

**AN EXPLORATION OF THE PERSONALITY PREFERENCES OF POST  
GRADUATE PSYCHOLOGY STUDENTS UTILISING THE MYERS-BRIGGS  
TYPE INDICATOR**

**RENÉ SMIT**

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**Supervisor:** Professor Gregory Howcroft

**Co-Supervisor:** Doctor Louise Stroud

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## SUMMARY

In order to continue their contribution to the profession of psychology in South Africa the selection committees of psychology departments of higher education institutions are faced with the difficult task of selecting the most suitable candidates to fill their Clinical, Counselling, Educational and Industrial Psychology masters coursework programmes. Selection committees have traditionally made use of several admission criteria and procedures ranging from academic performance to personality assessment to a combination of methods. Admission criteria vary greatly across Higher Education Institutions. The selection committee at the selected participating institution of higher education takes into account the prospective students' academic performance, relevant work or practical experience, research experience, active participation in the classroom, active involvement outside of the classroom (participation in and engagement with community activities), and personality. Currently the institution of higher education that provided the sample for the current study employs the NEO PI-R as well as the MMPI-2 to assess masters applicants' personality traits. A study by Britz (1994) recommended that the MBTI® be included in the assessment battery for psychology masters students.

The primary aim of the proposed study is to identify, explore and describe the personality preferences of a group of prospective psychology masters applicants and a group of successfully selected psychology masters students at a South African Higher Education Institution utilising the Myers-Briggs Type Indicator® (MBTI®). The study was exploratory descriptive in nature and was based on the quantitative research approach. Non-probability convenience sampling and the survey method was utilised to identify and approach prospective participants. Participants were requested to complete the MBTI® questionnaire. The MBTI® protocols were hand-scored and the findings analysed utilising frequency distributions and inferential statistics, that is, means and standard deviations. The MBTI® was found to be valid and reliable in a variety of populations and contexts.

Results indicated that the ISTJ (15%), INTP (15%) and ESFJ (15%) personality types were the three most common personality types amongst participants from the group of prospective psychology masters applicants. The ENFP (13%), INTP (13%) and ISFJ (13%) personality types were the three most common personality types amongst participants from the group of successfully selected masters students. The majority (14%) of participants from the total sample displayed a preference for the INTP personality type. An examination of the dichotomous personality types of the participants revealed that the majority of participants preferred the Extraversion attitude, Sensing and Thinking functions, and Judgement attitude.

#### Key words

Myers-Briggs Type Indicator (MBTI®), personality preferences, sixteen complete personality types, dichotomous personality types, personality assessment, personality, type theory, selection of psychology masters students

## CHAPTER ONE

### INTRODUCTION

#### Chapter Preview

Chapter One aims to provide the reader with a general orientation to the study and an understanding of the theoretical context of the study by providing a brief overview of the type approach to psychology. More specifically, the chapter provides a broad definition of personality, personality psychology (personology) and the measure used in the study. Furthermore, the chapter also focuses on the specific motivation for undertaking the study by placing the study within the higher education context in South Africa. The chapter concludes with a brief summary of the key concepts discussed in the chapter as well as an overview of the chapter outline of the study.

#### General Orientation to the Study

In order to orientate the reader to the current study, this chapter is divided into three primary areas of relevant literature. The first section of the chapter attempts to explain the theoretical context of the study relevant to personality psychology. More specifically, the section places the study within the type approach to personality assessment and explores the underpinning theory in which the type approach is grounded. Thus, a brief introduction to the psychodynamic approach to psychology and personality is provided. The second section provides a brief introduction to the concept of personality psychology (personology). In doing this, the reader is introduced to the Myers-Briggs Type Indicator (MBTI®), the chosen measure for the study. The MBTI® is particularly designed to measure personality preferences or types, thus making it particularly useful in meeting the aims of the current study. The final section attempts to place the study within the context of higher education. In this section issues

related to the selection and admission procedures and the potential usefulness of personality assessment within the aforementioned procedures for masters psychology applicants are briefly introduced.

### *Theoretical Overview – Personality Psychology*

Personology, the study of personality and personality development, is one of the many specialised areas in modern day psychology (Merenda, 1999). This specialised area of psychology is often a point of interest and the focus of research. This kind of research focuses on individual characteristics and the differences as well as similarities between individuals (Liebert & Spiegler 1997). Meyer, Moore and Viljoen (1997) define personology as “the branch of psychology which focuses on the study of the individual’s characteristics and differences between people (p.5).” Personology also seeks to synthesise, examine and explain the numerous processes, which impact on the interaction of individuals with their environment in order to provide a holistic account of the individual (Meyer, Moore & Viljoen, 1997; Phares & Trull, 1997). According to Liebert and Spiegler (1997) personality psychology refers to the study of the functioning of individuals in all their aspects. This vast field primarily deals with normal psychology.

Ehrenreich (1997) emphasised the importance of understanding personality. Such an understanding of personality leads to a greater understanding of human behaviour and functioning. Understanding human behaviour becomes crucial in any context where individuals are present and interact with one another (Hurter, 2008). Personality psychology influences many areas of modern day psychology including social psychology, educational psychology, environmental psychology and abnormal psychology (Liebert & Spiegler, 1997).

Understanding personality is not a simple task, as no single definition of personality exists. The multitude of definitions varies according to the theoretical approach in which they are grounded. For the purposes of the current study the psychodynamic approach and more specifically the work of Carl Jung is crucial. Carl Jung's approach to personality set the groundwork for the development of the MBTI® which was used to assess the personality preferences and identify the personality types of the participants (Ring, 1998). Plessman (1985) is of the opinion that Jung's approach to personality utilising psychological types is one of the most popular approaches to understanding personality today. Chapter two will examine Jung's and Myers and Briggs' work extensively.

Type psychology does not view personality preferences and types as specific categories that fit only specific individuals. Instead types are dimensions (attitudes and functions) on which all individuals can be described in varying degrees (Johnson, 1997). The MBTI® measures four dichotomies (two attitudes and six functions) in order to assign a specific type to individuals. The dichotomies are the attitudes of Extraversion/Introversion (E/I) and Judgement/Perception (J/P), as well as the functions of Sensing/Intuition (S/N) and Thinking/Feeling (T/F). It is important to note that one attitude or function is not more desirable than the other, that is, a preference for Extraversion is not more desirable than a preference for Introversion. Furthermore, all individuals display a preference for and use each attitude and function at some point in time, depending on the situation they find themselves in. The type approach to personality and the MBTI® will be discussed in greater detail in subsequent chapters.

### *Personality Assessment*

Personality assessment is not restricted to a single method. Instead personality assessment can take the form of behavioural observation and projective techniques, and objective personality inventories (Aiken, 2000). This current study relied on an objective personality inventory to gain the necessary data. Many different measures exist to measure personality. For the purposes of this study, the MBTI® was utilised. The measure has been translated into 43 different languages and is being used extensively internationally (Myers, McCaulley, Quenk & Hammer, 2003). A study by Carlyn (1997) examining the test-retest reliability of the MBTI®, concluded that the measure is reliable.

According to Piedmont (1998) personality assessment is pivotal as it allows for clear, concrete evidence of the psychological status of individuals. Like many other personality inventories, the MBTI® provides valuable information regarding individuals' areas of strength and potential areas of growth. The difference between conventional personality inventories and the MBTI® is rooted in the fact that the latter inventory does not focus on pathology thus avoiding placing a stigma and label on participants.

### *Admission and Selection of Masters Psychology Applicants*

Masters psychology programmes in the South African context are particularly demanding and competitive and there is limited available space for admissions into these programmes. The participating higher education institution receives approximately 200 applications for the psychology masters degree annually. Each year large numbers of undergraduate students in psychology aspire to continue with post-graduate studies in psychology. The limited number of internship placements, necessitate that universities employ stringent admissions procedures (Van der Westhuizen & Plug, 1987). Universities thus have to



make use of screening measures during the stringent selection processes of students applying for admission to the masters training programme.

The afore-mentioned screening measures are employed to secure the integrity of psychology as a profession. Leverett-Main (2004) emphasise the importance of stringent selection and admissions processes as it ensures that students who are successfully selected are able to succeed academically as well as professionally in practice as counsellors and therapists. Various authors accentuate academic aptitude as well as professional and personal development in the field of psychotherapy and counselling (Smaby, Maddux, Richmond, Lepkowski & Packman, 2005). Psychology masters students face multiple challenges including demanding coursework, internships, and research requirements as well as personal and emotional developmental expectations. The greatest challenge facing higher education institutions is the development of sufficient and effective criteria and admission procedures for assessing all relevant spheres of psychology masters applicants (Ametrano & Stickell, 2001; Leverett-Main, 2004). The current emphasis on individual constitutional rights, and institutional transparency and accountability highlights the need for sufficient and effective criteria and admission procedures (Kumar, 2003).

Predicting the success of individuals as psychologists-in-training has proved to be a difficult task. Selection committees have traditionally made use of several admission criteria and procedures ranging from academic performance to personality assessment to a combination of methods. Admission criteria vary greatly across higher education institutions. The selection committee at the selected participating institution of higher education takes into account the prospective students' academic performance, relevant work or practical experience, research experience, active participation in the classroom, active involvement outside of the

classroom (participation in and engagement with community activities), and personality. In order to assess whether an applicant meets the admission criteria, selection committees employ academic record, interviews, letters of recommendation, referee reports, and personality profiles.

Even though academic performance previously carried the greatest weight in the selection process (Cerrai, 1997), research has shown that academic success at an undergraduate level is not necessarily a predictor of success at a postgraduate level (Abedi, 1991; House & Johnson, 1993). Leverett-Main (2004) stresses the need for creative and practical abilities of individuals to cope with and adjust to stressors of a postgraduate life style as these impact on success. Despite the continuing emphasis on academic ability as an important criterion (Cerrai, 1997; Cheryshenko & Ones, 1999), research confirms the notion that academic success does not necessarily predict success for psychology students (Leverett-Main, 2004). Academic performance does not allow for the assessment of individuals' abilities to cope with and adjust to the demands of a psychology masters programmes, and the capacity, knowledge, personal and interpersonal skills particularly related to counselling and psychotherapy (Hurter, 2008).

In recent years personality has received growing attention in the selection and admission criteria as it is viewed as a predictor of success. Chippindall and Watts (1999) and Wheeler (2002) view personality as an important factor in distinguishing between effective and less effective therapists. Personality assessment is therefore a valuable tool when selecting psychologists-in-training.

### Motivation for the Study

Currently the institution of higher education that provided the sample for the current study employs the NEO PI-R as well as the MMPI-2 to assess masters applicants' personality

traits. A study by Britz (1994) recommended that the MBTI® be included in the assessment battery for psychology masters students. Despite the fact that the study did not focus on the MBTI®, the research concluded that the measure was a valuable instrument in identifying the unique personality types associated with successful masters students (Britz, 1994). The current study thus aims to explore the value of the MBTI® in assessing masters applicants' personality traits.

### Aims and Purpose of the Study

The primary aim of the proposed study is to identify, explore and describe the personality preferences of a group prospective psychology masters applicants and a group of successfully selected psychology masters students at a South Africa Higher Education Institution utilising the Myers-Briggs Type Indicator® (MBTI®). More specifically the study will aim to:

1. Identify, explore, and describe the personality type preferences of a group of successfully selected masters students.
2. Identify, explore and describe the personality type preferences of a group of prospective masters applicants.

In other words, the current study aimed to identify, explore and describe the personality preferences of a group of prospective psychology masters applicants currently enrolled in the psychology honours or BPsych programmes and a group of successfully selected psychology masters applicants at a South African institution of higher education. Not all psychology honours and BPsych students aspire to further their studies beyond their fourth year of studies. They are thus exposed in a very limited fashion to the use of personality measures on both an academic and personal level. Administering a personality measure during psychology students'

fourth year of study will enhance the participating students' professional and personal development, as they will have better insight and understanding into their strengths and potential areas of growth.

In the current study, the Myers-Briggs Type Indicator® (MBTI®) was utilised as the measure to assess the honours and BPsych students' personality preferences. The same measure was also administered to the group of successfully selected masters applicants to measure their personality preferences. This allowed for a comparison of the personality preferences of both groups of participants. By administering the measure to both groups the researcher was able to derive a clearer picture of the personality preferences of young professionals in training in the field of psychology, irrespective of whether they aspire to continue with their studies beyond a fourth year level or not.

Knowledge of individuals' psychological type preference can have far-reaching implications for understanding and interpreting human behaviour (Foster & Horner, 1988). Research has demonstrated that career choice, as well as success and satisfaction with one's chosen career, is often consistent with and directly linked to personality characteristics (Plessman, 1985; Vogt & Holder, 1988). The above-mentioned opinions formed an important and integral part of the proposed study. It is this knowledge about individuals' personality preferences and its impact on their professional development that might assist the participating students to make more informed and sound career decisions, such as whether or not to apply for entrance into a masters psychology programme or to apply for entrance into the Clinical or Counselling training stream.

A further motivating factor for comparing these two samples is rooted in the additional information that the MBTI® may provide about both the prospective psychology masters

applicants as well as successfully selected group of applicants. Administering the MBTI® to successfully selected applicants served two purposes. Firstly, it allowed for generating a profile of young professionals in training in psychology. Secondly, it provided the data to which the honours student sample could be compared.

Recently there has been much debate as to whether or not to separate the different streams of psychology while students are in training. Interpreting the MBTI® scores provides a picture of possible strengths and potential areas of growth/development for both the prospective applicants and successfully selected applicants. Not only does the MBTI® provide information on the participants' personality preferences, it also allows for a way to assess which stream of training, that is, Clinical or Counselling psychology will suit individuals best, in the case of prospective applicants by means of assessing their strengths and potential areas of growth. These strengths and potential areas for growth will provide an indication as to whether the prospective psychology masters applicant will be able to cope with specific demands and requirements associated with the different streams of psychology.

In contrast to the conventional assessment measures of personality currently employed as selection measures in the psychology masters programmes, the MBTI® is less time consuming and thus more cost effective. The time - and cost effective MBTI® consisting of 94 questions could be administered to applicants as an alternative to the invasive and threatening MMPI-2 consisting of 567 questions and the NEO PI-R consisting of 240 questions. Unlike the MMPI-2 and NEO PI-R, the MBTI® does not focus on psychopathology, but rather on individual personality preferences. The MBTI® is thus far less threatening to individuals.

### Chapter Outline of the Study

The study consists of six chapters. The chapters are structured as followed:

Chapter One:	Introduction to the study
Chapter Two:	Personality and personality psychology
Chapter Three:	Personality assessment and the Myers-Briggs Type Indicator (MBTI®)
Chapter Four:	Research design and methodology
Chapter Five:	Results
Chapter Six:	Discussion and conclusion
Chapter Seven:	Limitations, value and recommendations for future research

### Conclusion

Chapter One has provided a brief overview and introduction to the current study. The chapter placed the study within a theoretical orientation of psychology as applied to the higher education context. The motivation, aims and purpose of the study were highlighted. The subsequent chapter marks the beginning of the literature review related to the study and will address the concepts of personality and personality psychology. Chapter Two will also provide an overview of the behavioural, phenomenological, dispositional and psychodynamic approaches to psychology. Such an overview will provide for an opportunity to contextualise the type approach on which the MBTI® is based.

## CHAPTER TWO

### PERSONALITY THEORIES AND PERSONALITY PSYCHOLOGY

#### Chapter Preview

This chapter examines the concept of personality. Personality is the focus of this study and therefore it has to be examined and explained at the outset. One also has to examine and look at the use of personality within the profession and field of psychology. Therefore, the concept of personality psychology, in essence the study of personality, has to be included in this chapter. Four of the most frequently used approaches utilised to define and understand personality and personality psychology will be discussed briefly. Such an overview is necessary as it allows for a better understanding of the conceptualisation of Carl Jung's (1923) theory of psychological types. Jung's theory will be discussed in greater detail, as it is the theory in which the measure that was used for the study is grounded, that is the Myers-Briggs Type Indicator (MBTI®). The chapter concludes with an overview of the Type approach to understanding personality development.

#### Personology and Personality Defined

##### *Personology or Personality Psychology*

Personology, the study of personality and personality development, is one of the many specialised areas in modern day psychology (Merenda, 1999). This specialised area of psychology is often a point of interest and the focus of research. Research aimed at personality focuses on individual characteristics and the differences as well as similarities between individuals (Liebert & Spiegler 1997). Personality psychology is essential if one wishes to gain an understanding of and insight into the complex nature of personality. Personology attempts

to study the concept of personality and to provide a comprehensive analysis of all the diverse and complex aspects associated with the concept (Mischel, Shoda & Smith, 2004).

At first glance personality psychology appears to be a well-integrated field of study (Francis, Craig & Robbins, 2007). Individuals who are involved in this area of research attempt to identify and classify human characteristics. These attempts are aimed at establishing ways to understand, explain and predict individual differences in attitude, behaviour and performance (Francis, Craig & Robbins, 2007). A closer examination of this branch of psychology highlights the fragmented nature of personology. Francis, Craig and Robbins (2007), emphasised that individual researchers devote great amounts of time and energy to establish and test behavioural patterns of relationships that fit into their personal and professional frame of thinking. These researchers often lose sight of the relationship between their findings and those of other researchers (Francis, Craig & Robbins, 2007).

Personology seeks to synthesise, examine and explain the numerous processes which impact on individuals' interaction with their environment in order to provide a holistic account of the individuals (Meyer, Moore & Viljoen, 1997; Phares & Trull, 1997). According to Liebert and Spiegler (1997) personality psychology refers to the study of the functioning of individuals in all their aspects. This vast field primarily deals with normal psychology. Personality psychology influences many areas of modern day psychology including social psychology, educational psychology, environmental psychology and abnormal psychology (Liebert & Spiegler, 1997).

Despite difficulties encountered by scholars that studied personology during the previous centuries, McCrae and Costa (2003) are of the opinion that the field of personality psychology has experienced a renaissance over the last 30 years. They stressed a number of



advances in the conceptualisation, description and measurement of personality (McCrae & Costa, 2003). These advances led to an increase in order and understanding of personality.

### *Personality*

Personality is a psychological concept. No single, simplistic, all encompassing definition of personality exists. Today a very broad definition of what personality is, includes: (a) the social dimension of individuals' functioning; (b) general behavioural patterns, and (c) human nature, or individual differences (Liebert & Spiegler, 1997). This section attempts to describe personality in some detail.

Over the centuries the term personality evolved, expanded and developed. The development and expansion of the definition of personality led to diverse definitions that attempted to explain the concept. Some of these definitions view personality as individuals' ability to be socially effective. Other more technical and statistical definitions allow for a mathematical calculation to determine personality (Hergenhahn & Olson, 1999). This evolution resulted in an array of definitions of personality. These definitions of personality ultimately resulted in different frameworks for understanding personality. Different theorists' understanding and conceptualisations of personality are in essence attempts to define personality.

It became increasingly difficult to generate a single definition of personality. The main cause of this difficulty is rooted in the fact that it was a difficult task to define personality objectively, as most pragmatic concepts mirror the conceptual frame of the observer (Hall & Lindzey, 2001). One might thus say that the observers' orientation to psychology will impact on or influence their definition of personality. A theorist ascribing to the behavioural approach will utilise the fundamental principles embedded in the approach to understand and define

personality. In contrast a theorist who understands personality utilising Jungian principles will thus attach a definition of personality that reflects these Jungian principles. Taking this into account, it becomes essential to take a broad look at different perspectives amongst the array of possible definitions of personality without limiting the true definition, depth and scope of personality. Very broadly personality may be depicted as the continuously changing, but also fairly stable organisation of all qualities such as cognitions, values, attitudes, habits, emotions, prejudices and goals, that determine individuals behaviour in interaction with the environment (Meyer, Moore & Viljoen, 1997; Millon & Everly, 1985).

As theorists' interest in personality increased, so did personality's popularity as a field of interest increase. During this process certain constructs and concepts became synonymous with personality. A review of several prominent approaches to personality by Moller (1995) found that there are crucial constructs that must be included in an acceptable definition of personality. These constructs are: (a) the characteristic structure, combination and organization of behavioural patterns, cognition and emotion that emphasizes uniqueness; (b) the individual ability to adapt to unique daily life circumstances; and (c) the dynamic nature of an individual as well as the individual's tendency to react in a more or less constant and predictable way to various life situations (Moller, 1995). Should a definition of personality incorporate and encompass these crucial constructs, it would emphasize the constancy and distinctive nature of different personalities (Moller, 1995).

According to Larsen and Buss (2005) personality is the collection of psychological traits and mechanisms innate to individuals. These psychological traits and mechanisms are organized and relatively stable and enduring and influence individuals' interactions with, and adaptations to, the intrapsychic, physical, and social environments. Rothbart (2004) defines

personality as the content of cognitions and attitudes concerning the self, others and the physical world. Personality could also be viewed as an ongoing compromise between numerous independently operating mental subsystems (Funder, 2001). Pervin and John (1997) define personality as “those characteristics of people that account for consistent patterns of feeling, thinking, and behaving” (p.4).

It seems as though behaviourist theorists hold two seemingly contradictory views on personality. On the one hand, behaviourists argue that personality must be measured and defined based on objective information and discernible facts. On the other hand, there are those behaviourists who hold that individuals' personality should include both objective and discernible facts in conjunction with private and subjective experiences (Liebert & Spiegler, 1997). Hergenhahn and Olson (1999) are of the opinion that personality theory has set goals: (a) to describe what humans are like (characteristic behaviour, cognitions, emotions); and (b) to explain why humans are like that (reasons for the behaviour, cognitions, emotions) in order to describe and explain both human nature and individual differences. Regardless of what definition is utilised in understanding personality, most theorists agree that personality includes hereditary, environmental and maturational contributions (Guarnaccia & Vane, 1989). Both the obvious differences and similarities between the different theorists' conceptualisations of what personality entails, makes research in this field of psychology both necessary and interesting.

It would be impossible to comprehend fully the concept and construct of personality without considering the concepts of character and temperament. Some literature uses the terms personality, character and temperament interchangeably. It is crucial to note that these terms are separate terms and should not be used interchangeably. Personality is the broadest of the three terms and encompasses the latter two (Meyer, Moore & Viljoen, 1997).

According to Meyer, Moore and Viljoen (1997) the term “character” has a narrower and more limited focus than the term “personality”. Character refers to only those aspects and components of the personality involving individuals' values, and their ability to behave in congruence with these values (Meyer, Moore & Viljoen, 1997). Therefore, character is a socially constructed term or construct that develops over time. It is a much more complex task to define the term “temperament”.

