Implicit and explicit personality in work settings:

an application of Enneagram theory

Anna Sutton

Submitted in accordance with the requirements for the degree of
PhD

The University of Leeds

Leeds University Business School

November 2007

Acknowledgements

Abstract

Research in the field of personality is fragmented, with few attempts to unite the isolated models into a sensible whole. A type approach to personality can provide a level of analysis more conducive to viewing personality as an integrated whole. This thesis aimed to investigate the theoretical and practical application of the Enneagram personality typology,

Study 1 involved a survey of over 400 Enneagram-aware respondents. Participants completed a questionnaire containing measures of three personality models (Big Five Traits, Schwartz's Values and Implicit Motives), as well as job attitudes and cognitions (Internal Work Motivation, Job Satisfaction, Job Involvement, Organisational Commitment, Turnover Intention, Job Self-efficacy and Perceived Stress).

Most of the hypothesised relationships between the Enneagram and other models were supported, indicating that the Enneagram types describe coherent patterns of conscious and unconscious personality. The Enneagram predicted job attitudes and cognitions at an equivalent level to the values and motives models, though not as well as the Big Five.

The general psychological literature and medical research indicate that greater self-awareness is associated with increased well-being and better coping strategies. However, the role of self-awareness in the workplace and its associated outcomes has not been extensively investigated.

In Study 2, 80 volunteers took part in one of two workshops designed to improve their self-awareness: an introduction to the Enneagram or training in self-awareness tools. Participants completed questionnaires before and after the workshop in a switching replications design. The questionnaire measured the Reflection and Rumination aspects of self-awareness as well as job attitudes (Job Satisfaction, Internal Work Motivation, Job-related Well-being) and Coping Behaviours. Participants were also asked to describe the effect of the workshop in their own words to allow for qualitative analysis.

Reflection was positively correlated with Well-being and Rumination was negatively correlated with Job Satisfaction. Self-awareness was also associated with increased use of Coping Behaviours. Participants reported a wide range of influences such as improvement in understanding of themselves and others, and increased confidence.

The Enneagram typology is a useful tool for researchers, providing an integrative framework for models of explicit and implicit personality. For the occupational psychologist, it can predict job attitudes and provide a structure improving employee self-awareness and the associated benefits.

Contents

List of Tables

List of Figures

Chapter 1   Introduction

The first part of this thesis sets the context for the research. Chapter 1 reviews the literature to come to a working definition of personality, differentiated from the self-concept, which guides the rest of the work. How to define a "good" theory of personality is the second issue this chapter addresses, and draws three main criteria from the literature against which personality theories may be assessed.

These three criteria are then used in Chapter 2 to review and critically assess the development of personality theory. Psychoanalytic and Humanistic approaches, which emphasise the unconscious, are contrasted with Situationist and Personologist approaches, which focus much more on conscious personality, and the argument for an integrative model of personality is outlined. A Type approach to personality is suggested as the most appropriate level of analysis for integrating models of conscious and unconscious personality.

The third chapter introduces the Enneagram typology, its origins and theory, and reviews the limited academic research that has been conducted on it. The Enneagram is put forward as a Type model which can integrate different aspects of personality as described by other models.

The fourth chapter delves deeper into models of conscious personality, differentiating general trends of behaviour from the conscious reasons for that behaviour. The Five Factor Model is suggested as the best model of behavioural traits and the Schwartz Values model as the best description of conscious reasons underlying behaviour. The use of both models in the workplace is also reviewed. Hypotheses are made as to how each of these models will relate to the Enneagram Types.

In the fifth chapter, the literature on unconscious personality is reviewed and the model of Implicit Motives is outlined, which can describe unconscious reasons for behaviour. The use of Implicit Motives in predicting occupationally important outcomes is outlined. As with the previous chapter, hypotheses are made as to how the Motives may relate to the Enneagram.

Chapter 6 reviews several important job attitudes and cognitions, their importance in the workplace and their hypothesised relationships with the Enneagram Types. This chapter suggests that the Enneagram can be a useful tool in predicting such occupational outcomes as the model describes both explicit and implicit aspects of personality.

Self-awareness as the link between conscious and unconscious personality is the theme of Chapter 7. Self-awareness is defined for the purposes of this study as private self-attentiveness, and the measurement and effects of self-awareness are reviewed. It is shown that self-awareness has important influences on well-being but that this has not been investigated in

an occupational context. Hypotheses are made about improving employee self-awareness and the possible effects of this on job-related affect and cognition.

Chapter 8 summarises the context and aims of the research and describes the two studies that form the basis of this thesis. Study 1 investigates the usefulness of the Enneagram as a model for combining implicit and explicit personality and predicting job attitudes and choices. Study 2 attempts to improve employee self-awareness and explore some of the outcomes associated with improved self-awareness in the workplace.

In Chapter 9, the Method and Results of the first study are reported, and Chapter 10 discusses the findings. The Enneagram Types are shown to describe clear patterns of conscious and unconscious personality as captured by the traits, values and motives models. In addition, the Enneagram predicts several job attitudes and also appears to be related to occupational choice.

Similarly, Chapter 11 describes the methodology and the findings of the second study while Chapter 12 consists of a discussion of this study. While statistical analysis shows little effect of training in improving private self-attentiveness, a fuller picture is constructed from the qualitative analysis. The effects of self-awareness in the workplace are described in detail and the relative merits of an Enneagram introductory workshop and a generic self-awareness training are outlined.

Finally, Chapter 13 draws the findings of both studies together to make general conclusions and recommendations for practitioners and theorists.

Chapter 2   Personality: a review of the literature

2.1   Defining the field

2.1.1 What is personality?

"Yet this thing we call personality is a great and mysterious problem. Everything that can be said about it is curiously unsatisfactory and inadequate... All the usual explanations and nostrums of psychology are apt to fall short here... Inferences from heredity or from environment do not quite come off; inventing fictions about childhood...ends...in unreality; explanations from necessity ... remain caught in externals. There is always something irrational to be added, something that simply cannot be explained."

Jung (p205-206 in Storr 1998)

Personality psychology is a growth area in the business world. The number of tests or questionnaires available to companies for use with job applicants and incumbents grows every year. In selection, personality instruments can be used to choose the candidate most suited to a particular job. For employee development, personality tools can identify an employee's unique strengths or areas for improvement. The personality of team members can have a large impact on team performance and effectiveness. Personality also has implications for leadership, entrepreneurship or managerial burn out.

But what is personality? And what models of personality are most accurate and useful in a business environment? These are the questions this literature review attempts to answer.

The word personality comes from the Latin word *persona*, which was the mask worn by actors on the stage; and at first glance this may seem an ideal way of defining it: a person's personality is simply who they appear to be. But the scientific study of personality has shown it to be a far more complex area than this. Personality psychology is currently more like a collection of vying theories than a mature science; its basic assumptions have not yet crystallised. It is therefore essential to have a clear definition of personality, of what it is we are studying, before proceeding.

Sometimes, personality and self are thought of as interchangeable constructs. Certainly for most people, both are just "Who I am". However, in personality psychology the concepts can be differentiated. The *self* is often described as a story that each person tells themselves about who they are (Bruner 1990), a way of bringing together their experiences and making sense of their reactions (Polkinghorne 1988). The concept of *personality* is broader and deals with deeper issues of defining human nature (Baumeister and Tice 1996; Shoda and Mischel

1996). Every model of personality is an attempt to explain why people think, feel or behave as they do.

The following sections discuss the distinction between the concepts of self and personality in more detail.

2.1.1.1 The self

Modern Western thought conceives of the "self" as a dynamic *centre of awareness* (Geertz 1975). Each of us thinks of ourselves as unique and separate from other people. The "self" is an integration of our emotions, thoughts and motivations; the place from which we judge and act. Geertz contrasts this view with notions from different cultures, which have a radically different conception of the self and highlights the idea that the concept of self is culturally bounded. As personality psychology research has been conducted primarily from a Western viewpoint, the following definitions of the self concept are all from Western thinkers and this pre-existing bias should be borne in mind while considering them.

Reflecting the idea of the self as a centre of awareness, the philosopher Harré (1998) said that it is a site – a place from which to perceive the world and act upon it. "Selves are not entities but evanescent properties of the flow of public and private action" (Harré 1998, p68). He postulates that the person is made of three "types of self", none of which are actually entities but rather points of view, patterns of attributes and impressions made on other people. The drawback of this theorising is that a point of view has no meaning unless there is something doing the viewing, attributes have to be *of* something, and impressions have to be made *by* something. By redefining self and person, Harré has simply moved the difficulty back a step without actually addressing it. However, he does make the good point that the self is more a "pattern of discourse" than some kind of separate object in the mind.

Using the word *proprium* for the self, Allport defined it as made up of the parts of a person's experience that s/he sees as most essential, warm (or precious) and central (Boeree 1997-2000). By completing a series of functions such as self-identity and rational coping, it develops dispositions or individual characteristics. Allport (1955) warned against using the "self" as a way of explaining the inexplicable and suggested that the whole concept of self might not be needed. Instead, he suggested, self should only be used in certain compound forms, such as self-knowledge and self-belief. While the warning is worth remembering, it is difficult to see how one can have self-knowledge without having a concept of self.

Dweck (1996), a proponent of goal-theory, sees the self-concept as made up of the goals that people pursue in different areas of their lives. Goal analysis can therefore be seen as a way of organising and integrating research on the self. For example, self-esteem, an essential part of the self-concept, is seen as a life-long goal rather than something that a person "has". This view of the self as an "organising" construct is common to many authors and could be seen as an

emergent definition of the concept. Pervin and John (2001) describe the self as being an integrative function which balances and brings together the broader conflicts and functions of personality.

Polkinghorne (1988) describes the self as constructed from others' responses and attitudes. It is an ongoing narrative that synthesises the varied social responses that a person experiences. Similarly, Bruner (1990) sees the self as an outcome of the process of making sense of the world and our experiences. This meaning-making is done through telling stories (narrative). The self not only recounts events but justifies them and links them together, both with the past and the future. Additionally, the self is not just a centre of consciousness within the person which is completely isolated from other people, but actually exists within the relationships with other people. This emphasis on the importance of others in defining our sense of self is one that is often overlooked and highlights the Western individualist bias about the self that was first identified by Geertz.

A working definition of the concept of "self" which takes account of the concerns and thoughts outlined above could therefore be: My concept of what I am like, an ongoing story which integrates my thoughts, feelings and actions.

2.1.1.2 Personality

This section gives a brief review of how some of the most influential thinkers in psychology have defined the personality construct and differentiated it from the self. It takes a historical perspective, beginning with Freud and concluding with modern conceptions.

In Freud's three-fold model of personality, the ego can be identified as the "self", as defined above, while personality is the whole collection of conscious and unconscious structures, processes and drives. The use of Latin names for Freud's original terms can disguise the simplicity of the system he proposed. Basically, he said that the personality is made of conflicting demands from our biological drives, our socially developed idea of what is the right thing to do, and the current situation we are in. To paraphrase a quote of his: "I am therefore uneasily poised between three agencies: the external world, my desires and my concept of an ideal self, each of which may be urging a different course." (p49 in Storr 1989).

Jung was another of the early psychoanalysts who was concerned with investigating human personality. Central to his theory of personality was the idea that it is not something that everyone has! Rather, he viewed it as something to strive for, only achieved after years of development. Personality is the individual's adaptation to the demands of life combined with the greatest possible freedom for self-determination (Storr 1998). He said "Personality is a seed that can only develop by slow stages throughout life. There is no personality without definiteness, wholeness and ripeness." (Jung in Storr 1998, p195). Jung's definition of personality is therefore a little idiosyncratic and could perhaps be better served nowadays by the concept of

self-actualisation. He defined the self as the "centre of gravity" of the personality, a point that is in balance between the conscious and the unconscious.

Another writer who emphasised self-actualisation was Carl Rogers, the founder of person-centred counselling. Rogers' (1951) theory of personality was phenomenological (i.e.: based on the interpretation of experience) and described a self-structure which consisted of a collection of beliefs the individual holds about him- or herself. He saw personality as existing in order to achieve goals and the basic striving of humans as to actualise, maintain and enhance the self (both physical and psychological).

Similarly, Kelly (1955) described personality as an organisation of constructs about the world and individual which guide cognition and behaviour; and the "self" as a collection of constructs created of relationships with other people. A construct is a single formulation of a likeness and a difference, so the self is a construct of how "I" am alike and different from other people. As constructs are continually modified by experience, this view of personality is a dynamic one.

In fact, all these definitions and descriptions of personality share a belief in its dynamism – an underlying assumption that personality can change, and indeed *should* change on the path towards self-actualisation. These concepts of personality include a consideration of the conscious self-concept as well as various conceptions of unconscious aspects of personality.

In contrast, many modern psychologists emphasise the static, conscious aspects of personality, especially those parts that can be measured by self-report or observation. This is perhaps a result of wanting to make psychology appear more "scientific", a concern which can be traced back through Behaviourism even to Freud, who tried to cast his theories in medical language. In line with the general scientific worldview of attempting to describe and predict phenomena in the world, modern personality psychologists emphasise the observable phenomena (i.e.: behaviour) in their realm of study, as well as the internal and external variables (such as genes or the environment) which affect the expression of that behaviour.

For example, Shoda and Mischel (1996) write that the goal of personality psychology is to gain a deeper understanding of "the puzzling inconsistencies of human nature" (p414). This quote reflects the authors' focus on situation-specific behaviours rather than generalities. A person's behaviour can vary dramatically from one situation to another and these authors believe that averaging behaviour over many situations misses out on key aspects of personality.

In contrast to this are those researchers who see personality as a description of the *consistencies* of human nature. They look for general response patterns that are independent of the specific situation. For authors such as Pervin and John (2001) or Costa and McCrae (2003), personality is the concept which brings together the characteristics that lie behind a person's typical patterns of thinking, feeling and behaving.

Despite these differences in emphasis, authors do agree that any attempt at explaining human behaviour must be able to account for both consistency and inconsistency, stability and change. In addition, their definitions highlight the importance of *behaviour* in the study of personality. In a causal scientific model of personality, behaviour is the variable that researchers usually wish to predict.

Modern authors tend to see personality as the over-arching construct which can be invoked to explain behaviour. Westen's (1996) definition of personality provides a good summary of the current position, which is less philosophical than many of the earlier authors and a lot more concerned with measurable phenomena. He defines personality as the "tendency to respond cognitively, affectively, conatively or behaviourally in particular ways under particular circumstances" (Westen 1996 p401). This brings together the various mental processes that make up personality: cognitions, emotions, volition and behaviour; as well as giving consideration to the environmental influences and context that surround the person.

2.1.1.3 Conclusion

Despite differences in terminology and emphasis, broad agreement can still be found among psychologists about what constitutes the self and personality. The self concept is the part of personality which gives the individual the sense of who she or he is. It integrates aspects of personality into an ongoing story of "who I am".

Personality can be defined as the pattern of conscious and unconscious mental functions, processes and characteristics that give rise to the ways people respond to their environment. At first glance, the inclusion of behaviour in the concept of personality may seem strange. Yet it is essential if one is to have a deep understanding of human nature. It is in a person's behaviour that all of the intricacies of personality are finally expressed.

2.1.2 What makes a good theory of personality?

"The challenge is to think of any human behaviour that would force psychologists to question a current premise."

Kagan (1998 p106)

The sheer number of different theories of personality can be overwhelming. As Kagan (1998) points out, psychology is a very young science and has very few fundamental principles: almost anything can be hypothesised, and very rarely disproved.

This section reviews what several different authors have stipulated as necessary and sufficient for a good personality theory. Three major concerns emerge in the literature on personality theory. The first is a need for personality theory to meet basic scientific criteria.

Second, there is an oft-expressed desire for a theory of personality that will be *useful* rather than an abstract description which cannot be applied to improve people's everyday lives. And finally, there is the search for a theory which can encompass all that researchers have discovered so far within the field, personality psychology's wish for a "Theory of Everything".

2.1.2.1 A scientific theory of personality

As a social science, psychology attempts to describe the world according to scientific principles. A scientific theory binds facts together so that they can be understood all at once and makes testable predictions of future states (Kelly 1955). A good scientific theory, according to Kelly, should also meet further criteria:

It should inspire the production of new ideas, which in science would mean the formulation of testable hypotheses. Although hypotheses should be stated in concrete, testable ways, the theory itself should be abstract enough that it can be traced through many different phenomena. A higher level of abstraction is not the same as over-generalisation. The latter takes the concrete results from one situation and imposes them upon another, while the former suggests underlying causes that could account for both the observed results and others.

A theory needs validity. It cannot be "proven", but support for a good theory can be built up by finding support for many hypotheses generated from it. In its search for scientific validity, psychology has tended to create very specific, concrete mini-theories which have then been over-generalised to other situations (Kagan 1998).

Although a theory is abstract, it should allow the clear operational definition of variables. Operational definition is a statement of *how* the chosen variable links the antecedent to the consequence. Confusion of definitions can be a problem in personality theories, for example, in trait theories where the concept of personality consistency was operationalised in terms of scores on various trait measures. But these concrete scores were then treated as if they *were* personality consistency. The same thing happened with intelligence and IQ scores.

A theory should concern itself with properties rather than categories. It is not simply a description of different groups of people or behaviours, but an explanation of the properties of the people or behaviours that result in those groupings.

2.1.2.2 A useful theory of personality

While scientists might ideally like to discover the universal "truth" underlying their chosen field of study, we can generally only edge towards a closer approximation of it. In fact, the usefulness of a theory in everyday applications can be another test of its accuracy. Particularly in an applied area such as Occupational Psychology, the usefulness of a theory when taken out into the world at large is a good indication of how "good" that theory is.

Boeree (1997-2000) describes a theory as a "model of reality that helps us understand, explain, predict and control that reality." He compares it to a map; while it is not the same as the area it describes, and in some cases not even very accurate, it does act as a guide and is something that can be corrected when necessary. One of the most important standards of personality theory for Boeree, one that is certainly more easily grasped than "truth", is how *useful* a theory is.

This need for usefulness is echoed by Briggs Myers and Myers (1995), authors of the very successful Myers-Briggs Type Indicator (MBTI). "To be useful, a personality theory must portray *and explain* people as they are" (p18). McClelland (1996) also makes the suggestion that the study of personality should perhaps start by asking what would be useful rather than reliable and "factorially pure". He gives the example of competencies, which were developed as something to be useful in the workplace and have excellent prediction of job performance, yet were not derived from any current psychological theory.

2.1.2.3 A comprehensive theory of personality

In a field as broad and ill-defined as personality psychology, how can we ever be certain that a theory covers everything it needs to? Every author on the topic has created his or her own list of the essential components of a comprehensive personality theory (e.g.: Westen (1998), Caprara and Cervone (2000), Pervin and John (2001)) and at first glance these lists may show little overlap. However, common themes do emerge.

A "grand theory" of personality would need to be able to predict both the differences between people and the coherence within individuals. It would have to describe the psychological resources which humans have available to them, for example, cognitive processes and affects. How personality originates, develops and changes would also have to be covered, clearly explicating the roles of genetic inheritance and environmental factors. Identification of the situational factors which affect personality expression is an essential component of a personality theory which makes a claim to comprehensiveness. And finally, it would need to include a description and explanation of the individual self-concept or sense of identity.

The domain of personality theory may seem at first to be impossibly broad, including such things as basic tendencies and learned behaviours, both conscious and unconscious structures or processes, motives, development and change. But all these phenomena can be simply defined as the things that underlie consistencies and inconsistencies in behaviour, thoughts and feelings.

2.1.2.4 Conclusion

The three criteria of scientific rigour, usefulness and comprehensiveness provide a way to navigate and assess the vast array of personality theories available in the literature. The next

section turns to consider major theories of personality, assessing them according to these criteria.

2.2   Setting the scene: Theories of Personality

The more precisely the position is determined, the less precisely the momentum is known in this instant, and vice versa.

Heisenberg (1927)

The previous section defined personality and how it differed from the self-concept, as well as detailing the three criteria against which psychological theories can be assessed. In this section, the state of the art of personality psychology theories is reviewed and those three criteria used to assess the relative merits of different theories.

Central to theories of personality are what the researchers *believe people to be* (Bandura, 1986); the theories can be seen as individual researcher's comments on human nature. These beliefs often influence researchers to focus on that aspect of personality that they believe is central to being human.

In the discussion of the various ways personality has been defined, a tension was noted between definitions which include ideas of dynamism and the unconscious and those which prefer to focus on observable behaviour or conscious personality variables. Picking up this distinction, Westen (1996) contrasted two broad areas of personality theory: the "psychodynamic" and the "psychometric". The former are those theories which emphasise the interactions of internal psychological structures at a generalised level; at their core they have an idea of tension or dynamism in personality. On the other hand, psychometric theories are based on a more positivist approach and attempt to *measure* personality instead of trying to describe the hidden internal workings of the mind. They share a focus on describing personality as it is now rather than proposing ways for it to develop.

It is possible to use Heisenberg's uncertainty principle as a metaphor for the researchers' focus on either of these two categories: the more precisely the position (or measurements) of personality is determined, the less precisely the momentum (or dynamics) of personality is known, and vice versa. Neither category is mutually exclusive but they provide a useful way of reviewing the field. In order to locate this thesis in the broader context of personality theory, this section uses an expansion on Westen's distinction to organise and contrast major theories of personality.

2.2.1 Psychodynamic Theories

This psychology is not purely descriptive or academic; it suggests action and implies consequences

(Maslow 1968, piii)

This section discusses all those theories which have at their core an idea of tension or dynamism in personality. It includes both classical psychoanalysts such as Freud and Klein as well as needs theorists such as Maslow and humanistic psychologists such as Rogers. Central to all psychodynamic theories is the idea that personality is a dynamic interaction among psychological forces or processes. There is also a central place for the unconscious in these theories, an assumption that not all of personality is easily available to consciousness.

2.2.1.1 Psychoanalytic approaches

2.2.1.1.1 Sigmund Freud

The basis of Freud's psychodynamic theory of personality was that the organism is always striving to reduce tension caused by disturbing stimuli, which can be both external and internal (Freud 1963). At the simplest level, he proposed a three-fold model of personality (Storr 1989).

The *id* is the most primitive part of the personality. The "it" is an unorganised collection of inherited instincts, needs and drives. The two major drives that Freud proposed were Eros (a drive towards complexity, to bind things together and make connections) and Death (a drive towards simplicity, to destroy things and break connections). The id is unconscious and uses *primary functions* such as symbolisation and displacement, treats opposites as identical and is governed by the pleasure principle. This latter is not so much the seeking of pleasure as the avoidance of pain.

As the baby begins to perceive itself as separate from the environment, it develops a sense of "I" (in Latin, ego). The ego uses *secondary functions* such as common sense and reason to control the id's desires or change the external world where possible. In this, the ego is governed by the need for self-preservation.

Last to develop is the "over-I" (or superego), an internalisation of parental and cultural standards which constantly compares the ego (or self) to an ideal self. The superego also exerts demands on the ego and so personality is in a constant state of tension as the ego tries to balance demands from different parts.

Freud's original theory has been extensively reviewed, built upon and taken apart since he first proposed it. Although elegantly simple and apparently universally applicable, it is not able to describe what makes each person unique. With its roots in therapy, it is more an attempt

to describe how personality develops and the ways that development can stall or go wrong than a theory of the mental functions and characteristics that determine how people respond to their environment. However, Freud's initial conceptions have been invaluable to the development of personality psychology. Of particular importance is the concept of conflicting wishes or motivations within an individual and the fact that these conflicts are often unconscious.

2.2.1.1.2   Carl Jung

Jung articulated several important points about human personality (Storr 1998). His primary concern was with personality development and change. Along with other psychoanalytic psychologists, Jung emphasised the essential role of the unconscious in personality. He claimed that judgement about one's own personality is in general extraordinarily clouded. It is interesting that when Behaviourism arose in psychology, it was seen as a reaction to the psychoanalytic emphasis on abstraction and lack of scientific method, and yet Jung was very clear that a person's behaviour is the only thing that reveals their personality "... it is only our deeds that reveal who we are" (Jung in Storr 1998, p196).

