivity and eating disorders and traffic collisions (Faria, Gandolfi, & Moura, 2014). Studies have revealed increased participation in risk-taking behaviours among young adults (Carlson, Oshri, & Kwon 2015; Gilchrist, Magee, Smith, & Jones, 2012). According to Gilchrist et al., (2012), several studies in countries such as the United States of America and New Zealand revealed that among the broader population, university students are those with a tendency to engage in risk-taking behaviours, such as drinking at riskier levels. Similar cases were reported in Australia, with some studies suggesting a high prevalence of university students in Australia using alcohol at risky levels (Utpala-Kumar & Deane 2010). More than half of the population of South Africa are young people below 25 years, and this group is considered as the future of the country, however, many young people are faced with various health challenges such as HIV/AIDS (emerging as the leading cause of deaths among young people), violence, delinquency and substance abuse (Cooper, De Lannoy, & Rule, 2015). These factors affect the well-being of young people, thus acting as predictors of future health challenges.

Students' engagement in risk-taking behaviours leads them into serious health problems. For example, there are various problems related to alcohol use among students, which include risky sexual behaviours, violence, and academic problems, with some of these behaviours putting students at risks of sexually transmitted diseases such as HIV infection and unintended pregnancies (Gilchrist et al., 2012). Gilchrist and colleagues found a significant prevalence of risky behaviours such as high levels of alcohol use among students compared to young people of the same age, not enrolled at institutions of higher learning. The researchers also found that such behaviours are strongly related to serious injuries and deaths (injuries resulting from risk-taking behaviours).

Research shows an array of factors that influence students' tendencies to engage in risk-taking behaviours, thus a challenge to trace it back to only one single course, thereby making it complex. This complexity is due to influences from different spheres such as personal, cultural, biological, psychological and social domains (Chanakira, O'Cathain, Goyder, & Freeman, (2014).

Adolescence and young adulthood are periods of rapid physical and psychosocial changes and development, and at these stages, parental influence decreases as peers and media influences take over at an increased rate. These are stages are associated with an increased prevalence of experimentation and exploration, identity search, and consequently, a period of increased risky behaviour, alcohol and substance use and abuse, sexual problems, violence and mental illness (Cooper, De Lannoy, & Rule, 2015). Poscia, Parente, Frisicale, Teleman, Waure and Pietro (2015) argue that risky behaviours acquired during teenage years can either be magnified or decreased at university level, since the period is considered one where students start taking control of their lives, and reconsidering their individual lives and their future (Poscia et al., 2015).

According to Faria et al., (2014), when young students enter university, they tend to modify their lifestyles by adopting behaviours that are risky, in an attempt to fit into dynamics relating to their newly acquired academic life. Keller et al., (2008) state that the transition into university is an important period in students' lives, and it involves changing of environment and social networks. At this period, young students are at a level where they mostly live independently from their parents, resulting in an increased freedom in utilising their time and money as they please (Ilo, Onwunaka, & Nwimo, 2015). This elevated freedom from parental control has a remarkable impact on the health and behaviours of students, which could lead to behavioural patterns that may increase probabilities for

students' involvement in risk-taking behaviours (Keller et al., 2008; Ilo, Onwunaka, & Nwimo, 2015). Though risk-taking behaviours are often initiated during early stages of adolescence, their prevalence and dangers may be experienced in late teens and early adulthood when individuals are at the university (Ilo, Onwunaka, & Nwimo, 2015). The opportunity and freedom to adopt risky behaviours lead students into short-term negative outcomes.

According to Ilo, Onwunaka, & Nwimo (2015), the outcomes of many of these risk-taking behaviours acquired by young students, do not end in their youth but reflect themselves into adulthood, and have been reported to be the main and leading causes of premature morbidity and mortality. This is because risk-taking behaviours are some of the major contributing behavioural factors to chronic diseases such as heart diseases, diabetes and cancer (Dodd, Al-Nakeeb, Nevill, & Forshaw, 2010). It is estimated that globally, 80% of all deaths resulting from chronic diseases are associated with risk-taking behaviours (Porter, Johnson, & Petrillo, 2009). Porter, Johnson, & Petrillo (2009) add that without research and prevention efforts to deal with risk-taking behaviours, the world should expect an increase in deaths caused by chronic diseases from the reported globally estimated rate of 60% to 70% by 2020.