As is the case with “personality”, no single definition of “temperament” exists. There seems to be some disagreement as to what extent heritability plays a role in the development of temperament. According to Buss and Plomin (1984) temperament may be defined as traits that are developed from early childhood that have a biological basis. These traits are present and observable by the age of two years. Temperament is more enduring and is rooted in a biological basis. Temperament refers to individuals' emotions and the way in which they deal with these emotions (Meyer, Moore & Viljoen, 1997). It is thus clear that character and temperament play a vital role in the development of personality.

Despite differing views on the definitions of personality all personality theories are based on a particular view of the nature of mankind. Each different personality theory describes the composition of personality that allows the personality to function, the motivation behind behaviour and the development of personality (Jacobs, 2004).

#### Theoretical Framework for Understanding Personality

In order to attempt to understand personality one has to place the concept of personality into a specific theoretical framework. Personality is too complex in nature to study in totality. Despite obvious irreconcilable differences created through divisions, these divisions prompt and promote the study of personality (Larsen & Buss, 2005). According to Mischel et al.

(2004) personality theories or strategies can be put into six levels. These levels are the psychodynamic-motivational level, phenomenological level, behavioural-conditioning level, trait-dispositional level, social cognitive level, and the biological level. Larsen and Buss (2005) proposed six domains of knowledge regarding human behaviour that must be examined in order to provide an integrated approach or framework to understanding personality. These six domains of human behaviour impacting on personality include the intrapsychic domain, the cognitive-experimental domain, the dispositional domain, the social cultural domain, the biological domain, and the adjustment domain (Larsen & Buss, 2005).

Looking at the personality classifications proposed by Mischel et al. (2004) and Larsen and Buss (2005) it is evident that separate classifications for the psychodynamic, phenomenological, behavioural and dispositional approaches exist. These classifications were fundamental in the development of some of the earliest personality theories. The following section will examine the four most popular approaches to understanding personality, namely, the behavioural, phenomenological, dispositional and psychodynamic approaches.

### *Approaches to Understanding Personality*

Different theorists hold different opinions as to which aspects are crucial in personality development. Looking at modern day psychology, it is evident that there are many different approaches, which aim to depict and comprehend personality. Some approaches emphasise the importance of genetic factors while other approaches focus on the important role environmental influences play in personality development (Larsen & Buss, 2005). Another point of dispute centres around whether the personality is formed by the time the individual enters into adulthood or whether development is an ongoing process. Modern theories view personality development as an ongoing process that is both influenced by external and internal

determinants (Santrock, 2001). According to Hjelle and Ziegler (1992) external or environmental determinants include membership of a particular culture, socio-economic class, and family setting while internal determinants include genetic biological and physiological elements. Although no specific definition of personality has been agreed upon or accepted, each approach provides valuable insights into comprehending the construct of personality (Hurter, 2008). Liebert and Spiegler (1997) propose four conceptual approaches to formulate a definition of personality. These approaches include the psychodynamic approach, the phenomenological approach, the behavioural approach and the dispositional approach. The following sections will explore these approaches. The final section will outline Jung's approach based on personality types in some detail.

### *Behavioural Approach*

John B. Watson intended behavioural theory to end the popular belief that human behaviour was driven by instinct. He believed that except for a few basic emotions, behavioural patterns are learned through experience (Hergenhahn & Osmon, 1999). The broad behavioural approach may be divided into three more specific and specialised approaches. These approaches are: (a) radical behavioural approach, (b) social learning approach, and (c) cognitive-behavioural approach (Gauss, 2002). The radical behavioural approach focuses on overt behaviour that can be externally observed by others. In contrast, the social learning as well as cognitive-behavioural theoretical approaches focus on covert behaviour, which is more difficult to observe and describe (Corey, 2001). The underpinning principle of all behavioural approaches rests on the assumption that all behaviour develops and evolves largely through the process of learning as well as the individual's experience. Theorists that ascribe to this approach view human behaviour in terms of specific patterns that are characteristic of specific

individuals and that these patterns of behaviours are regulated by particular conditions (Mischel et al., 2004).

According to Mischel et al. (2004) theorists ascribing to the behavioural approach seek to comprehend specific patterns of behaviour that characterize individuals, as well as the circumstances that regulate these behaviours. Well-known theorists from the behavioural approach include John B. Watson, Burrhus F. Skinner and Albert Bandura (Meyer, Moore & Viljoen, 1997). Behavioural approaches hold that personality is both situation-specific and present-centred. The former implies that personality traits are highlighted by the specific situation in which the individuals find themselves. These situations thus govern individuals' responses to the situations. The latter implies that primarily learning influences individuals' personalities. This learning takes place in the present as opposed to past experiences (Liebert & Spiegler, 1997).

Often the usefulness of behavioural approaches are highlighted when a therapist seeks to employ brief, short-term, solution-focused techniques to assist individuals to change certain maladaptive personality characteristics that are evident in certain situations (Gauss, 2002). It is also practical in understanding how present experiences contribute to the development or suppression of desirable or undesirable characteristics (Liebert & Spiegler, 1997).

Despite the usefulness of the behavioural approaches, they have been criticised for being too simplistic, fragmented and deterministic in nature (Gauss, 2002). Behavioural approaches fail to account for how events and experiences of the past impact on personality development. In addition, the approaches were also criticised for their lack of consistency. As mentioned earlier behavioural approaches hold that personality is situation-specific. This assumption then implies that an individual's personality changes according to the situation

(Corey, 2001). In essence the critique highlights the fact that behavioural approaches lack emphasis on more stable and enduring personality traits, e.g., temperament (Liebert & Spiegler, 1997).

### *Phenomenological Approach*

Phenomenological approaches focus on the individuals' subjective perceptions and experiences, that is, the individuals' subjective observations; beliefs and experiences are the defining entities in the development of their personalities. Individuals' realities are thus subject to their perceptions of the self, environment and experiences and influence their behaviour (Möller, 1993). Well-known theorists who based their work on this approach to personality are Carl Rogers, Abraham Maslow, Gordon Allport, Victor Frankl, Henry Murray and George Kelly (Meyer, Moore & Viljoen, 1997). These theorists included the core assumptions of phenomenological theory in their approaches to personality. The above-mentioned theorists wanted to depict humans as individuals who are capable of much more than animalistic instinct that is driven by the unconscious (Meyer, Moore & Viljoen, 1997).

The most basic assumption on which these theories are based is that individuals are constantly evolving and developing as they move toward self-actualisation (Corey, 2001). Phenomenological approaches define personality as the holistic collection of thoughts, feelings and behaviour. These holistic collections are always actively and constantly evolving (Liebert & Spiegler, 1997). Phenomenological approaches also emphasise the fact that individuals are capable of influencing their development. Consequently, individuals can oppose and resist pressure and influence by the environment and circumstances. Personality is thus an ongoing process that continues far beyond childhood. Childhood experiences are thus not the only factors that shape childhood development (Louw, Van Ede & Louw, 1998).



Phenomenological approaches have made valuable contributions to the field of psychology. One of the most important contributions is that of recognising and acknowledging the unique needs of individuals. Firstly, it emphasises the fact that individuals have unique and specific needs, thoughts, feelings and behaviours that define their personalities. Secondly, phenomenological approaches also recognise individuals' capacity to grow and develop, irrespective of the degree of growth and development displayed by these individuals. Phenomenological approaches thus emphasise that no individual remains stagnant and stripped of development. Taking these two vital acknowledgements into consideration, it becomes clear that phenomenological approaches have the potential to be an empowering experience for the individuals (Gauss, 2002).

Corey (2001) outlined some of the limitations associated with phenomenological approaches. Firstly, phenomenological approaches lack objectivity as they place a great deal of emphasis on the individual's subjective reality. Thus, phenomenological approaches do not place enough emphasis on objective observations. Secondly, phenomenological theories were also criticised because they place far greater emphasis on what the individual might become (future oriented) rather than on whom the person has been (past) and who the person is now (present). There is thus very little emphasis on crucial personality traits that might have developed in early childhood (Corey, 2001; Liebert & Spiegler, 1997).

### *Dispositional Approaches*

In contrast to phenomenological approaches, dispositional approaches emphasise enduring, stable individual differences and traits. Furthermore, dispositional approaches seek to classify people according to psychological qualities, or traits. These psychological qualities or traits are either hereditary in nature or they develop over time.

According to Liebert and Spiegler (1997) dispositional approaches rest on three core assumptions. These assumptions about dispositions are that: (a) dispositions are fairly stable and enduring, and intrinsic to individuals; (b) dispositions have a level of consistency and generality; and (c) dispositions differ from individual to individual. The term “disposition” refers to an internal inclination to behave in a certain way (Larsen & Buss, 2005). Dispositional approaches focus on natural personality dispositions. These dispositions are believed to be relatively established and enduring within the individual (Gauss, 2002). The underpinning of dispositional approaches rest on the assumption that individuals are predisposed to behave in certain, predictable ways by the strength, amount and number of predispositions that they possess (Corey, 2001; Liebert & Spiegler, 1997). Dispositional theories that classify individuals according to personality traits or types are referred to as trait and type approaches (Briscore, 2002). This study incorporated the type approach to classify the participants into one of 16 different personality types proposed by Isabelle Myers and Catherine Briggs.

Dispositional theories received great criticism because they provide no adequate explanation for the causes of behaviour. They also fail to explain exactly how behavioural changes occur and originate (Liebert & Spiegler, 1997). Dispositional theories also overlook the role environmental factors play in the frequency of dispositions (Liebert & Spiegler, 1997).

Trait and type approaches to personality provide one framework for understanding the theoretical underpinning on which the MBTI® is based (Briggs Myers & McCaulley, 1992). This is not the only framework to understand the MBTI®. It is necessary to provide an explanation of especially type approaches as the MBTI® was the primary instrument utilised in this study.

The trait as well as the type approach focuses on personality predispositions that predispose individuals to behave in particular ways (Gauss, 2002). These two approaches differ greatly therefore a brief overview of trait approaches is necessary, as it will allow for a better understanding of the type approach to personality. McAdams (2006) defines traits as internal dispositions that are relatively stable over time and across situations. These traits are then also regarded as the basic building blocks of personality within dispositional theories (Larsen and Buss, 2005). McCrae and Costa (2003) portray traits as facets of individual disparities in tendencies to display consistent patterns of thoughts, feelings and actions. Traits are thus those unique cognitive, emotional and behavioural patterns that create diversity amongst individuals. Some traits may be used to describe all individuals, while others are unique to specific individuals.

In comparison, types are not specific categories that fit only specific individuals. Instead they are dimensions on which all individuals can be described in varying degrees (Johnson, 1997). Examining the types Introversion and Extraversion, an individual might display a greater degree of Introversion than Extroversion, but all individuals will fall somewhere on the Extroversion/Introversion continuum (Johnson, 1997). According to Starck (1999), types are usually normally distributed with individuals falling within the average range along the continuum. The normal distribution of types contradicts older and often outdated theories that considered types to be dichotomous. A particular individual was either Introverted or Extraverted (Bachtis, 1999; Starck, 1999).

Table 2.1 highlights important differences between trait theories as opposed to type theories.

Table 2.1

## Differences between Trait Based Theories and Type Based Theories

<b>TRAIT THEORIES</b>	<b>TYPE THEORIES</b>
All people possess all traits (universal qualities).  The only difference is the amount of each trait that individuals possess.	Qualitatively distinct categories exist; and individuals display a preference for one or the other personality type.
Measure the amount of each trait	Sorts individuals into one or the other category
Scores are variables that indicate the quantity of traits individuals possess	Scores are expected to be bi-modal  Scores are estimates of confidence in the accuracy of the sorting procedure
Assume that behaviour is caused by relevant underlying trait	Assume that behaviour is an expression of underlying type preference
Assume that traits are independent of each other	Assume that type preferences interact dynamically to form a whole that is different from the sum of its parts

Adapted from Quenk, 2000.

The MBTI®, the personality inventory utilised in the present study, measures different personality type preferences that are in turn clustered into 16 different personality types. These personality types are rooted in the work of Carl Jung who focused primarily on psychological type approaches (Francis, Craig & Robbins, 2007). In turn Jung's work (and the MBTI®) is

grounded in the psychodynamic approach which is discussed in greater detail in the next section.

### *Psychodynamic Approaches*

Psychodynamic approaches focus on intrapsychic events and explore motivations, conflicts and defence mechanisms (Sammons, 2009). Well-known theorists that based their work on these approaches are Sigmund Freud, Erik Erikson, Karen Horney and Harry Sullivan (Louw & Edwards, 1993). Psychodynamic approaches focus a great deal on past experiences and events and hold that the development of personality traits are influenced and shaped by childhood experiences (Corey, 2001; Liebert & Spiegler, 1997). Sammons (2009) hypothesized that psychodynamic theories primarily describe the inherent psychological processes that determine personality. Broad psychodynamic approaches can be classified into three more specific categories. Traditional Freudians emphasise and study the influence of childhood experiences on personality development. Ego psychologists shift their attention to personality development beyond the childhood sphere. Object relational psychologists focus on the exchange between interpersonal matters and the self (Gauss, 2002). The crux of psychodynamic approaches rests on the belief that unresolved material, originating from childhood experiences cause personality conflict (Corey, 2001). This conflict then needs to be resolved for adequate and appropriate personality development to take place.

Liebert and Spiegler (1997) and Sammons (2009) are of the opinion that personality is made up of three levels of awareness. These levels include (a) the unconscious; (b) the preconscious; and (c) the conscious. Furthermore, personality is viewed as having three basic, but conflicting functions (Liebert & Spiegler, 1997, Sammons, 2009). The first primitive function is called the id. Primarily, the id functions on the pleasure-seeking impulse and houses

the biological drives. These biological drives include sex, thirst, hunger and aggression (Sammons, 2009). The id demands immediate gratification of the individuals irrespective of the consequences (Liebert & Spiegler, 1997; Sammons, 2009). The ego functions as the rational self and orchestrates a fine balance between the pleasure demands of the id and the demands of reality and the moral limitations of the superego. The ego (mediator) operates according to the reality principle. It considers what is actually possible (Liebert & Spiegler, 1997; Sammons, 2009). The superego consists of all internalised societal values i.e. what is morally acceptable to the broader society and other individuals. This moral aspect of personality is what guides individuals to fulfil certain ideals (Gauss, 2002). The three aforementioned functions of personality are in constant conflict. An example of such conflict might be found in the following scenario. A student sitting in a lecture might experience a great urge to smoke. The id will demand that the student get up immediately, go outside and smoke. The superego will argue that it is disrespectful to leave the lecture hall in the middle of the lecture. The ego will mediate between the two extremes and argue that the lecturer normally allows for a 5-minute break during each lecture. Appropriate and adequate personality development thus depends greatly on the resolution of the conflict between the id, ego and superego.

Psychodynamic approaches have made various invaluable, crucial contributions to the field of psychotherapy. The greatest contribution is certainly the alternatives to understanding and addressing unconscious conflicts and defence mechanisms in the treatment of psychopathology and the resolution of childhood traumas (Gauss, 2002).

Despite the many contributions to the field of psychotherapy, the many limitations to psychodynamic approaches detract from its value. One such a limitation is that psychodynamic

approaches fail to recognise and incorporate the influence of societal dynamics as well as conscious and present experiences in the treatment of psychopathology. In addition psychodynamic approaches focus primarily on abnormal personality development as opposed to normal, adaptive and appropriate personality functioning and development (Corey, 2001). Future oriented theorists have also criticised psychodynamic approaches for the reason that the said approaches are deterministic in nature. Psychodynamic approaches thus fail to shift the focus beyond childhood experiences that might have influenced the personality development and ignore experiences that might have occurred later in life. Traditional psychodynamic approaches to personality assume that the development of personality is completed by the time individuals reach puberty and thus leaves no room for future development (Hook, Watts & Cockcroft, 2002).

Other critique against psychodynamic approaches mainly centres on the deterministic nature of the approach. Hergenhahn and Olson (1999) criticised psychodynamic approaches for being: (a) being internally inconsistent; (b) demonstrating male chauvinism; (c) overemphasising sexual motivation; (d) overemphasising unconscious motivation; (e) being too pessimistic about human nature; and (f) equating the ultimate state of happiness with the tension-free state that results when all of an individual's biological and physiological needs are satisfied.

These criticisms identified the need to expand on the initial psychodynamic approaches. Object relations theorists and ego-psychologists increased the scope of the psychodynamic approaches to accommodate supplementary dynamics that may contribute to human functioning such as societal dynamics, environmental milieus, conscience (present) life experiences (Meyer, Moore & Viljoen, 1997). Post-Freudian theorists made one particularly

major contribution to psychodynamic approaches when they included present-focused experiences in order to understand and explain normal personality development and functioning (Gauss, 2002). This suggested that personality development is not limited to childhood, but continues throughout the later stages of life.

A student of Sigmund Freud, Carl Jung, investigated, developed and broadened some of the terms and concepts initially used to describe and understand personality. Jung's exploration, development and expansion of Freud's theory led to the development of his theory of psychological types. This theory led to the development of the MBTI®. According to Myers and McCaulley (1985), the MBTI is one of the most popular and versatile personality measures. The next section will focus exclusively on Jung's theory of psychological types.

#### *Type approach*

Carl Jung, a Swiss psychiatrist, first introduced the type approach to personality development. According to Schuit (2003) Jung's approach to psychological types is one of the most widely used and popular approaches today. Jung (1923) theorized that what seems to be random variation in human behaviour is essentially quite orderly, logical, and consistent, and is the result of a few fundamental differences in mental functioning and attitude (Bess & Harvey, 2001). These noticeable differences affect what individuals perceive, as well as how they draw conclusions about those perceptions (Francis, Craig & Robbins, 2007). This approach developed from Jung's study of his own intrapsychic inconsistencies and conflicts as well as the manner in which his patients reacted differently in similar situations. Jung concluded that the differences in behaviour between people result from how they develop patterns of behaviour. Jung defined eight different patterns of normal behaviour, or types (Francis, Craig & Robbins, 2007). He started to categorise his patients into these eight possible patterns of



behaviour in order to explain individual differences. He explained these individual differences in terms of function and attitude. The four basic mental functions (processes) each represent a characteristic way of approaching experience and are considered to be the essence of Jung's personality theory (Francis, Craig & Robbins, 2007).

A core concept of type theory is rooted in the assumption that an individual's present personality is shaped and determined by his/her perception of the self. This perception includes who and what the individual has been (past) as well as his/her perception of who he/she aspires to become (Jung, 1990). The core assumption that grounds the type approach to personality is that individuals are inclined to progress towards the fulfilment or realisation of their abilities (Jung, 1990). Jung placed much emphasis on the individuals' ability to adapt to changing circumstances and the demands of their environment. He also emphasised that all individuals are unique and have characteristic processes in reaching decisions or making choices (Gauss, 2002).

According to Jung (1990) personality development is the result of opposing forces, which draw energy from the psyche. One of these forces then dominates the other, thus resulting in a more dominant personality type. An individual would thus be more Introverted than Extraverted and vice versa. The core characteristics of Jung's theory will be discussed in the following section.

Human behaviour is determined by eight different functions. All individuals possess all these functions, but to varying degrees. These functions are divided into judging (rational) and perceiving (irrational) functions. The judging functions, Thinking and Feeling, are opposites on the continuum. The perceiving functions, Sensing and Intuition, are also opposites on the continuum (Myers, 2000). These functions interact constantly with one function dominating

the other function. The dominating function manifests as conscious overt behaviour, which in turn influences personality type. The direct opposite of the dominant function is repressed and characterises unconscious functioning (Myers, 2000). An individual that employs the Intuition and Feeling functions will thus behave in congruence with these functions while the functions of Sensing and Thinking will be repressed. The repressed functions are much more difficult to assess as they are covert and related to the unconscious mind.

The above-mentioned functions are located in the storehouse of personality, the conscious mind. The conscious mind comprehends reality through the functions of Sensing, Intuition, Thinking or Feeling. The four basic mental functions (processes) each represent a characteristic way of approaching experience and are considered to be the essence of Jung's personality theory. Each of the four functions – Sensing/ Intuition, Thinking, and Feeling - involve individuals' orientation toward self and the environment through the use of perception and judgment (Myers, 2000).

Jung believed that in order for individuals to function well they must have a way to perceive a stimulus through Perceiving either through Sensing or Intuition and to make an adequate response by making a decision. Decision-making occurs by utilising Judgement through Thinking or Feeling (Francis, Craig & Robbins, 2007).

Perceiving refers to the different ways in which individuals become aware of things, people, events, or ideas in the environment and is divided into two opposing functions. The Sensing and Intuition functions are thus the characteristic ways in which individuals prefer to take in information about the world (Myers, 2000). Individuals who prefer to function on a sensing level display a preference to focus on concrete aspects of a situation by using one or more of the five senses. They focus their attention on present actualities and details (Gaffner &

Hazler, 2002). They value past experience and practicality (Myers, 2000). Alternately, individuals who prefer to function on an intuitive level will focus their attention on abstract ideas made through possibilities, meanings, and relationships associated with a concrete situation (Myers, 2000). They see the bigger picture and are innovative and creative (Gaffner & Hazler, 2002; Tan & Tiong, 1999).

Judgement refers to the ways in which individuals arrive at conclusions about that which has been perceived. This process includes decision-making, evaluation, and selection of an appropriate response to the information. Judgement is also divided into two opposing functions. The two Judgement functions are Thinking and Feeling. The thinking function describes the ways in which ideas are linked together through logical connections (Gaffner & Hazler, 2002). This type of decision-making process is analytical. Individuals who prefer to utilise the Thinking function are characterised as fair, reasonable and tough-minded and they display great integrity (Myers, 2000). Feeling, on the other hand, describes a rational act of evaluation using subjective values and relative merits of the issues (Myers, 2000). Individuals who prefer to utilise the Feeling function are empathic, compassionate, and tender-hearted and strive to maintain harmonious relationships with individuals in their lives (Myers, 2000 Gaffner & Hazler, 2002).

Despite the fact that the four functions operate as opposites, their value and use remain intact and complement each other. Jung outlined this complementary process as follows: “Sensation establishes what is actually present, thinking enables us to recognise (comprehend) its meaning, feeling tells its value and intuition points out the possibilities as to where it came from and where it is going in a given situation” (Spoto, 1995, p.48).