Rather than attempting to describe a universal structure of personality as Freud did, Jung proposed several "psychological types": people who had differing habitual attitudes towards life which determined their interpretation of experience. He was quick to point out that it was not a complete theory of personality because there were many psychological functions that it did not address, such as will and memory.

A person's "type" is a way of acknowledging their preference. The preferences develop in an effort to maintain psychological equilibrium. For an introvert, the primary objects of experience are in the internal world, whereas an extravert is primarily oriented towards experiences in the external world. Each person also has four different functions that they use to deal with their experiences. The "irrational" functions are concerned with realities, whether actual or potential: Sensation tells us that something exists and is opposed to Intuition which tells us where the thing comes from and where it's going. The "rational" functions are concerned with discriminating between things: Thinking tells us what something's meaning is and Feeling tells us what its value is.

These three sets of preferences have been related to three of the Big Five factors (which will be discussed in more detail later) and this is an indication of the continuing usefulness of his theory. Jung's descriptions were later developed into the Myers-Briggs Type Indicator, currently one of the most well-used psychometric tests in the world. As Jung himself pointed out, this theory was not meant to describe the whole of human personality. But as an attempt to describe some of the internal functioning and preferences that make people similar or different, this was certainly a step in the right direction.

2.2.1.1.3 Alfred Adler

Adler was responsible for a third school of psychoanalytic thought: Individual Psychology. It was meant to emphasise the indivisibility of the person and his/her relationships to the community. Adler believed that understanding a part was only possible when it was understood in relation to the whole.

Turning the normal cause-effect process on its head, he described understanding a person's goals as being essential to understanding their behaviour. "We cannot think, feel, will, or act without the perception of some goal." (Adler 1924, p3) In effect, the "cause" of the behaviour was a future goal rather than a past state. "Every action and every gesture of a person derives from its directive line of life" (in Ganz 1953, p23). Individual psychology assumes that once a person's goal is known, all parts of the person will coincide in their seeking to achieve it. This contrasts with Freud's theory of competing drives and pre-shadows the social-cognitive strand of personality psychology which emphasises people as causal agents (Bandura 2001).

2.2.1.1.4 Development of psychoanalytic theory

Each of the authors above defined a central determinant of personality. In Freud's case, it was the drives or instincts which formed and underpinned personality, as well as the concept that personality was not necessarily a singular entity but had competing parts. For Jung, it was a person's preferences in dealing with the world, while for Adler it was a person's goals in life that gave coherence to personality. As Jung pointed out, classification on its own is pointless. But it can be a valuable tool for the researcher in understanding individual differences and even other psychological theories, as the latter are based on how different researchers interpret the world.

While psychoanalytic theory has developed substantially since Freud first articulated his theories, five basic assumptions still underpin it (Storr 1989; Storr 1998). The first assumption is one that is common to much of personality theorising, namely that the theory applies to both "normal" and neurotic people. Mental illness is seen not as an entirely separate way of functioning, but is related to normal personality. Second, psychoanalytic theory remains primarily concerned with subjective experience and only secondarily with overt behaviour. Behaviour is seen as a resolution of the underlying personality conflicts or influences.

Third, it focuses on adaptation of oneself to the world. Rather than urging a discharge of all instincts, it urges the maintenance of an equilibrium between different desires and the demands or restrictions of the environment. Essential to this is the idea of internal conflict, that humans are often caught between opposing desires. Fourth, psychoanalytic theory also remains deterministic: mental events are not random, but have specific causes and outcomes which can be uncovered. And finally, it is a central tenet of psychoanalysis that there are aspects of mental life that are inaccessible to consciousness.

2.2.1.1.5   Psychoanalytic approaches – Conclusion

Psychoanalytic theory has fallen out of favour somewhat with mainstream psychology, yet many of its propositions have quietly been absorbed by other theories (Westen 1998). There are three main psychoanalytical concepts that have made the transition to modern theories.

The first is that much of mental life is unconscious. The implication of this is that common psychological tools, such as self-report measures, cannot access many mental processes. Wilson and Dunn's (2004) review shows a large amount of support for the concept that it is difficult for people to know themselves, due to both motivational limits (as commonly described by psychoanalysis) and non-motivational limits (such as limited processing powers).

The second concept that has been absorbed into modern theories is that mental processes operate in parallel. This means that a person can have conflicting feelings or motivations and may find compromise solutions. And the final concept is that stable personality patterns begin to form in childhood.

Having outlined psychoanalytic theories of personality and their influence on modern theories, the next section turns to Humanistic approaches, which share an emphasis on the dynamic nature of personality.

2.2.1.2   Humanistic approaches

The humanistic approach holds that another person can only be understood if one gains a grasp on his or her experience of reality (Funder 2001). This can be seen as an extension of the classical psychoanalytic approach with its focus on the individual's personal experiences, affects and thought patterns, and several of the authors in this tradition are therefore included in the psychodynamic section. As Funder (2001) points out, behavioural consistency and change are not necessarily unrelated to each other and it is perhaps only in investigating the individual's perception of reality that they can be reconciled.

2.2.1.2.1   Abraham Maslow

Maslow's theory shows similarities to the dynamic view of personality outlined by the psychoanalysts above. His theory of personality was based on the description of inborn needs, an idea similar to Freud's instincts or drives. Behaviour can be understood as an effort by the person to satisfy those needs.

Similarly to Freud, he described two opposing forces at work in the personality. One motivates towards wholeness and uniqueness of the self while the other holds back and is afraid of change. He called these the Growth and Safety forces and emphasised that growth is only possible if a person feels secure.

In contrast to most psychoanalytic theories, though, Maslow (1968) emphasised that the needs did not have to be understood as discomforts to be resolved, but could actually be

welcomed and enjoyed. He arranged the needs in a hierarchy, postulating that the more basic physiological needs had to be satisfied before a person could address higher "growth" needs (such as esteem or self-actualisation). With regard to the higher needs, he pointed out that the idea of homeostasis when a need is met could not apply because meeting these needs often leads to a hunger for more.

Both he and Jung emphasised the developmental process of personality by describing the ideal of self-actualisation, and both recognised that not everyone strove to achieve and even fewer ever attained it. Despite this, however, he believed that an explanation of the human tendency towards self-actualisation was essential for a full personality theory. For Maslow, self-actualisation was the development of biologically-based human nature into full humanness, a fulfilling of potential. He saw his psychology as a description of how to be healthy, as opposed to the models of personality which were based in mental illness and described simply how to be "unsick".

2.2.1.2.2 *Carl Rogers*

Like other psychodynamic theorists in this section, Rogers (1951) saw the personality as in a state of tension, in his case because the *self-structure* is not congruent with experience. The self-structure consists of a collection of concepts about the self that are available to awareness, but which are not necessarily based on sensory evidence. These concepts can be internalised standards or ideas from parents and others that may or may not be true.

The person's experiences are either congruent with this self-structure, in which case he or she accepts them, or incongruent, in which case the experiences may be denied to conscious awareness. Development is about increasing the congruence, which leads to less tension, fewer feelings of vulnerability and threat, and improved adaptation to life because experience is less distorted.

Rogers makes a point of saying that it is the *perceived experiences* which constitute a person's reality, and that this is what they react to, not some "absolute" reality. And it is in this immediate experience that he finds the cause of behaviour, not some past event.[1] People guide their behaviour using hypotheses about reality, some of which they check and later refine, and others of which remain unchecked because the individual is not aware of them. Although Rogers uses the word "awareness" rather than consciousness, he is echoing the earliest psychoanalysts in saying that people simply do not have easy access to all of the reasons for their behaviour.

---

[1] Even though this seems to imply a dismissal of early childhood experiences, this is not the case as current perceptions make use of constructs that must have arisen sometime in the past.

2.2.1.2.3 *George Kelly*

Personal construct theory was proposed by Kelly (1955) as an attempt to create a scientific theory of personality, based on the idea that what mattered to people in therapy was not *what* explanation they were given, but simply that they *had* an explanation of their difficulties. The fundamental postulate is that "a person's processes are psychologically channelised by the ways in which [s]he anticipates events" (p46). This means that people do not just experience events; they anticipate them and interpret them in accordance with their personal constructs. Of central importance is the individual's interpretations of events.

Research by Downey and Feldman (1996) provides support for Kelly's theory. They found that people who expected social rejection tended to interpret social interactions as rejection when others would not. This is a vicious circle in that the person expects rejection, interprets events to support that expectation, and then feels justified in having the initial expectation.

Although Kelly did not approve of classification systems or personality typing, he did mention that people are similar in so far as their construct systems are similar. If one knows a person's construct system, one can predict their behaviour. In fact, for Kelly, understanding someone else's construct system was essential if any sort of social process was to take place. He saw personality development as about opening oneself up to new alternatives and discovering the freedom to choose between them.

2.2.1.2.4 *Humanistic approaches – Conclusion*

Although one of the first trait researchers, Allport (1955) saw personality less as a finished product than a transitive process and described his theory as a psychology of "becoming" rather than being. He criticised theories which were based on animal research, sick people and criminals instead of healthy, whole people. "Becoming" is a process of incorporating earlier stages into later ones and this is largely achieved through self-aware striving. This emphasis on self-actualisation is shared by the humanistic and psychoanalytic authors but largely ignored by more recent psychologists, who are more concerned with describing personality as a static concept.

Several writers (eg: Kagan 1998) have emphasised the significance of personal interpretation in the study of personality psychology. Polkinghorne (1988) wrote that human behaviour originates in, and is contextualised by, the *meaning* of experience. This was echoed by Bruner (1990 p xiii): "Are not plausible interpretations preferable to causal explanations, particularly when the achievement of a causal explanation forces us to artificialise what we are studying to a point almost beyond recognition as representative of human life?" He proposed that meaning should be the central concept of psychology, as the search for meaning in life is the ultimate cause of human behaviour.

2.2.1.3 Psychodynamic Theories – Conclusion

Psychoanalytic and Humanistic theories of personality both try to describe the conflicting forces operating in the human mind that influence behaviour. The previous sections have outlined the main contributions of authors in these two fields and the argument now turns to assessing psychodynamic theories in general. As mentioned in the introductory section about the requirements of a good theory of personality, there are three main criteria to be considered: scientific rigour, comprehensiveness and usefulness.

The great advantage of these psychodynamic theories is that they aim to be comprehensive. They are not descriptions of a small part of personality but make claims about how personality as a whole operates and hangs together. The difficulty arises in operationalising the theory into testable hypotheses. This develops into a concern for scientific rigour. The centrality of the unconscious in these theories, the notion that personality cannot be adequately described by the very owner of the mind, throws up issues of measurability. It may at first be difficult to see how these theories can be assessed by mathematical procedures.

However, some researchers have taken up this challenge and are working on reliable methods for testing theories about unconscious processes. For example, McClelland and colleagues (eg: McClelland, Koestner et al. 1989) have developed rigorous methods for assessing unconscious motives originally derived from Maslow's needs theory. Kelly, as would be expected from someone attempting to create a scientific theory of personality, described a method for assessing an individual's personal constructs, the repertory grid, which is used widely not only in psychology but in business applications such as marketing. It is therefore clear that these theories can be subjected to scientific scrutiny.

As far as the usefulness of these theories go, many of them continue to be in widespread use. Carl Rogers' approach, for example, has developed into a whole school of counselling – the Person Centred Approach. Psychoanalysis in its various forms is practised by both psychiatrists and counsellors. Several of these theories have also been applied in occupational settings. Jung's typology (as operationalised in the Myers-Briggs Type Indicator) is the most commonly used personality instrument in the workplace and Maslow's needs hierarchy has been the basis of much work around motivating employees.

The main contributions of psychodynamic theory are the prominence of the unconscious in personality, the emphasis on self-development in both theory and practice, a recognition of the centrality of the subjective meaning of experience and finally, a level of abstraction suitable to a comprehensive theory.

2.2.2 Psychometric theories

The whole trick of science is to test ideas against reality, and in order to do that, something has to be measured.

(McCrae and Costa 1990)

Rather than trying to describe the hidden internal workings of the mind as psychodynamic approaches do, the theories grouped under this title are based on a more positivist approach and attempt to measure personality. There are, however, two very different approaches within this field, commonly described as the situationist versus the personologist approach. The former emphasise the importance of the environment in determining behaviour while the latter emphasise the importance of individual's stable traits.

Funder (2001) provides evidence that the behaviour of people in one situation commonly correlates with their behaviour in a second situation with a magnitude of r=0.4. This same statistic is viewed completely differently by researchers from the two sides of the debate. To the situationalists, the correlation indicates that behaviour varies so much between situations that it is pointless to take an average of behaviour across the situations as an indication of stability in personality. To the personologists, the correlation is large enough to indicate that there are underlying similarities in the way people behave in different situations. This next section reviews the theories in both camps.

2.2.2.1 Situationist theories

Situationist theories emphasise the change in an individual's behaviour across different situations. Because the situation-to-situation similarity in behaviour is so low, these theorists postulate a more important role for environmental factors than for person factors in determining behaviour.

2.2.2.1.1 Learning theories

These theories, also known as behaviourist theories, all share a strong emphasis on empirical research. They hold that the laboratory is the place to study behaviour, and therefore tend to focus on simple behaviours and often use animal subjects (Pervin and John 2001).

Founded by Watson, who was concerned with using objective methods in psychology, learning theories attempted to bring an end to speculation about things that happen inside a person. They focus instead on aspects of the organism's environment to explain behaviour. The general laws of learning discovered in the lab are seen as more important than any proposed individual differences because of their universal applicability.

At its extreme, behaviourism restricts psychology to observable stimuli and responses. It has no room for what Skinner called mentalistic constructs – those things that cannot be

observed. It is a huge contrast to psychodynamic theories which postulate unseen structures and even interactions among them, based only on inferences from behaviour.

The science of personality in this view is a precise description of general laws and focuses on how people learn and adapt in order to survive. However, the assumption that a human is no more cognitively complex than a rat is obviously an oversimplification and these approaches have been superseded by other cognitive theories.

2.2.2.1.2 Social Cognitive Theories

These theories developed out of the behaviourist tradition and still have an emphasis on the impact of the environment (stimulus) and observable behaviour (response). They share with behaviourism an emphasis on the importance of the situation in the study of personality and provide a welcome balance to approaches which describe personality traits without any context (Mischel 1973). In fact, when the leading authors in this approach give a description of a comprehensive theory of personality, one of the three criteria they demand is a way to conceptualise the situation in psychological terms (Mischel and Shoda 1998). But instead of assuming the behaviourist "black box" approach to the mind, they postulate various internal structures and functions that process the stimulus in set ways.

The social cognitive approach tends to view observed behaviour in much the same way as waves on the sea. Waves are not caused by more invisible waves beneath the surface, as trait theories may often suggest, but by the interactions of several different related yet independent systems: currents, the sea floor, the weather and so forth. Social-cognitive approaches try to describe these underlying structures and the ways they interact, seeking "causes of behaviour not in traits, which are defined independently of the social environment, but in the individual's socioculturally grounded interpretations of the world." (Caprara and Cervone 2000, p104). Similarly to many dynamic approaches, personality is seen as an abstraction or hypothetical construction from or about behaviour (Mischel 1968), rather than a collection of statements about average behaviour.

There are two central postulates of social-cognitive theory: a) that personality functioning involves reciprocal interactions between the person, behaviour, and sociocultural environment, and b) that people are causal agents. This is known as *causal reciprocity*, or to use Bandura's (2001) term *reciprocal determinism*. The expectation of this model is that stable situation-behaviour relationships will be found and that these express personality coherence, (eg: Vansteelandt and Van Mechelen 1998). So instead of searching for cross-situational consistency, as trait approaches do, proponents of this approach search for cross-situational coherence (Krahe 1990). This tries to account for the individual's interpretation of events and their conception that they are behaving in a consistent manner even when the observed behaviours might be radically different.

The drawback of social-cognitive approaches is that, while they pay lip-service to the notion that people are agents, they still have a tendency to view humans simply as "information processing systems". There is the implicit assumption that if psychologists can accurately describe the cognitive-affective units (Shoda and Mischel 1996), they can describe how the system processes the input (psychologically relevant situation variables) to reach a particular output (behaviour), thus negating the possibility of agency.

2.2.2.2 Personologist (Trait) Theories

While situationist theories focus on the environmental influences on human behaviour, trait theories emphasise the individual's consistency of behaviour across different situations, focusing on finding universal, stable differences between people. McCrae and Costa (1990) define traits as "dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings and actions" (p23).

McCrae and Costa (1990) readily accept Mischel's (1968) finding that traits only account for about 5-10% of individual differences in specific behaviour, but point out that situations, moods and other determinants come and go while traits show this consistent prediction over the whole lifetime of the individual.

The definition of traits highlights the fact that they are not determinants of behaviour but tendencies to behave in a certain way. Although there is evidence that traits are heritable to a certain degree (Saudino and Plomin 1996), the origins of the traits, whether genetic or from interactions with parents or peers, are relatively unimportant in this theory. Ultimately, trait theory is about the description of *current* individual differences and their prediction of consistent behaviour, rather than personality development.

In the trait approach, participants complete questionnaires asking them to indicate the extent to which they agree that certain personality descriptors (words or phrases) accurately describe them. The scores for these items are then summed for each scale or factor and the person assigned a standardised score relative to the population. In this way, the traits do not measure "absolute" levels of a trait, but rather the extent to which a person differs from the average.

2.2.2.2.1 Eysenck's three factors

Eysenck saw traits as providing a way of systematising the differences among people. He believed it was essential to take account of traits during any other psychological research: "No physicist would dream of assessing the properties ... or the ... qualities of random samples of matter, of stuff-in-general." (Eysenck 1967, p4) He described a hierarchical model of personality where "types" were made up of underlying "traits", which were in turn collections of habitual responses made up of specific situational responses. He also insisted that the Type

dimensions, as the highest level possible, should be as uncorrelated with each other as possible. The two main ones he described were extraversion/introversion and emotionality/stability. He later added a third factor, psychoticism.

Eysenck (1967) drew on a vast amount of research in his description of personality and showed how the high level traits he described could be understood in terms of biological systems, such as the sensitivity of the autonomic nervous system. Biological causes were seen as acting as predispositions to behave in a certain way. Although his model has fallen into some disuse, two of the three traits survive within the currently popular Five Factor Model.

2.2.2.2.2 Cattell's 16 Personality Factors

Cattell criticised Eysenck's persistence in maintaining three factors, claiming that it was unjustifiable both on theoretical grounds and on criterion prediction when compared with his own model (Cattell 1986). He argued that Eysenck's three factor solution was arrived at by "underfactoring", which results in mixing of first and second order factors (Cattell 1972).

Cattell began his work on personality traits in the 1940s (Cattell 1943a) by analysing a list of words from the English language that could be used to describe personality. The list was designed to be as comprehensive as possible, including natural language words as well as those gleaned from the psychological literature. He reduced the original list of over 5,000 words to 171 categories of terms with similar meanings (Cattell 1943). A small sample of adults was then rated on these scales and cluster analysis was conducted on their scores. This resulted in 60 clusters which were further refined by factor analysis into 16 factors.

This factor structure has been confirmed in several subsequent studies by the author (Cattell 1974). The questionnaire which he developed to assess these factors, named the 16PF, is now in its fifth revision and still very popular in many applications (IPAT 2001). However, the structure has not been replicated by other authors (McCrae and John 1992) and ratings on the 16 PF can be subsumed into the Five Factor Model (McCrae and Costa 1990).

2.2.2.2.3 Five Factor Model

The Five Factor Model (FFM) describes five main factors of personality and has been proposed as a universal, cross-cultural structure of individual differences (McCrae and Costa 1997). It is impossible nowadays to discuss the role of personality in organisations or indeed any other area of interest without considering this model. Reviews and meta-analyses almost exclusively summarise current knowledge using the FFM.

It is worth noting that there is a difference in terminology between different authors. The exact makeup of the factors can vary from author to author, and the differences in the names reflect these differences in emphases. Those who have derived the five factors from analysis of natural language, such as Goldberg (Ashton, Lee et al. 2004), tend to call them the "Big Five" and individually Surgency, Agreeableness, Conscientiousness, Emotional Stability

and Culture / Intellect. Researchers who have derived the factors using analysis of personality questionnaires, such as Costa and McCrae (1997), refer to it as the Five Factor Model and name them respectively Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience. Other authors use the names interchangeably. In this thesis, the Five Factor Model (FFM) terminology will be used, with the exception of Neuroticism. The term Emotional Stability is preferred for its less pejorative connotations.

McCrae and Costa, probably the most prolific of the Five Factor authors, have made efforts to develop the factors into a comprehensive theory of personality. They claim that this model can subsume other trait systems, even those based on an individual's characteristic needs (McCrae and Costa 1990). "The five factors appear to be both necessary and sufficient for describing the basic dimensions of personality; no other system is as complete and yet as parsimonious." This is, in fact, an emerging consensus among trait psychologists. The five factors are postulated to represent the "raw material" of personality, the basic tendencies of humans that must be inferred from behaviour (McCrae and Costa 1996).

An issue that is often overlooked in trait theories is the basic assumption they have that personality is equal to the conscious self-concept. Yet there is significant evidence that self-representations are biased and many personality processes are unconscious (Wilson and Dunn 2004).

2.2.2.3 Psychometric theories – Conclusion

There has long been a tension in personality psychology between the person and the situation when it comes to predicting behaviour. A strictly situationalist approach would imply that individual differences are irrelevant and that behaviour is determined entirely by the situation in which a person finds him- or herself. In contrast, a strictly person-based approach would imply that a person behaves according to internal traits or motivations, regardless of the particular situation. Stated like this, it is obvious that neither approach can capture the realities of human behaviour. Research has found that questionnaire items which contain information about the context have higher criterion-related validities than more generalised items (Hough 2003). Attempts have been made on both sides of the person / situation divide to combine the various theories into a comprehensive model of personality.

Stewart and Barrick (2004) point out four important lessons that have been learned from the debate between personologists and situationalists. The first is that traits only predict behaviour in situations that are relevant to their expression. Related to this is the second point that traits predict behaviour more strongly when the situational cues are weak. Third, a person's traits can alter the situation and finally, people choose situations that are congruent with their traits. The majority of personality researchers now take an interactionist approach to predicting behaviour, emphasising the interaction of both individual and situational variables.

Psychometric approaches bring a valued focus on methodological vigour to the scientific study of personality. While their exclusive reliance on observable behaviour or self-reports certainly limits the depth or comprehensiveness of their theories, it also gives personality psychology a solid base from which to proceed.

Reliable personality questionnaires based on the psychometric approach have provided researchers with a way to assess the impact of personality on many different outcomes of value to businesses. For example, the trait of Conscientiousness has been found to be moderately predictive of job performance (Barrick and Mount 1991). The final test of a good theory is its usefulness, and in this the psychometric theories are particularly successful, being applied in a wide range of everyday settings, from selection of job candidates to employee development.

The trait profile, while useful in many applications which require comparison of people on a standardised scale, is not yet able to describe how those traits interact within an individual. Identifying a limited set of traits which can accurately describe individual differences is not enough because there is no description of how individual personality patterns may be grouped on the trait dimensions. Even the highly trained and experienced specialist can find it difficult to bear in mind an individual's scores on several scales at once. An approach which addresses this problem is the type approach.

2.2.3 Type theories

"Therefore, any comprehensive conceptualization of personality will, in our view, have to make a place for both traits and motives"

Winter et al (1998) p246

Bronowski, a physicist, once noted that psychological "theory" is often only a redescription of the facts in a different language. While this represents the facts, it is not abstract enough to enable one to understand how the mind works (Scott Kelso 1993). Scott Kelso argues that viewing human functioning from a dynamic systems perspective is one way to create this necessary level of abstraction. The concepts of dynamic systems are closely linked to the type approach to personality. Both have as their aim the description of the functioning of a whole system, rather than reducing it to its component variables. Indeed, both approaches would claim that even knowing everything about component variables cannot accurately predict the functioning of the system as a whole: the system has emergent properties (Mandara 2003).