Risky behaviours such as excessive drinking, drug abuse, impaired driving, and unsafe sexual activities are prevalent among students and these pose significant risks to students, as well as the society. Certain risky behaviours such as substance abuse, risky sexual activities, and reckless driving are prevalent among students and pose considerable risks to students as well as the society. Such behaviours do not only associate with certain leading factors of mortality worldwide, but also lead to increased costs to society with regard to decreased lifespan, treatment costs, violent behaviour and imprisonment (Ilo, Onwunaka, & Nwimo, 2015). Globally, 70% of premature adult deaths are estimated to be caused by behaviours initiated at

a young age, and that many of such behaviours are related to substance abuse (Cooper et al., 2015). Tobacco use has been identified as the leading cause of adult non-communicable health challenges such cardiovascular diseases, long-term respiratory diseases and cancer, with excessive alcohol as a cause for chronic kidney and liver problems, brain defects and also leading to undesired social conduct (Cooper et al., 2015).

Ngidi et al., (2016) posit that most students identify peer influence as one of the most important factors that pushes them to engage in risky behaviours. Students involved in the study maintained their participation in such risk-taking behaviours was a passport to attaining entry and certification into their desired social groups. For one to be accepted as a member of a group, one has to model the groups' behaviour (Ngidi et al., 2016). Raghibi (2012) asserts that free time and seeking pleasure are some of aggravating elements that increase the likelihood for risky conduct among students, leading to increased incidences of well-known diseases. According to Ilo, Onwunaka, & Nwimo (2015), university students participate in risky behaviours, such as substance use, as a way of conforming to perceived social norms (which may be different from norms previously acquired), alleviate their distress, entertain themselves, and as a form of celebration, usually after writing examinations.

3.4 CONCEPTUAL FRAMEWORK OF THE STUDY

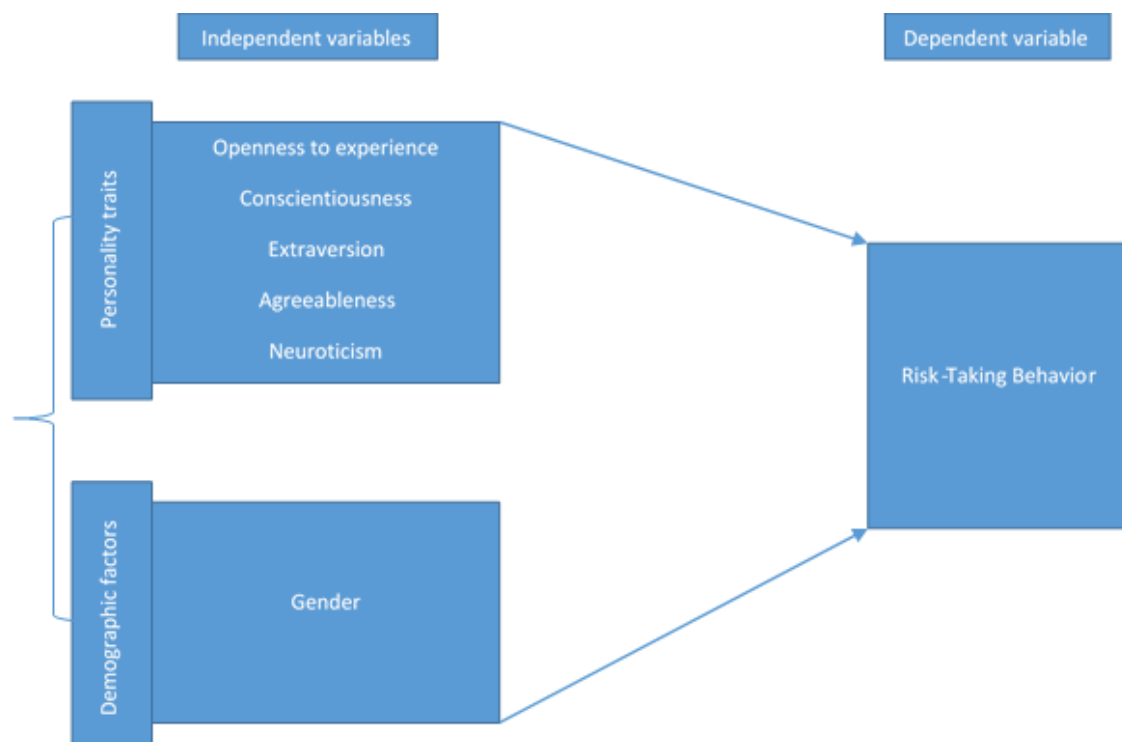


Figure 1: Conceptual framework of the study

CHAPTER FOUR

RESEARCH METHODOLOGY

4. INTRODUCTION

This chapter presents the research methodology including research approach, research design, research context and participation, sampling methods, description of procedures, validity and reliability of research instruments, data analysis.