All four functions thus have a certain role to play in personality development process. The question is which one dominates. The dominating function is thus the superior function, that which individuals prefer and is best developed. Individuals' also develop a secondary function, which they are aware of and use as a support mechanism for their superior function. Individual's tertiary function is slightly less developed and conscious while the inferior function is poorly developed and individuals are unaware of this unconscious function.

The two attitude types, Extraversion and Introversion, depict how individuals prefer to connect with the environment and utilise the four basic mental functions (Myers, 2000). These attitudes are also called attitudes of consciousness and refer to the direction into which individuals direct their energy (Bilsker, 2002). These attitudes are in opposition with each other with one attitude always dominating while the other attitude is repressed.

Extraversion describes the actions of individuals who prefer an orientation to the outer world of people, places, and things. Extraverts are sociable, expressive and display a wide range of interests. They prefer to do and talk about things (Myers, 2000). Introversion describes a preferred orientation toward the inner world of thoughts, concepts, and ideas (Myers, 2000). Introverts reflect on their inner world and are reserved, contemplative and display a depth of interests (Myers, 2000). Introverts tend to spend more time alone than in the company of other people as they are prone to become tired and lose energy (Myers et al., 2003).

In the same manner that he viewed the functions, Jung (1923) viewed Extraversion and Introversion as complementary orientations toward life. Both attitudes play a role in personality development. Type theory assumes that individual, innate and distinctive characteristics already exists during childhood and continue to develop across the lifespan of

individuals as they aspire to reach their full potential and self-actualise (Gauss, 2002). Personality development is thus influenced by past, present and future dynamics.

According to the type approach, personality development is a life long process including both a repeated and consistent reaction (behaviour) in and decision-making style about any given situation individuals might experience. Both the behaviour and decision-making style is unique and adapted to life circumstances (Stevens, 2001). Coetzee, Martins, Basson and Muller (2005) is of the opinion that personality development commences at birth, continues during adulthood, midlife and even in late adulthood. The dominant function emerges early in life. The auxiliary function follows. The tertiary and inferior functions only emerge and are accessed during midlife and beyond (Myers et al., 2003).

Despite the emphasis on the uniqueness of individuals the type approach does not fail to recognise the role different innate and fundamental traits play in the classification of individuals into specific and different groups, that is, personality types. The type approach thus views personality as an intrinsic predisposition or inclination to behave in a particular way in a particular situation or circumstance. The mutual interaction between biology and environment may result in either a stifling or promoting influence on individuals' uniqueness (Corey, 2001; Jung, 1990; Liebert & Spiegler, 1997).

The personality types proposed by type theory are rooted in the combinations between the attitudes of Extraversion/Introversion (E/I) and the functions of Sensing/Intuition (S/N) and Thinking/Feeling (T/F). The combinations of these preferences account for the differences between individual personality types. This approach thus promotes the distinctive and unique ways in which individuals view and interact with the world (Francis, Craig & Robbins, 2007).

Jung's work had such an impact on the psychological community that many researchers have devoted time and energy into developing instruments to assess the psychological types proposed by Jung. One such an instrument was the MBTI®. Katherine Briggs and Isabelle Myers expanded on Jung's existing three dichotomies (E/I, S/N, T/F). They added a fourth dichotomy, the Judging/Perception (J/P) dichotomy. This dichotomy explores how individuals are oriented to the external world or life (Myers, 2000). Individuals who prefer to employ the Judgement attitude are organised, rational and structured (Myers, 2000; Tan & Tiong, 1999). Individuals who prefer to employ the Perceiving attitude are flexible, responsive, adaptable and open to change (Myers, 2000; Tan & Tiong, 1999). Sixteen different combinations of the four dichotomies exist and make up 16 distinct personality types (Francis, Craig & Robbins, 2007). The characteristics of the personality types relevant to the study will be provided in a subsequent chapter.

### Conclusion

In summation, this chapter focused on various definitions of personality and a definition of personology was explored. Different approaches to personality development were highlighted, as the term "personality" is broad and complex term. The chapter thus aimed to contextualise the term personality. The dispositional as well as the psychodynamic approach to personality was highlighted, as both are relevant to the study. Jung's approach to personality development, that is, the MBTI® was emphasised as the chosen measure for the study. Chapter three will focus on and explore the measure, the MBTI®, in detail. The chapter will provide a brief overview of the development of the MBTI®. It will also explore the psychometric properties, versatility, reliability and validity of the MBTI®.

## CHAPTER THREE

### PERSONALITY ASSESSMENT AND THE MYERS-BRIGGS TYPE INDICATOR

#### Chapter Preview

In order to meet the primary aim of the study which is to identify, describe and explore the personality preferences of a group of successfully selected psychology masters students and a group of prospective applicants consisting of honours and BPsych students at a higher education institution in South Africa, a personality measure was utilised. The measure selected was the Myers-Briggs Type Indicator (MBTI®). The present chapter will discuss the above-mentioned measure. A brief overview of the development of the MBTI® will be provided. The chapter will also explore the use of the MBTI® in the international arena as well as its utility within the South African context will be discussed. The chapter will conclude with a discussion of the distribution of personality types.

#### Brief Introduction to the MBTI®

Myers et al. (2003) proposed that type theory is an expansion of Jung's theory on which the work of Isabelle Myers and Katherine Briggs is based. Schuit (2003) suggests that the MBTI is the most popular and widely used personality assessment tool of its kind in the world (Schuit, 2003). The MBTI® is used in diverse domains ranging from education, career development, organizational behaviour, group functioning, team development, and leadership, counselling and psychotherapy (Schuit, 2003). One of the most important applications is to use the instrument to demonstrate how individuals of different personality types approach their work and problem solving in a different manner. These differences have the potential to significantly influence group functioning and teamwork. The measure was initially designed to simplify and explicate Carl Jung's complex theory on personality types (Francis, Craig &

Robbins, 2007). This measure is especially popular as it is suitable to use in non-psychiatric settings. The clinician can thus administer the MBTI® to individuals without focusing on pathology only. The MBTI® is used extensively both internationally (Schuit, 2003) and in South Africa (De Beer, 1997). The versatile nature of the MBTI® is clearly illustrated by the broad spectrum of human experience to which it was applied successfully over the past decades (Schuit, 2003).

The Myers-Briggs Type Indicator is a psychometric instrument designed to explore and describe individuals' personality preferences. This instrument succeeded in simplifying Jung's personality theory of type. The MBTI® thus allows individuals to comprehend the complex nature of Jungian theory. Individuals are thus able to apply the principles embedded in type theory to their everyday lives free of judgement and the notion that there is something wrong with their personality.

Jung's theory of psychological types assumes that what one considers as random behaviour is in fact orderly and consistent (Francis, Craig & Robbins, 2007). Jungian theory postulates that this seemingly random behaviour merely reflects the different ways in which individuals take in and process information and the ways in which they make decisions based on the processed information (Francis, Craig & Robbins, 2007). The MBTI® categorises individuals into groups of personality types based on their personality preferences (Francis, Craig & Robbins, 2007). According to Jungian theory disparity in human behaviour is not coincidental (Jung, 1979). Jung postulated that this disparity is rather the result of fundamental and discernible disparities in the ways individuals prefer to apply their minds to assemble and process information. The MBTI® can be used to determine and explore the personality



preferences of ordinary, healthy individuals from fourth year of high school, university learners and beyond (Myers et al., 2003).

The MBTI® has been translated into 43 languages which allows for extensive global use (Myers et al., 2003). Extensive research has been conducted utilising the MBTI®. In South Africa the measure's popularity has grown over the past two decades. Prior to 1993, before Jopie van Rooyen represented publishers and distributors of the MBTI®, very limited research was conducted in South Africa (Dugmore, 1989). A study by De Beer (1997) emphasised that there is no need to standardise the MBTI® for the South African context as the findings of research responses in the USA and South Africa were found to be similar. The number of studies conducted in South Africa increased greatly after 1993 (Gauss, 2002).

#### *Historical Overview*

The MBTI® is the result of the life work of Isabelle Myers and her mother Katherine Briggs. The measure was developed in the United States of America (Saunders, 1991). The initial stages of test development started during World War II. According to Ring (1998), the devastating aftermath of the war inclined Myers to develop an instrument that would not only promote understanding and harmony amongst individuals, but she also wanted to assist individuals in avoiding future disparaging conflicts. It is important to remember that when Briggs and Myers initiated the development of the MBTI® neither of them had ever undergone formal training in psychology (Ring, 1998).

Despite the fact that they had no knowledge of statistical methods or any financial assistance, Myers and Briggs set out to develop the MBTI®. Initially, they commenced to develop items to tap ordinary individuals' attitudes, perceptions, feelings and behaviours (Ring, 1998).

The research was all conducted in accordance with their knowledge and understanding of what personality entailed. The psychological theory underpinning their work was that of typology theory of personality first introduced by Jung. The first version of the MBTI® was published two decades after Myers and Briggs first ventured to develop the MBTI®. During this time Myers subjected the items to pragmatic testing, gathering an immense amount of data and altering test forms. In 1962 the first version of the MBTI Manual appeared (Myers, 1962). The manual was revised in 1985 (Myers & McCaulley, 1985) and again in 2003 (Myers et al., 2003).

Isabelle Myers set out to revolutionise the way in which psychology views individuals. She wanted to move away from the medical model to a more humanistic model. In essence the former model's focal point is that of pathology. In contrast to this, Isabelle Myers did not wish to focus on what was 'wrong' with people, but rather the MBTI® was designed to focus on what was 'right' with people. She wished to preserve the fundamental nature of the MBTI® and wanted to avoid producing yet another conformist mould of clinical personality measures (McCaulley, 1998).

### *Brief Overview of Underlying Theory*

The MBTI is a psychometric instrument designed to sort people into groups of personality type preferences. Jungian theory posits that discrepancies in human behaviour are not the result of chance, but rather the result of basic and observable differences in the ways people prefer to apply their minds to assemble and process information (Jung, 1971).

Human behaviour is determined by eight different functions. All individuals possess all these functions, but to varying degrees. These functions are divided into judging (rational) and perceiving (irrational) functions. The judging functions, Thinking and Feeling, are opposites on

the continuum. The perceiving functions, Sensing and Intuition, are also opposites on the continuum (Myers, 2000).

Judgment entails a decision-making process and allows for a means to come to conclusions about how to approach and process the available information. Decisions are made by utilising either the Thinking or Feeling function. Perceiving entails an information gathering process. Sensing perception employs the physical senses of seeing, hearing, tasting, touching, and smelling. In contrast, Intuition is perceived through an intangible, usually unconscious process, sometimes called the "sixth" sense. These two perceptions are measured on the MBTI®'s SN index.

Decision-making involving Thinking judgment allows for an objective and impersonal process, based on laws, ideology, and factual information. Thinkers are analytical, practical, precise and logical (Feist & Feist, 2002) In contrast, Feeling judgement allows for a decision-making process that is subjective and personal, based on relationships and values. These values might be one's own values and/or societal values. The Thinking/Feeling index reflects Judgment preferences (Myers, 2000).

Two other indices deal with orientation and attitude (Myers, 2000). The E/I index describes the Extraversion and Introversion dichotomies. Extraversion centres around an orientation toward the outer world, focusing on people and things. Individuals scoring high on Extraversion will thus draw their energy from people and activities. In contrast, Introversion centres on an orientation toward the inner world of concepts and ideas. Individuals scoring high on Introversion thus draw their energy from an inner world of ideas and concepts (Myers, 2000).

Myers expanded on Jung's theory by adding a Judgement/Perception index to the original indices to describe the process used primarily in dealing with the outer world, the extraverted part of life. This index thus focuses on the individuals' perception of and approach to the world around them. An individual could either display a preference for Judgement or Perception for dealing with their outer world. The Judgement process utilises either Thinking or Feeling. The Perception process utilises either Sensing or Intuition (McCaulley, 1998).

All four indices are dichotomous. People thus tend to develop one preference on the scale at the expense of the other (Ring, 1998). Individuals however do not forsake the other attitude or function on the dichotomy completely. They thus use particular attitudes and functions more readily and regularly, depending on the situation. An MBTI® result consists of a four-letter code, such as INFP (Introverted Intuition Feeling Perception), to indicate the personality type of the individual (Myers et al., 2003). All possible combinations yield sixteen personality types, each with a unique descriptive profile of characteristic behavioural patterns. This profile is the result of the dynamic interaction of the individual processes.

It is important to note that all individuals utilise all of the type preferences and processes at different times, and each is appropriate in particular situations. However, individuals' innate preferences will mostly determine which are most frequently used and which will, therefore, be best developed. This gives rise to infinite variation, even among individuals of the same type (Myers, 1980; Myers, 1995; Myers & McCaulley, 1985; Myers et al., 2003). The MBTI manual (Myers et al., 2003) gives an extensive overview of the underlying theory and type dynamics according to Myers' life-long observations integrated with her understanding of Jungian typology. In addition, her book (Myers, 1980), written for

the general populace, discusses type development. Optimum use of the instrument requires a thorough understanding of these by the person who will interpret the results.

### Personality Type Preference Distributions

#### *South African Personality Type Preference Distribution*

For decades the MBTI® has been utilised to establish globally the personality type preference distribution patterns of diverse cultural, age and gender groups (Arnau, Gleaves, Green, Melancon & Rosen, 2003). The MBTI® has been used successfully in South Africa, one of the most diverse countries in the world in terms of race and language (De Beer, 1997; Lewis, 1997). De Beer (1997) compiled a database of personality type profiles of 6452 South African participants. The South African sample consisted of both males and females of varying ages from diverse cultural backgrounds and occupations. The majority of participants were white (78%) and male (61%). The majority of the sample (75%) was employed and 28% of the participants were between 30-39 years of age. This database provided the personality type distributions of the South African sample. This allowed for a comparison of the South African personality type preference distribution with international personality type profiles.

De Beer (1997) found that the most common personality preference was ESTJ (23%), followed by ISTJ (20%). All the other personality type preferences were all below 10%, with the lowest being ISFP (2%) and ESFP (2%). A more recently conducted study by Taylor and Yiannakis (2007) on behalf of the South African MBTI® distributors, Jopie van Rooyen and Partners, yielded similar results. The sample of the study consisted of 648 psychologists and psychometrists. The psychologists who participated in the study conducted by Taylor and Yiannakis were mainly industrial psychologists, thus practicing in a different context and working environment than Clinical and Counselling psychologists. Despite a decrease in

preference, ESTJ (21%) was still the most common personality type preference amongst the 1538 participants. Results of the study emulated De Beer's (1997) findings, as ISTJ (20%) was still the second most common personality type preference. The most significant difference is found when one looks at the least preferred personality type preference. The research study found the least preferred personality type preference to be INFJ (2%) (Taylor & Yiannakis, 2007).

The study conducted by De Beer (1997) also examined the differences within the four dichotomies. This study yielded that 54% of participants preferred Extraversion while 46 % of participants preferred Introversion (De Beer, 1997). The study by Taylor and Yiannakis (2007) yielded results indicating that 55% of participants preferred the Extraversion attitude while 45% of participants preferred Introversion. Previously, 65% of participants preferred the Sensing function and 35% preferred Intuition (De Beer, 1997). The study also found 68% of participants to prefer the Sensing function and only 32% preferred Intuition. In 1997, 75% of participants preferred the Thinking function while 25% of participants preferred Feeling (De Beer, 1997). A decade later 72% of participants preferred Thinking while 28% preferred Feeling (Taylor & Yiannakis, 2007). De Beer (1997) found that 74% of participants preferred the Judging attitude and that 26% of participants preferred Perceiving. There seems to be a significant change within this dichotomy. The study conducted by Taylor and Yiannakis (2007) found that 65% of participants to preferred the Judging attitude while 35% preferred the Perceiving attitude indicating a change in previous trends. Both of the afore-mentioned studies indicated that the majority of South Africans have a strong preference for Thinking and Judging, implying that they prefer to function using logic, rules and structure. Furthermore,

they have a preference for social activities (Extraversion) and prefer to gathering information utilising their five senses (Sensing).

Taylor and Yiannakis (2007) conducted a study examining the personality type preferences of training course delegates who attended a training course on the MBTI® instrument. The sample consisted of 648 psychologists and psychometrists. It should be noted that the participants were professionals from various corporate settings and practitioners in private practice. It is thus important to note that the participants could be expected to show a high degree of self-awareness that could influence their responses to the MBTI® items. Furthermore, despite some similarities between the sample from the present study and the sample from the study by Taylor and Yiannakis (2007), important differences should be taken into account when comparing the results of the two samples. Participants had some psychological training and sophistication, but the degree and extent of their training and psychological sophistication differed. The participants from the sample of the present study were still in training while the participants from the previous study had completed their training.

#### *South African Personality Type Preference Distribution Compared to International Trends*

Previously researchers hypothesized that personality type distribution data in South Africa (SA) will yield similar results found in the United Kingdom (UK) and United States of America (USA) as English is widely spoken (De Beer, 1997). In order to test this hypothesis, the Center for Psychological Preference Inc. released data on a USA sample consisting of 1502 participants. This data was utilised to explore the differences of personality type preferences across the two samples (USA and SA) (Taylor & Yiannakis,

2007). This comparative study revealed some differences between the SA and USA samples in terms of personality type preference (Taylor & Yiannakis, 2007). Previously De Beer (1997) found that South Africans were more Extraverted and had a higher preference for Thinking and Judging. Previously conducted studies indicated similar results on the Extraversion and Introversion dichotomy when the South African sample was compared to UK, USA and German samples that were similar in terms of age and gender distribution (Taylor & Yiannakis, 2007). South African Sensing, Thinking and Judging personality type preference distributions were different to those of the UK, USA and German samples. Table 3.1, which has been adapted from Taylor and Yiannakis (2007), summarises the results of four separate studies conducted analysing data obtained from samples originating from SA, UK, USA and Germany. The percentage of each personality type preference distribution within the UK, USA and German samples are slightly different from that of the SA sample. This is depicted in the table below which has been adapted from Taylor and Yiannakis (2007)



Table 3.1.

Personality Type Preference Distributions of Four Countries <sup>1</sup>

## Applications of the MBTI®

Percentage of each type								
GROUP	E	I	S	N	T	F	J	P
South Africa <sup>2</sup>	54	46	65	35	75	25	74	26
UK general population <sup>3</sup>	53	47	76	24	46	54	58	42
US general population <sup>4</sup>	49	51	73	27	40	60	54	46
German general population <sup>5</sup>	51	49	54	46	68	32	54	46

Gauss (2002) conducted a study on the personality, learning styles and academic performance of 91 third year psychology students at a South African institution for higher education. The most common personality type amongst the participants was found to be ESTJ (14%). De Beer (1997) found similar results, as the STJ personality type preferences are representative of the South African population. ESTJ and ISTJ personality type preferences were amongst the most common types in the South African sample (De Beer, 1997). Gauss (2002) further determined that the ISFJ and ISTJ personality types were equally represented (11%) in the sample of 91 third year psychology students. Furthermore, the ENFP type was the third most common personality type preference amongst the participants (Gauss, 2002). This reflected international trends. Hammer (1993) found that the ENFP type is most commonly

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<sup>1</sup> General population of SA, UK, US and Germany personality type preference distribution are compared

<sup>2</sup> De Beer (1997): N = 6452

<sup>3</sup> Kendall (1998): N = 1634

<sup>4</sup> Myers, McCaulley, Quenk, & Hammer (1998): N = 3009

<sup>5</sup> Deakin (2006): N = 228

associated with counsellors and individuals who enter into fields of study focussing on the humanities internationally. The fact that the ESFP, ISFP and ISTP personality preference types were the most infrequent and least preferred personality types in Gauss' (2002) study emulates previous South African trends identified by De Beer (1997). De Beer found the ISFP personality type preference to be the most infrequent and least preferred type within the South African sample. However, the study conducted by De Beer predominantly consisted of white South African males. These results should therefore be viewed in the context (economy and employment practices) of the time during which the study was conducted.

Gauss (2002) also found that 53% of the participants were Extraverted while 47% were Introverted. This small difference on the Extraversion and Introversion dichotomy indicates a fairly even distribution between extroverts and introverts. Both South African and international studies yield similar results (De Beer, 1997; Martin, 1996, Myers & McCaulley, 1992). Results also indicated a higher incidence of the Sensing function (56%) than the Intuition function amongst the 91 participants (44%) (Gauss, 2002). Both South African and international studies support these results that indicated a dominant Sensing personality type preference (Martin, 1996; McCaulley & Natter, 1980). Furthermore, results indicated that 52% of participants preferred to employ the Thinking function in relation to 48% of participants who preferred to employ the Feeling function, indicating a fairly even distribution of thinking and feeling types (Gauss, 2002). A study by De Beer (1997) contradicts these results. According to this study, the vast majority (75%) of South Africans prefer to employ the Thinking function while only 25% of South Africans prefer to employ the Feeling function (De Beer, 1997). A study conducted by Martin (1996) yielded similar results to that of the study conducted by De Beer (1997). Gauss (2002) also found that 64% of the participants preferred to employ the Judging

personality type preference in relation to the 36% of participants who preferred to employ the Perception function. South African and international studies have found that the majority of individuals indicated a strong preference for the Judging function over the Perception function (De Beer, 1997; Martin, 1996).

### Application of the MBTI®

The MBTI® is one of the most popular and widely used personality measures today. The following section will examine the versatile nature of the MBTI®. Each subsection will examine both international and South African applications of the measure.

#### *Counselling and Psychotherapy*

The MBTI® instrument measures normal personality and does not focus on and indicate pathology (Briggs Myers & McCaulley, 1992). It is a useful instrument to assist in the process of personal and interpersonal development. This makes the MBTI® especially useful in individual and couples counselling as well as group counselling (Corey, 2001). A research review examining the use of the MBTI® in counselling and psychotherapy in community based treatment settings found that the MBTI® to be the fourth most frequently used standardised measure used by counsellors (Quenk & Quenk, 1986). According to Quenk and Quenk the most frequently used standardised measures were found to be the Minnesota Multiphasic Personality Inventory (MMPI), Strong Interest Inventory, and Wechsler Adult Intelligence Scale (WAIS-R).

Briggs Myers and McCaulley (1992) highlight that one crucial benefit of using the MBTI® in the counselling process is the shift in focus away from right or wrong personality types to the uniqueness and individual personality type of clients. Furthermore, the MBTI® allows for building a good relationship between clients and therapists as well as adjusting

therapeutic techniques and activities to accommodate the client's personality type (Briggs Myers & McCaulley; 1992).