The reductionist approach to personality research is misguided at the most basic conceptual level and does not take account of the complexity of human personality. Most of modern psychological theory is based on the assumption of linear causality, but this assumption is only valid for systems that are in a state of equilibrium. Living creatures, by the mere fact that

they continually add energy to their own systems, are non-equilibrium systems (Scott Kelso 1993) and are typified by a kind of circular causality: the parameters of the system are created by the interaction of individual parts, but they in turn govern the behaviour of those individual parts. A paradigm which takes account of the complexity of the system is necessary.

To quote Scott Kelso (1993, p2), "Understanding [in this paradigm] will be sought in terms of essential variables that characterise patterns in behaviour regardless of what elements are involved in producing the patterns or at what level these patterns are studied or observed." The goal of personality research in this paradigm, therefore, is to find the parameters of characteristic patterns of personality. These are the specific patterns in human functioning that type theories attempt to describe.

The concepts of system dynamics can give psychologists a way to deal with the old debate of person-centred and situation-centred approaches, by combining them with the type approach. It is well-known that some situations constrain people to act in the same way, whereas in others people behave in a more individual manner. The theoretical framework of system dynamics has three parts (Scott Kelso 1993): boundary conditions (the parameters which act on the system from outside, i.e.: the situational constraints or forces), the interacting elements (e.g.: a person's traits or values), and the emerging patterns (personality type). More than just the linear "result" of trait + situation, personality type is an emergent property of the whole system in interaction with its environment, which in turn governs and shapes the individual parts.

Asendorpf (2002) describes the type approach to personality as similar to completing a jigsaw puzzle: it is an attempt to bring together seemingly unrelated results from various constructs and methods. Type theories can be seen as a way of combining the dynamic and metric approaches to personality. At one extreme, personality is reduced to a set variables (e.g.: traits) and averaged over the whole population to develop generalised "laws" of behaviour. At the other extreme, personality is studied at the individual case-level and focuses on the complexities and functioning of the entire system in specific situations. The aim of type approaches is to describe groups of people who share a similar intra-individual structure of experience and behaviours. They thus act as an intermediary between the two extremes, identifying patterns of behaviour in groups of people while still retaining the "wholeness" of the individual (Mandara 2003).

A typology is a system of categorising objects according to their similarities and dissimilarities and can be either numerical or theoretical (Mandara 2003). A numerical typology uses mathematical equations to define the groups and classify objects into the most appropriate group. A theoretical typology, on the other hand, groups objects according to a theoretical understanding of similarities. Although the majority of typologies in the social sciences are numerical (Mandara 2003), based as they are on extrapolation from data, there are examples of

theoretical typologies in personality psychology. The following sections review some of the most well-developed and researched type theories according to this numerical / theoretical distinction, particularly those which have been used in an occupational setting.

2.2.3.1 Type A and B personality

The Type A/B personality dichotomy divides the population into two simple types. It is a numerical approach based on associating particular collections of behavioural and affective patterns with health outcomes. Type A personality is defined as being highly competitive, impatient, restless and feeling pressurised. Individuals characterised as Type B, on the other hand, are more laid back and patient, and less competitive. The types were originally described by two cardiologists who related Type A behaviours to increased risk of coronary heart disease (Friedman and Rosenman 1974).

Type A personality has been associated with many outcomes significant to the workplace, such as susceptibility to stress and ill health. But it is also associated with high performance and achievement. It is therefore of interest to employers who would wish to minimise the negative associations and maximise the positive. There has been a significant amount of research conducted on this type, a recent example of which relates Type A and an external locus of control to greater levels of stress, lower job satisfaction and poorer health (Kirkcaldy, Shephard et al. 2002).

This approach is an example of how a collection of related traits and behaviours can be divided into simple types to enable researchers to compare individuals and develop interventions to be used in the workplace.

2.2.3.2 Triple Typology Model

At one level, the type approach can be an attempt to describe underlying personality dynamics that may be hidden by the averaging approach used in trait theories. People with the same scores on a particular trait, although behaving similarly *on average*, can still show a wide variation in behaviour in specific situations. Vansteelandt and Van Mechelen (1998) demonstrated this with research which classified people according to a combination of personality, situation and behaviour variables. In this example, the situation was defined as high- or low-frustration and behaviour was classified into six classes, such as "attack" or "blocking" reactions. Differences between different groups (or types) of people were then defined as differences in "if...then" profiles (Mischel and Shoda 1995). For example, *if* a person of type 1 is unfairly accused of cheating in an exam, *then* s/he is likely to become tense, feel irritated and lose patience; whereas a person of type 5, if facing the same situation, is more likely to have "blocking reactions", such as trembling hands or spluttering.

People in the same type therefore show similar situation-behaviour profiles. This method of classifying people according to their behaviour in specific situations does not rely on averaging their behaviour across many situations and can therefore uncover interactions in personality that would not otherwise be found. It can account for both inter- and intraindividual differences in behaviour (Vansteelandt and Van Mechelen 1998). However, while there is an advantage to be gained in more accurate prediction of behaviour using this model, it is severely limited by the situation. Each new situation needs to be classified, as do the list of possible behaviours. So while this method of constructing typologies can give new insight in specific applications, it is too time-consuming and unwieldy to be used in personality psychology generally.

2.2.3.3   Three Types

One of the most robust findings in Type research is of a three cluster grouping corresponding to *over-controlled (inhibited)*, *under-controlled* and *robust (well-adjusted)* personality types (Asendorpf, Borkenau et al. 2001). These types were originally found by Thomas and Chess in their studies of infant temperament (Thomas and Chess 1977). Since then, the three types have been reproduced in studies using different methods and samples and with participants of different ages (Caspi 2000).

In a longitudinal study spanning 21 years, the three types were linked to important outcomes in home, school, work and interpersonal relationships (Asendorpf, Borkenau et al. 2001). For example, temperamental type at age three predicted length of education and periods of unemployment as well as risk of being fired. Although the effect sizes were small to medium, they demonstrate pervasive associations between infant temperament and many different aspects of personality functioning at different ages and in different areas (Caspi 2000).

In a large-scale study using both adult and child participants and four different methods for measuring personality, Asendorpf et al (2001) reliably recovered the three types. They also found correlations between the three types and other personality variables such as loneliness and self-esteem; as well as social relationship and interaction variables.

These clear replications of the three types are somewhat disputed by other authors, however. Costa et al (2002) suggest that the findings of replicable types may be inflated by methodological artefacts such as the fact that the Five Factors are non-orthogonal. They do point out though, that the three types cannot be entirely explained away by these known correlations.

De Fruyt et al (2002) looked at the consistency of these types and concluded that the three types should be thought of as patterns of traits that are typical for a significant number of individuals in any particular sample, rather than universal groupings. This echoes Costa et al's (2002) point that types may have utility as labels, summarising trait combinations that have

important outcomes, and be of theoretical interest even if the predictability is not much higher than that captured by traits.

The difficulty in replicating types based on trait questionnaires may be largely due to the methodology employed in scoring traits (Hofstee 2002). Relative scaling of the data, as used in the FFM, results in a scale midpoint that is different to the mean of the assessments. This can result in a biased picture of an individual's personality as someone who actually scores low on, for example, extraversion, is considered average with respect to the population.

While there is still discussion around the implications of this typology, the fact that these three types have been recovered from a wide range of populations and using a range of methods for measuring personality is a clear indication of their validity.

2.2.3.4 MBTI

In contrast to the previous typologies, which were based on the numerical approach to classifying people into groups, the Myers-Briggs Type Indicator (MBTI) is theoretical. It identifies 16 personality types based on Jung's theory, further developed by Myers and Briggs-Myers, that people have preferences in how they perceive and process the world (Briggs Myers and Myers 1995). The theory also represents the unconscious interactions of the underlying preferences within an individual. This may underlie the success of the MBTI as a personality tool: it combines a measure of personality with a description of the inner workings of the mind that can be understood by the layperson yet is still a useful model for professional interventions.

The MBTI is often used in a development context. The focus is on increasing self-awareness as the basis for improving one's interactions with others and for improved self-efficacy. By assisting employees' self-awareness, and showing them that these preferences are not "wrong", psychologists can help employees become more effective and realise their full potential (Childs 2004).

In addition, this typology is often used in team-building to help people to understand how other people's work styles differ from their own and to enable them to recognise the unique contributions each team member can make. Garrety et al (2003) describe how knowledge of the MBTI provides a new discourse model for employees that helps them to make sense of their workplace and interactions, and thereby deal with change more effectively. They make the claim that "cultural change in the organisation as a whole could only be achieved through personal transformation among managers." (p214)

In other research programs, MBTI preferences have been associated with different problem-solving and creativity styles (Gryskiewicz and Tullar 1995). The MBTI has also been used to investigate person-organisation fit and its effect on work performance (Tischler 1996).

2.2.3.5 "Fuzzy" types

In their discussion of type theory, Asendorpf et al (2001) describe the different ways that scores on two uncorrelated trait dimensions might be distributed. Ideally, the scores would be binormal, meaning that the pattern of results would cluster around the means for each trait. If this is the case, one could describe personality types in terms of high or low scores on one or both of the traits, but it would be entirely arbitrary where the cut-off points were made.

The second distribution pattern would be discrete clusters of scores on the two traits. This would mean that individuals could be clearly assigned to one and only one of the clusters, although they might differ to a certain extent in their prototypicality.

Both of these two patterns are considered unrealistic. Asendorpf et al (2001) suggest that it is more realistic to consider types which have "fuzzy" borders, that is, they are not clearly separated. Individuals can still be assigned to the best-fitting group but there is uncertainty about the classification at the edges of the groups.

Mandara (2003) describes how the type approach to personality shows similarities with systems theory, where the behaviour of the system cannot be predicted merely through knowing about its variables. The variables interact in unpredictable ways and the system often shows emergent properties which were not evident at a lower level of analysis.

In systems theory, "state space" is a representation of all the potential states that the system can be in. In personality psychology, this corresponds to all the possible behaviours a human can engage in. Within this state space there are points which represent relatively stable patterns of behaviour over time: called "attractors" in systems terminology (CNAC 2004), they correspond to personality types in psychology. Over the long term, people, like other complex living systems, tend to settle in one of these attractor basins. The attractor basins can be related to the concept of prototypicality and fuzziness in type theory. The attractor point itself is the prototypical behaviour, with some people being very close to the centre of the basin and others further away.

A type approach which acknowledges both prototypical groupings of personality as well as fuzzy borders between types has many advantages (Asendorpf, Borkenau et al. 2001). It would be a more accurate description of personality than a trait model which assumes that trait levels are independent of one another within an individual. In addition, it would capture some of the intra-individual organisation of personality by showing how groups of traits are commonly found together. This would enable researchers to come closer to identifying the possible causes of personality structure. Finally, it enables the classification of personality in a way that does not use arbitrary cut-off points such "high" or "low" scores on a trait.

2.2.3.6 Type Theories – Conclusion

Although type approaches have been criticised for a lack of methodological rigour in the past, the evidence outlined above indicates that the modern approaches have certainly addressed this issue, finding appropriate methodologies and replicating results in different samples.

On the surface, type theories are inherently comprehensive: they claim that everyone falls into one of these types. Of course, it is rarely as clear cut as that. There is the difficulty of how to deal with individual cases which fall on the "borderline" between two types. However, using "fuzzy" types, with people assigned to the best-fitting category is a way of overcoming this issue. With types, it is the interaction of traits or preferences that is the important concept, and discussing the type as a whole with the individual (as MBTI practitioners do) is a way of enabling a person to decide for themselves which type most accurately describes them. By allowing a certain amount of leeway at the edges of the types, the theories can accommodate all personality variations and can therefore be considered comprehensive.

The success of the MBTI and Type A personality concepts in occupational settings is a strong indicator of their value to organisations. The Three Types approach has linked infant temperament to long term outcomes of relevance in the workplace. It is clear that types provide a simple approach to personality for the layperson to use, and allow organisations to begin to apply the often overwhelmingly complex findings of IO research.

Improvements to research methods or personality theory will not be of value to businesses unless there is a clear way of communicating that knowledge to them and helping them to apply it to make better use of their human capital. Using a type approach, with concise descriptions of which traits or motivations (for example) are associated with each type, and how they affect work outcomes, would be an ideal way of doing this.

2.2.4 Theories of personality – Conclusion

This review of personality theories has covered a large array of different approaches. In the psychodynamic group were those theories which try to describe the inner workings of the personality, its conflicts and resolutions, and the role of subjective experience in creating the context a person responds to and is embedded in. Psychodynamic theories have a central place for the unconscious and describe a path for personality development which involves becoming aware of the aspects of personality which are hidden in the unconscious.

Psychometric theories, on the other hand, have their emphasis on the aspects of personality which can be more accurately measured through self-report or observation. Especially where self-report is used, these theories primarily address conscious personality and give little notice to those parts of personality that may operate unconsciously. Within their area

of expertise, however, the psychometric theories provide a good example of rigorous scientific testing.

It would be of great benefit to the study of personality to be able to combine the complementary strengths of these two approaches. A good theory is one which can be tested rigorously, as the psychometric theories have been; is comprehensive, as the psychodynamic theories are; and useful, as both approaches have proven.

Another level of complexity in personality psychology is the divide between explicit and implicit personality. Explicit personality is that which the person is aware of, the parts of personality she or he has conscious access to. Implicit personality covers those aspects which operate unconsciously. Psychometric approaches have typically concentrated on explicit personality as it is more amenable to measurement. Psychodynamic approaches, with their emphasis on comprehensiveness, have attempted to describe the implicit aspects of personality as well.

In order to understand the whole of human personality, the explicit and the implicit aspects of personality need to be combined in some way. Given the complexity of each of the individual systems and models in each approach, however, how is the psychologist supposed to achieve this?

It was argued that the type approach is of value to organisations because it provides them with a simple way to access and begin to apply the vast literature on personality and work. In a similar vein, a type approach is uniquely valuable to psychologists because it highlights important patterns in human functioning and can provide a unifying framework for seemingly disparate but important facets of personality.

The next section introduces a typology called the Enneagram which portrays personality in terms of both explicit and implicit personality. By uniting unique combinations of conscious traits, individual values and unconscious motivations into personality types, it may be well-suited to combining insights about conscious and unconscious personality in a way that is highly applicable in an occupational setting.

Chapter 3   The Enneagram

Like any field of scientific study, personality psychology needs a descriptive model or taxonomy of its subject matter.

(Oliver John, in Naranjo 1994)

The Enneagram (from the Greek *ennea* meaning "nine" and *gramma* meaning "written") is a personality typology which describes nine basic types of personality, or "nine distinct and fundamentally different patterns of thinking, feeling and acting" (Daniels and Price 2000, p1). Each type is represented by a number on the Enneagram diagram (Figure 1), which also captures some the dynamics of this system. Riso and Hudson (1999) describe the Enneagram as a hybrid of spiritual wisdom and modern psychology. It is spiritual in that it concerns itself with an element they believe is fundamental to all spiritual paths, namely, self-knowledge. It is psychological because of its description of personality types, their developments and interactions.
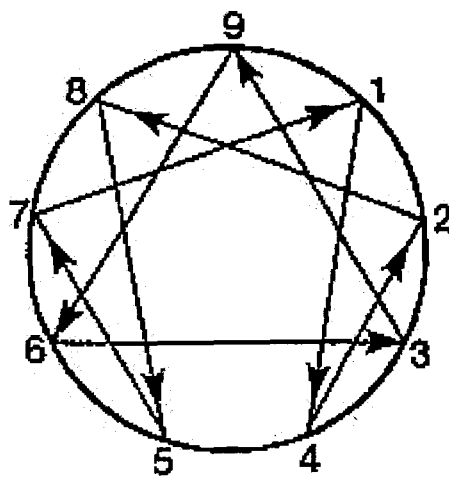
Figure 1: The Enneagram

3.1   Origins and background of the Enneagram

3.1.1 Ancient origins?

The Enneagram developed as a map to help people on their path of self-actualisation or spiritual development. It shares similarities with several other humanistic approaches to personality, such as Rogers', with the emphasis being on helping people to recognise the unconscious limitations they impose on themselves. In common with the humanistic

approaches, Enneagram theory also contains the concept of "essence", or a person's true potential, that becomes hidden through the development of a false self-concept.

However, in contrast to theories expounded by specific psychological researchers, the body of knowledge about the Enneagram system has developed through an oral tradition. Its exact origins are difficult to pinpoint and there is some controversy over how and when it developed. Self-actualisation or the development of human potential is in other cultures, and historically has been in the West, regarded as a spiritual process. Some have made claims for an ancient origin for the Enneagram in the mystical traditions of various religions.

Most authors claim that the Enneagram originated with the Sufis (eg: Wagner 1981). There is, however, some controversy over this origin (eg: Riso and Hudson 1999). Gamard (1986) claims that the Enneagram was a kind of "secret knowledge" (perhaps comparable to alchemy in the Western world) which was closely guarded by a sect known to the Sufis – hence the confusion over its origins in the Sufi tradition. Still other authors have found parallels with the teachings of the Christian "Desert Fathers" (Nathans 2004) or with Platonic thought (Riso and Hudson 1999).

Blake (1996) claims that as the Enneagram symbol is based on the decimal system, it cannot be older than the adoption of this system by the Arabs in the ninth century. However, this does not negate other claims, such as that made Goldberg (1999), that Homer used his knowledge of the nine types in writing the Odyssey.

In line with common practice among Sufis and other mystic groups, the knowledge of the Enneagram was never written down but passed on from teacher to student (Wagner 1981). It was important to the early teachers that students only begin to pass on the knowledge once they had truly understood it, so that the knowledge did not become "devalued". It is only in the last couple of decades that some of the students of the Enneagram have begun to publish books and teach the personality types publicly. The following section assesses the modern development of the typology.

3.1.2 Gurdjieff

The Enneagram symbol was brought to the West by George Gurdjieff (1872-1949), a Russian teacher and thinker who used it as a model of natural processes and a way of understanding the world. He is described as a "pioneer in adapting Eastern spiritual teachings for use by modern Westerners" (Tart, preface in Palmer 1988). Gurdjieff claimed he had learnt the Enneagram symbol from Sufi mystics during his travels, where it was used as a way of guiding the spiritual development of disciples (Pacwa 1991). This claim was later supported by a Sufi teacher named Idries Shah.

Gurdjieff's teaching was collected by one of his students, Ouspensky, and published as a book *In search of the miraculous* in 1949. It is in this book that Gurdjieff is quoted as

identifying the "chief feature" of each type – its particular psychological blind spot. It seems that he used his understanding of the Enneagram to guide his students but did not believe they were ready to be taught the whole system (Palmer 1988). He was more concerned with guiding his students' self-development than going into detail about their personality types.

Gurdjieff urged his students to begin to observe and recognise their defence mechanisms at about the same time that Freud was first describing these unconscious mechanisms to the wider world. It was his theory that every type had specific ways it "buffered" itself from reality. Those buffers, or defence mechanisms, made life easier and protected the person from the shocks of ordinary life. However, they also lulled the person into a kind of sleep, where they function on automatic and cannot see the world or themselves as they really are because their perceptions are distorted by their personality type.

It seems that, Gurdjieff taught the Enneagram symbol as a system for understanding processes in the world, was aware that each person had a "Chief Feature" around which the rest of their personality was arranged, and emphasised the importance of cultivating self-observation to recognise the unconscious defences that perpetuated this limitation on potential. But he did not describe the nine personality types. This was begun by Oscar Ichazo, who had a similar background in Sufi training although he did not report having learnt from Gurdjieff himself.

3.1.3 Ichazo

Ichazo combined the Enneagram symbol with spiritual traditions of the unconscious blocks to self-actualisation experienced by different people (Wagner 1981). These attributes can be traced back to the second or third century AD, where they appeared in Plotinus' "The Enneads" (Riso and Hudson 1999). They also appear in Christian writings in reverse, as the seven deadly sins plus the general sins of fear and vanity (Palmer 1988). Ichazo termed these classical passions "fixations", in line with psychoanalytic theory of the place at which personality becomes stuck or fixated. With one of his students, Claudio Naranjo, he arranged them around the Enneagram in their current positions (Arica Institute 2005).

Ichazo then went on to name the higher mental and emotional qualities which each type tends to develop in the process of self-actualisation (Palmer, 1988). He was also responsible for first identifying the three "subtypes", which will be discussed in more detail later. Now director of the Arica Institute, Ichazo continues to use the Enneagram symbol in his teachings about increasing self-awareness and spiritual development, and views the Enneagram personality system as incomplete without the inclusion of the whole process of development. The personality descriptions were therefore further developed by Naranjo (Gamard 1986), a psychiatrist with a long-standing interest in personality type.

In contrast to Gurdjieff's attribution of the Enneagram to the Sufis, Ichazo has stated that his teachings, including the Enneagram, did not originate with the Sufis (Arica Institute

2005). Instead, he describes his approach as a development of Neoplatonic thought with influences from many different spiritual traditions from across the globe. It seems unlikely, however, that having learnt from similar traditions to Gurdjieff, he would have come up with the Enneagram entirely separately. It may be that he is only referring to his own application of this older knowledge.

3.1.4 Naranjo

While Gurdjieff and Ichazo may be credited with some of the very basic concepts of the Enneagram system, it was really Naranjo who developed it into a comprehensive theory of personality type. Claudio Naranjo was aware of Gurdjieff's teaching and in contact with one of his successors, Idries Shah, when he was invited to hear Ichazo speak about the nine types. Based on the arrangements of fixations which Ichazo had developed, Naranjo expounded the "fixations" into a more complete theory of personality using modern psychological findings. It was particularly significant to him that the Enneagram combined personality traits and much psychoanalytic theory (Naranjo 1994). He saw the Enneagram as providing a way to combine the cognitive approaches to psychology with psychodynamic perspectives. As a student of both Allport and McClelland he was aware of personality trait research from an early point and learnt the factor analysis approach to traits while working with Cattell (Barron, in Naranjo 1994).

Besides developing the descriptions of the personality types in great detail, through continual observation and relation to psychological theory, Naranjo was also responsible for pioneering the panel interview method of typing which is still used by some Enneagram teachers. The panel interview consists of people of the same type being interviewed by a teacher, who uses the stories they tell to illustrate points about the type. It helps people in the audience to find their own type by hearing about the experiences of other people (Palmer 1995). This is similar to "interactional themes", recurrent interpersonal themes expressed in narrative accounts of personal experience, which are one of the aspects of personality that thematic analysis attempts to access (Smith, Atkinson et al. 1992).

Naranjo also related the defence mechanisms of each type to those described in the psychological literature and related mental illnesses to the types by describing how they were on a continuum with the typical biases of each of the nine types (Naranjo 1994).

In Naranjo's work, the nine types are presented as nine different "specialisations" of the psyche. His book *Character and Neurosis* (Naranjo 1994) describes the types using trait descriptors and discusses the possible origins and interactions of the traits. He believes that separating personality traits from motivations and ways of seeing things is artificial. For a true understanding of the person, trait descriptions need to be united with personal motivations.

3.1.5 The expansion of Enneagram teaching

Starting in the early 1980's, several of Naranjo's students began teaching the Enneagram to other people and applying it to work relationships and organisational culture, where it became particularly popular. This was initially against the wishes of Naranjo, who, following the oral tradition he had been taught, had asked his students to ensure they kept the knowledge to themselves.

One of these students was Helen Palmer, who with a professor of psychiatry from Stanford University, David Daniels, has gone on to found a school which continues to teach the Enneagram. She wrote one of the first books on the Enneagram, which presented the personality theory to a wider audience for the first time. She also developed the Enneagram theory beyond what she had been taught by Naranjo by describing the typical focus of attention of each type and how that related to intuitive understanding.

Robert Ochs, a Jesuit priest, was also in the original group that learnt the Enneagram from Ichazo and has taught it to his students, from where it has spread within the Roman Catholic church. The first doctoral dissertation written on the Enneagram was by a student who learnt of it from Ochs (Wagner 1981). The Enneagram's increasing popularity with practitioners has prompted academic interest in the typology and interest in relating the Enneagram to established psychological theory is blossoming.