4.1 RESEARCH DESIGN

A quantitative research approach was used in conducting this study. Etikan, Musa, & Alkassim, (2016) state that a quantitative study is the systematic experimental examination of evident phenomena, which uses statistics, measures and computational techniques. A cross-sectional design was used in the study since data was collected at one single occasion. The independent variables in the study were personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and gender. The dependent variable was risk-taking behaviour.

4.2 RESEARCH SETTING

The study was conducted at the North-West University (Mafikeng Campus), North West Province, South Africa. The setting was considered appropriate for the study due to paucity of data on risk-taking behaviour among younger persons, including university students in the Province; even though research suggests that risk-taking behaviours have significantly increased among younger South Africans in recent years (Porter, Johnson & Petrillo, 2009).

4.3 RESPONDENTS

A total of 312 full time first-year students at the North-West University (Mafikeng Campus) participated in the study as follows: (126 (40.4%) males and 186 (59.6%) females). The age of respondents ranged between 17 and 19 years, with the mean age of 18.5 (SD =.62). Further

analysis revealed that 57.7% of respondents were 19 years old, 35.6% were 18 years old while 6.7% of respondents were 17 years old.

4.4 SAMPLING TECHNIQUE

A multistage sampling process was used in three specific stages. In the first stage, the Faculty of Humanities was purposively selected on the basis of being one of the faculties with the highest number of first year students in the 2018 academic year. The second stage involved the use of stratified random sampling technique in selecting two departments from the Faculty. Each department formed a cluster and was used as a primary sampling unit. A list of departments and number of students registered for undergraduate courses offered by each department was obtained from the Registrar's office of the North-West University. Two departments were randomly selected from the Faculty of Humanities. Finally, simple random sampling was used to select respondents from students in classroom settings.

Calculation of sample size

Sample size was determined using Slovin sample size calculation method (Tejada & Punzalan, 2012).

The Slovin method is presented as follows:

Slovin Method which is

$$n = \frac{N}{(1 + N \times e^2)}$$

n = Sample number required

N = Total population

e = error tolerance = 0.05

The population of first year students in faculty of humanity was 2,998 at the time of this study (2018).

Using the formula, the overall sample size was calculated as

$$\text{Sample size} = \frac{2998}{1+2998 (0.05^2)}$$

$$= \frac{2998}{1+2998 (0.0025)}$$

$$= \frac{2998}{1+7.5}$$

$$= \frac{2998}{8.5}$$

$$= 352$$

4.5 RESEARCH INSTRUMENTS AND PSYCHOMETRIC PROPERTIES

Data was collected using a structured self-report paper and pencil questionnaire. The instrument was divided into sections that measured variables considered in the study. Section A focused on the demographic characteristics of respondents (age and sex), section B focused on personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) while section C focused on risk-taking behaviours.

Section B

This section focused on personality traits, making use of the Big Five Personality Inventory traits (John & Srivastava, 1999). It is a 44-item self-report measure designed to screen individuals on the five broad dimensions of personality (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism). The items on the scale are written in short phrases. Responses are rated on a 5-point Likert-type format with options ranging from disagree strongly (1), disagree a little (2), neither agree nor disagree (3), agree a little (4) and agree strongly (5). The Cronbach alpha reliability coefficients were found in the study for the subscales of the Big Five in this study were as follows: Openness to experience

.43; Conscientiousness .71; Extraversion .67; Agreeableness .64; and Neuroticism .66. Higher scores on each dimension indicate possession of that personality trait.