### *Counselling and Career Counselling*

The MBTI® has been used extensively to gather crucial data regarding occupational choice and personality type (Ring, 1998). This data was used to develop statistics that have been compiled into lists of occupations and the types represented (Myers & McCaulley, 1985). These lists of occupations and the corresponding personality types were coded to correlate with the Dictionary of Occupational Titles (1991), thus making the enormous amount of career-related information of the United States of America Department of Labour relevant to personality types. Hammer (1996) found the MBTI® to be among the three most widely used instruments in American college career counselling settings, along with the Strong Interest Inventory and Holland's Self-Directed Search.

The MBTI® has been applied successfully when counselling individuals and couples (Becvar & Becvar, 1996) as well as in a group context (Corey, 2001). The benefit of utilising the MBTI® in the counselling process is the shift toward exploring individuals' uniqueness as opposed to labelling personality types as desirable or acceptable (right) or unacceptable (wrong) (Briggs Myers & McCaulley, 1992). The MBTI® also enhances the therapeutic relationship as it allows the therapist to adjust therapeutic techniques to suite the client's personality type (Briggs Myers & McCaulley, 1992).

Deller (1997) emphasised the usefulness of the MBTI® when engaged in career counselling. Results of Deller's (1997) study indicated greater career satisfaction where the personality type of the individual matched the demands and characteristics of their career. The above-mentioned results were obtained by assessing 500 school leavers that had applied at the

largest tertiary education provider in South Africa. The racially mixed sample attending a career guidance workshop (Deller, 1997). Results identified three dominant personality types, ESFJ (19%) followed by ESFP (16%) and ESTJ (14%) (Deller, 1997). The bulk of participants (60%) of the participants displayed an ES preference that is indicative of practical realists, a common trait associated with businessmen.

Hinckley (1996) found the MBTI® to be useful in the South African context when utilised as part of marriage enrichment programmes. An understanding of one's spouse's personality type enhances communication, conflict resolution and general marital satisfaction (Hinckley, 1996).

### *Education*

The MBTI® has been utilised successfully in an educational context at the primary, secondary and tertiary levels (Briggs Myers & McCaulley, 1992). In accordance with the person-environment fit theory proposed by Holland (1962), Myers and McCaulley (1985) propose the matching hypothesis. The matching hypothesis proposed that a good fit between individuals' characteristics and the characteristics of their occupational environment result in higher job satisfaction, productivity, creativity as well as personal and vocational stability (Briggs Myers & McCaulley, 1992; Holland, 1997). Myers (1993) found that individuals are inclined to seek out and choose fields of study and ultimately, occupations and careers that match their individual personality types. Career decision-making is thus facilitated and stimulated during the career counselling process by utilising the MBTI® (Hirsch & Kummerow, 1989; Myers & McCaulley, 1985).

The MBTI® allows individuals to identify their personality types and then match these personality types to compatible fields of study, occupations and careers. DiTiberio and

Hammer (1996) explored the person-environment fit theory introduced by Myers (1993) by researching which occupations appealed to which particular personality type. A study conducted by DiTiberio and Hammer (1996) yielded interesting results regarding the match hypothesis. These findings are briefly summarised in Table 3.2 (p. 51).

According to these results individuals who score high on the Feeling and Intuition functions are likely to gravitate toward careers in the fields of the behavioural sciences, counselling, journalism, writing and education (DiTiberio & Hammer, 1996). These careers are predominantly focussed on providing a service to others. The afore-mentioned careers in essence contribute to the development, enhancement and growth of individuals both professionally and personally. Deller (1997) found that individuals who prefer to employ Intuition and Feeling functions (NF) find fields of study, occupations and careers that allow for creativity and meaningful service to others appealing.

Table 3.2  
Personality Type Compatible Fields of Study

<b>Sensing/Thinking</b>	<b>Sensing/Feeling</b>
Management/ Business	Health Care
Accounting/ Banking	Teaching
Law	Religious Service
Engineering	Administration
Skilled trade	Community Service
<b>Intuition/Feeling</b>	<b>Intuition/Thinking</b>
Counselling	Law
Writing/ Journalism	Physical Science
Behavioural Sciences	Computers
Education	Management
Art/Music	Research

Adapted from DiTiberio & Hammer, 1996.

The Centre for the Application of Psychological Type (CAPT) devotes much time to researching topics related to the use of the MBTI®. Research done by CAPT has yielded similar results to those obtained by DiTiberio & Hammer (1996). Both the study conducted by DiTiberio & Hammer (1996) and CAPT are similar to South African trends (Coetzee, 1997). Coetzee (1997) found that South African trends in occupational choices of particular personality types correlate positively with international trends.

According to Coetzee (1997) individuals preferring to employ practical, thinking functions (ST) gravitate to occupations that provide opportunities for the application of logical theory in a practical environment such as law and engineering. South African samples consisting of students in a business school, managers and engineering students were found to display the ST preference (Coetzee, 1997; Conradie, 1996; DiTiberio & Hammer, 1996; Ritz, 1992).

De Beer (1997) found the ST preference to be the most common preference within the South African population. This implied a national preference for skilled trade and business related fields of study, occupations and careers (De Beer, 1997). DiTiberio and Hammer (1996) found that individuals who score high on the Sensing and Thinking functions are expected to gravitate towards occupations in the fields of business management, accounting, law, engineering and skilled trade (See Table 3.2, p. 50).

Individuals who preferred to employ the Sensing and Feeling functions, that is, practical, feeling types (SF), find fields of study, occupations and careers that provided opportunities for physical involvement and practical application incorporating a more personal and meaningful component appealing, for example, teaching (De Beer, 1997). De Beer's (1997) results are similar to those of DiTiberio and Hammer (1996) who also found that individuals who score high on the Sensing and Feeling functions prefer are likely to choose occupations in religion, health care, teaching and community service (See Table 3.2, p. 50).

Individuals who prefer to employ Intuition and Thinking functions (NT) find fields of study, occupations and careers that require innovation and creativity, but also logical thought processes appealing (Deller, 1997). The results in Table 3.2 indicate similar trends. DiTiberio and Hammer (1996) found that individuals who score high on the Intuition and Thinking



functions gravitate toward careers in law, physical sciences, information technology and research.

### *Business*

The MBTI® has been employed in the business sector to investigate a number of business related areas such as the personality type preferences associated with team functioning, different managerial styles and effective conflict resolution. This section will focus on these particular applications of the MBTI®.

Teams are an integral part of most organizational environments. The fundamental assumption is that the multiplicity of resources intrinsic in a team of individuals will enhance the effective resolution of organizational problems (Hammer & Huszczo, 1998). The publication of team building materials and training programme by Hirsh (1985) which supplied tools for employing personality type preferences made the MBTI® a popular tool with organizational development consultants. In using the MBTI®, it is assumed that an understanding of individual differences will facilitate teams to identify the individual skills and abilities of each team member (Ring, 1998). This understanding of individual differences and abilities will reduce conflict.

South African studies on business teams yielded varying results. Verster (1993) found no significant difference in team functioning on completion of the MBTI®. Contrary to the aforementioned study, both O'Brain (1996) and Van Rooyen (1997) found that an increased awareness of own and others' personality type preferences increased the effectiveness of team functioning. Once identified, individual team members' strengths and potential areas for growth can be accommodated in the team thus resulting in better team functioning (O'Brian, 1996; Van Rooyen, 1997).

## Conclusion

This chapter provided a brief introduction to the MBTI® as a personality measure as well as a historical overview of the development of the MBTI®. South African and international personality type preference distributions were discussed. The chapter concluded with an overview of the utility of the MBTI® in various contexts. The following chapter will outline the research methodology for the study.

## CHAPTER FOUR

### RESEARCH DESIGN AND METHODOLOGY

#### Chapter Preview

This chapter provides an overview of the research design and methodology employed in the present study. The primary aims of the study are also outlined. The chapter contains a description of the research method and sampling procedures. A description of the measure employed and its psychometric properties will be provided, followed by a section focusing on the research procedure and some vital ethical considerations. The chapter concludes with an explanation of the data analysis methods utilized in this study.

#### The Primary Aims of the Research

The primary aim of the study is to identify, explore and describe the personality type preferences of a group of successfully selected applicants in a psychology masters and a group of prospective applicants consisting of honours and BPsych students at a Higher Education Institution in South Africa. The personality type preferences will be identified by utilising the Myers-Briggs Type Indicator® (MBTI). More specifically the study will aim to:

1. Identify, explore and describe the personality preferences of a group of successfully selected masters students.
2. Identify, explore and describe the personality preferences of a group of prospective masters degree applicants.

#### Method

Considering that the research depended upon the scores obtained on the MBTI®, a quantitative research design and method was employed. According to Cormack (1991) quantitative research is a formal, methodical process that utilizes numerical data in an attempt

to acquire information about the world. Considering the aims of the study, qualitative research methods were deemed inappropriate. In contrast to qualitative research methods that focus on data that is primarily verbal in nature, quantitative research methods focus on data that is primarily numerical in nature. The ways in which the quantitative data is analysed and summarised also differ from the ways in which qualitative data is analysed and summarised. Quantitative research results are presented as statistical summaries and analysis.

Advantages to quantitative research are twofold. Firstly, quantitative research methods are more objective and enable the researcher to remain detached. Secondly, the results obtained by means of quantitative research methods can be generalized to the general population. Quantitative research methods can either be experimental or descriptive in nature (Hopkins, 2008). The present study aims to describe the personality type profiles of the participating sample.

Experimental research studies usually deduce causal relationships by manipulating an independent variable across different situations (Hopkins, 2008). Experimental research methods are however time consuming, expensive and complicated to administer (Malhotra, 1999). Contrary to experimental research methods, descriptive research methods do not attempt to change behaviour or manipulate conditions. It simply provides a description of a given set of data. An exploratory descriptive design was utilised in this study.

According to Struwig and Stead (2001), descriptive research endeavours to provide a complete, holistic and exact description of a situation or phenomenon. This is the first step in research as it lays the groundwork for similar future research studies (Hopkins, 2008). This particular research study is descriptive in nature as it endeavours to describe the personality preferences of a group of successfully selected psychology masters students as well as the

personality preferences of a group of prospective applicants. Descriptive studies are structured and focus on a few dimensions of a well-defined entity, measuring these dimensions precisely and systematically (Singelton, Straits & Straits, 1993). The study endeavoured to do this by measuring specific personality preferences of successfully selected psychology masters students and a group of prospective applicants consisting of honours and BPsych students (well-defined entity) utilising a structured personality measure, the MBTI®.

Descriptive research designs utilise a multiplicity of techniques to gather information including surveys, observations, case studies, and archival data (Cozby, 1993). This study utilised the survey research technique as the researcher approached prospective participants. The prospective participants were then required to complete both a biographical questionnaire and a paper-and-pencil measure (MBTI®).

Descriptive research that employs the survey technique as a means of data collection has a number of advantages. Firstly, summarising and describing a relatively large set of data aids in saving both time and money. This type of research method is cost effective and less time consuming, and enhances the quality of information obtained (Babbie, 1990; Kerlinger, 1986). Secondly, researcher bias is reduced and the results have greater generalizability. Thirdly, the coding, analysis, and interpretation of data collected through a survey technique are also relatively simple.

According to Neuman (2006), three major disadvantages to utilising this method of data collection had to be considered. Firstly, a possible increase in the likelihood of misunderstood items was likely to occur. Secondly, incomplete responses could compromise the validity of the study. Lastly, the unpredictability of response rates could have been a threat to the accuracy of the study. In order to counteract these disadvantages the researcher was

available to the participants to explain misunderstood items and participants were urged to answer all questions.

This study was also exploratory in nature. The exploratory approach to research is employed when little is known about the population or field of study, with the purpose of exploring and gathering data and identifying patterns in order to build a foundation for further research ideas (Cozby, 1993). Primarily exploratory research attempts advance insight into and increase understanding of a specific problem at hand (McKinnon, 2003). The primary aim of this study was to explore the personality preferences of a group of successfully selected applicants in a psychology masters programme as well as the personality preferences of a group of prospective applicants consisting of a group of honours and BPsych students. The researcher thus endeavoured to explore the possibility of the existence of a specific personality type amongst masters degree students and prospective masters students.

#### Participants and Sampling Procedures

The sample of interest for the study consisted of various groups of psychology students at a Higher Education Institution in South Africa. Firstly, a group of masters students, both psychologists-in-training and interns was identified as possible participants. Secondly, a group of honours students was identified as possible participants. Finally, a group of fourth year BPsych students was identified to participate in the study. In the case of the psychology masters group, participants from both the Clinical and Counselling Psychology streams were included in the study. As the masters programme constitutes the last academic phase towards becoming a psychologist in South Africa, the participants from the masters group will provide an indication of the personality type preferences entering the field of mental health as Psychologists. Considering the fact that Registered Counsellors are also permitted to work in

certain mental health settings, the inclusion of this group of students will also provide insight into the personality type preferences entering the field of mental health as Registered Counsellors. Another reason for including this sample in the study is rooted in the complicated and selective nature of the selection procedures at this level of higher education.

The Myers-Briggs Type Indicator® (MBTI) was utilised as the measure to assess the participants' personality preferences. This allowed for a comparison of the personality preferences of the participants. By administering the measure to all participants, the researcher was able to derive a clearer picture of the personality preferences of young professionals in training in the field of psychology, irrespective of whether they aspire to continue with their studies beyond a fourth year level or not.

Knowledge of individuals' psychological type preferences can have far-reaching implications for factors such as career satisfaction, and stress related to inadequate career decisions (Houghton, 2007). Research has demonstrated that career choice, as well as success and satisfaction with one's chosen career, is often consistent with and directly linked to personality characteristics (Plessman, 1985; Vogt & Holder, 1988) and this forms an important and integral part of this study. Nikolaou (2003) emphasised this by highlighting the fact that work performance is often influenced by individuals' personality preferences. It is this knowledge about individuals' personality preferences and the consequent impact on their professional development that might assist the participating students to make more informed and sound career decisions, such as whether or not to apply for entrance into a masters psychology programme or to apply for entrance into the Clinical or Counselling training stream. Berings, Fruyt and Bouwen (2004) argue that attention to individual to personality differences

A motivating factor for including these three groups in the study is rooted in the additional information that the MBTI® may provide about both the successfully selected group of applicants as well as prospective applicants. Administering the MBTI® to successfully selected applicants serves two purposes. Firstly, it allows for generating a profile of young professionals in training in psychology. Secondly, it will provide the data with which to compare the personality preferences of the honours and BPsych students, thus exploring the similarities and differences in the personality preferences of the three participating groups.

Recently there has been much debate as to whether or not to separate the different streams of psychology while students are in training. Interpreting the MBTI® scores provides a picture of possible strengths and potential areas of growth/development for both the successful and prospective applicants. Not only does the MBTI® provide information on the applicants' personality preferences, it also allows for a way to assess which stream of training will suit individual applicants best, that is, Clinical or Counselling psychology in the case of prospective applicants.

In contrast to the conventional personality assessment measures currently employed in the selection procedures in the psychology masters programmes, the MBTI® is less time consuming and thus more cost effective. The time and cost effective MBTI® consisting of 94 questions, could be administered to applicants as an alternative to the invasive and threatening MMPI consisting of 567 questions and the NEO PI-R consisting of 240 questions. The MBTI® does not focus on psychopathology, but rather on individual personality preferences. The MBTI® is thus less threatening to individuals.

The group of honours and BPsych students included in the present study was part of the 2009 honours and BPsych groups. The psychologists-in-training commenced their studies in



2009 while the interns commenced their studies in 2008. The sample consisted of 44 participants. The sample was extracted by visiting the respective classes. The researcher then introduced the study and research aims to prospective participants. Prospective applicants were then given the opportunity to participate in the study. The only inclusion criterion was that participants must be enrolled in the psychology masters or honours or BPsych degrees. Therefore there were no exclusion criteria. All students meeting this criterion were allowed to participate in the study. A very important requirement was that they at least speak English as a second language to complete the questionnaires.

Non-probability convenience sampling was employed in this study. This form of sampling does not make it possible to specify the probability that any specific person will be included in the sample (Robson, 2002). Thus, a certain degree of risk of skewed results existed, as the researcher had no way to guarantee that the sample was truly representative of the population (Struwig & Stead, 2001). Convenience sampling yields a sample purely based on the basis of availability (Struwig & Stead, 2001). Robson (2002) emphasised the disadvantage of this method. Convenience sampling does not allow for statistical generalization to any population beyond the sample being approached. The results of this study therefore are thus applicable only to the approached sample and cannot be generalized (Malhotra, 1999).

Since convenience sampling relies on the convenient accessibility and proximity of the intended sample to the researcher some disadvantages have to be acknowledged. Castillo (2009) listed some disadvantages related to this type of sampling procedure. Firstly, sampling bias results in the sample not being representative of the whole population. Secondly, systematic bias results from sampling bias and refers to a continuous difference between the results from the sample and the theoretical results from the whole population. It is quite

common for the results for a study that employed a convenience sample to differ significantly from the results from the whole population (Castillo, 2009). Skewed results could thus be possible outcome when employing convenience sampling. Thirdly, the results cannot be generalized to the whole population thus limiting the inferences made about a sample and population. The sample is not representative of the whole population and thus the results of the study cannot be generalized to the whole population. Fourthly, there is no method to guarantee that the participants will be equally presented since the sample will only include those participants who were willing to make themselves available for the study (Castillo, 2009).

Convenience sampling does however hold certain advantages. One such an advantage of this sampling method lies in the fact that it saves time and reduces costs. Also, no list of the population is required (Struwig & Stead, 2001). Malhotra (1999) postulated that convenience samples could be used in exploratory research studies to produce new ideas, insights and hypotheses. This advantage to employing convenience sampling added to its appeal as this study was primarily exploratory in nature. Generalizing the results was thus not of key importance.

In summary, the sample consisted of 44 participants affiliated to a Higher Education Institution in South Africa. Of the 44 participants, 11 were psychology honours students, 9 were BPsych students, 15 were psychologists-in-training and 9 were psychology interns. The sample was obtained through convenience sampling. The participants will be described in greater detail in the next section of the chapter.

### *Biographical Description of Participants*

In order to provide a clear, holistic and concise picture of the sample, a number of variables were identified and included in the biographical questionnaire. The variables reported on

and relating to the biographical characteristics of the total sample included, gender, age, home language, ethnicity, nationality, marital status, degree and intention to further studies.

### *Gender*

Both males and female participants were included in the study. An even distribution across both genders would have been the desired outcome. Unfortunately this was not the reality of the study. Table 4.1.1 depicts the gender distribution across the total sample.

Table 4.1

Distribution of Gender of the Total Sample (N=44)

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	10	23
Female	34	77
<b>Total</b>	44	100

Table 4.1 clearly shows that the majority of participants in this study were female.

Tables 4.2 through 4.5 provide the gender distribution of the respective groups represented in the sample.

Table 4.2

Distribution of Gender of Psychology Interns (N=9)

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	2	22
Female	7	78
<b>Total</b>	9	100

This discrepancy is echoed by the national statistics provided by the Health Professions Council of South Africa (HPCSA, Hurter, 2008). These statistics reflect to some extent national demographics within the profession of psychology. Health Professions Council of South Africa (HPCSA, Hurter, 2008) statistics for the year 2007 designate a prevalence of females within the profession of psychology. Nearly 60% of South African psychologists, and more than 70% of masters psychology interns are female (McKinnon, 2003). Of the psychology interns that participated in the study, 78% were female. At 22%, the percentage of males in the sample of this study is 3% higher than the national percentage of 19%. The statistics for psychologist-in-training, honours and BPsych groups also demonstrated a tendency towards female predominance within the profession of psychology.

Table 4.3

Distribution of Gender of Psychologists-in-training (N=15)

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	5	33
Female	10	67
<b>Total</b>	15	100

Table 4.4

Distribution of Gender of Honours Students (N=11)

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	1	9
Female	10	91
<b>Total</b>	<b>11</b>	<b>100</b>

Table 4.5

Distribution of Gender of BPsych Students (N=9)

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	3	33
Female	6	67
<b>Total</b>	<b>9</b>	<b>100</b>

In summary, more females than males participated in the study. The ratio of male to female professionals in training in the field of psychology in the present study closely emulates national trends. The following section will provide a summary of the age biographical variable.

### *Age*

Generally, postgraduate samples are moderately variable when examining the age of students. It thus becomes increasingly difficult to control for age in this type of sample, as vital information could subsequently be lost. In order to avoid losing vital information, no participant was excluded on the basis of age. Personality research does however hold that a

relationship between age and personality exists. Coetzee, Martins, Basson and Muller (2005) is of the opinion that personality development commences at birth, continues during adulthood, midlife and even in late adulthood. Research indicated that younger individuals are generally less clear and consistent in their preferences than mature individuals (Myers et al., 2003).

Table 4.6 indicates that more than half of the total sample was 24 years of age or younger (52%). The majority of the total sample (84%) was younger than 30 years of age. The mean age of the sample was calculated at 26 years of age.

Table 4.6

Distribution of Age (N=44)

<b>Age</b>	<b>N</b>	<b>Percent</b>
20-24	23	52
25-29	14	32
30-34	1	2
35-39	5	11
40-44	0	0
45+	1	2
<b>Total</b>	44	100

### *Home Language*

Home language was categorized into four different groups. The four groups were English, Afrikaans, Xhosa and Other. The “other” group included the remaining official

South African languages as well as international languages. Table 4.7 provides an overview of the home language distribution of the total sample.

Table 4.7

Distribution of Home Language (N=44)

<b>Language</b>	<b>N</b>	<b>Percent</b>
English	27	61
Afrikaans	13	30
Xhosa	1	2
Other	3	7
Total	44	100

The data depicted in Table 4.7 indicates that those participants with English as home language constituted more than half (61%) of the total sample. Thirty percent of the participants listed Afrikaans as their home language. A certain level of English proficiency is required for the MBTI® results to be considered valid. According to Myers, McCaulley, Quenk and Hammer (2003) twelfth grade reading level is required to understand the items of the MBTI® accurately. No participants were excluded from the study on the basis of their home language. All the participants had taken English as a subject up to a Grade 12 level and it was thus assumed to meet the reading proficiency levels more than adequately.

*Ethnicity*

Table 4.8 depicts the racial composition and distribution of the total sample.