3.2   Basic Enneagram Theory

It should be noted at this stage that much of the Enneagram knowledge has been built up through narrative methodologies and experience and remains to be subjected to rigorous scientific testing. In addition, this development through workshops and panel interviews means that no one person can be credited with much of the theory.

In the Enneagram typology, each person is held to be one and only one of the nine types. Although everyone has aspects of the nine types in them, one is their preferred or habitual way of dealing with the world (Riso and Hudson 1999). The basic Enneagram theory is that people lose touch with their true selves, often referred to as their "essence", by developing a limited set of coping strategies to deal with the world. Similarly to the theories of Carl Rogers (Rogers 1951) and other humanistic psychologists, people then identify with this limited personality rather than the real self[2].

---

[2] Just as authors in other traditions are prone to equating the area of personality which they study to the whole of personality, it is common for Enneagram authors to equate the concept of personality with the self-image and collection of beliefs a person holds. "Personality type" is therefore thought of as a limited

Personality type is the particular "filter" that people use to understand themselves and the world, deal with the past and anticipate the future, and the way they learn (Riso and Hudson 1999). In Enneagram theory, filters are the "organising assumptions or core beliefs" (Wagner 1996, p1) around which the rest of personality is arranged: a basic belief about what an individual needs in life for survival and satisfaction, and how it can best be achieved.

The word "filter" used in Enneagram books is comparable to the concept of schemas in psychology. Cantor (1990) describes schemas as a record of a person's expression of underlying dispositions that ultimately reinforces those dispositions. Schemas determine the way in which an individual sees and remembers an event. These schemas distort perception in order to make it fit with an individual's preconceptions, limiting one's learning and perceived options to what fits with these rigid structures. This echoes the work of humanistic theorists who emphasised the primacy of an individual's interpretation of experience over the objective reality.

Many authors describe the usefulness of the Enneagram not in telling people who they are but in making them aware of how they have limited themselves. It is also distinctive in its emphasis on development, with clear proposals for how each type can overcome its unconscious limitations. Finding one's type is seen as the beginning of a journey rather than an end in itself.

3.2.1 Summary of the Enneagram personality types

As Enneagram theory has developed primarily through the use of narrative methodologies, there are very deep, rich descriptions of each of the nine types available. Descriptions of the Enneagram types are often organised around the worldview that colours their perception. The type profiles provided in many books and discussed in narrative tradition workshops are then fleshed out by describing common personality traits, typical behaviours and personal values. There is also a great deal of emphasis placed on the often unconscious motivations that lie behind the personality type in an attempt to explain why the person tends to behave in this way.

The following is a very brief summary for each type (adapted from Daniels and O'Hanrahan 2004), designed to give an overview of the Enneagram typology. It covers the type's worldview and the impact of this on the person, including where they typically direct their attention. The types will be described in later sections in terms of established personality models. In addition, more detailed descriptions of each Type and how the personality type manifests at work can be found in Appendix A.

Type 1s (often called the Perfectionist) – perceive a world which is judgemental and punishes bad behaviour and impulses. People of this type believe they can only gain love

---

version of human nature rather than a comprehensive concept. This thesis, however, will maintain the broader view of personality defined in section 2.1.1.3.

through being good, correcting error and meeting their own high internal standards. Seeing others not adhering to those same standards leads to resentment and suppressed anger. Their attention is directed towards identifying error.

Type 2s (the Giver) – believe that in order to get their own needs met, they must give. This type tries to gain love and get their personal needs met by giving others what they need and expecting others to give in return. Pride in being best able to give someone what they want develops. Attention is directed towards identifying others' needs.

Type 3s (the Performer) – perceive that the world only rewards people for what they do, rather than who they are. People of this type believe they can only gain love through success and portray this successful image to others and themselves, identifying with the image. Attention naturally goes towards tasks and things to accomplish.

Type 4s (the Romantic) – experience a world in which an idealised love is missing. They believe the real connection can be found in a unique, special love or situation and strive to make themselves as unique as possible. Envy develops from the perception that everyone else has this unique connection. Attention is directed towards what is missing rather than what is present.

Type 5s (the Observer) – experience a world which is too demanding and gives too little in return. They therefore come to believe they can gain protection from intrusion by learning self-sufficiency, limiting their own needs, and gaining knowledge. Time, energy and knowledge are hoarded because of a fear of there not being enough to go round. Attention goes to detaching themselves from the world in order to observe it.

Type 6s (the Loyal Skeptic) – perceive the world as a hazardous and unpredictable place. To gain security and certainty, people of this type attempt to mitigate harm through vigilance and questioning. Fear or doubt develops concerning their own safety and attention is directed towards worst case scenarios.

Type 7s (the Epicure) – the world is perceived as frustrating, limiting or painful. They believe that frustration and pain can be escaped and a good life can be assured by going into opportunities and adventures. Gluttony for positive possibilities and pleasures develops and attention focuses on options and keeping life "up".

Type 8s (the Protector) – the world is seen as a hard and unjust place where the powerful take advantage of the weak. People of this type try to assure protection and gain respect by becoming strong and powerful and hiding their vulnerability. Attention goes towards injustices and to what needs control or assertiveness.

Type 9s (the Mediator) – perceive a world which considers them unimportant. They believe they can gain belonging by attending to and "merging" with others, that is, blending in with everyone else. This develops into self-forgetting, an inability to recognise or act on their own priorities or opinions. Attention is directed towards others' claims on them.

3.3 *Important concepts*

As mentioned earlier, although it is beginning to attract attention from academics, the Enneagram typology is not well known and it is necessary to describe the important theoretical concepts in some detail.

3.3.1 Virtues, Passions and Vices

With its background in spiritual traditions, the Enneagram uses terminology that at first can seem unrelated to modern psychology. However, the terms are used in very specific ways in Enneagram theory and can be related to established psychological terminology.

The modern descriptions of the types are in Western psychological terms of a mental and emotional habit and the ways they are acted out. But the system is based on older approaches that describe type in terms of *passions*. The word is used in its original sense of being a compulsion rather than a simple emotion, and has strong associations with pain and suffering[3]. The passion organises thoughts, feelings and behaviour in type-characteristic ways (Palmer 1995). It is viewed as the central motivator behind personality, in Naranjo's words a "form of deficiency motivation" (1994, p xxxiv). The nine worldviews of the Enneagram types are rooted in a ruling passion which developed as a childhood coping strategy (Palmer 1995). This passion unites thoughts, feelings and hopes and gives rise to a systematic bias in perception and action. It is comparable to Jung's concept of a complex (Wagner 1981).

The *fixation* is the cognitive bias which is characteristic of each type, the rationalisation of the corresponding passion (Naranjo 1994). It is the area on which a person habitually focuses his or her attention. While probably adaptive enough to allow a person to live reasonably, it is a sub-optimal solution that will also cause a repeating pattern of problems and ironically, be unable to fulfil the real need. The use of the word fixation comes out of the psychoanalytic tradition, indicating the point at which a person is stuck, a fixed pattern of thoughts (Wagner 1981).

A person's energy is naturally directed towards the area that is their focus of attention (Palmer 1995). This habitual expression of energy which is governed by the passion and fixation is referred to as a *vice*. It can be contrasted with the *virtue*, from the Latin *virtus*, meaning strength. In the Enneagram, each of the nine types has a primary virtue which is its natural strength.

---

[3] "passion" *The Concise Oxford Dictionary of English Etymology. Ed. T. F. Hoad. Oxford University Press, 1996. Oxford Reference Online. Oxford University Press. Leeds University Library. 11 November 2004*

<http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t27.e10945>

The following sections deal with more of the terminology, building up a detailed description of Enneagram theory.

3.3.2 The Three Centres

The Enneagram recognises three centres, or types of intelligence (Daniels and Price 2000), which are different ways people learn and react to things. Several authors have related this to the three-level nature of the human brain. The Mental centre is associated with the cortex, dealing with thought, logic and analysis. The thinking centre's intelligence is wisdom, thoughtfulness and intuition. The Emotional centre is linked to the limbic system, dealing with emotional understanding and values. Emotional intelligence is about understanding interpersonal relationships, empathy and compassion. The Instinctual centre deals with basic human instincts and kinaesthetic awareness, and has been associated with the more primitive brainstem. Instinctual intelligence gives a physical sense of how a person is doing in relation to him/herself (Wagner 1996) and the appropriate level of energy needed for action.

In the West there has long been an emphasis on the mental centre as the primary centre of intelligence, as for example reflected in the interest within psychology research in measuring intelligence in terms of verbal, mathematical or spatial reasoning. Recently, there has been more interest in so-called Emotional Intelligence and its value in managing human relations. As yet, the instinctual centre has only been addressed within religions such as Buddhism.

Although everyone uses all three ways of knowing, the types each have one which is their primary centre. The three centres are represented on the Enneagram by three personality types each. The Instinctive (gut) types are 8, 9 and 1; the Feeling (heart) types are 2, 3 and 4; the Thinking (head) types are 5, 6 and 7.

3.3.3 The diagram

The Enneagram diagram (Figure 1) provides a simple visual aid to explain the influences on the different types and the effects of stress and security on personality.

On the Enneagram diagram, each type is connected by the circle to two "wings", the types on either side. While types can share characteristics with those on either side, in contrast to other circumplex models types on opposite sides are not necessarily "opposite types" (Thrasher 1994). Each of these wings can have an effect on how personality develops and is expressed but authors differ in how they interpret the influence of these wings. Riso and Hudson (1999) for example, claim that there are not any "pure" types and that one wing is usually dominant. However, they also claim that some people have two equally balanced wing-influences on their type. If it is possible to have two balanced wings or one dominant wing, it is

difficult to see why it should not be possible to have neither. Riso and Hudson have yet to provide evidence to support this theoretical development.

Each type is also connected to two others via lines with arrowheads on them (see Figure 1: The Enneagram). Following the line in the direction of the arrow shows which direction the type moves in when under stress. This point is referred to as the *stress point* or the direction of disintegration (Riso and Hudson 1999). A person does not "become" the other type when under stress, but takes on some of the worst of that type's characteristics. For example, Type 7s are usually upbeat and laissez faire, but under stress will take on some of the negative characteristics of the Type 1, becoming critical, intolerant and fixated on trying to get things right.

In times of security or relaxation, a person takes on characteristics of the type they are connected to in the direction against the arrow, known as their *security point* (Riso and Hudson's direction of integration). Goldberg (1999) refers to this point as the "High Performance" point, which mobilises a person's true potential. Continuing the previous example, Type 7s are generally easily distracted and always seeking new sources of stimulation. When relaxed and at their best, they take on aspects of Type 5 and are able to concentrate for extended periods of time, becoming completely immersed in one thing and ignoring distractions.

Thrasher (1994) addressed the issue of stress points in her doctoral thesis by asking participants who knew their Enneagram type to complete an anxiety measure. By asking significant others to type the participants as they were "usually, under stress and when doing well", Thrasher hoped to find support for the movement between types. This did not happen, but the results might be confounded by the fact that significant others were found only to be reliable at choosing type when they were already familiar with the Enneagram. Thrasher suggests that future research of this area should use longitudinal studies and more sophisticated measures of stress or self-actualisation.

3.3.4 Instinctual variants

A person's instinctual variant (also known as a subtype) is their dominant way of expressing their emotional energy through the instincts. Each of the variants emphasises a basic instinct that all people have, namely survival, group relationship and one-to-one connection (Naranjo 1994). As the variants are each based on an instinct believed to be basic or crucial to human survival, everyone will use all three. But one variant is usually dominant and becomes the main conduit for a person's type, even to the extent of being used in the wrong arena (for example, using the self-preservation instinct in the social arena).

The *one-to-one* instinct, also called the sexual instinct, is the drive towards one-to-one relating, whether with a partner or close friend. It seeks intense one-to-one connections or experiences.

The *social* instinct is about the human need to belong and is concerned with relationships in groups. It is focused on becoming accepted and necessary in one's relationships with the group.

The *self-preservation* instinct is the drive to stay alive, to get and maintain physical safety and comfort. It is expressed not only in physical survival (eg: food) but in issues relating to money or other people perceived as important to one's personal survival or identity (eg: family) as well.

The variants have a particular style which describes a lot of the variation within a type: each of the 9 types has these three different variants, leading to a total of 27 different types. Combined with the effect of wings and stress and security points, it can be seen that the Enneagram model captures a huge amount of human variety within a relatively simple structure.

3.3.5 Self-development

The expressed aim of Enneagram teachers is to assist personal growth and the Enneagram describes the particular problems that each type faces in this life-long process. Central to this process of becoming more self-aware is the need to relax judgement. Palmer (1995) points out that change is only possible when a person feels accepted for who they are now.

Self-development is a process of becoming more aware of one's habits. Awareness is the ability to take a step back and notice habitual thoughts and feelings as they arise, realising that one's self is not synonymous with the thought or feeling (Riso and Hudson 1999). This is in contrast to the normal *modus operandi* where a person identifies him- or herself with the thought.

Wagner (1996) emphasises that the way to wholeness is found in integration, and his model of development is similar to the theories of Carl Rogers and Karen Horney, whereby the ideal self (or personality) is integrated with the real self (or essence). As one wishes to develop, it is the passion that becomes the major stumbling block because it will not relinquish its hold as a motivator until it is satisfied. Paradoxically, it can never be satisfied because it is not addressing the real deficiency. It can be seen then, that making someone consciously aware of their particular "blind spot" or stumbling block will enable them to progress in their self-development.

3.4   Academic Research

As already mentioned, the main Enneagram authors have tended to concentrate on the use of the system as a self-development tool rather than conducting academic research. There have been few dissertations written and even fewer journal articles published. Academic research at doctoral disseration level has been carried out on the Enneagram in diverse fields, ranging from Religious Philosophy to Education. Those theses relevant to the personality psychology or business fields will be reviewed here.

In the business field, the Enneagram has been applied in several different ways. For example, it was incorporated into a dense theoretical paper presenting a new framework for knowledge acquisition and sense-making by Cutting and Kouzmin (2004). A paper on psychographic market segmentation suggested using the Enneagram typology (Kamineni 2005) to create different marketing strategies for each of the types as consumers. It was also recommended as a way for companies to improve "workplace spirituality" (Kale and Shrivastava 2003), which is seen as a means to creating a more harmonious and profitable company. Brugha (1998) included the Enneagram in a proposal for a system for analysing development decision making in management. All of these papers, however, focused on theoretical developments or applications and none of them conducted research to test these suggestions.

Wyman (1998) presented a psychotherapy model aimed at the counselling practitioner which combined the MBTI and the Enneagram, suggesting that the former captured the "core self" and the latter described a person's typical defence system. However, the Enneagram Types are already described in terms of a "core self" and it is therefore hard to justify ignoring these descriptions in favour of the MBTI. As with the business-focused papers, little attempt was made to support this suggested model with research.

Naranjo (1994) has drawn parallels with other psychological models, such as the interpersonal circumplex and the DSM-IV categories of mental illness. Although his theorising is detailed and readily available, it has not yet been tested.

While there has been some interest in publishing theoretical papers about the Enneagram, there has been less interest in conducting scientifically rigorous testing of the model. The next section will review published research which aims to test the Enneagram model of personality.

3.4.1 Reliability of typing

Wagner's (1981) doctoral dissertation was concerned with establishing the reliability and validity of the Enneagram as a typology of personality. During two to three day workshops, participants were introduced to the Enneagram and decided on their type. The workshop

involved detailed oral explanations and descriptions of the types, written type descriptions, listening to people of each type sharing their experiences, discussion with others of the same type as the participant and discussions with the workshop leader. In summary, decisions about type were based on a combination of self, peer and expert judgements. All of this was designed to ensure the typing process was as accurate as possible.

After a time lapse of up to a year, the participants were asked if they believed themselves to still be the type they had initially identified with. The percentage of people whose initial type judgement remained the same ranged from 79% to 100%, depending on type. The mean percentage of participants whose type was stable was 85%. Cohen's Kappa Coefficient (statistical measure of agreement) ranged from .76 to 1.00 for the stability of typing, which Wagner interprets as evidence of good stability for the typing. Interestingly, over half of those who did change their judgements settled on a type that was a neighbour of the original type, providing some initial support for the concept of the "wings".

3.4.1.1 Questionnaire studies

In line with much trait research, testing type stability has tended to focus on constructing a reliable questionnaire to measure the 9 types. Several questionnaire studies have also had as their goal a demonstration of the reliability or validity of the Enneagram theory itself, rather than just the particular questionnaire under investigation. It is of course difficult to separate tests of the theory from tests of the instruments, especially at these early stages.

All of the attempts to develop a reliable Enneagram questionnaire face similar issues or problems. The first problem is that the Enneagram theory describes many unconscious processes and motivations which a person may not have easy access to. This is why the teaching of the Enneagram has traditionally relied on workshops conducted over a significant length of time, assisting participants to increased self-awareness as part of the process of identifying type. Self-report questionnaires are only able to tap a respondent's conscious self-concept. It is therefore to be expected that Enneagram questionnaires may show lower reliabilities than questionnaires which measure explicit personality.

Showing concurrent validity relies on comparing responses across two or more measures of personality and demonstrating theoretically expected congruencies between profiles on the different measures. This will, of course, only be possible insofar as the measures have comparable theoretical underpinnings.

Several investigations of different Enneagram questionnaires have been carried out. The questionnaires generally show good item-scale reliabilities. A factor analytic study demonstrated validity for the factor structures of three different Enneagram questionnaires (Sharp 1994).

Concurrent and discriminant validity studies have shown distinctive profiles for each type, as measured by these questionnaires, on a range of other instruments:

- Holland Vocational Preference Inventory (only weak support for concurrent validity) (Sharp 1994)
- 16PF (Warling 1995)
- Adjective Checklist (Dameyer 2001)
- NEO PI-R (Newgent 2001)
- OPQ-32 (Brown and Bartram 2005) – this research used a mixed sample, some of whom had completed a questionnaire to determine type and others who had been on courses.

However, a person's type as determined by these questionnaires is generally less stable than when determined by a workshop. This is perhaps not unexpected, as workshops use a combination of self, peer and expert judgements to decide on a person's type. These studies do demonstrate, however, that there are clear differences between the types on trait scales and that findings so far support the theoretical descriptions of the types. In addition, participants in Wagner's research, where participants typed themselves on a workshop, completed the Millon Illinois Self-Report Inventory scales and the Myers-Briggs Type Indicator and statistically significant differences were found between the types on these scales (Wagner 1983).

One of the strengths of the Enneagram model is its combination of many aspects of personality, such as self-efficacy, affect temperament or locus of control. It is likely that a more valid and reliable description of the types could be built up by combining several of these aspects of personality, rather than confining it to traits.

3.4.1.2 The problem of a reliable criterion measure

A constantly recurring problem facing Enneagram researchers is the lack of a standard (criterion measure) against which to assess the effectiveness of questionnaires or other approaches to determining type. Gamard (1986) focused his doctoral research on this problem by evaluating the level of agreement among "expert judges" who watched videoed interviews and were asked to type the interviewee. However, Gamard's research compared the expert judges' type decisions to a criterion rating based on a joint decision between himself and Claudio Naranjo. So although the judges showed highly significant agreement among themselves, their agreement with the criterion rating was not high enough to reach significance.

It seems strange that the author then interpreted this as not providing evidence for the reliability of expert judgements. A more reasonable interpretation would seem to be that there was consensus among the judges on the types that differed from Naranjo's judgements. Additionally, the inter-rater agreement for the Enneagram was comparable to that found in research for inter-rater reliability in DSM-IV categories (Skodol, Oldham et al. 2005),

indicating that expert judges are able to make clinically valid judgements. However, Gamard's results also indicated that the judges were more confident of their intuitive rating of participants than was really warranted, and this sounds a note of caution when evaluating future research.

As Thrasher (1994) pointed out, Gamard's research indicated that expert judges, although very familiar with the Enneagram, were completely unacquainted with the participants. She suggested that people who were familiar with the participants ("significant others") might make better judges of type. Results, however, indicated that significant others were only good judges of type if they were already very familiar with the Enneagram system.

Taking Gamard's and Thrasher's results together seems to indicate that maximising the accuracy of judgements by others can be done by increasing a judge's familiarity with both the person and the system. This is, of course, what the longer-term Enneagram workshops already do.

3.5   Applications

An essential part of the Enneagram teaching is its emphasis on self-actualisation, growth towards fulfilling one's potential. The Enneagram is mostly used to help people develop their self-awareness. By doing this, it can give people an insight into their own and others' behaviour and motivations (Riso and Hudson 1999), easing personal and work relationships. Understanding other people's behaviour becomes possible once their philosophy of life is understood (Goldberg 1999). It allows one to respond to the other person's intention rather than misinterpret their behaviour, lending itself to team-building.

The Enneagram can also highlight a person's particular strengths and weaknesses, giving advice on how to improve weaknesses and cautioning against applying one's strengths in the wrong arena. Integral to the Enneagram is the guidance it provides in overcoming one's personality bias, loosening the limitations of personality.

Goldberg (1999) has used the Enneagram in many business organisations, for the following: professional development, training, strategic planning, conflict resolution, leadership, team working, decision making. He has also applied the Enneagram to whole organisations in order to identify their culture and the particular blind spots they may have to deal with.

3.6   Summary and conclusion

Personality has been defined as the pattern of conscious and unconscious mental functions, processes and characteristics that give rise to the ways people respond to their environment. There are two main questions that personality psychology attempts to answer: "What are people like?" and "Why?" It was noted that psychometric theories tend to concentrate on answering the first question by building up an accurate description of how people behave,

what they think and believe, either in specific situations or generalised across many different situations. Psychodynamic theories, on the other hand, go into detail about why people do things but are not so much concerned with what it is they do.

It has been argued that a type approach to personality is an ideal way to combine the strengths of psychodynamic and psychometric theory as well as disseminate the complex research findings to applied fields. A typology can describe both how individuals differ from one another as well as how their unique combination of traits, values and motivations interact dynamically.

This thesis proposes that the Enneagram personality typology provides just such a clear interface between models of explicit and implicit personality. As has been demonstrated in this section, the Enneagram typology describes personality in terms of both the *what* and the *why* of personality.

The next two sections look at explicit and implicit personality in greater detail, reviewing the major models in each and showing how they can be related to the Enneagram types.

Chapter 4   Explicit Personality and the Enneagram

Explicit personality refers to those aspects of personality that are available to the individual's conscious awareness and can be reliably assessed by self-report questionnaires. Broadly, explicit personality can be divided into two areas: "What I do" and "Why I do it", that is, an individual's consistent behavioural patterns (*traits*) and the *values* which he or she uses to guide and evaluate behaviour (Roccas, Sagiv et al. 2002).

As reviewed in Section 2.2.2.2, trait models describe generalised patterns of behaviour, but do not address the issue of *why* people behave as they do. Bandura (2001) emphasises how important it is for psychologists to remember that people do not just undergo experiences – they are active agents in choosing and directing much of their lives. But what motivates people to choose particular actions?

In personality psychology, motivation can refer to a biological drive or instinct that impels action and is usually unconscious; or to a usually conscious goal or intention that guides action (Hogan 2004). As this section describes explicit personality, the meaning of importance in this context is that of a conscious goal or intention. These conscious goals are referred to in the literature as values: higher-order concepts which affect behaviour indirectly through attitudes and goals (Roe and Ester 1999).

Bilsky (1998 unpublished, in Rohan 2000) noted that values can be characterised by the degree to which they are implicit or explicit and suggested that this could be a way to combine values (explicit) with motives (implicit). The concept of unconscious motivations will be dealt with in Section 5.1. In this section, the dominant models in traits and values research will be discussed and hypothesised links drawn between the models and the Enneagram typology.

4.1 Traits – the Five Factor Model

As described in the review of personality theories, the most widespread and well-supported model in trait psychology is the Five Factor Model (FFM). This review covers the development of the model before giving an overview of the five traits and how it has been applied to the world of business. Finally, hypothesised relationships with the Enneagram types are explicated.