Section C

This section focused on Risk-taking and Self-harm Inventory for Adolescents (RTSHIA) developed by Vrouva, Fonagy, Fearon & Rossouw (2010). RTSHIA is a self-report measure designed to screen risk-taking and inventory among adolescents. It was divided in order to separate risk-taking (RT) and self-harm (SH). 38 items on the scale measured sexual behaviours, suicide behaviours, substance use, violence and self-harm. Items are scored on 4-point Likert scale with options ranging from 1 = (never), 2 = (once), 3 = (more than once) and 4 = (many times). RTSHIA has been shown to be a high reliable scale. The inter-item and test-retest reliability were high with a Cronbach's α of .85 and .93 and substantial indication arose in support of the measure's convergent, concurrent and divergent validity (Vrouva, Fonagy, Fearon and Roussow, 2010). Higher scores correspond to greater risk-taking and self-harm behaviours. Cronbach's α was .96 and .90 in this study.

4.6 DATA COLLECTION

The researcher approached lecturers and sought goodwill permission to collect data among first year students in the Departments of Psychology and Social Work. On entering the first year lecture room, the researcher introduced himself and his research assistants to create a rapport with the students. Next, the researcher discussed issues relating to the aim and objectives of the study with the students. A non-probability (purposive) sampling technique was used to select the study participants in the classroom setting. Only those who gave their consent were given a copy of the questionnaire to complete and return to the researcher. Respondents took about 30 minutes to complete the questionnaires. Out of the 400 questionnaires issued out, 312 were found usable for data analysis, yielding a response rate of 78%.

4.7 DATA ANALYSIS

Data was analysed using the Statistical Package for the Social Sciences, Version 24. Descriptive and inferential statistics were performed for data analysis. Descriptive statistics utilised consisted of simple percentage, frequency and mean. These were used to describe the demographic attributes of respondents such as age and gender. Inferential statistics used consisted of standard multiple regression analysis and independent samples t-test. Standard multiple regression test was used to predict risk-taking behaviour from personality traits. Independent samples t-test was used to test gender differences in risk-taking behaviours.

4.8 ETHICAL CONSIDERATIONS

Prior to data collection, the researcher sought and obtained written approval to carry out the study from the Ethics Committee of the Faculty of Humanities, North-West University. The researcher discussed issues related to the study to ensure informed consent. To ensure that participation was on a voluntary basis, respondents were informed of the option to discontinue participation in the research anytime they felt uncomfortable. Confidentiality was ensured by asking respondents not to write their personal details or credentials on the questionnaires. Respondents' right to privacy, while they completed the questionnaire, was also respected. They were assured that the material will not be shared with unauthorised persons. This step was taken to ensure confidentiality.

CHAPTER FIVE

PRESENTATION OF RESULTS

5. 0. INTRODUCTION

This chapter provides a detailed presentation of results of the research from the quantitative statistical analysis of the participants' data. The purpose of this study was to investigate the predictive impact of personality traits (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) and gender on risk-taking behaviours among first year university students. Multiple regression analysis and independent sample t-test were used to test the stated hypotheses.

Table 5.1: Socio-demographic characteristics of respondents

<i>Variables</i>		<i>Frequency</i>	<i>Percentage</i>
<i>Age in years</i>	Mean = 18.50; SD = .62		
	Minimum age = 17; Maximum age = 19		
	17years	21	6.7
<i>Age category</i>	18years	111	35.6
	19years	180	57.7
<i>Sex</i>	Male	126	40.4
	Female	186	59.6
<i>Total</i>		312	100

Table 5.2: Bivariate correlation among dimensions of the big-five personality factors, age and risk-taking behaviour

<i>Variables</i>	<i>Age</i>	<i>RTB</i>	<i>Ext</i>	<i>Agr</i>	<i>Cons</i>	<i>Neuro</i>	<i>OTE</i>
<i>Age</i>	1						
<i>RTB</i>	-.035	1					
<i>Ext</i>	.090	-.012	1				
<i>Agr</i>	.027	-.171**	.155**	1			
<i>Cons</i>	.095	-.240**	.234**	.429**	1		
<i>Neuro</i>	-.014	-.113*	-.272**	-.335**	-.327**	1	
<i>OTE</i>	.114*	.003	.222**	.158**	.276**	-.067	1
<i>Mean</i>	18.50	58.49	24.22	36.26	34.02	21.39	36.45
<i>SD</i>	.62	6.68	4.700	5.24	5.70	5.62	4.47

**p<.001; *p<.05 *RTB*= risk-taking behaviour; *Ext* = extraversion; *Agr* = agreeableness; *Cons* = conscientiousness; *Neuro* = neuroticism; *OTE* = openness to experience