Table 4.8

Distribution of Racial Groups (N=44)

<b>Race</b>	<b>N</b>	<b>Percent</b>
Asian	1	2
Black	3	7
Coloured	4	9
White	36	82
Other	0	0
Total	44	100



Table 4.9

Distribution of Race Group of Psychology Interns (N=9)

<b>RACE</b>	<b>N</b>	<b>PERCENT</b>
Asian	1	11
Black	1	11
Coloured	1	11
White	6	67
Other	0	0
<b>TOTAL</b>	<b>9</b>	<b>100</b>

From Table 4.9 it is evident that the majority of the psychology intern sample comprised of White participants (67%). Black, Coloured and Asian participants were represented equally. The large discrepancies in racial composition echoed the South African socio-political history and are supported by the national statistics released by the HPCSA. According to statistics released in 2000 by the HPCSA, 90% of South African psychologists and more than 80% of South African psychology interns were white (McKinnon, 2003). In the case of the present sample, it should be noted that not all psychology interns were included in the sample. A total of 7 psychology interns chose not to participate in the study. More recent statistics obtained from the HPCSA does however reflect some changes in the demographics since 2000. Updated statistics obtained from the HPCSA in March 2008 indicate that 55% of South African psychologists are White, 5% are Asian, 5% are Black African and 2% are Coloured (Hurter, 2008). The race distribution of South African psychologists provided by the

HPCSA could however be unreliable as the statistics according to race of nearly one third (33%) of the population were unknown (HPCSA, Hurter 2008). One third of respondents did not indicate their race.

The intake of masters psychology interns nationally clearly reflects the shift in terms of demographics within the profession of psychology. Statistics related to race distribution of psychology interns signify a considerable decrease in the number of White intern psychologists. The percentage of White intern psychologists decreased from over 80% in 2000 to 56% in 2008. In 2008, 999 registered intern psychologists were recorded of which 56% were White, 7% were Coloured, 9% were Asian, 24% were Black African and 4% were unknown. These statistics raise some concern as to the validity of the transformation within profession of psychology. Only 2% of the recorded 24% Black African interns were South African by birth. The remaining 22% come from other African countries (HPCSA, Hurter 2008).

Table 4.10

Distribution of Race Group of Psychologists-in-training (N=15)

<b>Race</b>	<b>N</b>	<b>Percent</b>
Asian	0	0
Black	1	7
Coloured	0	0
White	14	93
Other	0	0
Total	15	100

Table 4.11

Distribution of Race Group of Honours Students (N=11)

<b>Race</b>	<b>N</b>	<b>Percent</b>
Asian	0	0
Black	0	0
Coloured	0	0
White	11	100
Other	0	0
Total	11	100

Table 4.12

Distribution of Race Group of BPsych Students (N=9)

<b>Race</b>	<b>N</b>	<b>Percent</b>
Asian	0	0
Black	1	11
Coloured	3	33
White	5	56
Other	0	0
TOTAL	11	100

### *Nationality*

Table 4.13 reflects the nationality distribution of the total sample.

Table 4.13

Distribution of Nationality (N=44)

<b>Nationality</b>	<b>N</b>	<b>Percent</b>
South African	41	93
International	3	7
Total	44	100

It is clear from Table 4.13 that the majority (93%) of the sample was South African. These statistics highlight the fact that the number of placements for masters psychology interns is limited. Furthermore, South African training institutions have a commitment and duty to train psychologists who will be able to meet the needs of South Africa. Also, different countries have different regulating bodies supervising the training and registration of psychologists. In South Africa, the Professional Board for Psychology of the HPCSA supervises this process while its counterpart the American Psychological Association (APA) fulfils this role in North America (USA). Taking this into account it is clear that training and registration requirements are tailor made for specific countries. For this reason, the majority of students often choose to train in their country of origin in order to avoid complicated registration procedures and regulations.

### *Marital Status*

Table 4.14 depicts the marital status distribution of the total sample.

Table 4.14

Distribution of Marital Status (N=44)

<b>Marital Status</b>	<b>N</b>	<b>Percent</b>
Single	33	75
Married	7	16
Divorced	2	5
Widowed	0	0
Cohabiting	2	5
Total	44	101

Table 4.14 clearly indicates that the bulk of participants (75%) were single. This trend is understandable as 52% of the participants were younger than 25 years of age.

### *Current Degree*

Taking into account the aims of the study, the sample consisted of participants from four different degrees that included the honours, BPsych and masters degrees. Table 4.15 provides an overview of degree distribution of the total sample.

Table 4.15 below indicates that more than half (55%) of participants were enrolled in the masters training programme, while the remaining 46% were enrolled in the honours and BPsych degrees respectively. It should also be noted that 63 % of the participants enrolled

in the masters training programme were psychologists-in-training with the remaining 38% being intern psychologists.

Table 4.15

Distribution of Current Degree (N=44)

<b>Current Degree</b>	<b>N</b>	<b>Percent</b>
Masters	24	55
Honours	11	25
BPsych	9	20
Total	44	100

*Intention to further studies*

This variable was only applicable to the participants enrolled in the honours and BPsych degrees. Table 4.16 shows the recorded responses.

Table 4.16

Intention to Further Studies Responses (N=20)

<b>Further Studies</b>	<b>N</b>	<b>Percent</b>
Yes	17	85
No	3	15
TOTAL	20	100

From the above it is clear that 85% of participants had aspirations to further their studies and obtain a masters degree in psychology and ultimately register as psychologists. The

15% of participants that had no aspiration to further their studies were enrolled in the BPsych degree.

### Measures

A biographical questionnaire as well as the Myers-Briggs Type Indicator® (MBTI) was utilised to obtain relevant data for the study. Both of these questionnaires are self-reporting in nature and require the participants to report on and describe their characteristics, feelings, beliefs, opinions and mental states (McIntire & Miller, 2000). According to various authors, there are various advantages to employing self-report questionnaires. Self-report questionnaires save time and expenses, and are easy to administer and score (Leary, 2004). McLeod (2003) is of the opinion that the self-report instruments have three main disadvantages. Firstly these instruments are open to faking and distortion by participants lacking self-awareness. The data gathered may thus lack reliability and validity. Secondly, self-report instruments are difficult to complete for people that have literary problems. Lastly, self-report instruments may not measure the constructs/dimensions that they appear to measure.

#### *Biographical Questionnaire*

A brief biographical questionnaire was administered to the participants. This questionnaire identified important variables that contributed to the development of a profile of the participants. These variables included gender, age, and ethnicity (See previous section for full description of variables).

#### *The Myers-Briggs Type Indicator (MBTI®)*

The Myers-Briggs Type Indicator (MBTI®) is a psychometric instrument designed to explore and describe individuals' personality preferences. The MBTI® was designed to simplify and interpret the personality types proposed by Jung's personality theory. It is

important to note that Jung's theory should not be viewed as a way to assess and measure personality, but rather a theoretical model examining what constitutes personality (Kremer, 2006).

Jung's theory of psychological types assumes that what might be considered as random behaviour is in fact orderly and consistent (Francis, Craig & Robbins, 2007). The theory also assumes that this seemingly random behaviour reflects the different ways in which individuals' take in information and the ways in which they make decisions (Francis, Craig & Robbins, 2007).

The MBTI is a self-report instrument based on Jung's (1923) theory of psychological types. The instrument records the participant's response to items based on four dichotomies. The dichotomies are Extraversion/Introversion, Sensing/Intuition, Thinking/ Feeling and Judging/Perceiving. The dynamic interplay of the four preferences, result in sixteen possible personality types (Furnham, Moutafi & Crump, 2003). Table 4.17 adapted from Myers et. al. (2003) contains the 16 personality types. It is important to note that no personality type is superior or inferior to the other types in any way. However, it is true that the preferences of one type might make it easier for a person to adapt to the demands of a certain situation or environment.



Table 4.17

## The MBTI® 16 Personality Types

<b>ISTJ</b>	<b>ISFJ</b>	<b>INFJ</b>	<b>INTJ</b>
<b>ISTP</b>	<b>ISFP</b>	<b>INFP</b>	<b>INTP</b>
<b>ESTP</b>	<b>ESFP</b>	<b>ENFP</b>	<b>ENTP</b>
<b>ESTJ</b>	<b>ESFJ</b>	<b>ENFJ</b>	<b>ENTP</b>

Schuit (2003) is of the opinion that the MBTI® is a popular and versatile personality measure. This measure is especially popular as it is suitable to use in non-psychiatric settings. The clinician can thus administer the MBTI® to individuals without focusing on pathology only.

Six different MBTI® questionnaire formats are available. Each of these formats varies in length and has different scoring procedures. Form G, the self-scoring format, was administered to participants in the present study. Form G is especially useful when assessing groups where time is limited. This MBTI® questionnaire format comprises of 94 items that cover a range of personality type preferences identified (Extraversion/Introversion, Sensing/Intuition, Thinking/Feeling, and Judgement/Perception). Each of the personality preferences of the four indexes are in opposition.

The items are written in forced-choice format. According to Van Rooyen and De Beer (1999) the forced choice format of the MBTI® is appropriate as type theory is dichotomous in nature. Type theory posits that the psyche is a dynamic, constantly moving system. The opposing poles on each of the dichotomies proposed by type theory create the energy that

flows from the psyche (Martin, 2009). Type preferences are dichotomous rather than extremes on a continuum (Van Rooyen & De Beer, 1999). Despite the forced-choice format of the MBTI®, the items are less intrusive than other forced-choice instruments because each item deals with only one polarity, and the responses reflect opposing, rather than competing choices (Myers, 2000).

The MBTI® may be administered individually or in groups under the supervision of a registered MBTI® user. Even though all necessary instructions are found on the cover of the questionnaire booklets, the instructions are read aloud by the test administrator. Participants indicate their choice by marking the chosen option on the answer sheet (Myers et al., 2003). There is no time limit given and on average participants take approximately 30 minutes to complete the questionnaire.

Hand scoring is done using stencils. There are computer scoring services and software available. Each of the eight columns on the answer sheet represents a pole of each of the MBTI® dichotomies. The participant's total is written below each column. Depending on the gender of the participant different weights are allocated to different responses on the Thinking/Feeling dichotomy of the MBTI®. The participant's highest score on each dichotomy is then viewed as their specific personality type preference for that particular dichotomy. Scores of 21 on any given dichotomy indicate a very clear preference; scores of 11 to 20 indicate a clear preference; scores of 6 to 10 indicate a moderate preference while scores below 6 indicate a slight preference (Myers et al., 2003). The highest score on each dichotomy is then combined to form a four-letter code, which then represents the participant's personality type preference.

MBTI® scores can be interpreted in various ways (Briggs Myers & McCaulley, 1992). One method of interpreting the MBTI® is to explore the personality type characteristics associated with the 16 complete personality types. Another method of interpreting the MBTI® scores is to explore the personality characteristics associated with each pole within the four dichotomies.

Various international studies have been conducted on the psychometric properties of the MBTI® over time (Briggs, Myers & McCaulley, 1985; Carlyn, 1997; Harvey, 1992; Kapes, Mastie & Whitfield, 1994; Myers et al., 2003). Previously, South African research on the psychometric properties of the MBTI® have been limited (De Beer, 1997; Van Rooyen & De Beer, 1995). This void in available research inclined test distributors, Jopie van Rooyen and Partners to conduct extensive research on the validity and reliability of the instrument in a South African context.

Previously two prominent South African studies were commonly referred to when exploring the psychometric properties of the MBTI® (De Beer, 1997; Van Rooyen & De Beer, 1995). Frazer (1994) assessed the personality preferences of 246 tertiary learners within a career-counselling context. This study found a significant relationship between the MBTI® and the Jung Personality Questionnaire (JPQ), a South African developed version of the MBTI®. This led to the conclusion that both of the afore-mentioned measures measure the same preferences and thus, a form of reliability exists.

#### *Validity of the MBTI®*

In order for an instrument such as the MBTI® to demonstrate validity, it must adequately reflect the personality theory it claims to represent (Babbie & Mouton, 2001). The validity of the MBTI® is determined by its capacity to exhibit various relationships and

outcomes predicted by Jung's theory of psychological types. Jung's theory postulates that individuals can be categorised into different personality types (Jung, 1979). Should these types be accurately identified and measured by the MBTI®, the measure can be considered to be valid. Different types of validity include content validity, predictive validity, constructive validity, and convergent and discriminant validity (Wolfaardt, 2001). The following sections will explore the abovementioned types of validity as related to the MBTI®.

“The purpose of the MBTI® instrument is to aid individuals to identify their true or ‘best-fit’ type through a process of validation or verification of type” (Taylor & Yiannakis, 2007, p4). The MBTI® test distributors conducted a study on the validity of the MBTI® instrument by means of type verification (Taylor & Yiannakis, 2007). This study will be discussed in the following section.

#### *Verification of type*

In a study conducted by the South African test distributors, Taylor and Yiannakis (2007) accessed a sample consisting of 89 South African psychologists and psychometrists attending an accreditation course. Both Form G and Form M were administered to the sample before the course. Results yielded that 55% of participants obtain the same four-letter code (type) on both forms. Also, 96% of participants verified their obtained type preference (Taylor & Yiannakis, 2007). When matching their four-letter codes (types) to their best-fit type in terms of the number of letters in their type that agreed with their reported type, as well as the percentage of agreement with each of the type dichotomies, the MBTI® was proven valid. The vast majority of participants agreed with all four letters of their type.

The results of the South African study emulate the findings of international studies. Deakin (2006) found 93% agreement with 3 or 4 letters for a similar sample to the South

African study. According to Hackston (2005) 89% of participants agreed with 3 or 4 letters of their code, while Kendall (1998) reported a 95% agreement with 3 or 4 letters of their code in a United Kingdom sample.

#### *Face validity*

Face validity refers to the extent to which a scale, measure, inventory, questionnaire or test appears to be appropriate for the purpose for which it was designed (Dyer, 1995). This implies that participants would be more willing to complete a particular questionnaire if they perceive it to be a psychological instrument in terms of its appearance and what it measures (Dyer, 1995). According to Briggs Myers and McCaulley (1992) 75% of participants tend to agree with their personality type description on completion of the MBTI®. Participants therefore agree with their feedback and find such feedback useful, free of value judgement and less threatening (Myers & McCaulley, 1985; Myers et al., 2003). The MBTI® displays an adequate degree of face validity (Myers et al., 2003).

#### *Convergent validity*

This type of validity refers to establishing correlations with other measures with which the MBTI® is expected to correlate (De Beer, 1997). Over the years numerous studies have been conducted comparing the MBTI® with other personality inventories in order to examine its convergent validity (Carlson, 1985; McCrae & Costa, 1989; Myers & McCaulley, 1985; Sipps, 1985). A study conducted by Furnham, Moutafi and Crump (2003) found significant relationships between the primary scales of the MBTI® and the “Big Five” personality factors measured by the NEO PI-R. In addition, various researchers have found correlations between the MBTI® scores and other psychometric instruments such as interest tests, career and educational tests (Kapes, Mastie & Whitfield, 1994; Myers & McCaulley, 1985, Myers et al.,

2003). Research also yielded results indicating positive correlations between Introversion and Intuition and academic achievement (Briggs, Myers & McCaulley, 1992; Gauss, 2002). Taking the afore-mentioned into consideration it is evident that an adequate body of research exists to confirm the convergent validity of the MBTI®.

### *Content validity*

Struwig and Stead (2001) define content validity as the degree to which a measure's items reflect the theoretical content domain of the construct that it was designed to measure (Struwig & Stead, 2001). According to Hogan (2007) content validity is established by a group of experts who determine whether or not items within the measure match the set stipulations for a specific content area.

A study conducted by Carlyn (1997) exploring the self-analysis of 28 Jungian analysts who rated themselves on the Extraversion/Introversion, Sensing/Intuition and Thinking/Feeling dichotomies yielded valuable results related to the content validity of the MBTI®. The analysts reported 100% agreement in the Extraversion/Introversion dichotomy with 68% and 61% agreement on the Sensing/Intuition and Thinking/Feeling dichotomies respectively (Carlyn, 1997). From these results it was concluded that the Extraversion/Introversion scale was valid for the sample of the specific study.

Hammer and Yeakly (1987) reported that researchers who interviewed 120 adults in order to identify their best type fit found that 85% of participants agreed with all four preferences reflected in the four-letter code. Another study conducted utilising a sample consisting of 241 bank managers yielded similar results. The vast majority of the participants (93%) agreed with three or four of the letters that they had identified as their best-fit type (Myers & McCaulley, 1985).

### *Construct validity*

Construct validity refers to the diverse processes employed to establish the extent to which an instrument measures the identified theoretical construct it claims it measures (Hogan, 2007; Wolfaardt, 2001). Construct validity is more exact and refined than the content validity approach to the validation process of a measure. Construct validity implies that an instrument or measure has been explicitly based on one or more specific theoretical concepts or constructs in order for the individual test items to provide measures of the construct question (Dyer, 1995). The processes employed to explore and support construct validity of a measure include correlations with other measures, factorial validity, and convergent and discriminant validity.

Convergent validity is reported when an instrument or measure produces high correlations with another instrument that measures the same construct. Contrary to convergent validity, divergent validity stems from low correlations between instruments or measures that measure different psychological constructs (Aiken, 2000). Various studies yielded results supporting the construct validity of the MBTI®. A study conducted by Carlyn (1997) found that numerous instruments produce similar scores to the scores of the MBTI®, thus indicating convergent validity. The MBTI® manual reported correlations between MBTI® scores and the scores of more than 25 psychometric instruments or measures. These instrument or measures ranged from personality measures, interest and educational measures. Sample sizes involved in these studies ranged from 65 to 1218 participants (Myers & McCaulley, 1985). More recently Myers, McCaulley, Quenk and Hammer (2003) reported that the validity of the MBTI® is estimated at 75%, based on feedback obtained from psychologists who administer and interpret the results of the MBTI®.

### *Predictive validity*

This form of validity refers to the degree to which the results of an instrument or measure can be employed to predict future behaviour and the relationship between personality type and other variables (Dyer, 1995). Studies on the predictive validity of the MBTI® reported it to be valuable in the prediction of specific career choices and academic achievement (Myers & McCaulley, 1990). Lawrence (1984) reported the MBTI® to be useful in predicting consistent learning and teaching style differences. Hammer (1996) reported that the MBTI® displays significant predictive reliability.

Examining the above-mentioned research evidence it is clear that the MBTI® was proven valid for the South African context as well as for the international context. The next section will provide an overview of the reliability of the MBTI® in both the international and South African context.

### *Reliability of the MBTI®*

According to Struwig and Stead (2001) reliability can be defined as the degree to which the scores obtained on an instrument or measure is exact, reliable and stable. Reliability also refers to how consistently an instrument measures what it is supposed to measure (Zeisset, 1996). The reliability of an instrument or measure is thus determined by the degree to which it is able to produce consistent results despite possible variables and influences such as learning, fatigue or changes in motivation. Various methods exist to assess and determine an instrument or measure's reliability. The following section will focus on different forms of reliability related to the MBTI®.



### *Split-half reliability*

The MBTI® is an ipsative measure and is thus measured against itself. The results obtained from such a measure are observed as facts and not compared to other results. The results are then placed into context of an average or expected outcome. Participants thus provide their own frame of reference (Blenkinsop & Maddison, 2007). Järlström (2000) is of the opinion that the ipsative nature of the MBTI® scales enhances its split-half reliability.

### *Test-retest reliability*

Test-retest reliability determines the degree to which an instrument or measure is reliable over a period of time (Wolfaardt, 2001). The test-retest reliability is determined by administering the instrument or measure to the same sample on separate occasions. It is vital that a reasonable amount of time lapses between the two assessment occasions as to prevent variables such as learning from skewing the resultant scores. The scores obtained during the two separate assessment occasions are compared by calculating the correlation coefficient (Wolfaardt, 2001). As personality is viewed to be relatively stable over time, test-retest reliability of a measure is essential (Costa & McCrae, 1992). Test-retest reliability can be expressed numerically by means of a correlation coefficient (Pearson product moment correlation) with a score of 1.0 indicating 100% test-retest reliability (Dyer, 1995). Research studies found significantly higher test-retest reliability amongst samples with higher intelligence (Myers & McCaulley, 1985, Myers et al., 2003). A study conducted over a one year period on the reliability of the MBTI® found the personality type preferences to be stable (Carlyn, 1997). The sample consisted of 200 university students of which 68% were female. The results led to the deduction that the MBTI® is reliable when utilised in tertiary educational settings. Also, reliability increases significantly when administered to samples with higher

intelligence (Carlyn, 1997). More recently Myers, McCaulley, Quenk and Hammer (2003) reported that 66% of respondents reported the same four preferences after a four-week interval, and 91% reported three personality preferences to be the same as measured on the first administration.

### *Internal consistency*

Internal consistency reliability refers to the degree to which the instrument or measure items all reflect the same attribute (Struwig & Stead, 2001). Internal consistency reliability of the MBTI® reflects the extent to which the instrument items are sampling the same domain i.e. type (Taylor & Yiannakis, 2007).

Early reviews by Mendelsohn (1965) and Sundberg (1965) reported internal consistency reliabilities for the four scales ranging from .75 to .85 with a low coefficient of .44 for the Thinking/Feeling dichotomy. Internal consistency was determined by employing the split-half method. Myers and McCaulley (1985) reported split-half reliabilities to fall between .75 and .88 for Extraversion/Introversion, .83 and .91 for Sensing/Intuition, .76 and .88 for Thinking/Feeling, and .80 and .92 for J/P, thus indicating that the scores for the Sensing/Intuition and Judgement/Perception are likely to remain stable and consistent.

Murray (1990) found the reliability of the MBTI® proved to be consistent with those of other personality inventories such as Cattell's 16PF and the MMPI. De Beer (1997) and Frazer (1994), while exploring internal consistency reliability, found that more mature and higher achieving samples are more likely to yield higher reliability scores on the MBTI® than younger, underachieving or disadvantaged samples.

A South African study conducted by Taylor and Yiannakis (2007) found the alpha Cronbach coefficients for the four dichotomies to be reliable. The sample consisted of 1583

participants. The alpha Cronbach coefficients were .91 Extraversion/Introversion, .85 Sensing/Intuition, .88 Thinking/Feeling and .91 Judgement/Perception.

The above-mentioned research evidence confirms the reliability of the MBTI® in the South African context as well as in the international context. The following section will focus on the ethical considerations related to the study.