4.1.1 History of the FFM

Lexical analysis uses factor analysis of natural language terms to investigate the structure of personality, based on the assumption that people have developed ways to describe each others' personality that are useful to psychologists (Ashton, Lee et al. 2004). It began with

Allport's analysis of English language terms that could be used to differentiate people from each other. Allport (quoted in Block 1995) suggested that his final list could be used as a basis for developing personality scales, but also warned that a lexical analysis was a poor guide to the subtleties that psychologists might be interested in.

Contrary to Allport's warning, Cattell (1943a) claimed that language already records all those aspects of human personality which are of interest, and hence that an analysis of the lexicon could provide a foundation for the analysis of personality. Cattell (1943) added the terms that had been used by psychologists to describe personality to the list of trait names which Allport had developed. The huge resulting collection went through several refinements until Cattell arrived at 16 Personality Factors. As Block (1995) notes, this process was very isolated and has not since been validated by other researchers. However, the 16 PF became a very widespread personality instrument and Cattell's research is the basis for a lot of the subsequent Five Factor work.

The lexical approach has been criticised for its assumption that everything needed for describing personality is captured by single words in English and for the fact that these descriptors cannot convey the dynamics or structure of personality. However, the five factor solution is robust and is generally recovered in similar form from many different languages (Ashton, Lee et al. 2004). Goldberg (in eg: Ashton, Lee et al. 2004) repeated the lexical approach from the beginning and confirmed the finding of five major factors corresponding to those already found in previous analyses.

Tupes and Christal (reprinted in Tupes and Christal 1992), psychologists employed by the American Air Force, conducted factor analyses of respondents' ratings of each other on 35 traits from previous trait research (eg: Cattell 1943). They found that five factors emerged consistently in different samples. However, several objections to their methodology and generalisability of their results have been raised (Block 1995) which cast doubt on whether this research can really be considered the reliable foundation for the Five Factor Model that has subsequently been claimed.

Similarly to Tupes and Christal, Costa and McCrae began their work on the Five Factor Model by cluster analysing people's responses to Cattell's 16PF questionnaire. They found three clusters, two of which were related to Eysenck's Neuroticism and Extraversion concepts, and the third of which they named Openness to Experience. They subsequently created and refined questionnaires to improve the definition of these factors and linked them to three of the Big Five factors Goldberg's lexical analysis had found. They then expanded the questionnaire to cover Goldberg's two remaining factors as well and showed good correspondence between the factors found by the two different approaches (McCrae and Costa 2003).

There is a great deal of evidence for the ability of the FFM to subsume other personality measures (McCrae and Costa 1990). The five factors account for the bulk of the variance in

many samples, while other factors are small and specific and less useful for what only claims to be a broad taxonomy (Costa and McCrae 1995). There is also evidence that the five factors are universal and can be recovered from samples in many different countries and languages (McCrae and Costa 1997).

4.1.2 Overview of the model

The Five Factor Model portrays five broad traits for describing the basic dimensions of individual differences in personality. As mentioned previously, authors differ in their use of terminology and labels for the factors. The five factors as used in this thesis are[4]:

Extraversion – people who score highly on this trait are assertive, sociable and outgoing, with their focus on the outside world rather than their internal states. Those with low scores are reserved, quiet, and more concerned with their own thoughts and feelings than with the outside world.

Agreeableness – This factor describes the degree to which people are warm, kind, generous, unselfish and trusting. People who score at the lower end of this scale are less inclined to adapt their behaviour to take account of others around them.

Conscientiousness – High scorers on this trait are organised, thorough, dependable and practical. Those with lower scores are less concerned with completing tasks and can be careless, negligent of their duties or commitments and unreliable.

Emotional Stability – People with high scores on this trait tend to have a relatively stable emotional life, remaining calm and unperturbed through most of life's events. Those with low scores are temperamental, moody, tense and nervous and tend to view life in a negative manner. (Reverse-scored, this trait is also known as Neuroticism.)

Openness to Experience – This factor describes the extent to which a person is imaginative, curious and creative. Low scorers tend to avoid new experiences and stick to what they know. (The trait is sometimes referred to as Intellect, although it does not measure intelligence.)

4.1.3 Criticisms of the FFM

As popular as it is, the FFM is not without its opponents. Diener (1996) discusses the role of stable traits in predicting psychological phenomena, noting that even where they provide strong prediction (for example, with subjective well-being), they still lack explanatory power. Traits are useful in describing long-term phenomena, but when the psychologist is interested in more short term responses, they need to be supplemented by other explanations.

---

[4] Adapted from Coleman, A M (2001) *A Dictionary of Psychology*. Oxford University Press : Oxford

The traits that started out as descriptive facts are too often turned into (explanations. Trait theorists describe a tendency to behave in a certain way and then in: underlying structure in personality that gives rise directly to this tendency. For exam| person who is scored as high on extraversion is posited to behave in an extraverted way be their personality has a high level of "Extraversion". This argument is circular: the obs behaviour cannot also be a causal explanation (Mischel 1968). Rather than describing level, basic causes that give rise to behaviour, trait theories are describing surface averaged behaviour.

Another criticism of the FFM made by Block in 1995 and still relevant today i reliance on laypeople. The model is based on personality assessments made by no' overwhelmingly university students, rather than personality experts. Westen (1996) echoe concern about lay observation being sufficient for understanding and constructing mode personality. As long as the FFM is understood as a model of the way laypeople think ; personality it can make important contributions, but he sees the idea of the FFM as the "{ theory" of personality as problematic. Block (1995) points out that several traits that a particular significance to psychologists (such as sexuality) are simply not assessed in the (and McCrae questionnaires.

There are also issues around measurement accuracy. Concerns have been raised ɛ the analyses that have resulted in the five factor structure (Block 1995; Block 2001). The f analysis is commonly based around "core" variables, which may constrain the analysis producing the expected factors.

The problem of social desirability effects on self-reports is particularly relevant i: I/O field as much research is conducted on job applicants, who have a vested intere presenting themselves in the best possible light. Rosse et al (1998) found that job appli· distorted their responses and that this distortion could have a significant impact on wl ultimately hired by changing the rank order of applicants. However, Smith and Robie (2 suggest that evidence indicates very little effect of response distortion on final outcomes su· job performance. While impression management may bias self-reports, evidence indicate: the applicant will then attempt to live up to the image he or she has reported.

4.1.4 Strengths of the FFM

Despite all the above objections, the FFM is excellent at providing a generalised pi of an individual's personality in the here-and-now that can be easily compared with othei addition, the FFM provides a framework for bringing together the research conducted ι different trait measures.

Instead of having to consider hundreds of different traits, researchers can be conf that they are getting a comprehensive overview of the trait domain simply by assessing

broad groupings (McCrae and Costa 2003). It has been shown to subsume the California Q-Set (McCrae and Costa 2003), which was developed explicitly to be a comprehensive description of personality. In a review of personality assessment, the FFM was called the latitude and longitude along which other trait measures could be located (Ozer and Reise 1994).

The FFM emphasises the aspects of personality that show stability across situations and the lifespan and has a remarkable degree of research support (McCrae and Costa 2003). As long as the model is used as it was intended – as a description of broad individual differences – it is a scientifically valid and useful theory. The problems only arise when it is claimed to be more comprehensive than it truly is.

4.1.5 Application of the FFM in business

4.1.5.1 Individual outcomes

Tokar et al (1998) reviewed the literature about work-related behaviour and related the results to the FFM. They looked at such outcomes as career progression, attitudes and values, satisfaction and performance and found that several themes emerged. Assessments of people's vocational interests showed moderate overlap with four of the five factors, but less so with Neuroticism. Extraversion and Neuroticism were related to several career processes and to job satisfaction. Neuroticism was also found to be associated with negative perceptions of stress. Conscientiousness predicted job performance for most occupations and Extraversion was a good predictor in jobs with a substantial interpersonal component. Conscientiousness was also linked to desirable occupational behaviours.

The Five Factor traits have also been related to the coping mechanisms that individuals choose in response to stress or work-related distress (George 2004), as well as leadership (eg: Spangler, House et al. 2004). However, identifying that high Extraversion is associated with leadership does not explain why this particular role is sought out rather than another social outlet. This is in fact a common problem with trait research: too often, studies settle for describing a correlation between an outcome and a trait and make no effort to explain the underlying causes or mechanisms.

4.1.5.2 Team outcomes

The effect of personality traits on team processes or performance is reviewed by Stewart (2003). High Agreeableness of individual team members is associated with social roles and a resultant improved team success, while high Conscientiousness affects task-related roles and thereby improves team success. Considering team-level personality is more difficult. The easiest approach is simply to aggregate the scores of individual members, but this misses out on important predictive information.

Barrick et al (1998) examined the relationships between team composition, processes and outcomes. They found that teams higher in aggregated Conscientiousness, Agreeableness, Extraversion and general mental ability but lower in Neuroticism were rated as having better performance and being more viable in the long term. Overall, the authors found that the mean and the minimum levels of a trait were the most important predictors for their outcomes. This was related to the type of task the team was completing. Further support for the importance of type of task in determining the effects of personality was found by Bowers et al (2000) in a meta-analysis of homogeneity effects in teams. They found that homogenous groups performed better on low complexity tasks which did not require high levels of performance while heterogeneous groups were better at high complexity tasks such as those requiring creativity.

4.1.6 Summary

The comprehensiveness and utility of the FFM have been demonstrated in many different research domains, including the occupational setting. As a measure of that part of explicit personality which is represented by general behaviour patterns and preferences, it is the best available model. As this thesis aims to combine descriptions of explicit and implicit personality, the FFM model has been chosen as the most reliable and comprehensive measure of personality traits.

4.1.7 Hypothesised Relationship to the Enneagram

Although the Enneagram focuses on inner motivations and worldviews for its explanation of personality types, the personality traits that are commonly associated with each type are clearly described[5]. This section hypothesises the links that can be expected between each type and the Five Factor traits, using previous research (see section 3.4.1.1) as a basis but including further hypotheses where they can be justified from the literature. Specific hypotheses

---

[5] The descriptions given in this and following sections are drawn from several different sources, including Naranjo (1994), Palmer (1995), Wagner (1996), Goldberg (1999), and Daniels and Price (2000), as well as the author's own notes from workshops.

are numbered according to the Enneagram type to which they relate, so all hypotheses about Enneagram Type 1 are numbered H1a, H1b and so on. A table summarising all the hypotheses is given in Chapter 8.

A small piece of preliminary research which was designed to develop and check these hypotheses with qualified Enneagram practitioners is described in Appendix B.

4.1.7.1   Type 1

Type 1s are described as disciplined and hard-working as well as calm and emotionally controlled. Newgent et al's (2004) research found a positive correlation between questionnaire items designed to identify Type 1s[6] and Conscientiousness and Emotional Stability (negative Neuroticism), which this research would expect to replicate.

H1a Type 1 will score higher than the rest of the group on Conscientiousness

H1b Type 1 will score higher than the rest of the group on Emotional Stability

This type also prefers to avoid risk and stick to the rules, and can have a rigid approach to life, which may be captured by low Openness to Experience scores.

H1c Type 1 will score lower than the rest of the group on Openness to Experience

Type 1s have very clear principles of how things "ought" to be and feel it is important to do things right, even when this leads to conflict with other people. However, Type 1s take care to behave civilly and so would probably not appear, either to themselves or others, as disagreeable. No relationship is therefore expected with Agreeableness. As this type is neither particularly introverted or extraverted, no significant relationship with Extraversion is hypothesised.

4.1.7.2   Type 2

Newgent's research did not show a relationship between Type 2 and Agreeableness. It is possible that this relationship was not found if the questionnaire items used to assess Type 2 personality in her study did not include any that were related to the Agreeableness factor. However, because people of this type base their self-image on being liked and valued by others, adjusting their behaviour to take account of the other person, they are likely to show a high degree of Agreeableness.

H2a Type 2 will score higher than the rest of the group on Agreeableness

Type 2s are oriented towards other people and individuals of this type are therefore likely to have a high level of Extraversion. This was supported by Newgent's research.

H2b Type 2 will score higher than the rest of the group on Extraversion

---

[6] Throughout these hypotheses, reference to Newgent's findings are to the correlations found between the FFM and Type as defined in the Riso-Hudson questionnaire she used.

Type 2s are usually open about how they are feeling, having a rich and varied emotional life. They can be described as emotionally volatile. This should translate into a low score on Emotional Stability.

H2c Type 2 will score lower than the rest of the group on Emotional Stability

The descriptions of the Enneagram Type 2 personality do not make specific predictions about the Conscientiousness or Openness to Experience factors. Therefore, a null relationship is expected between Type 2 and these two factors.

4.1.7.3 Type 3

The Type 3 focuses on achievement and activity in order to try to earn the appreciation or love of others. This implies that Type 3s will be very Conscientious, committed to completing their tasks. This relationship was found in Newgent's study.

H3a Type 3 will score higher than the rest of the group on Conscientiousness

Type 3s are very other-focused, looking to other people for feedback on how successful they are rather than looking to themselves to monitor success. It could be expected that this outward-focus be captured by high scores on the Extraversion factor.

H3b Type 3 will score higher than the rest of the group on Extraversion

No specific predictions about the relationship between Type 3 and the factors of Agreeableness, Openness to Experience and Emotional Stability can be made at this stage. It is not expected that scores on these factors will help to differentiate Type 3s from other types on the Enneagram.

4.1.7.4 Type 4

For Type 4s, the emotional life is paramount and the highs and lows of emotional experience are actively sought out. A strong correlation with low Emotional Stability is therefore to be expected, and was indeed found in Newgent's research. Low scores are also expected on Extraversion, pointing to the 4s' focus on the internal world of the emotions rather than the external world.

H4a Type 4 will score lower than the rest of the group on Extraversion

H4b Type 4 will score lower than the rest of the group on Emotional Stability

A positive relationship with Openness to Experience could also be hypothesised, as 4s have a desire to experience life to the full and are often deeply interested in the arts.

H4c Type 4 will score higher than the rest of the group on Openness to Experience

The factors of Agreeableness and Conscientiousness are not expected to show a significant relationship with the Type 4 personality.

4.1.7.5 Type 5

Type 5s try to detach from others rather than adapt to them, and are very independent-minded. This is likely to result in a lower score on the Agreeableness factor.

H5a Type 5 will score lower than the rest of the group on Agreeableness

One of the aspects of Type 5 personality is their ability to concentrate for extended periods of time, almost to the exclusion of everything else but the task in front of them. This could be reflected in a high score on the Conscientiousness factor.

H5b Type 5 will score higher than the rest of the group on Conscientiousness

Type 5s are very private people and would therefore be expected to have low scores on the Extraversion factor. This was confirmed by Newgent's research and should be replicated by this study.

H5c Type 5 will score lower than the rest of the group on Extraversion

A defining aspect of the type 5 personality is the way 5s keep their emotions under control, appearing calm and collected most of the time. This would probably be captured as a high score on the Emotional Stability scale.

H5d Type 5 will score higher than the rest of the group on Emotional Stability

No relationships would be expected between the Type 5 and scores on the Openness to Experience factor that would help to differentiate this type from the others.

4.1.7.6 Type 6

Type 6s always aim to be prepared for any situation that might arise or demand that is made on them, making them conscientious in their work and reliable. This should be reflected in a positive score on the Conscientiousness factor.

H6a Type 6 will score higher than the rest of the group on Conscientiousness

Type 6s have a heightened sense of danger or threat from their environment. In Newgent's research, this was captured by high scores on the neuroticism factor (inverted Emotional Stability).

H6b Type 6 will score lower than the rest of the group on Emotional Stability

Fear of the unknown also makes 6s reluctant to try new things, probably resulting in a negative correlation with Openness to Experience.

H6c Type 6 will score lower than the rest of the group on Openness to Experience

No specific relationships with Agreeableness or Extraversion can be predicted from the typical descriptions of type 6.

4.1.7.7 Type 7

Type 7s are oriented towards the outside world, seeking stimulation and variety from it, actively seeking out new experiences and opportunities. It would be expected therefore, that

they have high scores on both Extraversion and Openness to Experience. The search for newness and a dislike for completing tasks after the initial excitement has worn off would result in a low score on Conscientiousness. All these relationships were found in Newgent's research. In addition, 7s are often described as the great optimists of the Enneagram types, and avoiding negative emotion. Low scores on Emotional Stability indicate that a person experiences a lot of negative emotion and 7s will therefore probably score high on it.

H7a Type 7 will score lower than the rest of the group on Conscientiousness

H7b Type 7 will score higher than the rest of the group on Extraversion

H7c Type 7 will score higher than the rest of the group on Emotional Stability

H7d Type 7 will score higher than the rest of the group on Openness to Experience

No specific relationship between type 7 and Agreeableness is expected.

4.1.7.8 Type 8

Type 8s are determined to stick to their way of doing things, believing it to be right no matter what others might feel or say. They also enjoy a good argument, believing it is the way to get to the truth of the matter. This could show itself as a low score on the Agreeableness scale.

H8a Type 8 will score lower than the rest of the group on Agreeableness

They are very good at taking charge of situations and exerting control over others, which could be reflected in a high Extraversion score. Newgent's research supports both of these hypotheses.

H8b Type 8 will score higher than the rest of the group on Extraversion

Type 8s can be volatile, particularly when it comes to expressing anger, which they rarely hold back. It is therefore somewhat surprising that Newgent found a negative relationship between neuroticism (inverted Emotional Stability) and type 8s. On theoretical grounds, it is difficult to make a case for a strong relationship between type 8s and Emotional Stability. In this study, a null relationship is hypothesised. Based on the descriptions of Type 8 personality in the Enneagram literature, no particular relationship with Conscientiousness or Openness to Experience is expected.

4.1.7.9 Type 9

Of central importance to people of type 9 is maintaining the harmony in interpersonal relationships, even to the extent of suppressing their own wishes or opinions, which is captured in the Five Factor Model by high scores on the Agreeableness factor. Newgent's research confirmed this hypothesis.

H9a Type 9 will score higher than the rest of the group on Agreeableness

Type 9s are easily distracted, and therefore not known for their ability to complete tasks or meet deadlines. This is likely to mean a low score on Conscientiousness.

H9b Type 9 will score lower than the rest of the group on Conscientiousness

Type 9s are often described as having a calming influence on people, able to mediate solutions to arguments and pouring oil on troubled waters. They are also often seen as slow to react, not exhibiting many overt signs of emotion. This would be reflected in a high score on the Emotional Stability scale.

H9c Type 9 will score higher than the rest of the group on Emotional Stability

It is easy for 9s to get into a rhythm and they feel most comfortable when things continue as they always have done. This should be captured in a low Openness to Experience score.

H9d Type 9 will score lower than the rest of the group on Openness to Experience

Differences between type 9s and the other Enneagram types on the remaining traits cannot be hypothesised.

As described at the beginning of this section on Explicit Personality, traits are only one part of the conscious personality. To fully describe the explicit personality of the Enneagram types, and to identify patterns linking the two parts of conscious personality, the discussion now turns to personal values.

4.2   Values

It was described earlier how traits capture the "What I do" part of personality and that "Why I do it" is the realm of values. There is a great deal of confusion in the literature about the term values. Or to be more precise, the term is used to refer to many different things, including "needs, personality types, motivations, goals, utilities, attitudes, interests, and nonexistent mental entities" (p 351, Meglino and Ravlin 1998). In her review of the literature, Rohan (2000) provides a list of some of the more influential definitions of values. She points out that people consistently engage in assessment of the "goodness or badness" of their environment and that this is a process of assigning value to things.

While the fact that a person reports something as an important value may not mean she or he will always act congruent with that value, it is an important conscious determinant for behaviour. Certainly it is an essential part of the definition of values that they guide the selection and evaluation of behaviour (Schwartz and Bilsky 1987). Not only this, but values are often invoked as a means of legitimising past behaviour (Meglino and Ravlin 1998).

Allport (1955) pointed out that values influence the way people perceive reality. Rohan (2000) relates this to Bartlett's definition of schemata as ways of organising experience and describes values as high-level cognitive structures, linked to the affective system, that serve to produce meaning and guide behaviour. The value system structures judgements about "best

possible living", or how a person believes she or he can flourish. This goes beyond the definition of values as guides on how best to survive. She relates this to a person's worldview – the collection of beliefs a person holds about how things are or should be. However, her assertion that the worldview is conscious and a function of the person's value priorities assumes a cause and effect direction for which there is no evidence. There is nothing to suggest that a person's value priorities do not stem from his or her worldview. In addition, the extent to which the worldview is conscious could be contested. While people may have conscious access to it if prompted, it is unlikely that they are continually aware of it or its influences on their perception and behaviour.

As the Enneagram describes personality in terms of a central worldview for each type and how it affects diverse aspects of their life, an assessment of values would seem an ideal way of linking Enneagram theory with the established literature.

4.2.1 Values Models

During the course of life, people are inevitably faced with situations in which their values come into conflict with each other. These conflicts are resolved by comparisons between the values (Rokeach 1973), leading researchers to suggest that values are organised hierarchically. An underlying assumption in many value theories is that there is a universal structure of values but that people differ in the importance they ascribe to the individual values (Rohan 2000). Empirical support for this has been found by Schwartz and colleagues (Schwartz and Bilsky 1987; Schwartz 1992).

A distinction between instrumental and terminal values was drawn by Rokeach (1973), who can be credited with reviving interest in the study of values after behaviourism had downplayed the concept. Terminal values are desirable end-states that a person attempts to achieve (eg: comfortable life) while instrumental values are ways of behaving (eg: honesty). However, Schwartz (1992) could not find evidence to support this distinction.

Individual values have been assessed using both normative and ipsative techniques. The former involve respondents rating each value on its own scale whereas the latter is a more comparative process involving ranking of each individual's values in order of importance. Meglino and Ravlin (1998) recommend that the measure chosen should be phenomenologically appropriate to the research question.

Although Rokeach's Value Survey has been the most used instrument for assessing values (Rohan 2000), it suffers from a lack of theoretical basis. In contrast, Schwartz's work (Schwartz and Bilsky 1987) was based on clear theory of how the value types arose and why they were important to human functioning. In addition it describes the kinds of conflicts that could arise between opposing values. Continuous refinements and impressive cross-cultural support make it an ideal candidate for a universal structure of human values.

Schwartz and Bilsky (1987) theorised that human societies across the world must be responsive to three basic types of needs: the individual's biological needs, the need for coordinated social interaction and the survival of the group.

From these needs, they initially derived eight value domains based on cross-cultural analysis of what people reported as "guiding principles" in their lives. In future research this was added to and refined to create a circumplex model of ten values at the individual level (see Figure 2), where neighbouring values on the circle are more compatible with each other than are values opposite each other (Schwartz 1992; Roccas, Sagiv et al. 2002). Although the value domains are represented as separate in the model, they actually form a continuum of motivations (Schwartz and Sagiv, 1995).