The results in Table 5.2 are a summary of the relationships among variables considered in the study. The results show a significant relationship among some dimensions of the Big Five Personality factors and RTB; Extraversion and RTB ($r = -.012$; pns); Agreeableness and RTB ($r = -.17$; $p < .001$); Conscientiousness and RTB ($r = -.24$; $p < .001$); Neuroticism and RTB ($r = -.11$; $p < .05$); Openness to experience and RTB ($r = .00$; pns); Age and RTB ($r = -.035$; pns). The results also show that as the level of agreeableness increased, there was a significant decrease in the level of risk-taking behaviour among students. In the same manner, the more conscientious an adolescent is, the lower the tendency to engage in risk-taking behaviour. Also, increased level of neuroticism was associated with less risk-taking behaviour. However, the results showed that the relationship between extraversion, openness to experience and age with risk-taking behaviour were not statistically significant respectively.

Hypothesis one assumed there is a significant independent and joint influence of the Big Five Personality factors (extraversion, agreeableness, conscientiousness, neuroticism, openness to new experience) and age on risk-taking behaviour among first year university students. The hypothesis was tested with multiple regression analysis, and the result are presented in Table 5.3.

Table 5.3: Influence of the Big Five Personality factors and age on risk-taking behaviour

	<i>Independent variables</i>	<i>B</i>	<i>B</i>	<i>t</i>	<i>P</i>	<i>R²</i>	<i>F</i>	<i>P</i>
<i>RTB</i>	Extraversion	-.017	-.012	-.209	Ns			
	Agreeableness	-.188	-.148	-2.402	<.05	.121	6.953	<.001
	Conscientiousness	-.328	-.279	-4.405	<.001			
	Neuroticism	-.299	-.251	-4.172	<.001			
	Openness to experience	.137	.092	1.596	ns			
	Age	-.190	-.018	-.322	ns			

RTB= risk-taking behaviour

The results in Table 5.3 show a significant joint influence of the Big Five Personality factors (extraversion, agreeableness, conscientiousness, neuroticism, openness to experience) and age on RTB; these factors, as a group, accounted for 12% variance in risk-taking behaviour [$R^2 = .12$, $F(6,302) = 6.953$; $p < .001$]. A further analysis of the results for independent prediction revealed some dimensions of the Big Five personality factors contributed to risk-taking behaviours. Specifically, agreeableness [$\beta = -.148$, $t = -2.402$, $p < .05$], conscientiousness [$\beta = -.279$, $t = -4.405$, $p < .001$] and neuroticism [$\beta = .251$, $t = 4.172$, $p < .001$] significantly predicted risk-taking behaviours. The results suggest that risk-taking behaviours tend to decrease among more agreeable students; similarly, the more conscientious a student is, the lesser the tendency to engage in risky behaviour. The results

further revealed that the higher the level of neuroticism, the lower the tendency to engage in risky behaviours. The hypothesis was thus, partially confirmed.

Hypothesis two stated that males have significantly higher scores on RTB than female students. The hypothesis was tested with independent samples t-test and the results are presented in Table 5.4.

Table 5.4: Independent samples t-test showing gender differences on risk-taking behaviour

<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Df</i>	<i>T</i>	<i>P</i>
Male	126	61.34	7.51	310	6.609	<.001
Female	186	56.56	5.42			

The results in Table 5.4 show a significant gender difference on risk-taking behaviour $t(310) = 6.609$; $p < .001$. More specifically, the results revealed that males had higher scores on risk-taking behaviours compared to females. This is confirmed by the mean score comparison, which showed that males had a higher mean score (mean = 7.51) compared to females (mean = 5.42). The mean difference between both sexes was statistically significant. Thus, the hypothesis was confirmed.

CHAPTER SIX

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6. 0. INTRODUCTION

This chapter provides a detailed discussions of the research findings from the participants' data. This study focused on the influence of personality traits on risk-taking behaviour among first year students of the North-West University (Mafikeng Campus), South Africa. Gender was also examined as a factor that contributes to risk-taking behaviour.

6.1 DISCUSSION

The results showed a significant relationship between some dimensions of the Big Five Personality traits and risk-taking behaviours among first year university students. A significant negative but weak relationship between agreeableness, conscientiousness, neuroticism and risk-taking behaviour was established in this study. Also, there was no significant relationship between extraversion, openness to experience, age and risk-taking behaviour. Age was not significantly related to risk-taking behaviour. This suggests that age does not account for differences in risk-taking behaviour among freshmen. The results showed agreeableness, conscientiousness and neuroticism as the three personality traits significantly associated with risk-taking behaviour among freshmen.