### Research Procedure and Ethical Considerations

According to Babbie and Mouton (2001) all research projects are bound by ethical principles and procedures. Kumar (2003) stresses that the consideration of ethical issues demonstrates that the researcher recognises the rights of the participants. In order to ensure that the research study was conducted in an ethical manner, certain precautions were taken. Firstly, all participants were given the opportunity to withdraw from participating in the study. Participants could at any stage indicate that they want to end their participation in the study without incurring any penalties. Secondly, all participants were required to complete a standard consent form. These consent forms were stored in a secure location on the premises of the participating higher education institution. Thirdly, providing participants with a unique code ensured anonymity. The participants wrote the code on the biographical questionnaire and MBTI® protocol. Researcher bias was thus eliminated completely. Fourthly, the researcher, thus ensuring complete confidentiality, computed all data capturing. Fifthly, an opportunity for feedback on their personality profiles was offered to all participants. Feedback was provided in a group context. The participants were instructed to remember their unique code. The researcher then posted a list with the unique codes and corresponding four-letter codes. Once the participants were sure of their four-letter code, the researcher provided feedback on the relevant codes when requested.

The above-mentioned steps not only allowed for an ethical study, but also simplified the whole research process. The following section will provide an overview of the data analysis and statistical procedures employed to meet the aims of the study.

### Data Analysis

Due to the exploratory descriptive nature of the study, descriptive statistics was used to describe the data and to meet the three aims of the study (Graziano & Raulin, 2002). Descriptive statistics were employed to describe and analyse the biographical variables associated with the participating sample. The resultant information was employed during the interpretation phase of study. Descriptive statistics were also employed to describe the personality types of the participants.

In order to meet the primary aims of the study the data obtained from the MBTI® was analysed using descriptive statistics, more specifically, frequency distributions, means and standard deviations and inferential statistics, namely, t-tests. The research aims of the study were twofold:

1. Identify and explore the personality preferences of a group of prospective psychology masters applicants.
2. Identify, explore and describe the personality preferences of a group of successfully selected masters students.

This particular method of data analysis allowed the researcher to identify and describe the participants' personality preferences and characteristics associated with each of the 16 MBTI® personality types. Furthermore, the researcher was able to identify and describe the participants' personality characteristics associated with each of the four MBTI® dichotomies. Statistical analysis was not required to achieve this aim.

## Conclusion

This chapter focused on the research methodology and design employed in the study and a detailed description of the sample was provided. The study was exploratory descriptive in nature and made use of a quantitative research method with non-probability convenience sampling. The survey method was employed to gather the necessary data. Two measures, a biographical questionnaire and MBTI®, were utilised to gather data. A detailed description of MBTI® was provided. Special attention was given to the psychometric properties of the MBTI®. The sample was described in terms of a number of biographical variables. Descriptive statistics were employed to analyse and describe the data obtained during the data collection phase of the study. Results from the data analysis phase described in this chapter are reported in Chapter Five.

## CHAPTER FIVE

### RESULTS

#### Chapter Preview

This chapter will focus on the results of the present study. The results will be presented according to the aims of the study. The primary aim of the present study was to identify, explore and describe the personality type preferences of postgraduate psychology students at a South African institution of higher education. The total sample of the study consisted of a group of prospective psychology masters students (n=20) and a group of successfully selected masters students (n=24). The personality profiles of the sample was identified, explored and described utilising the Myers-Briggs Type Indicator.

More specifically, the study aimed to:

1. Identify, explore and describe the personality type preferences of a group of prospective psychology masters applicants (n=20) utilizing the MBTI®; and
2. Identify, explore and describe the personality type preferences of a group of successfully selected masters students (n=24) utilizing the MBTI®.

The chapter will thus focus on the results from the statistical analysis. The data obtained by administering the MBTI® to the sample was analysed using frequency distribution statistics, means and standard deviations. The results reported in this chapter can only be applied to the sample of the present study and cannot be generalized to other samples or the general population as a descriptive research method was employed.

### Personality Type Distributions

This section will focus exclusively on the results identifying, exploring and describing the personality profiles of: (a) the total sample; (b) prospective masters applicants; and (c) successfully selected masters students.

#### *Personality Type Distributions of the Total Sample*

Table 5.1 indicates the personality type distributions of the total sample for the present study.

Table 5.1

Personality Type Distributions of the Total Sample (N=44)

<b>ISTJ</b> 11% f=5	<b>ISFJ</b> 9% f=4	<b>INFJ</b> 7% f=3	<b>INTJ</b> 5% f=2
<b>ISTP</b> 0% f=0	<b>ISFP</b> 2% f=1	<b>INFP</b> 0% f=0	<b>INTP</b> 14% f=6
<b>ESTP</b> 5% f=2	<b>ESFP</b> 7% f=3	<b>ENFP</b> 9% f=4	<b>ENTP</b> 0% f=0
<b>ESTJ</b> 9% f=4	<b>ESFJ</b> 9% f=4	<b>ENFJ</b> 5% f=2	<b>ENTJ</b> 9% f=4

Table 5.1 clearly indicates that only 13 out of the possible 16 personality types were represented in the sample. The INTP personality type was the most frequently represented personality type (14%). The second most frequently represented type was the ISTJ personality type (11%). The results indicated that the ISFJ, ENFP, ESTJ, ESFJ and ENTJ personality types were all represented equally in the sample (9%). Of the 13 represented personality types the ISFP was represented least frequently. None of the participants indicated a preference for the ISTP, INFP and ENTP personality types.

*Personality Type Distributions of Prospective Psychology Masters Applicants*

Table 5.2 provides a summary of the personality type distributions of prospective psychology masters applicants. Table 5.2 clearly indicates that only 11 of the possible 16 personality types were represented amongst the prospective psychology masters applicants. The most frequently represented personality types were ISTJ, INTP and ESFJ (15%). The second most frequently represented personality types were ESFP, ESTJ and ENTJ (10%). The third most frequently represented personality types were ISFJ, INFJ, ESTP, ENFP and ENFJ (5%). The INTJ, ISTP, ISFP, INFP and ENTP personality types were not represented amongst the prospective psychology masters applicants.



Table 5.2

Personality Type Distributions of Prospective Psychology Masters Applicants (N=20)

<b>ISTJ</b> 15% f=3	<b>ISFJ</b> 5% f=1	<b>INFJ</b> 5% f=1	<b>INTJ</b> 0% f=0
<b>ISTP</b> 0% f=0	<b>ISFP</b> 0% f=0	<b>INFP</b> 0% f=0	<b>INTP</b> 15% f=3
<b>ESTP</b> 5% f=1	<b>ESFP</b> 10% f=2	<b>ENFP</b> 5% f=1	<b>ENTP</b> 0% f=0
<b>ESTJ</b> 10% f=2	<b>ESFJ</b> 15% f=3	<b>ENFJ</b> 5% f=1	<b>ENTJ</b> 10% f=2

*Personality Type Distributions of Successfully Selected Psychology Masters Students*

Table 5.3 provides a summary of the personality profiles of the successfully selected masters students.

Table 5.3

Personality Type Distributions of Successfully Selected Psychology Masters Students

(N=24)

<b>ISTJ</b> 8% f=2	<b>ISFJ</b> 13% f=3	<b>INFJ</b> 8% f=2	<b>INTJ</b> 8% f=2
<b>ISTP</b> 0% f=0	<b>ISFP</b> 4% f=1	<b>INFP</b> 0% f=0	<b>INTP</b> 13% f=3
<b>ESTP</b> 4% f=1	<b>ESFP</b> 4% f=1	<b>ENFP</b> 13% f=3	<b>ENTP</b> 0% f=0
<b>ESTJ</b> 8% f=2	<b>ESFJ</b> 4% f=1	<b>ENFJ</b> 4% f=1	<b>ENTJ</b> 8% f=2

Table 5.3 indicates that 13 of the possible 16 personality types were represented amongst successfully selected psychology masters students. The ISFJ, INTP and ENFP types were the most frequently represented personality types (13%). The ISTJ, INFJ, INTJ, ESTJ, and ENTJ types were the second most frequently represented personality types (8%). The

ISFP, ESTP, ESFP, ESFJ and ENFJ types were the third most frequently represented personality types (4%). The ISTP, ENFP and ENTP types were not represented amongst the successfully selected psychology masters students.

#### Dichotomous Personality Type Distributions

This section will focus on the results relating to the four dichotomies of: (a) the total sample; (b) prospective psychology masters applicants and (c) successfully selected psychology masters students.

Table 5.4 provides a summary of the dichotomous personality type distributions of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected psychology masters applicants.

Table 5.4

## Summary of the Dichotomous Personality Types Distributions

	<b>E</b>	<b>I</b>	<b>S</b>	<b>N</b>	<b>T</b>	<b>F</b>	<b>J</b>	<b>P</b>
<b>Total Sample<sup>6</sup></b>	52% f=23 M=13.41 SD=5.96	48% f=21 M=12.61 SD=6.62	50% f=22 M=12.75 SD=8.57	50% f=22 M=13.70 SD=6.16	52% f=23 M=10.91 SD=5.96	48% f=21 M=10.05 SD=4.81	64% f=28 M=15.55 SD=7.49	36% f=16 M=11.50 SD=7.49
<b>Prospective Applicants<sup>7</sup></b>	60% f=12 M= 13.85 SD=6.08	40% f=8 M=12.50 SD=7.26	55% f=11 M=13.50 SD=7.23	45% f=9 M=13.00 SD=5.68	55% f=11 M=11.05 SD=4.87	45% f=9 M=10.00 SD=4.39	65% f=13 M=15.55 SD=7.49	35% f=7 M=11.60 SD=7.44
<b>Successfully Selected Students<sup>8</sup></b>	46% f=11 M=13.04 SD=5.97	54% f=13 M=12.71 SD=6.20	46% f=11 M=12.13 SD=9.65	54% f=13 M=14.29 SD=6.59	50% f=12 M=10.79 SD=6.83	50% f=12 M=10.08 SD=5.23	63% f=15 M=15.54 SD=7.65	37% f=9 M=11.42 SD=7.69

*Dichotomous Personality Types Distributions of the Total Sample*

Table 5.4 (p. 96) indicates that the majority (52%) of participants from the total sample preferred to utilise the Extraversion attitude while the remaining 48% of participants preferred to utilise the Introversion attitude. Results indicated that 50% of participants preferred to utilise the Sensing function and that the remaining 50% preferred to utilise the Intuition function. Results also indicated that the majority (52%) of participants from the total sample preferred to utilise the Thinking function while the remaining 48% preferred to utilise the Feeling function.

<sup>6</sup> N=44 (postgraduate students; 20 4<sup>th</sup> year psychology students and 24 masters students)

<sup>7</sup> N=20 (4<sup>th</sup> year psychology students)

<sup>8</sup> N=24 (masters students – 15 psychologists-in-training & 9 intern psychology)

Finally, the results indicated that the majority (64%) of participants from the total sample preferred to utilise the Judgement attitude while the remaining 36% preferred to utilise the Perception attitude.

*Dichotomous Personality Types Distributions of Prospective Psychology Masters*

*Applicants*

Table 5.4 (p. 96) indicates that the majority (60%) prospective psychology masters applicants preferred to utilise the Extraversion attitude while the remaining 40% of participants preferred to utilise the Introversion attitude. Results indicated that 55% of participants preferred to utilise the Sensing function and that the remaining 45% preferred to utilise the Intuition function. Results also indicated that the majority (55%) prospective psychology masters applicants preferred to utilise the Thinking function while the remaining 45% preferred to utilise the Feeling function. Finally, the results indicated that the majority (65%) of participants preferred to utilise the Judgement attitude while the remaining 35% preferred to utilise the Perception attitude.

An examination of the mean scores in Table 5.4 (p.96) indicates that the strongest preference for the prospective psychology masters applicants is Judgement ( $M=15.55$ ) and the weakest is for Feeling ( $M=10.00$ ). The greatest difference between the dichotomous types is between the Judgement (65%) and Perception (35%) attitudes. The dominant personality type in each of the four different dichotomies is Extraversion, Sensing, Thinking and Judgement.

In order to determine the significance of the preferences for individual types, inferential tests were conducted for each of the dichotomies. T-tests were based on the mean score for each type. The results of the t-tests were not significant at the .05 level, the lowest p-value being 0.49 for the t-test comparing the Sensing and Intuition mean scores.

*Dichotomous Personality Types Distributions of Successfully Selected Psychology  
Masters Applicants*

Table 5.4 (p. 96) indicates that the majority (54%) of successfully selected masters students preferred to utilise the Introversion attitude while the remaining 46% of participants preferred to utilise the Extraversion attitude. Results indicated that the majority (54%) of participants preferred to utilise the Intuition function and that the remaining 46% preferred to utilise the Sensing function. Results also indicated that 50% of successfully selected masters students preferred to utilise the Thinking function while the remaining 50% preferred to utilise the Feeling function. Finally, the results indicated that the majority (63%) of participants preferred to utilise the Judgement attitude while the remaining 37% preferred to utilise the Perception attitude.

An examination of the mean scores in Table 5.4 (p. 96) indicates that the strongest preference for successfully selected masters students is Judgement (M=15.54) and the weakest is for Feeling (M=10.08). The greatest difference between the dichotomous types is between the Judgement (63%) and Perception (37%). The dominant personality type in each of the four different dichotomies is Introversion, Intuition, Thinking and Judgement.

In order to determine the significance of the preferences for individual types, inferential tests were conducted for each of the dichotomies. T-tests were based on the mean score for each type. The results of the t-tests were not significant at the .05 level, the lowest p-value being 0.49 for the t-test comparing the Sensing and Intuition mean scores.

### Conclusion

This chapter focused on a discussion of the results obtained by administering the MBTI® to the sample (N=44). The obtained data was analysed utilising frequency distribution

and inferential statistics. The results were reported on in terms of the 16 MBTI® personality types as well as the four dichotomous personality types. An overview of the four dichotomous personality types for all four participating groups was provided.

Chapter 6 will focus on a discussion of the results of the present study. The discussion will focus on the characteristics of the most frequently represented personality type of (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected psychology masters students. The chapter will also focus on a discussion of the dichotomous personality types for each of the afore-mentioned groups. A general discussion on the personality types and dichotomous personality types will also be included. This section will be aimed at highlighting the similarities and differences in personality types and dichotomous personality types for the participants. The INFP personality types will also be discussed briefly. The chapter will conclude with a brief summary of the conclusions drawn from the results of the present study.

## CHAPTER SIX

### DISCUSSION AND CONCLUSIONS

#### Chapter Preview

This chapter will focus on a discussion of the results of the present study. The first section of this chapter will provide a discussion of the personality types (profiles) of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected masters students. The discussion of the results for each of the afore-mentioned groups will highlight which of the 16 personality types were represented most frequently and least frequently amongst the participants of the present study. This section will also highlight the strengths, potential areas for growth and best-suited careers associated with the most frequently represented personality types.

The second section of this chapter will focus on a discussion of the results relating to the dichotomous personality type preferences of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected masters students. In addition, the results relating to the four dichotomous personality types preferred by the afore-mentioned groups will be compared to the results of two previous South African studies.

A general discussion of the sixteen MBTI® personality types and dichotomous personality types of the participants of the present study as well a summary of the INFP personality type characteristics will also be provided. The chapter concludes with a summary of the conclusions of the study according to the aims of the present study.

#### Sixteen Complete Personality Types

This section will focus on the 16 complete personality types of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected masters students.



*Sixteen Complete Personality Types of the Total Sample*

Results indicated that the INTP (14%) personality type was the most frequently represented personality type amongst the participants of the present study. INTPs dominant function is Thinking and their auxiliary function is Intuition. Their tertiary and inferior functions are Sensing and Feeling respectively.

INTP types are independent problem solvers and are able to provide a detached, concise and clear analysis of an idea or situation. Individuals who prefer this personality type are not afraid to ask difficult questions or to challenge themselves or others to formulate new, logical approaches. INTPs are likely to be logical, analytical, objectively critical, detached and contemplative. One of the greatest strengths of INTPs is their ability to see connections and possibilities beyond the present and obvious. Often INTPs are mentally quick, curious, insightful and ingenious and have a keen interest about abstract theories and hypothesis about how things work (Myers, McCauley, Quenk & Hammer, 2003). INTPs natural ability to identify inconsistencies and illogicality make them invaluable when having to revise established and proven procedures and ideas that do not seem to be working sufficiently. Others may see INTPs as quiet, contained, calm and even detached observers at times. INTPs are perceived to be independent and autonomous in their personal and professional lives (Myers et al., 2003).

If an INTP is prevented from developing and expressing their Thinking and Intuitive functions as a result of life circumstances, some potential areas for growth become evident. INTPs who have not developed their Thinking function tend to move from insight to insight without critically analysing such insights or integrating these insights into a meaningful whole (Myers et al., 2003). Should an INTP's Intuition function be poorly developed they experience

difficulty in taking in information and immersing information into their internal logic systems resulting in difficulty communicating their ideas. INTPs who are deprived of appreciation of their gifts and contributions often feel frustrated and may become cynical, negative and overly critical of self and others. They then tend to isolate themselves and become passive. In some instances INTPs may become argumentative and unreasonable.

INTPs natural tendency to focus less on their tertiary and inferior functions could have serious repercussions if they neglect the development of their Sensing and Feeling functions. INTPs may become insensitive to the needs of others. Often INTPs who neglect their Sensing and Feeling functions dismiss the needs and opinions of others because they view these needs and opinions as illogical. As a result of neglecting their tertiary and inferior functions, INTPs often fail to realise the impact of their decisions and communication style on those around them. They may be seen as impractical and neglecting details such as their physical needs as well as those of others (Myers et al., 2003).

In circumstances of great stress, INTPs may become overly emotional and inappropriately display emotions. These public outbursts of anger are uncharacteristic of the naturally calm and in control INTPs. INTPs are embarrassed and others may find these outbursts unnerving (Myers et al., 2003).

INTPs prefer careers and working environments where they are able to be autonomous, creative and earn a substantial amount of money. INTPs have difficulty in performing routine tasks, conforming to structure and excessive responsibilities and therefore avoid careers that require these qualities (Myers et al., 2003). Typical examples of careers that attract INTPs are inherently scientific and technical (Myers et al., 2003).

INTPs' ability to provide a detached, concise and clear analysis of an idea or situation may prove valuable in a therapeutic relationship. Also, INTPs are not afraid to ask difficult questions or to challenge themselves or others. The current researcher is of the opinion that a balance between this objective, detached and challenging nature of the INTP therapist/counsellor (student) could result in them being potentially efficient therapists/counsellors. The INTPs' ability to see connections and possibilities beyond the present and obvious are also likely to impact positively on the client and therapeutic relationship. INTPs' innate curiosity, insightfulness and ingeniousness combined with their mental abilities are assets that could prove invaluable in a career as a therapist/counsellor.

INTPs' natural tendency to focus less on their tertiary and inferior functions could have a negative impact on the therapeutic relationship and process if they neglect the development of their Sensing and Feeling functions too much. INTP therapists/counsellors (students) may become insensitive to the needs of their clients because they place too much trust in and emphasis on their logical, systematic and objective Thinking function. Clients may perceive the detached and objective INTP therapist (student) as cold and clinical, not displaying a satisfactory degree of warmth, understanding and empathy for the challenges/problems they face. If INTP therapists/counsellors (students) are not able to incorporate abstract information gathered through Intuition and concrete information gathered through Sensing, they stand the chance to lose valuable information that could have negative consequences on the therapeutic relationship and therapeutic process.

The above-mentioned concerns should be recognised and considered carefully before prospective psychology masters applicants with an INTP personality type enter into careers in the field of psychology. Prospective psychology masters applicants with this personality type

need to realise the necessity to develop and utilise their Sensing and Feeling functions. INTP therapists/counsellors (students) will have to pay special attention to developing their Sensing function that will allow them to take in concrete information and not only rely on abstract information. The development and utilisation of the INTPs' Feeling function may result in clients perceiving them as empathic and compassionate. In turn, this may lead to a positive therapeutic relationship, thus creating a safe environment for the client to open and honestly discuss the challenges/problems they face.

*Sixteen Complete Personality Types of Prospective Psychology Masters Applicants*

*Contextualization*

Before discussing the personality profiles of prospective psychology masters applicants it is important to understand the context in which these participants function. This group of participants consisted of 11 honours students and 9 BPsych students. The training offered to these students differs greatly from that of successfully selected students. Fourth year psychology students are required to apply abstract ideas and concepts to their course work. They are allowed to be creative and innovative when answering examination questions and completing assignments. One possible reason for this could be that the training that they are receiving is more theoretical and less specialised than that of psychologists-in-training and intern psychologists. Training at a fourth year level provides the underpinning for future studies in the field of psychology. Students are introduced to a variety of psychological theories and concepts. Despite the fact that BPsych students have to complete a substantial amount of practical training (720 hours), it is the opinion of the current researcher that this practical training is less structured, thus allowing more freedom to experiment with and explore different approaches.

### *Discussion*

Results indicated that the ISTJ (15%), INTP (15%) and ESFJ (15%) types were the most frequently represented personality types amongst prospective psychology masters applicants (see Table 5.2). This section will focus on the exploration of these three personality types.

ISTJ types' dominant function is Introverted Sensing and their auxiliary function is Extraverted Thinking. Their tertiary and inferior functions are Feeling and Extraverted Intuition respectively (Myers et al., 2003). ISTJ types have a great sense of loyalty and responsibility to the organizations, families and relationships in their lives. They almost always complete tasks assigned to them on time with meticulous attention to accuracy and details (Kirby & Myers, 1993; Myers et al., 2003). ISTJs are practical, sensible, realistic and systematic in all aspects of their lives. They gather vast amounts of information through their Sensing function and store this information in order to use it in future. ISTJs process this information utilising their Thinking function in a thorough, objective and systematic approach, thus making decisions only after considering all the facts and possible implications. ISTJs remain objective and detached when faced with challenges/problems (Kirby & Myers, 1993; Myers et al., 2003).

Others may see ISTJs as calm, reserved and serious, overlooking their individual, sometimes humorous, private reactions (Kirby & Myers, 1993; Myers et al., 2003). ISTJs may also be seen as consistent and orderly.

In situations where ISTJs are not supported and allowed to develop their Introverted Sensing (dominant) and Extraverted Thinking (auxiliary) functions because of life circumstances, a number of potential areas for growth become evident. Underdevelopment of

the ISTJs Sensing function may result in premature judgements and decisions because they do not have a reliable way of taking in sufficient amounts of information (Kirby & Myers, 1993; Myers et al., 2003). As a result, new information is also excluded when making a decision. When ISTJs do not develop their Thinking function sufficiently they may make decisions solely based on the internal data and past experience (Kirby & Myers, 1993; Myers et al., 2003). ISTJs may feel frustrated when their gifts and efforts are appreciated. This may lead to ISTJs becoming rigid and critical and judgemental of others. ISTJs may experience difficulty in delegating and trusting others to deliver satisfactory work (Kirby & Myers, 1993; Myers et al., 2003).