These value domains and the circular model were derived from 40 samples in 20 countries and 13 languages. The participants represented eight different religions as well as atheist beliefs (Schwartz 1992). The model was confirmed with very few deviations in all of the samples studied and provides one of the most robust and reliable models of personal values available.
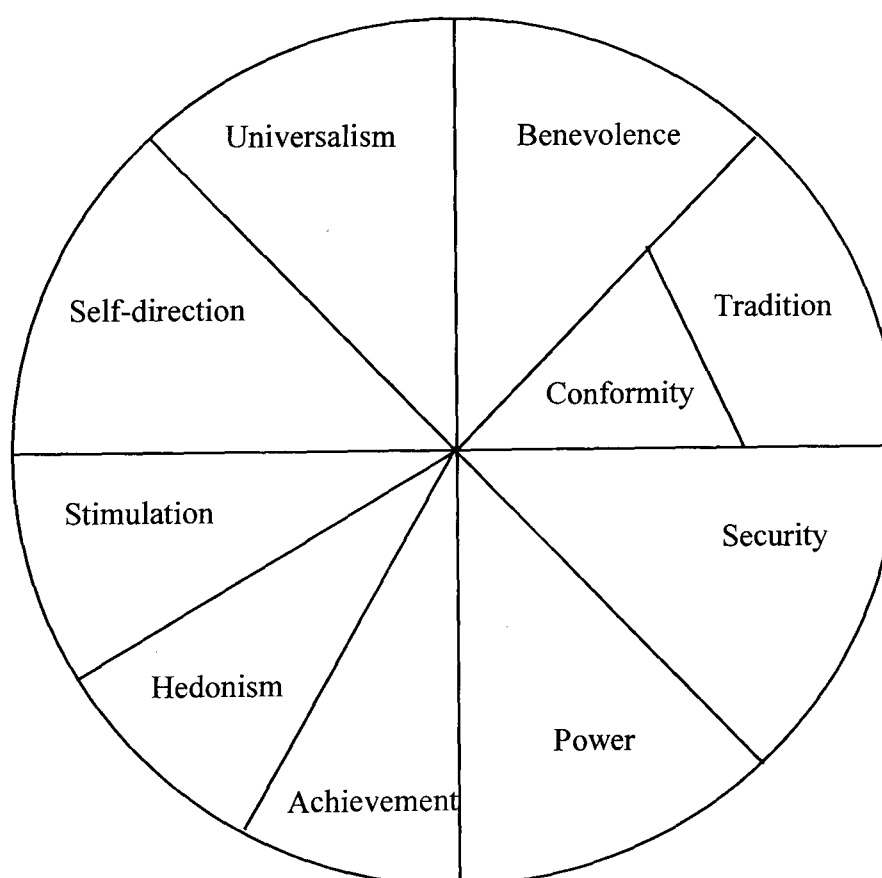
Figure 2: The Schwartz model of Values

4.2.2 Overview of the Schwartz Values model

Schwartz (1992) defines values as beliefs about desirable outcomes or behaviours. Values guide both the choice and evaluation of behaviour or events across many different

situations. Additionally, in any individual (or culture) these values will have hierarchical ranking of relative importance. Definitions of the ten values are given below (adapted from: Schwartz and Boehnke 2004):

Power: Social status and prestige, control or dominance over people and resources

Achievement: Personal success through demonstrating competence according to social standards

Hedonism: Pleasure and sensuous gratification for oneself

Stimulation: Excitement, novelty and challenge in life

Self-direction: Independent thought and action-choosing, creating, exploring

Universalism: Understanding, appreciation, tolerance and protection for the welfare of all people and for nature

Benevolence: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact.

Tradition: Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self

Conformity: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms

Security: Safety, harmony and stability of society, of relationships, and of self

4.2.3 Application of the Schwartz Value Model

Schwartz (1992) defines values as beliefs about desirable outcomes or behaviours. This area is of interest to occupational psychologists because value congruence is hypothesised to reduce conflict and improve cooperation in the workplace. Values are also a source of positive behavioural motivation and therefore positive work activity (Roe and Ester 1999).

It is in the area of vocational choice and employee selection that the majority of value research in the occupational setting has been conducted. Work values have a higher predictability of vocational interests than personality traits alone (Berings, De Fruyt et al. 2003), although this does not necessarily indicate prediction of job success. However, greater job satisfaction and lower turnover is related to congruence between employee and organisation values (Roe and Ester 1999). It is through this route of person-organisation fit that individual and organisational outcomes can be affected (Ryan and Kristof-Brown 2003).

Most studies of values in the workplace see work values as more specific instances of an individual's general life values (Roe and Ester 1999). There is evidence that work values have a circumplex structure similar to Schwartz's model of social values (Ros, Schwartz et al. 1999).

In a paper investigating cultural values and their relationship to the way work was viewed in different countries, Schwartz (1999) described how the values of the cultural

environment at large influenced and constrained the expression of work values. He proposed that managers choosing goals compatible with a country's prevailing cultural values would be more successful in motivating their employees because there would be no conflict in values.

Sagiv and Schwartz (2000) tested the hypothesis that fit between a person's values and the environment is essential to well-being and found support for it within a student sample. They also found that specific values (such as stimulation, self-direction and achievement) correlated positively with subjective well-being. The relationship of people's values to their level of trust in various organisations was investigated by Devos et al (2002), who found that trust was higher for people who valued stability, protection and tradition; and lower for people who valued independent thought and action.

Schwartz's model has also been combined with Hofstede's cultural model in an attempt to develop a comprehensive model of work values at the individual and cultural level (Spony 2003). This research indicated that combining the two levels of analysis was particularly useful in highlighting difficulties which managers from different countries might have in understanding each other.

4.2.4 Relationship to the Five Factor Model

The FFM claims to give a comprehensive picture of trait personality. Unfortunately, confusion between traits and values can arise if definitions become blurred and the FFM can sometimes be promoted as the entire sum of human personality. While the concepts of trait and value are related, Roccas et al (2002) point out that they are distinct: "traits are enduring dispositions. In contrast, values are enduring goals... Traits vary in the frequency and intensity of their occurrence, whereas values vary in their importance as guiding principles." (p790) Values are used to justify behaviour or choices to others or the self, whereas traits are descriptions of behavioural tendencies.

Investigating the correlations between the FFM and Schwartz's values has helped to refine both of them (Roccas, Sagiv et al. 2002). For example, it was found that different facets of Conscientiousness correlated with different values. This explained a distinction made between different Five Factor researchers about the makeup of this factor. In addition, the correlations of different values with Conscientiousness indicated that not only do the values blend with adjacent domains, but also with domains opposite on the circle. The results indicated that neither of these two models can be assimilated into the other.

4.2.5 Summary

The Schwartz model of individual values is robust and reliable and has demonstrated its usefulness in occupational applications. While it is related in complex ways to the FFM, it

clearly assesses a separate part of explicit personality and has therefore been chosen to provide a measure of personal values in this project.

4.2.6 Hypothesised Relationship to the Enneagram

Using the in-depth descriptions of the nine Enneagram personality types, those values hypothesised to be important to each type will now be discussed. It is worth noting at this stage that there will be some overlap in the types' values as this model is not expected to capture all of the essential aspects of the Enneagram descriptions of personality. It is only in combination with other models that the full picture of a person can be built up.

No published research has investigated the relationship between Enneagram Types and values, so these hypotheses were drawn solely from comparisons between type descriptions and value definitions. It was therefore even more important than with the traits hypotheses that the author's interpretations in this section were checked with other qualified Enneagram practitioners, and Appendix B describes a small study designed to do this.

4.2.6.1 Type 1

Conformity is about restraining impulses or actions which are likely to upset others or go against the social norms. With their strict standards about what is appropriate behaviour or emotional expression, Type 1s are likely to value Conformity highly.

H1d Type 1s will score higher than the rest of the group on Conformity

Type 1s repress their own desires out of belief it is wrong to indulge them and are therefore unlikely to seek out opportunities for new stimulation and enjoyment.

H1e Type 1s will score lower than the rest of the group on Stimulation

Because conforming to society's rules gives less scope for deciding one's actions oneself, 1s are also likely to value Self-direction less than other types.

H1f Type 1s will score lower than the rest of the group on Self-direction

4.2.6.2 Type 2

Type 2s like to do things for other people. They gain a sense of self-worth through finding out what others need and being the one able to provide it. This shows similarities with the value of Benevolence, which focuses on the welfare of other people, especially those one is in frequent contact with.

H2d Type 2s will score higher than the rest of the group on Benevolence

4.2.6.3 Type 3

Social prestige and status are important to Type 3s as indications that other people are recognising their success, so the value of Power, which taps into this, is likely to be highly rated.

H3c Type 3s will score higher than the rest of the group on Power

Type 3s try to earn the appreciation and love of other people through demonstrating their success at certain societally-approved tasks and are therefore likely to rank the value of Achievement highly.

H3d Type 3s will score higher than the rest of the group on Achievement

4.2.6.4 Type 4

It is important to the Type 4 to appear special or unique and to be able to express him- or herself creatively. The Type 4 values being able to follow his or her own path and is therefore likely to rank Self-direction highly.

H4d Type 4s will score higher than the rest of the group on Self-direction

Type 4s value the highs and lows of life and could therefore be thought of as valuing novelty and stimulation.

H4e Type 4s will score higher than the rest of the group on Stimulation

4.2.6.5 Type 5

Type 5s can feel easily overwhelmed by the demands of the world, feeling that they do not have enough resources to meet those demands. It is important to them to know clearly what is expected of them, and they dislike changing expectations. They are therefore likely to value stability and safety in their relationships and in society: the value of Security.

H5e Type 5s will score higher than the rest of the group on Security

Type 5s feel they are unable to meet a lot of the world's demands and are therefore unlikely to seek out demanding, exciting situations.

H5f Type 5s will score lower than the rest of the group on Stimulation

4.2.6.6 Type 6

Type 6s are very aware of the dangers the world may present them with and constantly scan the environment for possible threats in order to be prepared for them. They will therefore be likely to rank the value of Security for themselves and society at large highly.

H6d Type 6s will score higher than the rest of the group on Security

4.2.6.7 Type 7

Type 7s are often called "Epicures" and view life as a vast array of opportunities. They are easily bored and constantly seek out new experiences or ways of enjoying themselves. The values of Hedonism and Stimulation capture these qualities and are likely to be endorsed highly by 7s. In contrast, conforming their own wishes to the expectations of society is likely to be something that 7s value less than other types.

H7e Type 7s will score lower than the rest of the group on Conformity

H7f Type 7s will score higher than the rest of the group on Hedonism

H7g Type 7s will score higher than the rest of the group on Stimulation

In addition, 7s dislike having limits imposed on them from external sources, valuing being able to choose their own course, hence are likely to value Self-direction

H7h Type 7s will score higher than the rest of the group on Self-direction

4.2.6.8 Type 8

Type 8s dislike being controlled by others. They are naturally rebellious and think it is important to "shake things up". They are therefore likely to rate Conformity lower than other people.

H8c Type 8s will score lower than the rest of the group on Conformity

It is very important to Type 8s to feel that they are in control and they are natural leaders. They are likely to value Power highly, for the control it gives them over people and resources.

H8d Type 8s will score higher than the rest of the group on Power

Type 8s like to enjoy life to the full, often to the extent of over-doing it. This will probably be reflected in their high ranking of the Stimulation value.

H8e Type 8s will score higher than the rest of the group on Stimulation

4.2.6.9 Type 9

Maintaining harmony in their relationships and with the people around them is important to 9s, so they are likely to work for other peoples' welfare and value a world at peace. These wishes are captured by the values of Benevolence and Universalism respectively.

H9e Type 9s will score higher than the rest of the group on Benevolence

H9i Type 9s will score higher than the rest of the group on Universalism

Type 9s prefer to have routines that they can stick to, dislike change without good reason and have a respect for tradition. They are likely to value Tradition highly.

H9f Type 9s will score higher than the rest of the group on Tradition

With their focus on other people, 9s often lose sight of their own agendas and do not push to achieve their own goals. This will be captured by a lower score on Achievement and Self-direction.

H9g Type 9s will score lower than the rest of the group on Achievement

H9h Type 9s will score lower than the rest of the group on Self-direction

4.3   Explicit personality and the Enneagram – summary

The preceding sections have described the relationships that are expected between the Enneagram types and two models of explicit personality: the Five Factor Model of traits and the Schwartz model of values. Explicit personality models assess only that aspect of personality that an individual can tell the researcher about. The review of the Enneagram model in Chapter 3 highlighted one of the possible strengths of the Enneagram as its description of implicit personality as well as general trends in behaviour and personal values. It is therefore to implicit personality and the expected relationships between the Enneagram types and unconscious motives that the discussion now turns.

Chapter 5   Implicit personality and the Enneagram

The notion of implicit personality is radically different from the explicit personality approaches described above. Theories of explicit personality attempt to uncover the dimensions or structures which underlie what people can tell the researcher about themselves. Theories of implicit personality, however, attempt to uncover the structures which give rise to aspects of personality of which the person is often unaware.

Much of personality is unavailable to introspection (Asendorpf, Banse et al. 2002; Wilson and Dunn 2004), so exclusive reliance on self-reports restricts the study of personality to the explicit (conscious) self concept. This means that the personality psychologist will never be able to discover more about a person than that person already knows or chooses to tell. In the workplace, this can become a problem for personality applications as the hidden potential of a company's employees cannot be uncovered.

The concept of implicit cognitions is simple, and possibly even a central tenet of psychology: that traces of past experience influence current behaviour, even when the specific past experience may not be available to introspection (Greenwald and Banaji 1995). Even more remarkable than the idea that much of personality lies outside the realm of conscious awareness is the finding that people are consistently unable to recognise implicit influences on their behaviour. Evidence for this dates back at least as far as Maier (1931), who found that participants completing a task in which he gave them non-verbal hints believed that they had solved the problem entirely on their own, claiming that the solution "just came to them". Nisbett and DeCamp Wilson (1977) subsequently demonstrated this same effect in the use of word pairs as primers for an association task. Participants were again unable to identify the effect of the previous word pairs in influencing their associations, despite being able to recall nearly all of the words.

A major application of models of implicit personality is in improving people's self-awareness, providing them with information about their unconscious motivations that can assist them in understanding their behaviour, interpersonal relationships and the course of their lives. The first part of this section reviews the model of implicit motives that is currently widely accepted by researchers in this area, while the second part goes into the applications of this type of model in more detail.

5.1   Motives

The dominant approach to investigating implicit personality has developed out of the psychoanalytic tradition, looking for the underlying reasons or hidden motives for people's

behaviour. This section describes the development of the dominant model of implicit motives and gives an overview of it. Because of the difficulty in measuring motives that are hidden from conscious awareness, a discussion of methodologies employed in this area is also included before the hypothesised relationships with the Enneagram types are given.

5.1.1 History of Motivational Theory

Motives and traits have historically been separate but complementary approaches to personality (Winter, John et al. 1998). While Allport's theories on personality were focusing on traits, his contemporary Murray was developing a theory of personality based on needs. He describes the difference between these two approaches as the distinction between latent and manifest aspects of personality (Murray 1936), what is now called implicit and explicit. Murray drew up a comprehensive list of needs which he proposed underlie motivation.

Traits are typically assessed by self-reports and rely on a person being able to accurately report on their normal patterns of behaviour. They are an average of a person's general behavioural tendencies across many situations. Motives, on the other hand, are people's wishes and desires, part of the *why* of behaviour (Winter, John et al. 1998). They can be contrasted with values, which are a person's conscious goals, the principles he or she uses to guide decisions and behaviour.

Like other cognitions, motives are often implicit (i.e.: not available to consciousness) and therefore instruments other than self-report are needed to assess them. Observer report is also of little use here: it is perhaps even more difficult for an outside person to accurately describe what someone's motivation for a behaviour was than it is for the person involved.

The assessment of implicit motives was an area of contention for many years as different approaches very rarely correlated with one another. A common finding with implicit personality measures is that they rarely, if ever, correlate with explicit measures of the same trait or concept. Some authors take this as evidence that the implicit measures are unreliable and invalid. Others, such as Bornstein (2002), suggest that this dissociation is because they measure different constructs, that the implicit self-concept is subconscious and often at odds with the explicit personality.

McClelland et al (1989) demonstrated that different measurement approaches actually assessed two different types of motivation: implicit and explicit. This was confirmed by Asendorpf et al (2002), who conducted a study demonstrating a "double dissociation" between implicit and explicit self-concepts. This means that measures of implicit self-concept uniquely predicted spontaneous behaviour, while measures of the explicit self-concept predicted controlled behaviour.

Self-reported (explicit) motives affect behaviour through their interaction with social incentives in a specific situation or where conscious choice is required; whereas implicit

motives influence long term "spontaneous" behaviour trends (McClelland, Koestner et al. 1989). Each of the measures improves behavioural prediction above and beyond the other. For example, the level of self-attributed Achievement motive influences the *type* of task a person high in implicit Achievement motivation would do well at. Self-attributed motives give direction to the implicit motives by associating them with explicit goals (Schultheiss and Brunstein 1999).

Winter et al (1998) attempt a unification of the motive and trait theories by suggesting that traits act as channels for the expression of motives, or goal directed behaviour. They demonstrate that motives and traits are unrelated to each other (i.e.: scores on a trait are not related to scores for a motive) but interact to predict behaviour. Thus, for example, people with the same score for the Affiliation motive but different levels of Extraversion have significantly different behavioural outcomes: the Extravert who is high in Affiliation is more likely to take part in volunteer work than both the Introvert high in Affiliation and the Extravert low in Affiliation.

There have recently been attempts to measure the extent to which different implicit and explicit instruments assess situation-independent aspects of personality. For example, Schmukle and Egloff (2005) conducted a study using implicit and explicit measures of the trait of Extraversion and people's current state of anxiety. They found that all four measures were affected by occasion specificity, but that the influence of the situation was stronger for implicit than explicit measures and also higher for measures of state than for trait. The authors also found further support for the idea that implicit and explicit instruments assess different underlying personality constructs.

McClelland et al (1989) also provide evidence that implicit motives develop earlier than explicit motives, and are based on early (non-verbal) affective responses. Explicit motives, on the other hand, require a self-concept and the ability for verbal reasoning. The authors suggest that increased self-awareness can improve the congruence between the two sets of motives, thereby reducing ambiguity and inconsistency and contributing to well-being. This will be expanded on in Chapter 7, where the role of self-awareness as a link between the conscious and unconscious personality will be explored.

5.1.2 The major Motives

The field of implicit personality research was for a time as confusing and disparate as the area of personality traits as each theorist developed his or her own models of needs and motivations. However, similarly to the emergence of the FFM as a description of the basic dimensions underlying different trait concepts, three basic motives have been consistently demonstrated in the motives literature: Achievement, Affiliation and Power (Winter, John et al. 1998). This next section describes their development.

Just as trait concepts are heavily dependent on their methodology (i.e.: they measure conscious self-concept or generalised trends in behaviour), the motive concepts have evolved in close relationship with their methodologies. Murray designed the Thematic Apperception Test (TAT) as a way of assessing the presence of the needs which he had theorised in individual respondents. It is referred to as *thematic* because the material is analysed for story-like themes (Smith, Atkinson et al. 1992). So, for example, a person would write an imaginative story in response to an ambiguous picture and the response would then be scored for the presence of themes which demonstrate underlying implicit motives (McClelland, Koestner et al. 1989).

The TAT has undergone modification to become thematic content analysis. Although originally referred to as projective or fantasy measures, Smith (1992) prefers to see this kind of analysis investigating "thought samples" which describe a person's non-self-conscious experience of the world. It is important to note that the associative thought required in these assessments is more spontaneous and less self-critical than that demanded by self report measures. It is therefore investigating a much more implicit aspect of personality.

Thematic content analysis differs from the TAT itself in that a thematic structure was not imposed on the material from outside, but was instead developed from respondents' stories under different experimental manipulations (McClelland and Koestner 1992). So, for the Achievement motive, two groups of participants wrote stories in response to the same pictures. The experimental group was first exposed to a situation designed to arouse the Achievement motive while the control was not. The scoring system included only those themes that were *present* in the experimental group but *absent* from the control group. It was reasoned that in a subsequent neutral condition, those who scored high had a natural tendency to think in Achievement-related terms, that is, they had a high need for Achievement (nAch).

The Achievement motive has had successful cross-cultural replications. While the definition of what is being achieved varies between cultures, the notion of "doing something better" is constant. McClelland and Koestner (1992) suggest that based on this and other evidence, the nAch could be better named the Efficiency motive. Unfortunately, it seems that the original name has stuck. nAch has also been correlated with several theoretically-related outcomes, such as a preference for tasks of particular difficulties, persistence and work performance and career.

Fleming and Horner (1992) describe the "fear of success" motive, which was developed to address inconsistencies in the research on nAch. This is not simply a low nAch score, but a separate motive that when aroused acts to inhibit the expression of nAch.

The concept of the Affiliation motive (nAff) developed in the same way as nAch (McAdams 1992). It was originally conceptualised as the motivation to form positive affective relationships with a person or group. However, subsequent research indicated that the scoring system actually measured affiliative anxiety and concern about rejection, due mainly to the

experimental manipulation employed (Koestner and McClelland 1992). The more positive side of nAff, the preference for warm, close interaction with others, is assessed by the Intimacy motive. This motive relates to concepts such as Maslow's "being-love" (Maslow 1968). Like the fear of success motive and nAch, Intimacy has emerged as sufficiently different from nAff that researchers can be confident it is not simply a particular score on nAff. Intimacy correlates with nAff between .25 and .55 (McAdams 1992).

The study of power motivation (nPow) grew out of a refinement of the nAff assessment (Veroff 1992). Power was originally conceived of as an alternative to Affiliation and the concept drew heavily on Adler's (1924) work. The first scoring system turned out to assess fear of weakness or concern about being controlled, rather than actual desire for power. Refinements by Winter (1992) resulted in a more inclusive measure which was defined as the desire to have impact on other people. It was called hope of power, as opposed to Veroff's fear of power motive.

The result of decades of research by many authors then, indicates a surprisingly coherent set of motives. Each of the three main motives, nAch, nAff and nPow, are conceptualised in terms of both a desired and a feared aspect. Desired achievement is contrasted with fear of failure, desired intimacy is contrasted with fear of rejection, and desired power is contrasted with fear of weakness.

Whether this is the sum total of implicit motives is of course a difficult question to address. But while years of research have uncovered moderators, interactions and many implicit cognitions related to motives, no other motives have been identified. These three motives, in their desired and feared aspects, can therefore be considered a comprehensive summary of the current state of knowledge.

5.1.3 Overview of the model

The study of implicit motives has developed from psychoanalytic beginnings by holding to the idea that not all motives can be assessed by means of self-report (McClelland, Koestner et al. 1989). The use of projective methods such as story-telling and use of fantasy has allowed researchers to identify three major implicit motives: achievement, power and affiliation (see for eg: Schultheiss and Brunstein 1999).

Definitions of the implicit motives, with examples of the types of themes that might emerge in story-telling or throughout life are given below (Winter, John et al. 1998):

Achievement (nAch) – doing well, concerned with doing things better and to a higher standard of excellence

Examples of themes: involvement in a long-term achievement project

meeting internal standards of excellence

out-performing others

doing something unique

Power (nPow) – having impact, concerned with having impact, control or influence over another person, group or the world

Examples of themes: controlling others

taking strong, forceful action

giving unsolicited help or advice to others

attempting to impress, persuade or prove a point

Affiliation (nAff) – feeling close, concerned with establishing, maintaining or restoring positive affective relationship with another or with a group, or experiencing warmth and closeness in personal relationships

Examples of themes: expressing warm, positive or intimate feelings

expressing sadness about separation

affiliative, companionate activities

nurturant acts

5.1.4 Methodological considerations

"The hope still exists that asking a person just the right questions will yield a measure of implicit motives"

Raven (1988) in McClelland et al (1989) p691

The implicit motives outlined above have been investigated primarily using projective measures such as thematic content analysis. However, objections have been raised about the psychometric validity and reliability of this approach. In part these have been addressed by producing more reliable measures, including clear sets of stimuli pictures and precise scoring scales (Spangler 1992). This has resulted in inter-scorer agreement of $r = .85$ or more for the more established measures (Smith 1992).

The low test-retest agreement commonly found with thematic content analysis can be explained by respondents feeling that they have to come up with something new the second time they do a similar test. Giving instructions which counter this belief has improved retest agreement dramatically (Smith, Atkinson et al. 1992).

There still remains the objection that scores on subsequent stories by the same person are very varied, yet the motive is considered to be a stable disposition. Atkinson (1992) argues that this objection is based on a false assumption about the nature of the construct being measured, namely, that answering one item does not affect the way the next item is answered. In

motives research, it can convincingly be argued that the expression of a need or motive in a story acts as a degree of satisfaction or arousal of that need, therefore influencing how much it is expressed in the subsequent story. Therefore, consistency among the individual item scores is not a pre-requisite for the validity of the total score, as it is in questionnaire scales.