Hypothesis one assumed that there is a significant independent and joint influence of the Big Five Personality factors (extraversion, agreeableness, conscientiousness, neuroticism, openness to experience) and age on risk-taking behaviour among students. The results revealed a combined influence of the Big Five Personality factors and age on risk-taking behaviour among students. The results also revealed that these factors accounted for 12.1% variance of risk-taking behaviour. Further analysis of the results showed that, among the predictor variables, only agreeableness, conscientiousness and neuroticism significantly

contributed to risk-taking behaviour in the sample of the study. It also showed that conscientiousness contributed the most to risk-taking behaviours.

The results corroborate previous research that established personality traits as playing an important role in risky behaviour among adolescents (Fiddick et al., 2016; Arthur & Graziano, 1996; Chraif, Vilcu, Burtaverde, & Mihalia, 2015; McGhee, Erler, Buckhalt, & Philips, 2012). Interestingly, the study revealed that conscientiousness is the strongest predictor of risk-taking behaviour in the sample. Conscientiousness is associated with a number of self-inhibiting traits such as conventionality and self-discipline (McCrae & Costa, 1990). It is plausible that the more conscientious a student is, the more risk averse (more conventional, more self-disciplined) he or she tends to become, resulting in lowered tendencies to engage in harmful behaviours. In the case of neuroticism, the negative influence of neuroticism on risk-taking behaviour reported in this study may be a reflection of more neurotic students associating less with others, which, in turn, makes them less exposed to risky behaviours through peer influence. Alternatively, the results could indicate that the more tender-hearted (an attribute associated with neurotic personality) a student is, the lesser the likelihood that he or she may engage in behaviours that expose him and others to danger.

It was predicted that male students will have significantly higher scores on risk-taking behaviour than their female counterparts. The results showed that males had significantly higher scores on risk-taking behaviour compared to females. The results thus, confirmed the hypothesis. The results are consistent with previous studies which revealed that females are more risk averse compared to males (Charness & Gneezy, 2012; Daughters, Matusiewicz, Gorka, & Anderson, 2013; Reniers et al., 2016; Van Leijenhorst, Westenberg, Crone, 2008). There are, at least, two plausible explanations for this result. The first is that male students could have perceived situations that confronted them as less risky compared to females. Thus,

perceptual difference in the risk level associated with a potentially harmful activity could have fuelled male students' involvement in harmful behaviours. Secondly, it could be that males in the sample were influenced more by peer perception of approval to engage in harmful behaviours, while females were less likely.

6.2 CONCLUSION

The present study focused on the predictive impact of personality traits, age and gender on risk-taking behaviours among first year students at an institution of higher learning in South Africa. It is concluded that some dimensions of the Big Five Personality traits influence risk-taking behaviours. In particular, conscientiousness had the strongest impact on risk-taking behaviour. Age was not significantly associated with risk-taking behaviours. In addition, males showed a higher tendency with regard to engaging in risky behaviours compared to their female peers.

6.3 RECOMMENDATIONS

The results of the present study showed that agreeableness, conscientiousness and neuroticism predict risk-taking behaviours while conscientiousness was the most protective against risky behaviour. These results could assist professionals concerned with managing behavioural problems to design interventions that can reduce unhealthy risky behaviours among university students. For instance, training first year students to increase levels of conscientiousness-related traits (e.g. self-discipline, deliberation and scrupulous behaviour) could reduce their levels of participation in risky activities such as unsafe sex, alcohol and substance abuse.

In addition, the study revealed that male students are at a higher risk of engaging in harmful behaviours compared to their female counterparts. The results underscore the need for gender-specific interventions in favour of male freshmen. Assertiveness training could enable

male freshmen to resist peer pressure and participate in high level risky activities in interpersonal contexts.

6.4 LIMITATIONS OF THE STUDY

The design adopted in the study (i.e. cross-sectional design) does not allow tracking of risk-taking propensity over time. A longitudinal design would have provided more information about changes in risk-taking tendencies among first year students. Also, a self-administered questionnaire was used for data collection. This approach could have increased the likelihood of respondents faking their responses, thus affecting the reliability of the results. In addition, the sample was selected among first year students only at one university. This may affect the generalisation of results to first year students at other universities in South Africa.