ISTJs' natural tendency to focus less on the development of their tertiary and inferior functions may result in a failure to recognise and consider the impact of their decisions on others. Furthermore, ISTJs may fail to recognise and understand others' need for intimacy and emotional connection (Kirby & Myers, 1993; Myers et al., 2003). During times of great stress ISTJs may experience difficulty utilising their innate calm, reasonable judgement. They then imagine a variety of negative possibilities for themselves and others (Kirby & Myers, 1993; Myers et al., 2003).

Given that ISTJs' are practical, sensible, realistic and sensible, they generally find careers that allow them to incorporate these characteristics. Research has found ISTJs are likely to gravitate towards careers such as law enforcement and accounting (Hammer, 1993; Myers et al., 2003). The afore-mentioned qualities also make them extremely suitable for careers that require management and administrative abilities.

Given the above-mentioned description of the ISTJ personality type, it may be concluded that therapists/counsellors (students) with this personality type may experience

some difficulty in a career in the field of psychology. ISTJs ability to take in vast amounts of concrete information through their well-developed Sensing function may prove to be sufficient until they are faced with vast amounts of abstract information. Often clients do not present all the facts logically and in a concrete manner when verbalising their challenges. ISTJ therapists/counsellors (students) are then faced with the challenge to make connections and fill in gaps in the clients' stories. A real threat to effective counselling could arise when ISTJ type counsellors are faced with seemingly illogical and irrational stories clients often bring to therapy. When ISTJs are unable to utilise logical reasoning they may become confused, resulting in a possible inability to connect with clients emotionally. ISTJ type therapists/counsellors (students) will be able to remain detached and objective when interacting with clients. This detachment could have a damaging effect on the therapeutic relationship. Clients may feel as though the ISTJ therapist (student) lacks empathy for their specific situation. This perception of the ISTJ therapist (student) may be emphasised by the ISTJ therapist's (student's) natural tendency to utilise their Thinking function. This may result in clients seeing them as aloof, detached, cold and clinical in their matter-of-fact approach to the clients' challenges/problems.

The above-mentioned concerns should be recognised and considered carefully before prospective psychology masters applicants with an ISTJ personality type enter into careers in the field of psychology. Therapists/counsellors (students) with this personality type need to realise the necessity to develop and utilise their Intuition and Feeling functions. ISTJ therapists/counsellors (students) will have to pay special attention to developing their Intuition function that will allow them to see the connections and relationships between facts. Intuition also allows therapists/counsellors (students) to see deeper (abstract) meanings beyond the

surface of clients' stories. ISTJ therapists/counsellors (students) have to be able to place abstract facts within the bigger picture. The development and utilisation of the ISTJ's Feeling function may result in clients perceiving them as empathic and compassionate. In turn, this may lead to a positive therapeutic relationship, thus creating a safe environment for the client to more openly and honestly discuss the challenges/problems they face.

The INTP personality type has been discussed previously in the context of the total sample. This section will focus on characteristics that will assist therapists/counsellors (students) with an INTP personality type. Furthermore, this section will focus on the characteristics that may impede therapists/counsellors (students) with an INTP personality type.

INTP types' ability to provide a detached, concise and clear analysis of an idea or situation may prove valuable in a therapeutic relationship. Also, INTPs are not afraid to ask difficult questions or to challenge themselves or others. The current researcher is of the opinion that a balance between this objective, detached and challenging nature of the INTP therapist (student) could result in them being potentially efficient therapists/counsellors. The INTP's ability to see connections and possibilities beyond the present and obvious are also likely to impact positively on the client and therapeutic relationship. INTPs' innate curiosity, insightfulness and ingeniousness combined with their mental abilities are assets that could prove invaluable in a career as a counsellor/therapist.

INTPs natural tendency to focus less on their tertiary and inferior functions could have a negative impact on the therapeutic relationship and process if they neglect the development of their Sensing and Feeling functions too much. INTP therapists/counsellors (students) may become insensitive to the needs of their clients because they view these needs as illogical.



They come to this decision because they utilise their logical, systematic and objective Thinking function too rigidly. Clients may perceive the detached and objective INTP therapist (student) as cold and clinical, not displaying a satisfactory degree of warmth, understanding and empathy for the challenges/problems they face. If INTP therapists/counsellors (students) are not able to incorporate abstract information gathered through Intuition and concrete information gathered through Sensing, they stand the chance to lose valuable information that could have negative consequences. An underdeveloped Sensing function may cause the INTP therapist (student) to focus exclusively on the big picture, neglecting details.

The above-mentioned concerns should be recognised and considered carefully before prospective psychology masters applicants with an INTP personality type enter into careers in the field of psychology. Therapists/counsellors (students) with this personality type need to realise the necessity to develop and utilise their Sensing and Feeling functions. INTP therapists/counsellors (students) will have to pay special attention to developing their Sensing function that will allow them to take in concrete information and not only rely on abstract information. The development and utilisation of the INTJ's Feeling function may result in clients perceiving them as empathic and compassionate. In turn, this may lead to a positive therapeutic relationship, thus creating a safe environment for the client to open and honestly discuss the challenges/problems they face.

The ESTJ personality type's dominant function is Extraverted Thinking and their auxiliary function is Introverted Sensing. Their tertiary and inferior functions are Intuition and Introverted Feeling respectively (Kirby & Myers, 1993; Myers et al., 2003).

ESTJs require structure and order. They live according to a clear set of personal standards and beliefs. ESTJs value competence, efficacy, order and results and display these

values overtly in all aspects of their lives. ESTJs are intolerant of confusion and chaos because they primarily utilise their Thinking function externally to organise their work and lives (Kirby & Myers, 1993; Myers et al., 2003). ESTJs are likely to be logical, analytical and objectively critical of situations and others. The ESTJ's actions are decisive, clear and assertive. Generally ESTJs focus their attention on the present and readily adapt and apply past experience to deal with present challenges/problems. ESTJs' pragmatic and systematic nature makes them excellent administrators (Kirby & Myers, 1993; Myers et al., 2003,).

Others may rely on ESTJs to take initiative and get tasks done because of their natural ability to devise systems, procedures and schedules. At times, others may find it overwhelming to work with ESTJs because they always seem sure of what needs to be done. ESTJs are perceived as conscientious and dependable. Others may see ESTJs to be decisive, outspoken and self-confident (Kirby & Myers, 1993; Myers et al., 2003).

In situations where ESTJs are not supported and allowed to develop their Extraverted Thinking (dominant) and Introverted Sensing (auxiliary) functions because of life circumstances, a number of potential areas for growth become evident. ESTJs who have not developed their Thinking function may result to making inconsistent or harsh decisions because they do not possess a reliable way to evaluate information gathered (Kirby & Myers, 1993; Myers et al., 2003,). ESTJs whose Sensing has not developed adequately may make hasty decisions that only reflect their previously formed judgements or biases thus neglecting to gather new information that might effect their decisions (Kirby & Myers, 1993; Myers et al., 2003). When ESTJs' gifts and contributions are not appreciated they may feel frustrated. ESTJs then tend to become rigid and dogmatic. They may be intrusive, refuse to listen and as a result leave others feeling overpowered. ESTJs may also become selective about details and

display little understanding and tolerance towards people who they perceive to be not following procedures exactly (Kirby & Myers, 1993; Myers et al., 2003).

ESTJs are naturally inclined to pay less attention to their tertiary and inferior functions. Neglecting these functions too much may have far-reaching effects for ESTJs. ESTJs who neglect to develop their Feeling function may be unable to recognise when pure logic is not sufficient and when to consider emotions and how they impact upon people. Furthermore, an underdeveloped Feeling function may result in ESTJs failing to respond to others needs for intimacy and processing of feelings. ESTJs who have failed to develop their Intuition function are likely to fail to see the bigger picture and future implications of immediate, seemingly simple and negative actions. Their tertiary and inferior functions are Intuition and Introverted Feeling respectively (Kirby & Myers, 1993; Myers et al., 2003). During times of great stress, ESTJs may feel alone and unappreciated. This impacts on the innately expressive ESTJ's ability to communicate and express their feelings of distress. Their tertiary and inferior functions are Intuition and Introverted Feeling respectively (Kirby & Myers, 1993; Myers et al., 2003).

Research has found that individuals with an ESTJ personality type prefer a working environment where they are able to apply logic, order and rigour. ESTJ types are particularly attracted to occupations that require managerial and administrative abilities. ESTJs also gravitate towards careers in law enforcement. Their tertiary and inferior functions are Intuition and Introverted Feeling respectively (Hammer, 1993; Kirby & Myers, 1993; Myers et al., 2003).

This section will focus on characteristics that will assist therapists/counsellors (students) with an ESTJ personality type. Furthermore, this section will focus on the

characteristics that may impede therapists/counsellors (students) with an ESTJ personality type. ESTJs' ability to logically and objectively evaluate situations may prove valuable in a therapeutic relationship. Also, assertive ESTJs are not afraid to ask difficult questions or to challenge themselves or others. The current researcher is of the opinion that a balance between this objective and challenging nature of the ESTJ therapist (student) could result in them being potentially efficient therapists/counsellors.

ESTJs' natural tendency to focus less on their tertiary and inferior functions could have a negative impact on the therapeutic relationship and process if they neglect the development of their Intuition and Feeling functions too much. ESTJ therapists/counsellors (students) may become insensitive to their clients' need to process feelings that may become evident during the therapeutic process. Clients may perceive the objective and logical ESTJ therapist (student) as cold and clinical, not displaying a satisfactory degree of warmth, understanding and empathy for the challenges/problems they face. If ESTJ therapists/counsellors (students) are not able to incorporate abstract information gathered through Intuition and concrete information gathered through Sensing, they stand the chance to lose valuable information that could have negative consequences. An underdeveloped Intuition function may cause the ESTJ therapist (student) to fail to see how smaller details fit into the big picture, neglecting to view information as an integrated whole.

The above-mentioned concerns should be recognised and considered carefully before prospective psychology masters applicants with an ESTJ personality type enter into careers in the field of psychology. Therapists/counsellors (students) with this personality type need to realise the necessity to develop and utilise their Intuition and Feeling functions. ESTJ therapists/counsellors (students) will have to pay special attention to developing their Intuition

function that will allow them to take in abstract information and not only rely on concrete, Sensing information. The development and utilisation of the ESTJ's Feeling function may result in clients perceiving them as empathic and compassionate. In turn, this may lead to a positive therapeutic relationship, thus creating a safe environment for the client to open and honestly discuss the challenges/problems they face without the fear of being judged or criticised.

*Sixteen Complete Personality Types of Successfully Selected Psychology Masters*

*Students*

*Contextualization*

In contrast to fourth year students' training, psychologists-in-training and intern psychologists undergo specialised training. Students are exposed to an experiential learning process. They are lectured on a specific subject and then required to put theory into practice. Masters training is very demanding. Students have to attend lectures, complete a large quantity of assignments, hours of practical training (client hours), attend supervision sessions (research and clinical) and case conferences. Students are exposed to working with clients early on in their training and have to keep accurate records of these sessions. Students are also evaluated on their interaction with clients and application of theory during these interactions. In order to meet all these demands students are required to be organised and structured. Time constraints result in students having less time to explore and experiment with the theories that they have been exposed to during lectures. Students are thus less inclined to utilise and develop their Intuition functions as a result of limited time availability and large amounts of work that have to be completed.

## *Discussion*

Results indicated that the most frequently represented personality types amongst successfully selected psychology students were the ISFJ, INTP and ENFP types. Detailed descriptions of the characteristics associated with each of these personality profiles were provided in the section on the personality profiles of prospective psychology masters applicants. This section will thus focus on those characteristics that will either assist or impede therapists/counsellors (students) with these personality profiles in their efficacy of therapists/counsellors.

The current researcher is of the opinion that ISFJs' sensitivity to the needs of others combined with their caring, nurturing nature could contribute to ISFJ therapists/counsellors (students) success to be efficient therapists/counsellors. ISFJs' natural tendency to focus less on their tertiary and inferior functions could have a negative impact on the therapeutic relationship and process if they neglect the development of their Intuition and Thinking functions too much. ISFJ therapists/counsellors (students) may become too sensitive to their clients' need to process feelings that they focus too much on these feelings during the therapeutic process, thus ignoring crucial facts. Therapists/counsellors (students) with this personality type will have to create and maintain balance between facts and feelings when they deal with clients in therapy. Should ISFJ therapists/counsellors (students) not be able to incorporate abstract information gathered through Intuition and concrete information gathered through Sensing, they stand the chance to lose valuable information that could have a negative impact on both the therapeutic relationship and the client. An underdeveloped Intuition function may cause the ISFJ therapist (student) to fail to see how smaller details fit into the bigger picture, neglecting to view information as an integrated whole. The underdevelopment

of the Thinking function may result in the ISFJ therapist (student) to reach conclusions about clients and their situations based purely upon emotional and personal values, ignoring logic and reason in situations that require these qualities.

The current researcher is of the opinion that the above-mentioned concerns should not necessarily be seen as debilitating factors that exclude students with an ISFJ personality from the profession of psychology. Instead, these concerns should be recognised and addressed during the training of successfully selected masters students. Therapists/counsellors (students) with this personality type need to realise the necessity to develop and utilise their Intuition and Thinking functions. ISFJ therapists/counsellors (students) will have to pay special attention to developing their Intuition function that will allow them to take in abstract information and not rely on concrete Sensing information only.

Results indicated that 13% (Table 5.3, p.94) of successfully selected psychology masters students have an INTP personality profile. The current researcher is of the opinion that a combination of INTP types' ability to provide a detached, concise and clear analysis of an idea or situation and their ability to ask difficult questions or challenge themselves and others, are crucial in the therapeutic relationship and environment. A balance between this objective, detached and challenging nature of the INTP therapist (student) could result in them being potentially effective therapists/counsellors. The INTPs' ability to see connections and possibilities beyond the present and obvious are also likely to impact positively on the client and therapeutic relationship. INTPs' innate curiosity, insightfulness and ingeniousness combined with their mental abilities are assets that could prove invaluable in a career as a counsellor/therapist.

INTPs natural tendency to focus less on their tertiary and inferior functions could have a negative impact on the therapeutic relationship and process if they neglect the development of their Sensing and Feeling functions. INTP therapists/counsellors (students) may become insensitive to the needs of their clients because they view these needs as illogical. They come to this decision because they utilise their logical, systematic and objective Thinking function too rigidly. Clients may perceive the detached and objective INTP therapist (student) as cold and clinical, not displaying a satisfactory degree of warmth, understanding and empathy for the challenges/problems they face. If INTP therapists/counsellors (students) are not able to incorporate abstract information gathered through Intuition and concrete information gathered through Sensing, they stand the chance to overlook valuable information that could have negative consequences. An underdeveloped Sensing function may cause the INTP therapist (student) to focus exclusively on the big picture, neglecting details that that comprise the bigger picture.

The above-mentioned concerns should be recognised, considered and addressed during the training of counsellors/therapists/counsellors with an INTP personality type. However, these concerns should not be viewed as debilitating factors that necessarily will impact on the success of these therapists/counsellors. Successfully selected psychology masters students with this personality type need to realise the necessity to develop and utilise their Sensing and Feeling functions. INTP therapists/counsellors (students) will have to pay special attention to developing their Sensing function that will allow them to take in concrete information and not only rely on abstract information. The development and utilisation of the INTPs' Feeling function may result in clients perceiving them as empathic and compassionate. In turn, this



may lead to a positive therapeutic relationship, thus creating a safe environment for the client to discuss the challenges/problems they face open and honestly.

Results also indicated that 13% (Table 5.3, p.94) of successfully selected psychology masters students have an ENFP personality type. The current researcher is of the opinion that ENFPs' perceptive and insightful approach to people and awareness of present and future situations, will assist them in being successful therapists/counsellors. ENFPs' ability to find meaning and significance in relationships and connections between people, events and facts, could further contribute to their success as effective and successful therapists/counsellors. Therapists/counsellors often need to be curious, creative and imaginative in their attempts to support and empathize with clients in therapy. Typically ENFPs possess these attributes. ENFP therapists/counsellors (students) will have to guard against a possible inability to apply logic and reason when evaluating their decisions regarding life situations, decisions and people as a result of an underdeveloped Thinking function. ENFP therapists/counsellors must guard against neglecting concrete facts when gathering information about a client's situation and challenges/problems. These concrete facts could be of vital importance in the therapeutic situation.

The above-mentioned concerns should not be seen as debilitating circumstances that exclude ENFP therapists/counsellors (students) from the profession of psychology. ENFP therapists/counsellors (students) need to realise the necessity to develop and utilise their Sensing and Thinking functions. ENFP therapists/counsellors (students) will have to pay special attention to developing their Sensing function that will allow them to take and incorporate concrete information and details that may prove valuable in assisting clients in overcoming their problems/challenges. The development of ENFPs' Thinking function will

assist them in making decisions that consider and incorporate the overt and covert facts relating to their clients' challenges/problems. ENFP type therapists/counsellors (students) will be able to process both facts and feelings clients bring to therapy, thus crating a safe environment free from perceived judgement.

### Dichotomous Personality Type Distributions

This section will focus on a discussion of the results relating to the four dichotomies of: (a) the total sample; (b) prospective psychology masters applicants and (c) successfully selected psychology masters students. The discussion will also focus on a comparison between the results of the present study and those of previous studies.

The findings of the present study are similar to those of Gauss (2002) and Taylor and Yiannikas (2007). Table 6.1 provides a summary of the results for afore-mentioned studies as well as those of the present study.

Table 6.1

Comparison of the Dichotomous Personality Type Distributions of the Present Study and Previous Studies

<b>Study Conducted</b>	<b>E</b>	<b>I</b>	<b>S</b>	<b>N</b>	<b>T</b>	<b>F</b>	<b>J</b>	<b>P</b>
<b>2007<sup>9</sup></b>	54%	46%	64%	36%	73%	27%	61%	39%
<b>2002<sup>10</sup></b>	53%	47%	56%	44%	52%	48%	64%	36%
<b>2009<sup>11</sup></b>	52%	48%	50%	50%	52%	48%	64%	36%

<sup>9</sup> Taylor & Yiannakis (2007) (n=648 psychologists and psychometrists)

<sup>10</sup> Gauss (2002) (n=91 third year psychology students)

<sup>11</sup> Present study (n=44 honours, Bpsych, masters students and intern psychologists)

It should be noted that the three samples differ in some respects. The sample in the study conducted by Gauss (2002) consisted of 91 psychology third year students, while the sample in the study conducted by Taylor and Yiannikas (2007) consisted of 648 psychologists and psychometrists. The psychologists who participated in the study conducted by Taylor and Yiannikas (2007) were mainly industrial psychologists, thus practicing in a different context and working environment than Clinical and Counselling psychologists. The prospective psychology masters applicants will have to apply for training either as Clinical or Counselling psychologists. They are thus likely to possess attributes and characteristics different to Industrial psychologists. The results of all three studies indicated a preference for the Extraversion attitude. Gauss (2002) found that 53% of participants preferred the Extraversion attitude while 47% of participants preferred the Introversion attitude. Similarly, Taylor and Yiannikas (2007) found that 54% of participants preferred to utilise the Extraversion attitude while 46% of participants preferred the Introversion attitude.

#### *Dichotomous Personality Type Distributions of the Total Sample*

An examination of the mean scores in Table 5.4 (p. 96) indicates that the strongest preference for the total sample is Judgement ( $M=15.55$ ,  $SD=7.49$ ) and the weakest is for Feeling ( $M=10.05$ ,  $SD=4.81$ ). The participants' eight individual personality types across the four MBTI® dichotomies will be discussed in the following section.

#### *Extraversion/Introversion*

For the total sample, a higher incidence of Extraversion (52%) than Introversion (48%) was found, implying that participants draw their energy from the outer world of actions and people (Myers, 2000). They work through challenges and learn by means of discussion and practical experience (Kirby & Myers, 1993; Myers et al., 2003). They are sociable and

expressive and take initiative in their work and relationships (Kirby & Myers, 1993; Myers et al., 2003).

### *Sensing/Intuition*

For the total sample no difference was found in the percentage of participants who preferred Sensing (50%) than Intuition (50%) Thus, 50 % of participants prefer to gather tangible, concrete information utilising their five senses (Myers, 2000). They direct their attention to present realities. They are keen observers who remember specifics about a situation, person and experience (Myers, 2000). They take caution when deriving conclusions and weigh all possible positives and negatives attached to implement decisions made (Kirby & Myers, 1993; Myers et al., 2003). They value experience and understand theories and ideas through practical applications (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003;). The remaining 50% of participants from the total sample prefer to gather information intuitively (Myers, 2000). They direct their attention to future possibilities. They are able to see abstract, deeper meanings and connections between people, events and facts (Myers, 2000). They are verbally expressive and imaginative. They tend to focus on the big picture when dealing with people and events (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). Furthermore, they move quickly to conclusions and follow hunches (Kirby & Myers, 1993; Myers et al., 2003).

### *Thinking/Feeling*

For the total sample, a higher incidence of Thinking (52%) than Feeling (48%) was found, implying that participants from the total sample make decisions based on a logical and systematic thought process (Myers, 2000). They are objective and take a cause-and-effect approach to addressing challenges by weighing all possible positives and negatives. They are analytical, fair and tough-minded (Kirby & Myers, 1993; Myers et al., 2003).

### *Judgement/Perception*

For the total sample, a higher incidence of Judgement attitude (64%) than Perception (36%) was found, implying that participants prefer to be organised and pay great attention to planning their daily lives (Myers, 2000). They are systematic, methodical and decisive when making decisions and implementing such decisions (Kirby & Myers, 1993). They value structure, order and punctuality and prefer routines and schedules to spontaneity and unexpected changes (Myers, 2000).

### *Dichotomous Personality Types Distributions of Prospective Psychology Masters*

#### *Applicants*

An examination of the mean scores in Table 5.4 (p. 96) indicates that the strongest preference for the prospective psychology masters applicants is for Judgement ( $M=15.55$ ,  $SD=7.49$ ) and the weakest is for Feeling ( $M=10.00$ ,  $SD=4.39$ ). The participants' eight individual personality types across the four MBTI® will be discussed below.