This major development to motivational theory is referred to as the dynamics of action: stable dispositions can be expressed variably because of changes in the kind of activity or the content of the stream of thought (Smith, Atkinson et al. 1992). In other words, it was a way of emphasising the influence of the situation (both internal and external) on the expression of the motives, in much the same way that trait theorists had to recognise the impact of the situation on the expression of the stable dispositions they were investigating.

A second major development to motive theory only became possible after much research had been conducted on the motives in isolation. Once researchers could be reasonably confident that they were assessing motives accurately and finding important outcomes associated with them, they could move on to looking at the combinations of motives with each other and with moderators. It was found that motives interact in complex ways and that specific configurations (for example, high on one motive and low on another) added predictive validity beyond that of single motives. Moderators such as uncertainty orientation, maturity, activity inhibition and responsibility were also found to have effects on the expression of the motives and final outcomes (McClelland 1992).

5.1.4.1 The Multi-Motive Grid

It would of course be ideal if one could assess all three motives in one sitting. But one of the ways that researchers have recommended that the content analysis approach be improved is by including at least 6 pictures per motive. This makes the assessment of more than one motive, let alone both its desired and feared aspects, rather long-winded as participants have to write a story for each picture. A different approach has been developed by Sokolowski et al (2000), who combined the indirect approach of content analysis with the ease of administration and scoring of questionnaire approaches.

Just like in thematic content analysis, participants are shown ambiguous pictures. But instead of writing a story about them, they are asked to choose from a set of responses which ones are closest to what they think the picture represents. These responses have been chosen to tap the hoped-for and feared aspects of each motive. The Multi-Motive Grid has the advantage of being a psychometrically sound measure of implicit motives as well as relatively brief and concise to administer to participants.

5.1.5 Summary

Epstein (1996) sees the wide influence of early psychoanalysts as due to their conception of the unconscious, which explained previously inexplicable behaviour. It is critically important to personality psychology that an improved theory of the unconscious is developed. McClelland (1996) noted that personality is currently very much a study of the conscious self-image. Traits are investigated using self-reports, as are goals or attitudes. There is no place in much of the current theorising for the effects of the unconscious, despite the fact that research has shown self-images are nearly always biased.

The concept of implicit personality can no longer be ignored in personality theory. There is increasing evidence that developing self-awareness has a positive impact on performance. Especially with the development of the reliable and valid measures discussed in this section, there is no reason for psychologists to avoid the study of the unconscious personality.

5.1.6 Hypothesised Relationship to the Enneagram

One of the strengths of the Enneagram is its attempt to describe the implicit motivations of the nine personality types. However, because understanding of Enneagram types has developed independently from the literature on implicit motives, these descriptions have yet to be related to the established psychological theory. This next section sets out the hypothesised relationships between each type and the three implicit motives so that links between the models can begin to be drawn.

As with the Values, there is no published research investigating the relationship between this model of implicit motives and the Enneagram. Again, the hypotheses described below were initially devised based on the author's knowledge and carefully checked with other Enneagram practitioners (see Appendix B). Hypotheses are given in relation to the three higher-order motives (Achievement, Affiliation and Power) and then, where appropriate, broken down into the hoped-for and feared aspects as well.

5.1.6.1 Type 1

There is no reason to hypothesise that Type 1s will score higher or lower than other types on the implicit motives. The Enneagram literature does not focus on aspects of personality related to implicit motives when describing how Type 1s differ from other types. This may be because the uniqueness of this personality type can be best described by other aspects of personality such as traits or values.

5.1.6.2 Type 2

Overall, Type 2s are likely to be much more highly motivated by the need for Affiliation than the other types.

H2g Type 2s will score higher than the rest of the group on Affiliation

Type 2s are very other-oriented. They work hard to establish close relationships with those who are important to them and this is likely to show up in a strong implicit Hope of Affiliation. 2s are happy to approach others, with a belief that they can give others what they need, and are therefore unlikely to be concerned about rejection.

H2e Type 2s will score higher than the rest of the group on Hope of Affiliation

H2f Type 2s will score lower than the rest of the group on Fear of Rejection

5.1.6.3 Type 3

The central theme for Type 3s is doing and achievement. It is through achievement and success that a Type 3 feels he or she is a worthwhile person. 3s are therefore likely to have high Achievement scores.

H3e Type 3s will score higher than the rest of the group on Achievement

Type 3s focus on what they can achieve rather than worry about what they may fail at. Their high score on Achievement, therefore, is likely to be due to a high Hope of Success.

H3g Type 3s will score higher than the rest of the group on Hope of Success

Type 3s are often described as excellent salespeople, who are experts at knowing how to impress or persuade other people. This is a theme that emerges from the Power motive and a high score is expected on this motive.

H3f Type 3s will score higher than the rest of the group on Power

5.1.6.4 Type 4

Type 4s often describe a central part of their personality as the feeling of ambivalence, where they are initially drawn towards something only to find they subsequently wish to avoid it. This cycle of attraction-avoidance is likely to be expressed in a unique pattern of scores on the implicit motives. It is expected that 4s will come out lower than other people on *all three* of the combined motives due to this ambivalence, this feeling of being equally motivated to both approach and avoid. The overall Motive scores are calculated by subtracting the Fear component from the Hope component; if both scores are approximately equal, the result is a very low overall Motive score.

H4f Type 4s will score lower than the rest of the group on Achievement

H4g Type 4s will score lower than the rest of the group on Affiliation

H4hType 4s will score lower than the rest of the group on Power

In addition, on the single scale scores, 4s are likely to score higher than others on the Fear of Rejection. This is because they often report feelings of abandonment and loneliness and are likely to wish to avoid situations which could reinforce those feelings.

H4i Type 4s will score higher than the rest of the group on Fear of Rejection

5.1.6.5 Type 5

Type 5s are reluctant to exercise power over others because of the demands it makes on their own resources. A lower score for 5s compared to others on the need for Power is hypothesised.

H5g Type 5s will score lower than the rest of the group on Power

Similarly, 5s are concerned with maintaining the boundaries between themselves and other people and are relatively unmotivated by establishing or maintaining personal relationships. A low score on the Hope of Affiliation is therefore expected.

H5h Type 5s will score lower than the rest of the group on Hope of Affiliation

5.1.6.6 Type 6

It is common for Type 6s to be warm towards other people as a way of mitigating their concern about how others may harm them. This could be captured by a high score on the Affiliation motive.

H6e Type 6s will score higher than the rest of the group on Affiliation

5.1.6.7 Type 7

Many 7s find conflict uncomfortable, seeing it as a threat to their optimistic lives and are therefore concerned to keep relationships positive. This may be captured by a moderate relationship with the Affiliation motive.

H7i Type 7s will score higher than the rest of the group on Affiliation

Type 7s are not particularly concerned with exercising power over others. However, they are good at persuading others to their point of view and enthusing them for projects, which is one of the themes of the Power motive.

H7j Type 7s will score higher than the rest of the group on Power

5.1.6.8 Type 8

It comes easily to Type 8s to see what needs to be done in any situation they enter and they naturally take control. They are confident in taking strong, decisive action according to what they think will work and will often attempt to control other people's lives, believing they know what is best for the other person. A high score on the Hope of Power motive is hypothesised.

H8f Type 8s will score higher than the rest of the group on Hope of Power

The Type 8s often describe themselves as not so much concerned with being control as concerned that no one else should control them. This could be captured by the Fear of Power motive.

H8g Type 8s will score higher than the rest of the group on Fear of Power

5.1.6.9 Type 9

The desire for smooth-running, harmonious personal relationships is very strong for Type 9s. They will express warmth, engage in companionate activities and do all they can to maintain positive relations with and between those around them. A strong relationship with the implicit motive of Affiliation is hypothesised.

H9j Type 9s will score higher than the rest of the group on Affiliation

5.2 Implicit personality and the Enneagram - summary

This thesis presents the first known attempt to relate the descriptions of Enneagram Types as taught by prominent Enneagram practitioners to a firmly established model of implicit personality.

There have been attempts in the past to relate explicit and implicit personality but these have tended to focus on explicit and implicit aspects of the same concepts, such as comparing a person's reported nAch to his/her implicit nAch (McClelland, Koestner et al. 1989). Unlike other personality models, the Enneagram describes specific patterns of traits, values and implicit motives found within individuals of the same Type. Testing these expected relationships will add to the growing body of evidence for the validity of the Enneagram model, as well as provide researchers and psychology practitioners with a credible model of patterns of traits, values and motives within individuals.

Describing the Types in terms of established models does not, however, establish whether the Enneagram is useful in a more applied setting such as the workplace. To be of use to occupational psychology, the model must be able to relate individual differences in personality to outcomes of value at work. It is to this that the discussion now turns.

Chapter 6 Job Attitudes, Cognitions and the Enneagram

The "holy grail" of much of industrial / organisational (I/O) psychology is the prediction of job performance. It would be ideal if personality could be shown to have direct links with job performance. And in some cases this has been demonstrated, such as the higher level of sales made by salespeople high in Extraversion (Barrick and Mount 1991). Unfortunately, job performance can be difficult to measure, particularly with complex jobs where there is no clear measurable output. It would be a very time-consuming activity to determine performance measures for a varied sample of people from many different jobs and organisations. Each job being investigated would have to be assessed individually – a task that is simply impossible for many research projects. Hence, many I/O psychologists assess related concepts, such as job attitudes, which attempt to capture an employee's *experience* of work.

The influence of personality on people's attitudes towards their jobs is well-documented. For example, a review of job satisfaction showed that it was as much a product of the person as the situation or job attributes (Staw 2004). The influence of attitudes on behaviour is widely accepted in the social psychology literature (Greenwald and Banaji 1995) and research in the organisational psychology arena is showing similar results. Job attitudes are proposed to be the means by which personality exerts effects on certain workplace behaviours, such as organisational citizenship behaviours (Organ and McFall 2004). In fact, personality effects on job performance are often proposed to be mediated by job attitudes or cognitive processes such as self-efficacy (see for e.g.: Johnson 2003).

This thesis aims to identify the Enneagram Type personality influences on attitudes and beliefs that are important in the workplace.

6.1 Job Attitudes

There are a huge variety of job attitudes that could be studied, but the following have been chosen to give as comprehensive an overview as possible. To some extent these different attitudes are inter-related, but they are conceptually distinct enough to be worth measuring separately (for review, see: Cook, Hepworth et al. 1981).

6.1.1 Job Satisfaction

Job Satisfaction is the extent to which an employee is content or happy with various aspects of her/his job. A distinction may be made between overall and specific job satisfactions. Specific satisfactions are related to particular features of the job, for example, focusing on pay

or supervision, while overall satisfaction measures are at a higher level and attempt to assess the person's overall evaluation of the job (Cook, Hepworth et al. 1981). Overall job satisfaction may be the most extensively investigated occupational attitude and has been related to many behavioural outcomes, such as voluntary turnover (Judge 1991) and organisational citizenship behaviour (Nikolaou and Robertson 2001). Specific satisfactions have also been related to several important occupational outcomes, such as the relationship between pay satisfaction and performance (Williams, McDaniel et al. 2006).

Personality has been shown to be consistently related to job satisfaction (Bono and Judge 2003), with higher Emotional Stability related to higher satisfaction. Job satisfaction is often hypothesised to be related to job performance, either directly or moderated by other variables. A review by Judge et al (2001) concluded that the overall correlation between job satisfaction and performance was 0.3, though of course it is not possible to assess the direction of the relationship from this.

6.1.2 Internal Work Motivation

The motivation to work originates both within and outside an individual and is conceptualised as a force to initiate and sustain work-related behaviour (Latham and Pinder 2005). Internal or intrinsic work motivation refers to the motivation a person has to work that is not due to external factors, such as pay rewards. The relationship of personality to motivation was reviewed by Judge and Ilies (2002) and strong correlations between the two were found on three different models of motivation. In addition, the influence of motivation on many behaviours of relevance in I/O psychology has been demonstrated (reviewed in: Latham and Pinder 2005). Motivation is seen by some researchers as the link between personality traits and performance (Barrick, Mitchell et al. 2003) and is one of the factors in promoting longer working hours among managers (Feldman 2002).

6.1.3 Job Involvement

Job involvement is closely related to work motivation, as it is one of the factors influencing a person's impetus to work, but can be distinguished from it by its basis in a person's value priorities (Cook, Hepworth et al. 1981). A person is considered to have a high level of job involvement if her / his self-esteem is affected by performance on the job, and the job forms a part of his or her identity. Increased job involvement has positive pay-offs for the organisation and the employee, by engaging the employees more in their jobs and by providing them with a source of fulfilment at work (Brown 1996). Brown's meta-review indicated that job involvement is affected by personality variables and has strong relationships with other job attitudes.

6.1.4 Organisational Commitment

Organisational commitment (OC) shares an affinity with Job Involvement and Satisfaction. Individuals may, in the normal course of events, not distinguish between their feelings of being involved in or satisfied with a particular job and their commitment to their organisation. However, it is conceptually distinct from these other two attitudes: OC is a broad attitude including loyalty and a desire to remain a part of the organisation, as well as acceptance of the goals of the organisation (Cook, Hepworth et al. 1981). Meyer et al (1993) distinguish between three types of commitment to the organisation, the most extensively investigated of which is affective commitment. This is the aspect that is measured in attitudinal measures of commitment, the other two aspects being related to the loss of related benefits such as pensions, and a feeling of moral obligation to the organisation.

Commitment to the organisation is assumed to reduce withdrawal behaviours and increase extra-role behaviours that could benefit the organisation (Mathieu and Zajac 1990). Meta-analysis indicated that some of the consequences of high OC are decreased lateness and absenteeism, and that it has strong links with turnover intention (Mathieu and Zajac 1990).

6.2 *Job Cognitions*

Cognitions differ from attitudes in that they represent the intention to engage in a particular behaviour or an assessment of one's abilities. Although their effect on behaviour is not a simple mapping from intent to action, they are one of the influences on the eventual choice of behaviour that an employee may make.

6.2.1 Turnover Intention

Measuring employees' Turnover Intention has been one way of assessing how likely they are to leave their current employment. It is conceptualised as a serious and conscious intention to leave the organisation and is the last in a list of related cognitions from thinking of leaving to intent to search for new employment (Tett and Meyer 1993). Both job satisfaction and organisational commitment attitudes contribute to the turnover process but this is limited to their influence on turnover intentions (Tett and Meyer 1993). As it more closely predicts actual voluntary turnover, therefore, Turnover Intention is a useful measure to include.

6.2.2 Job Self-efficacy

Self-efficacy is described as the belief that one has the capability to meet situational demands and is an essential part of the agentic view of human personality which sees people as taking an active, decisive role in life (Bandura 2001). Originally, self-efficacy was thought to be distinct from other core self-evaluations such as self-esteem and locus of control, but evidence

indicates that these concepts overlap to a large degree and do not have incremental validity over each other (Bono and Judge 2003). The situational dependency of self-efficacy is important to bear in mind, as a person who feels they can meet the demands of one situation (for example, a family gathering) may feel unable to meet other demands (for example, a work meeting). It is therefore essential that self-efficacy is measured specifically as it relates to a person's work for the relationships with other work outcomes to be captured. Self-efficacy has been related to several important work outcomes including performance and learning (Chen, Gulley et al. 2001). Self-efficacy has also been shown to influence persistence at tasks as well as choice of vocation (Walsh 2004).

6.3   Perceived Stress

According to the charity Mind, stress costs the UK about 10% of the Gross National Product, mostly due to bad management of workplace stressors (Robertson 2005). Other documented effects of stress in the workplace are decreased productivity and increased turnover. The same report highlighted the fact that stress is the highest cause of absence among non-manual workers and results in mental health problems such as anxiety and depression. The knock-on effects of stress are even greater as colleagues have to take on the work of those absent through stress (Giga, Cooper et al. 2003) and organisations may have to fund sick leave and face further recruitment costs. A worrying trend in recent years has been the increase in aggressive behaviour by employees suffering from workplace stress (Stewart 2007). Not only is this a problem for organisations in and of itself, but it has the wider effect of also increasing the workplace stressors for other employees.

It is well-known that people differ in their susceptibility to workplace stressors, so that an "objective" measure of stress does not tell the researcher to what extent a particular stressor actually impacts on an individual (Cohen, Kamarck et al. 1983). Personality can impair well-being at work either by influencing a person's assessment of stressors or their choice of coping mechanisms. Recognising that different personalities respond differently to stress and may need alternative help could go a long way towards addressing this problem.

6.4   Hypothesised relationships between Enneagram Types and job attitudes / cognitions

6.4.1 Type 1

Type 1s are motivated by strong internal standards of how a job should be done, and are therefore likely to have a high Internal Work Motivation score.

H1g Type 1s will score higher than the rest of the group on Internal Work Motivation

With their feelings of responsibility of ensuring that work is done to the best of their abilities, Type 1s are likely to be highly involved in their jobs, drawing some of their identity from it.

H1h Type 1s will score higher than the rest of the group on Job Involvement

Type 1s are concerned with doing the right thing and often see it as right to be loyal to the organisation they work for. They are also reluctant to give up on something that is not working, preferring instead to work at it until it is better. This will result in a high level of Organisational Commitment.

H1i Type 1s will score higher than the rest of the group on Organisational Commitment

Because they take work seriously and feel engaged in a constant struggle to meet high internal standards, 1s are likely to report a higher level of stress than other people.

H1j Type 1s will score higher than the rest of the group on Perceived Stress

6.4.2 Type 2

Based on descriptions of this Type, no particular relationships can be hypothesised between Type 2s and Job Attitudes.

6.4.3 Type 3

Type 3s base a lot of their self-image on how successful they are at work and this is likely to be reflected in a high score on Job Involvement.

H3h Type 3s will score higher than the rest of the group on Job Involvement

3s are go-getters who are confident in their ability to do everything their job requires of them. They will therefore have a high score on Job Efficacy.

H3i Type 3s will score higher than the rest of the group on Job Efficacy

6.4.4 Type 4

Type 4s often report feelings of ambivalence, or a "push-pull" sensation about work or relationships based on the constant desire for something more real or meaningful. They are therefore likely to report feelings of wanting to leave the organisation they work for, though this may not result in actual turnover.

H4k Type 4s will score higher than the rest of the group on Turnover Intention

Low Emotional Stability (one of the Five Factor traits) has been associated with higher levels of reported stress (George 2004). It can therefore be hypothesised that 4s, who are likely to be low on this factor, will report high levels of stress.

H4l Type 4s will score higher than the rest of the group on Perceived Stress

6.4.5 Type 5

Type 5s prefer to keep their boundaries clear and are reluctant to involve themselves too deeply in things. They are therefore likely to have a lower score than others on Job Involvement.

H5i Type 5s will score lower than the rest of the group on Job Involvement

Because of their deep-seated belief that they are unable to meet all the demands life places on them, 5s are hypothesised to have a lower score on Job Efficacy than others.

H5j Type 5s will score lower than the rest of the group on Job Efficacy

6.4.6 Type 6

Type 6s are very loyal to a group or person that they have come to respect and are therefore likely to show high levels of Organisational Commitment.

H6f Type 6s will score higher than the rest of the group on Organisational Commitment

6.4.7 Type 7

Because of their generally optimistic nature, 7s are likely to be high on Job satisfaction.

H7k Type 7s will score higher than the rest of the group on Job Satisfaction

7s dislike feeling confined and always prefer to have their options open, so are likely to report a lower level of Organisational Commitment and a correspondingly high level of Intention to Turnover – even if that intention is not a definite plan.

H7l Type 7s will score lower than the rest of the group on Organisational Commitment

H7m Type 7s will score higher than the rest of the group on Turnover Intention

6.4.8 Type 8

8s tend to have a lot of energy and motivation and are therefore likely to report higher levels of Internal Work Motivation than others.

H8h Type 8s will score higher than the rest of the group on Internal Work Motivation

When Type 8s do something, they tend to throw themselves into it completely and this may be reflected by a high level of involvement in their jobs.

H8i Type 8s will score higher than the rest of the group on Job Involvement

Type 8s do not allow obstacles to get in the way of what they want to do, and are likely to feel that they can achieve everything they need to in their jobs.

H8j Type 8s will score higher than the rest of the group on Job Self-efficacy

6.4.9 Type 9

9s find it difficult to work towards their own agendas, tending to be distracted by others'. They are likely, therefore, to show a lower level of internal motivation for their work.

H9k Type 9s will score lower than the rest of the group on Internal Work Motivation

Because their focus is on other people so much, 9s often lose sight of their own abilities and tend to think that they cannot do as well or as much as others. This is likely to be captured by a low score on job-related self-efficacy

H9l Type 9s will score lower than the rest of the group on Job Self-efficacy

6.5 *Job Attitudes, Cognitions and the Enneagram – summary*

The preceding sections have outlined one of the applications of the Enneagram in an occupational setting, namely in capturing the personality effects on several important attitudes and cognitions in the workplace. While this goes some way towards testing the usefulness of this model, one of the strengths of the Enneagram model is its ability to describe the unconscious personality and it is in giving employees direction in discovering hidden aspects of their personality that the Enneagram is likely to prove most useful.

Helping employees to become more aware of behaviours and parts of their personality that they do not recognise is a central part of many occupational interventions based around personality models. This can range from something as simple as giving employees a language to talk about issues they have not been able to discuss before (Garrety, Badham et al. 2003) to helping employees appreciate what impact their personality has on others (e.g.: OPP 2007). An integral part of this process is increasing self-awareness and it is this topic that the next section discusses in more detail.

Chapter 7   Self-awareness: the link between explicit and implicit personality

Most of us feel as if a sort of cloud weighed upon us, keeping us below our highest notch of clearness in discernment, sureness in reasoning, or firmness in deciding. Compared to what we ought to be, we are only half awake.

William James (1911, p237)

Self-awareness is much vaunted by both philosophers and psychologists, being seen as an essential part of psychological maturity. Socrates, for example, claimed that "the unexamined life is not worth living". Many psychologists have emphasised the importance of self-awareness in a therapeutic context, for both therapist and client. Psychoanalysts focus on bringing unconscious elements into consciousness, becoming more aware of the self, as the path to health. The humanistic psychologists such as Carl Rogers wrote of the importance of authenticity and congruency in a client-therapist relationship (Rogers 1951).

Jung argued that growth and increased self-determination come about through an increase in self-awareness (Storr 1998). The emphasis on self-actualisation that is so central to the psychodynamic theories of personality reviewed in an earlier section has largely been lost in modern personality psychology. And yet it could be argued that self-development is one of the major applications of personality theory.

As Fenigstein et al wrote, "increased awareness of the self is both a tool and a goal" (1975, p522). Self-awareness is seen not only as the means of alleviating psychological distress, but also as the path of self-development for psychologically healthy individuals. Perhaps self-awareness could be viewed as just as basic to psychological health as exercise is to physical health.

Despite, or perhaps because of, the centrality of self-awareness to so many psychological approaches, the literature is often unclear about what exactly is meant by self-awareness. Many authors use the term interchangeably with self-knowledge and their definition depends on the focus of the particular research being reported. However, distinctions can be drawn between self-awareness, self-knowledge, and several related concepts.

7.1   Defining and measuring self-awareness

Self-awareness can be viewed as an overarching theoretical construct, which is operationalised in several different ways depending on the focus of the research. Generally, it means the extent to which people are consciously aware of their internal states and their

interactions or relationships with others (see for e.g.: Trudeau and Reich 1995; Trapnell and Campbell 1999). In the literature, a distinction is drawn between situational self-awareness and dispositional self-awareness (Brown and Ryan 2003), reflecting the different approaches of social psychologists and personality psychologists respectively. Each of these approaches also has distinctive ways of measuring or manipulating self-awareness.

Situational self-awareness is also referred to as "online" or "objective" self-awareness, an automatic process whereby an individual compares the self to internalised standards, then makes changes to reduce any inconsistency (Silvia and Duval 2001). These changes can be either to adjust the standard, make more effort to meet the standard, or to avoid the self-focusing stimulus.