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LIST OF APPENDICES

APPENDIX A

Big Five Personality Inventory

Self-Description Inventory _____ Female _____ Male (check one)
_____ Age

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please choose a number for each statement to indicate the extent to which you agree or disagree with that statement.

Disagree strongly Disagree a little Neither agree nor disagree Agree a little Agree strongly

1.....2.....3.....4.....-5

I see myself *as someone who ...*

- | | |
|--|--|
| ___ 1. is talkative | ___ 23. tends to be lazy |
| ___ 2. tends to find fault with others | ___ 24. is emotionally stable, not easily upset |
| ___ 3. does a thorough job | ___ 25. is inventive |
| ___ 4. is depressed, blue | ___ 26. has an assertive personality |
| ___ 5. is original, comes up with new ideas | ___ 27. can be cold and aloof |
| ___ 6. is reserved | ___ 28. perseveres until the task is finished |
| ___ 7. is helpful and unselfish with others | ___ 29. can be moody |
| ___ 8. can be somewhat careless | ___ 30. values artistic, aesthetic experiences |
| ___ 9. is relaxed, handles stress well | ___ 31. is sometimes shy, inhibited |
| ___ 10. is curious about many different things | ___ 32. is considerate and kind to almost everyone |
| ___ 11. is full of energy | ___ 33. does things efficiently |
| ___ 12. starts quarrels with others | ___ 34. remains calm in tense situations |
| ___ 13. is a reliable worker | ___ 35. prefers work that is routine |
| ___ 14. can be tense | ___ 36. is outgoing, sociable |
| ___ 15. is ingenious, a deep thinker | ___ 37. is sometimes rude to others |
| ___ 16. generates a lot of enthusiasm | ___ 38. makes plans and follows through with them |
| ___ 17. has a forgiving nature | ___ 39. gets nervous easily |
| ___ 18. tends to be disorganized | ___ 40. likes to reflect, play with ideas |
| ___ 19. worries a lot | ___ 41. has few artistic interests |
| ___ 20. has an active imagination | ___ 42. likes to cooperate with others |
| ___ 21. tends to be quiet | ___ 43. is easily distracted |

___22. is generally trusting

___44. is sophisticated in art, music,
or literature

The Risk-Taking and Self-Harm Inventory for Adolescents

Measure (RTSHIA) Age..... Gender.....

Please answer the following questions by choosing the option that is most applicable to you.

	Never	Once	More Than Once	Many Times
1. Have you ever taken chances while doing your hobbies (e.g. not wearing your helmet and other safety gear, riding risky stances on your skateboard, etc.)?				
2. Have you ever deliberately crossed the road dangerously or driven recklessly (e.g. raced, did not fasten your seatbelt, drove while intoxicated or drunk)?				
3. Have you ever put yourself in a risky situation (such as classroom cheating, traveling without a valid ticket, shoplifting etc.) knowing that you may get caught?				
4. Have you ever been suspended (i.e. punished with exclusion) or dropped out of school?				
5. Have you ever stayed out late at night, without your parents knowing where you are?				
6. Have you ever participated in gang violence, physical fights or held a weapon				
7. Have you ever been promiscuous (i.e. had many sexual partners within a short period of time)?				
8. Have you ever had sex avoiding precautions against sexually transmitted diseases or pregnancy?				
9. Have you ever put yourself at risk of sexual abuse?				
10. Have you ever had so much alcohol that you were really drunk?				
11. Have you ever used drugs (such as marijuana, cocaine, LSD etc)?				
12. Have you ever smoked tobacco?				

Please answer yes to the following questions only if your behaviour was intentional, or on purpose, to hurt yourself. Circle *Never* if you did something only accidentally (e.g. you tripped and banged your head accidentally).

	YES	NEVER
13. Have you ever intentionally cut your skin?		
14. Have you ever intentionally burned yourself with a hot object (such as a cigarette)?		
15. Have you ever intentionally bitten yourself, to the extent that you broke the skin?		
16. Have you ever intentionally banged your head against something, hit or punched yourself, to the extent that you caused a bruise to appear?		
17. Have you ever intentionally prevented wounds from healing or picked at areas of your body to the point of drawing blood?		
18. Have you ever intentionally scraped, scrubbed or Scratched your skin to the point of breaking your skin or drawing blood?		
19. Have you ever intentionally rubbed a sharp object (such as sandpaper) or dripped anything toxic (such as acid) onto your skin?		
20. Have you ever exercised an injured part of your body intending to hurt yourself?		
21. Have you ever deliberately broken a bone in your body either by making yourself fall or in another way?		