### *Extraversion/Introversion*

For prospective psychology masters applicants a higher incidence of Extraversion (60%) than Introversion (40%) was found, implying that more prospective psychology masters applicants draw their energy from the outer world of actions and people (Myers, 2000). They work through challenges and learn by means of discussion and practical experience (Kirby & Myers, 1993; Myers et al., 2003). They are sociable and expressive and take initiative in their work and relationships (Kirby & Myers, 1993; Myers et al., 2003).

### *Sensing/Intuition*

For prospective psychology masters applicants a higher incidence of Sensing (55%) than Feeling (45%) was found, implying that more prospective psychology masters applicants

prefer to gather tangible, concrete information utilising their five senses (Myers, 2000). They direct their attention to present realities. They are keen observers who remember specifics about a situation, person and experience (Myers, 2000). They take caution when deriving conclusions and weigh all possible positives and negatives attached to implement decisions made (Kirby & Myers, 1993; Myers et al., 2003). They value experience and understand theories and ideas through practical applications (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

### *Thinking/Feeling*

For prospective psychology masters applicants a higher incidence of Thinking (55%) than Feeling (45%) was found, implying that more prospective psychology masters applicants make decisions based on a logical and systematic thought process (Myers, 2000). They are objective and take a cause-and-effect approach to addressing challenges by weighing all possible positives and negatives. They are analytical, fair and tough-minded (Kirby & Myers, 1993 Myers et al., 2003).

### *Judgment/Perception*

For prospective psychology masters applicants a higher incidence of Judgement attitude (65%) than Perception (35%) was found, implying that more prospective psychology masters applicants prefer to be organised and pay great attention to planning their daily lives (Myers, 2000). They are systematic, methodical and decisive when making decisions and implementing such decisions (Kirby & Myers, 1993). They value structure, order and punctuality and prefer routines and schedules to spontaneity and unexpected changes (Myers, 2000).

*Dichotomous Personality Types Distributions of Successfully Selected Psychology Masters Applicants*

An examination of the mean scores in Table 5.4 (p. 96) indicates that the strongest preference for successfully selected psychology masters students was Judgement (M=15.54, SD=7.65) and the weakest is for Feeling (M=10.08, SD=5.23). The successfully selected masters students' eight individual personality types across the four MBTI® dichotomies will be discussed below.

*Extraversion/Introversion*

For successfully selected psychology masters students a higher incidence of Introversion (54%) than Extraversion (46%) was found, implying that more successfully selected psychology masters students draw their energy from their inner world of thoughts and ideas. They work through challenges and learn by means of contemplation and introspection (Kirby & Myers, 1993; Myers et al., 2003). They are quiet and reserved (Kirby & Myers, 1993; Myers et al., 2003).

*Sensing/Intuition*

For successfully selected psychology masters students a higher incidence of Intuition (54%) than Sensing (46%) was found, implying that more successfully selected psychology masters students prefer to gather information intuitively (Myers, 2000). They direct their attention to future possibilities. They are able to see abstract, deeper meanings and connections between people, events and facts (Myers, 2000). They are verbally expressive and imaginative. They tend to focus on the big picture when dealing with people and events (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). Furthermore, they move quickly to conclusions and follow hunches (Myers et al., 1993; Kirby & Myers, 2003).

### *Thinking/Feeling*

For successfully selected psychology masters students no difference was found in the percentage of participants who preferred Thinking (50%) and Feeling (50%). It can be concluded that 50% of successfully selected masters students make decisions based on a logical and systematic thought process (Myers, 2000). They are objective and take a cause-and-effect approach to addressing challenges by weighing all possible positives and negatives. They are analytical, fair and tough-minded (Kirby & Myers, 1993; Myers et al., 2003). The remaining 50% of successfully selected masters students make decisions based on personal values and beliefs (Myers, 2000). They are empathic and compassionate and may appear to be tender hearted (Kirby & Myers, 1993; Myers et al., 2003).

### *Judgment/Perception*

For successfully selected masters students a higher incidence of Judgement attitude (63%) than Perception (37%) was found, implying that more successfully selected masters students prefer to be organised and pay great attention to planning their daily lives (Myers, 2000). They are systematic, methodical and decisive when making decisions and implementing such decisions (Kirby & Myers, 1993). They value structure, order and punctuality and prefer routines and schedules to spontaneity and unexpected changes (Myers, 2000).

### *General Discussion of the Personality Types and Preferences of the Participants*

This section will focus on both the similarities and differences in the personality types and preferences amongst the participants of the present study. The similarities and differences relating to the 16 personality types will be discussed briefly. This will be followed by a brief discussion of the similarities and differences relating to the dichotomous personality types. In conclusion a summary of the characteristics of the INFP personality type will be provided, as



this personality type is frequently associated with careers in counselling and psychology. A summary of the characteristics of this personality type is necessary, as this personality type was not represented in the sample of the present study.

*General Discussion of the Sixteen MBTI® Personality Types of the Participants*

Results indicated that the majority of the total sample, prospective psychology masters applicants and successfully selected masters students indicated a preference for the INTP personality type. Even though the ISTJ and ESTJ personality types were not the most frequently represented personality types they were represented frequently amongst the participants of the present study. Table 5.1 (p. 91), Table 5.2 (p. 93) and Table 5.3 (p. 94) contain these results.

A clear difference amongst the participants from the separate groups is found amongst the participants of the total sample and successfully selected masters students as opposed to prospective psychology masters applicants. Table 5.1 (p. 91) and 5.3 (p. 94) indicate that 9% of participants from the total sample and 13% of successfully selected masters students indicated a preference for the ENFP personality type. Contrary to these findings, Table 5.2 (p. 93) indicates that only 5% of prospective psychology masters applicants indicated a preference for the ENFP personality type. Research has found that the ENFP personality type is commonly associated with careers in counselling, psychology and careers in humanities in general (Hammer, 1993, Myers et al., 2003).

*General Discussion of the Dichotomous Personality Types of the Participants*

Results indicated that majority of participants from the total sample as well as prospective psychology masters applicants and successfully selected psychology masters students indicated a preference for the Judgement attitude. The majority of participants from

the total sample are thus inclined to be organised and pay great attention to planning their daily lives (Myers, 2000). They are systematic, methodical and decisive when making decisions and implementing such decisions (Kirby & Myers, 1993). They prefer structure, order, punctuality, routines and schedules to spontaneity and unexpected changes (Myers, 2000).

One of the greatest differences is found on the Extraversion/Introversion dichotomy for the prospective psychology masters applicants and successfully selected masters students. The majority (60%) of prospective psychology masters applicants indicated a preference for the Extraversion attitude as opposed to the 46% of successfully selected psychology masters applicants who indicated a preference for this attitude (see Table 5.4, p. 96). It is clear that successfully selected masters students are Introverted. They thus draw their energy from their inner world of thoughts and ideas. They are quiet and reserved and often engage in contemplation and introspection to make sense of challenges and experiences (Kirby & Myers, 1993; Myers et al., 2003). The successfully selected psychology masters students' preference for the Introversion attitude may be ascribed to the intensive training that they undergo.

From Table 5.4 (p.95) it is also clear that the majority (54%) of successfully selected psychology masters students tend to utilise their Intuition function more readily than their sensing function. The contrary is true for prospective psychology masters applicants, as 55% of these participants prefer to utilise their Sensing attitude. The experiential nature of the training programme that successfully selected psychology masters students undergo may be a possible reason why these participants prefer to utilise their Intuition function. Successfully selected psychology masters students have to interact with clients and are exposed to abstract information that form part of the clients' stories. They thus have to be able to not only focus on concrete and tangible information, but also upon more abstract information. Successfully

selected psychology masters students have to be able to see the deeper meanings and connections between abstract information, people and events. Successfully selected psychology masters students are trained to develop therapeutic skills to see and process both abstract and concrete information. Prospective psychology masters applicants were enrolled in an honours degree or BPsych training programme. These training programmes are theoretical in nature and allow little contact with clients. At the time that the MBTI® was administered to this group of participants, the BPsych students were only two months into their intern placements. They thus had limited exposure to working with clients as opposed to the psychologists-in-training and intern psychologists who had been exposed to working with clients regularly for between 8 and 20 months respectively.

#### *Characteristics of the INFP Personality Type*

Results indicated that the INFP was not represented in the sample of the present study. This is an interesting result considering the fact that research has found INFPs to gravitate toward professions such as psychology (Hammer, 1993; Myers et al., 2003). The INFP personality type's dominant function is Introverted Feeling and their auxiliary function is Extraverted Intuition. Their tertiary and inferior functions are Sensing and Extraverted Thinking respectively (Kirby & Myers, 1993; Myers et al., 2003).

INFPs value both their own development and growth and that of others. It is important for them to have a greater purpose that is not limited to monetary incentives – they strive to contribute to the growth and development of mankind. They are especially sensitive to the psychological and emotional needs of others even when others do not express these needs openly (Kirby & Myers, 1993; Myers et al., 2003).

INFPs make decisions based on personal values of self-knowledge, individuality and growth. They are likely to be sensitive to and concerned for the needs of others, deeply caring about the emotional, physical and psychological well-being of others. By nature INFPs are idealists that are loyal to what they believe (Kirby & Myers, 1993; Myers et al., 2003).

INFPs are future oriented and frequently engage in discussion and reflections for positive change regarding self, others and the world. They are naturally curious and possess the ability to see deeper connections and meanings. INFPs' innate curiosity and creativity contribute to their ability to see long-term solutions to immediate and future challenges. They are thus visionary (Kirby & Myers, 1993; Myers et al., 2003). INFPs are intrigued by opportunities to explore the complexities of human personality. INFPs dislike routine and structure because it holds little meaning to them (Myers et al., 2003; Kirby & Myers, 1993).

Others may see INFPs as adaptable and flexible given that their inner values and beliefs are not threatened. By nature INFPs are reserved and selective about what values and feelings they share with others. INFPs build relationships based on depth, authenticity, true connection and growth of self and others. INFPs are often viewed as sensitive, introspective and complex which make it difficult to understand them. They are original and individualistic in their approach to challenges, others and the world (Kirby & Myers, 1993; Myers et al., 2003).

The INFP type finds careers and working environments that allow for creativity and the implementation of their own values very appealing. Careers that allow INFPs to contribute to their own development and growth as well as those of others also interest these individuals. INFPs find careers that allow them to practice and apply their natural interest in human personality appealing. Research has indicated that INFPs are likely to choose careers in the field of counselling, psychology and the arts and writing (Hammer, 1993; Myers et al., 2003).

It is thus interesting that none of the participants indicated a preference for this personality type.

### Conclusions of the Study

The conclusions of the study are presented according to the main aims of the study as outlined in Chapter Four. The researcher is unaware of research that has been done employing the same type of sample. The conclusions will thus be discussed in the context of general research that has been done utilising the MBTI®.

#### *Personality Type Preferences of Prospective Psychology Masters Applicants*

Aim one of the study was to identify, explore and describe the personality type preferences of a group of prospective psychology masters applicants. In order to meet this aim of the study the MBTI® was administered to 20 participants.

The data obtained through the administration of the MBTI® was analysed by means of frequency distribution statistics. From this process it could be concluded that:

1. The ISTJ (15%), INTP (15%) and ESFJ (15%) personality types were the three most common personality types amongst participants from the group of prospective masters applicants.
2. Participants who preferred the INTP personality type value abstract and theoretical concepts over social interaction. These participants are flexible, quiet and contained (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). Participants who preferred the ISTJ personality type are sensible, realistic, practical and systematic in their actions. They value efficiency and competence. They have a strong sense of responsibility and devotion to their organizations, families and relationships (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). Participants who indicated a preference for the ESFJ

personality type are conscientious, loyal and sociable (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They value traditions and a harmonious work environment. They are decisive and consistent in their decisions and actions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

3. The majority (60%) of prospective masters applicants indicated preference for the Extraversion attitude. It can thus be concluded that the majority of prospective masters applicants direct their energy outward and focus on the outer world of activity and people (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are sociable and expressive. They take the initiative in both their work and relationships (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
4. The majority (55%) of prospective masters applicants preferred to utilise the Sensing function. It can thus be concluded that the majority of prospective masters applicants assimilate information through a sensory process (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are oriented to present realities and rely on concrete facts. They seek to understand ideas and theories through practical applications and value past experiences in similar situations (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
5. The majority of prospective psychology masters applicants indicated a preference for the Thinking (55%) function. It can thus be concluded that the majority of prospective masters applicants make decisions about assimilated information utilising an objective, analytical process to examine the advantages and disadvantages of possible decisions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They solve problems

logically and utilise cause-and-effect reasoning. They are reasonable and objective (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

6. The majority of prospective psychology masters applicants indicated a preference for the Judgement attitude with 63% of participants preferring to employ this attitude. It can thus be concluded that the majority of participants from this group deal with the world in an orderly and planned way (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They require structure and routine and avoid rushed, hasty decisions. They are systematic and methodical in their actions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

#### *Personality Type Preferences of Successfully Selected Psychology Masters Applicants*

Aim two of the study was to identify, explore and describe the personality type preferences of a group of successfully selected psychology masters applicants. In order to meet this aim of the study the MBTI® was administered to 24 participants.

The data obtained through the administration of the MBTI® was analysed by means of frequency distribution statistics. From this process it could be concluded that:

1. The ENFP (13%), INTP (13%) and ISFJ (13%) personality types were the three most common personality types amongst participants from the group of successfully selected masters students.
2. The fact that the ENFP personality type is one of the three most common personality types amongst this group of participants can be ascribed to the fact that type is the most commonly associated with counsellors and individuals who select courses in the humanities (Hammer, 1993).

3. The majority (54%) of participants indicated preference for the Introversion attitude. It can thus be concluded that the majority of successfully selected psychology masters students direct their energy inward and focus on subjective thoughts, feelings and experiences (Myers, 2000; Myers, et al., 2003).
4. The majority (54%) of participants from the group of successfully selected psychology masters students preferred to utilise Intuition. It can thus be concluded that the majority of successfully selected masters students assimilate information by focussing on relationships and connections between the facts (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
5. An equal percentage of participants from the group of participating successfully selected masters students indicated a preference for the Thinking (50%) and Feeling (50%) functions. It can thus be concluded that 50% of participants from this group make decisions about information utilising an objective, analytical process to examine the advantages and disadvantages of possible decisions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They solve problems logically and utilise cause-and-effect reasoning. They are reasonable and objective. (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). The remaining 50% of participants from this group of participants make decisions based on what is important to them as well as to each party involved in and influenced by the decision (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are empathic, guided by personal values, compassionate and promote the fair treatment of all parties as individuals (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).



6. The majority of participants indicated a preference for the Judgement (63%) attitude. It can thus be concluded that the majority of successfully selected psychology masters students deal with the world in an orderly and planned way (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They require structure and routine and avoid rushed, hasty decisions. They are systematic and methodical in their actions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

*The Personality Type Preferences for the Total Sample*

In comparing the personality type preferences of the group of successfully selected psychology applicants to those of the prospective psychology masters applicants, it could be concluded that:

1. None of the participants displayed a preference for the INFP, ISTP and ENTP personality types.
2. The majority (14%) of participants displayed a preference for the INTP personality type while 11% displayed a preference for the ISTJ personality type. Participants who preferred the INTP personality type value abstract and theoretical concepts over social interaction. They are able to focus in depth to solve problems. These participants are flexible, quiet and contained (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). Participants who preferred the ISTJ personality type are sensible, realistic, practical and systematic in their actions. They value efficiency and competence. They have a strong sense of responsibility and devotion to their organizations, families and relationships (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
3. The majority (52%) of the sample indicated preference for Extraversion. It can thus be concluded that the majority of the sample direct their energy outward and focus on the

outer world of activity and people (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are sociable and expressive. They take the initiative in both their work and relationships (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

4. An equal percentage of participants from the sample preferred to utilise the Sensing (50%) and Intuition (50%) functions. It can thus be concluded that 50% of the sample assimilate information through a sensory process (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are oriented to present realities and rely on concrete facts. They seek to understand ideas and theories through practical applications and value past experiences in similar situations (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). The remaining 50% of the sample gather information by focussing on relationships and connections between the facts (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They are future oriented and hypothesise possibilities. They seek to clarify ideas and theories before putting them into action (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
5. The majority of participants from this group of participants indicated a preference for the Thinking (52%) function. It can thus be concluded that the majority of the sample make decisions about information utilising an objective, analytical process to examine the advantages and disadvantages of possible decisions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They solve problems logically and utilise cause-and-effect reasoning. They are reasonable and objective (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).
6. The majority of participants indicated a preference for the Judgement attitude

with 64% of participants who preferred to employ this attitude. It can thus be concluded that the majority the sample approach the world in an orderly and planned way (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003). They require structure and routine and avoid rushed, hasty decisions. They are systematic and methodical in their actions (Kirby & Myers, 1993; Myers, 2000; Myers et al., 2003).

### Conclusion

This chapter provided a discussion of the results of the present study. The first section of this chapter provided a discussion on the complete personality types (profiles) of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected masters students. The discussion of the results for each of the afore-mentioned groups highlighted which of the 16 complete personality types were represented most frequently and least frequently amongst the participants of the present study. This section highlighted the strengths, potential areas for growth, best-suited careers and sources of stress associated with the most frequently represented personality types. The second section of this chapter focussed on a discussion of the results relating to the dichotomous personality type preferences of: (a) the total sample; (b) prospective psychology masters applicants; and (c) successfully selected masters students. In addition, the results relating to the four dichotomous personality types preferred by the afore-mentioned groups were compared to the results of previous South African studies.

Chapter 7 will focus on a discussion about the value and limitations of the study and recommendations for future research will be provided.

## CHAPTER SEVEN

### LIMITATIONS, VALUE AND RECOMMENDATIONS FOR FUTURE RESEARCH

#### Chapter Preview

This chapter will review the value of the study and some limitations presented in the research. Chapter seven will conclude with a brief discussion on recommendations for future research studies.

#### Value of the Study

The study has proved to be valuable for a number of reasons. Firstly, the study added to an existing body of knowledge about the use of the MBTI® in the South African context. Secondly, the study provided for the identification, exploration and description of the personality type preferences of prospective psychologists who intend to practice in South Africa. Thirdly, the study provided for the identification, exploration and description of the personality type preferences of psychology students in their fourth year of study irrespective of whether they intend to continue their studies to qualify as psychologists or not. This allowed for the depiction of the personality preferences of young professionals in training in the field of psychology. Furthermore, the study allowed for a comparison of the personality preferences of the sample of this study to those of the general population, psychology undergraduate students and graduates (psychologists and psychometrists) thus resulting in an additional representation of the personality type preferences in the profession of psychology.

#### Limitations of the study

The following section highlights the most important limitations of the research and specifically concentrates on limitations relating to the sampling method, the sample, the measure utilised, and a lack of literature and previous research on the topic.

### *Limitations of the Sampling Method and Sample Utilized*

The sample employed a non-probability convenience sampling technique, utilizing data obtained through the surveying method. This presented various limitations.

Firstly, the data utilized in this study was obtained from a particular group of participants (honours' students, BPsych students, psychologists-in-training and intern psychologists) utilising the survey technique. There are three major disadvantages to utilising this method of data collection. Firstly, a possible increase in the likelihood of misunderstood items was likely to occur. Secondly, incomplete responses could compromise the validity of the study. Lastly, the unpredictability of response rates was a threat to the accuracy of the study. These limitations were however reduced significantly because the researcher was available to clarify any misunderstood items and participants were encouraged to answer all items.

Secondly, convenience sampling made it impossible to guarantee that the sample was truly representative of the population as it yielded a sample based purely on the basis of availability. Thirdly, the fairly small sample employed in this study, selected from only one institution of higher education in South Africa, compromised the generalizability of the results. The results could thus not be generalised to any population beyond the present sample. The results of this study are thus applicable only to the approached sample and could not be generalized to similar samples across South Africa.

Finally, convenience sampling is based on the fact that there is no method to guarantee that the participants will be equally represented since the sample only included those participants who were willing to make themselves available for the study. All participants might not have had equal opportunities to be included in the sample. The sample thus had an

uneven distribution of participants across biographical variables such as race, language, gender and age.

#### *Limitations of the Measure Utilised in the Study*

The self-report nature of the MBTI® coupled with the participants' perceptions of what is socially desirable could have led to biased responses. Biased responses could have skewed the results of the study. Furthermore, the measure was administered during the third term, just before the selection of applicants for the masters' degree. This could have led participants from the prospective psychology masters' group to believe that they could be included or excluded from the training programme based on the results of the measure. This in turn could have influenced participants to respond according to their perceptions of what was desirable. Responses based on social desirability could possibly be different from responses provided under circumstances free from evaluation.

#### *Limitations Due to a Lack of Literature and Previous Research*

The literature and research relating to the personality preferences of psychology honours' and BPsych students and psychologists-in-training and intern psychologists, particularly in the South African context, was very limited. Limited research has been conducted in the South African context utilising the MBTI® to explore the personality preferences of psychology students.

#### *Recommendations for Future Research*

It is recommended that future research should consider utilising a random sampling technique. By doing this, results could be generalised to larger populations. The results and findings as well as the value of such a study will thus increase considerably.

Another recommendation is that future research focus on a larger sample, as the sample participating in the present study was relatively small. The size of the sample made it impossible to generalize the results to other populations.

Future research could expand the sample by including other groups such as qualified psychologists and registered counsellors. This will allow for a more comprehensive picture of mental health professionals in the field of psychology within the South African context.

Future research could focus on a comparison of the results from the MBTI® instruments to those of other personality measures such as the NEO PI-R and the MMPI-III. This will allow for an elaboration on the validity and reliability of the MBTI® instrument in relation to the afore-mentioned measures.

Future research could focus on the possibility of supplementing existing batteries of selection measures for selecting psychology masters' students. It should however be noted that the MBTI® should be used supplementary to a personality measure such as the NEO PI-R as research has found correlations between the Openness scale of the NEO PI-R and the Intuition function of the MBTI®.

The above-mentioned recommendations will add great value to the already existing body of knowledge relating to the MBTI®. Also, the fields of psychology, personology and personality assessment will benefit tremendously from research based on these recommendations.

### Conclusion

Chapter Seven focussed on a discussion on the value of the study. Some of the limitations impacting on the study were highlighted and discussed. Recommendations for future research provided suggestions to eliminate the identified limitations. Despite these

limitations, the findings were believed to contribute in an important way to expanding on the existing body of knowledge on personality, personality assessment, the usefulness of the MBTI® and the personality preferences of young professionals in training in the field of psychology in the South African context.



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