22. Please choose A or B

.....A. I've never deliberately injured myself

.....B. I have at least once deliberately injured myself

If you answered B, which body parts did
you deliberately injure? Please tick one (or
more) of the following options.

..... Torso, belly, buttocks Hands, arms, fingers, nails

..... ..Head Legs, feet, toes

.....Face Other (please write).....

.....Neck

23. Have you ever intentionally pulled your hair out?				
24. Have you ever deliberately inhaled something harmful (excluding cigarette smoke or drugs) or swallowed something inedible?				
25. Have you ever starved yourself to hurt or punish yourself?				
26. Have you ever used laxatives to hurt or punish yourself? <i>Laxative: a drug that makes you go to the toilet</i>				
27. Have you ever forced yourself to eat too much to hurt or punish yourself?				
28. Have you ever stayed in a friendship or a relationship with somebody who repeatedly hurt your feelings on purpose?				
29. Have you ever tried to make yourself suffer by thinking horrible things about yourself?				
30. Have you ever taken an overdose? (i.e. taken an excessive amount of medication without having been prescribed this dosage)				
31. Have you ever seriously thought about harming a part of your body?				
32. Have you ever seriously thought about killing yourself?				
33. Have you ever intentionally hurt yourself in any of the above mentioned ways so that it led to hospitalisation or injury severe enough to require medical treatment?				

35. Have you engaged in any other self-destructive behaviours not asked about in this questionnaire? If yes, please describe below

.....

36. Please choose A or B

.....A. I know no one well who has deliberately injured himself/herself

.....B. I know someone well who has deliberately injured himself/herself

37. If you answered B, why do you think he/she did this?

.....

38. If you answered A or B, why do you think some young people harm themselves?

.....

APPENDIX B

LETTER OF INFORMATION

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0183892828
Fax: 0183892424
Email: 22590110@nwu.ac.za

Dear respondent

My name is Mmanoko Samuel Moetji, and I am conducting research for the purpose of obtaining a Master's degree of Social Sciences in Clinical Psychology (MA SOC SC) at the North-West University, Mafikeng Campus. The focus of my study is PERSONALITY TRAITS AND GENDER AS PREDICTORS OF RISK-TAKING BEHAVIOUR AMONG FIRST-YEAR STUDENTS, NORTH-WEST UNIVERSITY. I wish to request that you please complete some questionnaires for me. There are no wrong or right answers. Participation in this study is voluntary, and no person will be advantaged or disadvantaged in any way for choosing to participate or not in this study. All responses will be kept confidential, and no information that could identify you will be included in the research report. You may withdraw from the study at any point.

Your participation in this study will be greatly appreciated.

Kind regards

.....

M.S. Moetji
Student no: 25498479

APPENDIX C
INFORMED
CONSENT

Enquiry:

M.S. Moetji

Cell:

0732484078

Email Address: smoetji16@gmail.com

Research title: PERSONALITY TRAITS AND GENDER AS PREDICTORS
OF RISK- TAKING BEHAVIOUR AMONG FIRST-YEAR STUDENTS,
NORTH-WEST UNIVERSITY

Dear respondent

My name is Mmanoko Samuel Moetji (25498479), I am conducting a study for the purpose of obtaining a Master's degree of Social Sciences in Clinical Psychology at the North-West University, Mafikeng Campus. My research is titled -PERSONALITY TRAITS, AGE AND GENDER AS PREDICTORS OF RISK-TAKING BEHAVIOUR AMONG FIRST YEAR STUDENTS, NORTH-WEST UNIVERSITY (MAFIKENG CAMPUS). You are requested to complete a questionnaire and there are no wrong or right answers. Participation in this study is voluntary, and no person will be advantaged or disadvantaged in any way for choosing to participate or not to participate in this study. All your responses and identifying information will be kept confidential. You may withdraw from the study at any point with no questions asked.

If you choose to participate in the study, please sign below and kindly answer the questions attached.

Signature _____

Date_____