7.1.1 Situational Self-Awareness

Situational self-awareness can be experimentally manipulated by the simple expedient of having a mirror in front of participants, thus focusing their attention on themselves. It has been shown that inducing self-focus in this way causes people to act more consistently with their internal standards. For example, when in the self-focus condition, participants who believed that emotions should be regulated were found to be significantly less emotional than those who believed emotions should be expressed. This difference was not in evidence in the control condition (Silvia 2002). This goes some way to demonstrating the importance of self-awareness in promoting behaviour congruent with one's inner world.

7.1.2 Dispositional Self-Awareness

Dispositional self-awareness, on the other hand, is also known as self-consciousness or self-attentiveness and refers to the tendency for an individual to focus on and reflect on the self (Fenigstein, Scheier et al. 1975). By operationalising self-awareness in this way, Fenigstein et al (1975) identified two strands: public and private. Public self-consciousness is an awareness of how the self appears to others and involves taking on the other person's perspective as far as possible. This is a similar concept to self-monitoring (reviewed in Brown and Ryan 2003). Private self-consciousness is being aware of one's own internal states such as emotions and thoughts. It consists of internal state awareness (merely being sensitive to psychological processes) and self-reflectiveness (reflecting on and analysing those processes).

Recent research, however, has challenged this view and current thinking is that public and private self-consciousness represent *domains* for self-attentiveness rather than different types of awareness (Trapnell and Campbell 1999). Private self-consciousness is better referred to as "psychological mindedness", a person's interest in and ability to reflect on their own psychological processes and inner experiences of the self, as well as their relationships to others.

One way of measuring self-awareness then, is to use instruments which measure psychological mindedness. The link between psychological mindedness and positive outcomes in mental health is well-established (Trudeau and Reich 1995). It is an assumption of this approach that those who spend more time attending to themselves will have higher levels of self-knowledge, which is defined by Vogt and Colvin as "knowledge of one's personality traits as they are exhibited in behaviour" (2005, p240).

For many years, there was a paradoxical finding in the self-awareness research. It seemed that high scores on self-attentiveness measures (for example, Fenigstein's Private Self-Consciousness scale) were associated not only with positive outcomes such as those outlined above, but also higher levels of psychological distress. In addition, heightened self-focus is commonly associated with psychopathology. How were these conflicting findings to be reconciled?

By relating the Private Self-Consciousness scale to the Five Factor Model of personality traits, Trapnell and Campbell (1999) were able to distinguish between two forms of self-attentiveness that had previously been confounded in one scale. The first was a neurotic self-consciousness, related to the Neuroticism scale of the FFM, and reflected a tendency to focus on negative self-perceptions and emotions. It seemed to be motivated by perceived threats, losses or injustices to the self. This aspect was named Rumination and has been found to be a core process in depression, exacerbating negative mood, increasing negative thinking and impairing social problem solving (Watkins and Moulds 2005).

The second form of self-attentiveness is more intellective, related to the Openness to Experience scale of the FFM, and named Reflection. It is motivated by a general curiosity about the self rather than by fear of threats and is the tendency to reflect objectively on the self. It is Reflection that is associated with the positive outcomes of psychological mindedness, greater self-knowledge and better psychological adjustment (Trapnell and Campbell 1999).

An alternate approach to measuring self-awareness comes from the medical world, where the focus is on how patients' awareness of their limitations following medical trauma (such as brain injury) affects their future lives. In these studies, three aspects of self-awareness are taken into account: the patients' awareness of their deficits, their awareness of the functional implications of those deficits, and their ability to set realistic goals. This awareness can then be compared to expert judgements as well as ratings by significant others. A study of employment outcome twelve months after brain injury indicated that greater self-awareness was associated with more favourable employment outcomes and productive activity (Ownsworth, Desbois et al. 2006). This relationship was not found, however, for individuals who were emotionally distressed. In medical studies, of course, a person's physical functionality can be judged relatively accurately.

The difficulty of an accurate criterion measure is more obvious with psychological studies. If self-awareness is defined as low discrepancy between self- and other ratings of the individual's personality traits, for example, who is to say that the "other" or the "expert" is judging these more accurately than the self? The underlying assumption is that a person is self-aware who perceives him- or herself in a similar way to how others perceive them. But it is entirely possible that a person is aware of behaving in a certain way while not being aware that this behaviour is in opposition to their internal values. It is also possible for a person to act a role successfully, and be aware of doing so. In this case, the self-other consistency would be low as the individual may rate themselves as they feel they "really" are, and colleagues would rate them as they appear to be. It is arguable that of these two examples, the latter is actually the more self-aware, yet the scores would indicate otherwise.

Despite this problem, however, self-other consistency in ratings is sometimes the best way to measure self-awareness in applied settings, as for example in leader-behaviour studies. Leaders can rate themselves on how often they believe they demonstrate particular leader behaviours, and also be rated on the same scales by their subordinates. Comparison of the scores can indicate where there are discrepancies. Research has found that leaders generally over-estimate their leadership skills, but that those who are closest in agreement with their subordinates have more positive subordinate outcomes (Moshavi, Brown et al. 2003). High over-estimaters are associated with negative subordinate outcomes (such as dissatisfaction with leadership) and also seem to find it difficult to receive negative feedback.

Vogt and Randall (2005) measured self-knowledge based on the consistency among self-, parent- and observer-ratings of personality traits. They found that those people with the higher self-knowledge scores were perceived by others to have a higher level of psychological adjustment. Self-knowledge is also important to performance. Ghorbani et al (2003) demonstrated that it was at least as important a predictor of academic performance as students' ability.

The concept of self-awareness then, is far more complicated than many early psychologists may have imagined when they assumed its essential role in psychological health. Not only can a distinction be made between dispositional and situational self-awareness, but the tendency to focus attention on oneself can be both beneficial and detrimental. It is only by distinguishing Reflective from Ruminative self-attention that sense can be made of the conflicting findings.

7.2 Improving self-awareness

"There is no good reason why we should not develop and change until the last day we live."

Karen Horney

In their review of the self-knowledge literature Wilson and Dunn (2004) highlighted the common finding that most people have slightly over-positive self-perceptions and that this has been found to help them deal with difficult situations as well as promote more positive behaviour and coping strategies. However, they also point out that pure fantasy tends to undermine motivation and conclude that improved self-awareness is generally a beneficial process that leads to improved efficacy. McClelland et al (1989) suggested that increased self-awareness can improve the congruence between implicit and explicit personality, thereby reducing ambiguity and inconsistency and contributing to well-being.

Situational self-awareness can be increased simply by directing a person's attention towards themselves, such as by placing a mirror in front of them. This increase in self-awareness, however, has not been shown to have long term effects on behaviour: not surprisingly, it seems limited to the particular situation. For more long-term changes in self-awareness and associated outcomes it is the dispositional self-awareness literature that can give guidance.

Wilson and Dunn (2004) outlined three main ways to increase self-awareness: introspection, seeing oneself through others' eyes, and inferring non-conscious states from observing one's own behaviour. Introspection was found to have mixed results. The modern understanding of introspection is that it allows a person to construct a more coherent narrative of the self (McAdams 2001) rather than to "unearth" elements hidden in the unconscious as the early psychoanalysts thought. However, if the construction of the narrative is faulty, it can have negative effects. For example, analysing the reasons for their feelings or attitudes can have the effect of lowering people's satisfaction with their choices and lowering their accuracy and ability to predict their future behaviour. This is probably due to people using inaccurate reasoning based on a limited sample of what they think is the "real" reason behind their feelings (Wilson and Dunn 2004).

Introspection can also have negative effects when it becomes ruminative, focusing on self-defeating thoughts (Wilson and Dunn 2004). In contrast, engaging in structured introspection (such as writing) is associated with greater well-being and has been shown to have positive effects on health, academic performance and job outcomes (see for e.g.: Pennebaker, Mehl et al. 2003). This could be because writing allows a person to process complex feelings

and thoughts and bring them into the self-narrative in a more coherent way (Pennebaker, Mayne et al. 1997).

Seeing oneself through others' eyes is a way of identifying behaviours that may be motivated by unconscious motives. A longitudinal study by Cheston (1996) indicated that self-awareness in managers could be improved by the structured use of feedback from subordinates. Managerial self-awareness was also improved by the use of individual coaching to help managers work through the self-other rating discrepancies from 360-degree feedback (Luthans and Peterson 2003). These authors emphasised the importance of including a focus on strategies for future behaviour as part of this work.

Development of self-awareness can also be assisted by "inner work", a term covering such activities as meditation and psychotherapy. There is qualitative evidence that inner work assists professional effectiveness in the workplace (Levin 1997).

The final suggestion Wilson and Dunn make for improving self-knowledge is that of observing our own behaviour and carefully examining our own actions. This relates back to Socrates' claim that it is only the examined life that is worth living. There is clear evidence that people are happier when their conscious and unconscious goals align (Schultheiss and Brunstein 1999).

Dispositional measures of self-awareness recognise that there are individual differences in the extent to which people attend to or analyse their inner worlds. The second part of this thesis aims to discover whether self-awareness can be improved and what the workplace correlates of greater self-awareness may be.

7.2.1 Improving self-awareness in the workplace

Self-awareness as used in this study was defined earlier as self-attentiveness – the tendency to pay attention to one's internal world and reactions. The measure of this was refined by Trapnell and Campbell to include both the positive and the negative aspects of self-attentiveness, Reflection and Rumination respectively.

In their review, Wilson and Dunn (2004) describe several generic tools for improving self-knowledge, including introspection and journaling. There is good evidence that these tools can be taught, but it is unknown whether this will have a long-term effect in encouraging more general self-attentiveness. This study will attempt to improve employee self-awareness by providing training designed to increase participants' self-awareness.

H10a: Training employees in self-awareness techniques will increase their self-awareness.

Personality instruments are widely used for the purposes of development and training, to increase employees' understanding of each other and themselves in the workplace (Goodstein

and Lanyon 1999). A model that systematically describes implicit aspects of personality could be used to improve employees' knowledge of themselves. The Enneagram is well-suited to attempts to improve people's self-awareness as its descriptions of types hinge on their particular "blind spot" – the aspect of their personality that is most hidden to them.

Employee development programs that use personality models are based on an assumption that providing training and development tailored to the individual is more effective than providing generic training. This assumption will be tested using the Enneagram model of personality. Providing training in self-knowledge that is tailored to each personality type should improve self-awareness beyond that possible with the use of generic tools such as journaling.

H10b: Providing self-awareness training tailored to employees' Enneagram personality type will improve self-awareness more than will providing generic training.

7.3   Self-awareness outcomes

Several positive outcomes of increased self-awareness have been identified, (Wilson and Dunn 2004) one of which is an increase in general well-being. The review found evidence that reducing the discrepancies between implicit and explicit values or self-esteem can improve health and interpersonal relationships. High self-awareness has also been linked to improved self-regulated behaviour and psychological well-being, possibly because those who are more self-aware are acting in line with their values and interests (Brown and Ryan 2003).

Although people's stereotypes and attitudes and their effects on behaviour have been extensively investigated using conscious self-reports, there is much evidence to suggest that behaviour is also affected by unconscious aspects. For example, participants who scored low on a direct measure of racial stereotyping still displayed behaviour based on implicit stereotypes (Greenwald and Banaji 1995). This result has been demonstrated for many different stereotypes and this research showed that directing a person's attention towards these implicit stereotypes, that is, improving their self-awareness, enabled them to reduce those undesired influences on judgement.

In other studies of self-awareness in an occupational setting, there is evidence that leaders who are more self-aware are more effective and have more satisfied subordinates (Atwater, Roush et al. 1995) than those who are less aware. Self-awareness has also been found to be an essential aspect of development for successful global managers (Kho 2001).

In addition, one study has indicated that higher self-awareness is associated with higher job satisfaction (Luthans and Peterson 2003), possibly as a result of the increased sense of general well-being described by Wilson and Dunn. Job satisfaction is an important outcome to organisations because of its correlation with performance, which is of the same magnitude as for

the Conscientiousness trait and for biodata (Judge, Thoreson et al. 2001). Greater self-awareness has also been associated with more effective career decisions (Singh and Greenhaus 2004).

It is clear that the occupational implications of improved self-awareness are many and varied, and yet the studies described above are almost unique. Perhaps due to the difficulty in measuring self-awareness, or perhaps because self-awareness is seen as unimportant in a competitive work environment, there has been relatively little research conducted on its effects in the workplace.

7.3.1 Self-awareness outcomes in the workplace

The effect of increased self-awareness on job attitudes has been shown to be relatively limited, though there are indications that it may have promising effects on employee work lives. Where research has been conducted, it has not been after an intervention designed to improve self-awareness but by a cross-sectional approach, relating inherent levels of self-awareness with the participants' current attitudes. This study attempts to describe some of the work-related effects of self-awareness in a short-term longitudinal study.

Warr (1990) relates well-being at work to the affective circumplex developed by emotion researchers (e.g.: Feldman Barrett 1998). He suggests that three axes within this circumplex model are of particular interest to I/O psychology research. Self-awareness is predicted to have specific effects on each of these axes, which overall should indicate an association of higher self-awareness with higher well-being at work.

The first axis is a general pleased-displeased axis, commonly assessed by Job Satisfaction scales (Daniels 1997), and giving an impression of how satisfactory an employee finds his or her job. Luthans and Peterson (2003) found a positive relationship between self-awareness and job satisfaction, which this study would expect to replicate and extend. The positive aspect of self-awareness (Reflection) is expected to replicate this positive relationship while the negative aspect of self-awareness (Rumination) is likely to be associated with lower job satisfaction.

H11a: Reflection will have a positive relationship with Job Satisfaction

H11b: Rumination will have a negative relationship with Job Satisfaction

Reflection has been associated with positive feelings of well-being, while Rumination is associated with negative feelings of anxiety (Trapnell and Campbell 1999). It is expected, that this will be captured in job-specific well-being too. The second axis in Warr's model of job-related well-being captures the extent to which an employee is anxious or contented about their work (Anxiety-Contentment scale).

H11c: Reflection will have a positive relationship with Job Contentment

H11d: Rumination will have a negative relationship with Job Contentment

The third axis opposes depressive and enthusiastic feelings about work (Depression-Enthusiasm scale). As depressive feelings are associated with greater rumination, this research should show a similar relationship with the job-related version of these feelings. It is also likely that Reflection, as it is associated with higher well-being, will show a positive relationship with the enthusiasm scale.

H11e: Reflection will have a positive relationship with Job Enthusiasm

H11f: Rumination will have a negative relationship with Job Enthusiasm

Rumination (the negative or unconstructive aspect of self-attentiveness) is correlated with a decrease in motivation while positive self-awareness (the Reflection aspect of self-attentiveness) is associated with increased motivation (Wilson and Dunn 2004). In the workplace, motivation can be captured by Internal Work Motivation, which would be expected to increase with any increase in self-awareness.

H11g: Internal Work Motivation will have a positive relationship with Reflection

H11h: Internal Work Motivation will have a negative relationship with Rumination

Although research on self-awareness in the occupational arena is lacking, considerable research has been carried out in the medical world. These medical studies show that greater self-awareness is associated with patients using better coping strategies (Anson and Ponsford 2006). Reflecting upon what they can and cannot do enables identification of their weaknesses and leads to the adoption of appropriate coping strategies. It is expected that there will be a similar effect on workplace coping behaviours.

H11i: Coping behaviours are predicted to improve with Reflection

As Rumination involves getting bogged down in negative affect and not focusing on solutions to problems, it is hypothesised that increases in Rumination will correlate with decreased use of coping behaviours.

H11j: Coping behaviours are predicted to decrease as Rumination increases

It is possible that merely attending a special training programme could make employees feel appreciated and produce a general "feel-good" factor which could conceivably influence their job attitudes. It is therefore important to demonstrate discriminant validity of the findings by including measures that are hypothesised to be unrelated to self-awareness. These measures act as a kind of control, ensuring that changes in job attitudes are not just due to a generic feel-good factor, but that self-awareness shows specific relationships with key constructs. The following attitudes are not predicted to change with self-awareness.

H11k: Satisfaction with Pay will have no relationship with self-awareness

H11l: Job Freedom will have no relationship with self-awareness

7.4   Summary

Self-awareness has an important, if under-appreciated, role in personality psychology as the link between conscious and unconscious personality that allows for personal development. In this study, self-awareness has been operationalised as private self-attentiveness, a form of dispositional rather than situational self-awareness. A distinction has also been drawn between positive (Reflection) and negative (Rumination) aspects of self-attentiveness.

It was noted that there was little research on the effects of self-awareness in the workplace, despite the promising findings in related areas. This research aims to address this lack by attempting to improve employee self-awareness and defining the associated changes in job attitudes.

This and the previous chapters have reviewed the relevant literature and positioned the research in this broader context. The next chapter provides a brief summary of the two studies before the methodology is outlined in greater detail.

Chapter 8   Summary and aims of this research

8.1   Study One - The Enneagram typology as a unifying framework

The literature review identified a need for personality research to take account of both the conscious (explicit) and unconscious (implicit) aspects of personality. Rather than equating measures of the self-concept to the whole of personality, research should look to combining explicit and implicit measures. It was argued that a type approach to personality is the ideal way of doing this, providing the appropriate level of analysis for describing how particular personality variables show similarity to or difference from others. The Enneagram is suited to this task, describing personality in terms of both conscious and unconscious aspects.

This thesis aims to address this need by combining three established personality measures through the use of the Enneagram typology. The measures tap three well-researched but often unrelated areas of personality: traits, values and motives.

The Five Factor Model describes five main factors of personality and has been proposed as a universal, cross-cultural structure of individual differences (McCrae and Costa 1997). While it may be the best model available for describing generalised patterns of behaviour (referred to as personality traits), it does not tap into the motivations for those behaviours. As discussed previously, some authors have attempted to turn the Five Factors into *reasons for* behaviour as well as *descriptions of* general tendencies in behaviour; but this approach has been heavily criticised. Instead, it is more appropriate to turn to the literature on motivation.

There are two strands to the study of why people behave as they do, which can be summarised as explicit and implicit motivations. Explicit motivations are those which a person reports as being important to him- or herself, and are commonly referred to as *values*. These are the concepts that a person will use when consciously choosing certain behaviours, striving towards certain outcomes or evaluating their own and others' actions. A very robust model of values, tested in 49 countries over many years is that of Schwartz and colleagues (Roccas, Sagiv et al. 2002). It describes 10 values and their relative compatibilities with each other.

Implicit motivations, on the other hand, rarely correlate with self-attributed values and likely represent a separate type of human motivation (McClelland, Koestner et al. 1989). Implicit motivations (also referred to as *needs*) are subconscious desires for particular emotional outcomes rather than being cognitively-based like values. There are a small number of these implicit motivations: power, affiliation and achievement.

In the combination of relationships between each Enneagram type and these three different models, each tapping a different aspect of human personality, a detailed and whole

picture of personality can be built up. The following tables summarise the hypotheses described in detail in the previous sections, providing an outline of the key characteristics of each type.

Table 1: Summary of Enneagram and FFM hypotheses

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Agreeableness		+ H2a			− H5a			− H8a	+ H9a
Conscientiousness	+ H1a		+ H3a		+ H5b	+ H6a	− H7a		− H9b
Extraversion		+ H2b	+ H3b	− H4a	− H5c		+ H7b	+ H8b	
Emotional Stability	+ H1b	− H2c		− H4b	+ H5d	− H6b	+ H7c		+ H9c
Openness to Experience	− H1c			+ H4c		− H6c	+ H7d		− H9d

Key: + indicates this Type expected to score higher than the rest of the group on this trait.
− indicates the Type is expected to score lower than the rest of the group

Table 2: Summary of Enneagram and Values hypotheses

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Benevolence		+ H2d							+ H9e
Conformity	+ H1d						− H7e	− H8c	
Tradition									+ H9f
Security					+ H5e	+ H6d			
Power			+ H3c					+ H8d	
Achievement			+ H3d						− H9g
Hedonism							+ H7f		
Stimulation	− H1e			+ H4d	− H5f		+ H7g	+ H8e	
Self-direction	− H1f			+ H4e			+ H7h		− H9h
Universalism									+ H9i

Table 3: Summary of Enneagram and Motives hypotheses

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Achievement			+ H3e	− H4f					
Affiliation		+ H2e		− H4g		+ H6e	+ H7i		+ H9j
Power			+ H3f	− H4h	− H5g		+ H7j		
Hope of Success			+ H3g						
Hope of Affiliation		+ H2f			− H5h				
Hope of Power								+ H8f	
Fear of Failure									
Fear of Rejection		− H2g		+ H4i					
Fear of Power								− H8g	

Table 4: Summary of Enneagram and Job Attitudes hypotheses

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Internal Work Motivation	+ H1g							+ H8h	− H9k
Job Involvement	+ H1h		+ H3h		− H5i			+ H8i	
Job Satisfaction			+ H3i				+ H7k		
Organisational Commitment	+ H1i					+ H6f	− H7l		
Turnover Intention				+ H4k			+ H7m		
Job Self-efficacy			+ H3j		− H5j			+ H8j	− H9l
Perceived Stress	+ H1j			+ H4l					

Key: + indicates this Type expected to score higher than the rest of the group on this attitude.
− indicates the Type is expected to score lower than the rest of the group

8.2   Study Two – Self-awareness in the workplace

Self-awareness has been associated with increased well-being and there are indications it may be important to performance, for example by improving decision making. However, the literature review indicated that self-awareness has not been extensively investigated in the workplace. This is despite the underlying assumption of many personality-based interventions that helping employees become more aware of their behaviour, attitudes or preferences will improve their work life.

The second part of this thesis aims to address this gap by comparing two approaches to improving self-awareness in an occupational setting. The first approach will train employees in general self-awareness skills while the second will give guidance tailored to their Enneagram personality type. This study will use a longitudinal design rather than the cross-sectional one common to most of the self-awareness research. Self-awareness will be measured before and after the specific intervention and associated changes in work-related attitudes and affect will be investigated. In addition, any changes in coping strategies will be assessed.

It is generally hypothesised that positive changes in attitudes or affect will be associated with an increase in Reflective self-attentiveness while negative changes will be associated with an increase in Ruminative self-attentiveness. It is further suggested that training giving employees specific guidance on self-development, such as that provided by the Enneagram personality model, will be better at improving self-awareness than general training in self-awareness tools.

8.3   Conclusion

In summary, this thesis investigates the utility of the Enneagram model of personality in both theoretical and practical arenas. It will add to the body of personality theory by testing the extent to which explicit and implicit personality constructs can be related using the Enneagram typology. In addition, the usefulness of the Enneagram model for predicting individual differences in job attitudes will be gauged. The utility of personality models in improving self-awareness and thereby job attitudes will be assessed by comparison of the Enneagram with generic self-awareness training.

The next section deals with the proposed methodology in more detail.

Chapter 9   Study 1

9.1   Research Questions

This study has two aims. The first is to assess the Enneagram model's usefulness in bringing together aspects of both explicit and implicit personality. To address this, the relationships between the Enneagram typology and three established personality models are explored, looking at both participants' general behaviour and the reasons for their behaviour.

➔ **Research Question 1: Can the Enneagram provide a structure for linking models of explicit and implicit personality?**

Second, the study aims to improve the prediction of occupational attitudes and job choices related to personality by using the combinations of explicit and implicit personality described by the Enneagram types. Hypotheses about personality type-related outcomes are tested, including job satisfaction, internal work motivation, organisational commitment, turnover intention and stress. Longer term outcomes such as chosen organisation and occupation are also explored.

➔ **Research Question 2: Do the Enneagram types show unique patterns of relationships with job outcomes?**

9.2   Instruments

A large scale survey was carried out. Due to the length of the survey, measures which were short but had good psychometric properties were preferred over longer measures with no improvement in reliability.

9.2.1 Research Question 1: Linking explicit and implicit personality

For Research Question 1, three models were chosen to represent explicit and implicit personality. As this research aims to find patterns among those models, only well-established models with reliable instruments and substantial research support were chosen.

9.2.1.1 Five Factor Model

The comprehensiveness and utility of the Five Factor Model traits have been demonstrated in many different research domains, including the occupational setting (Tokar, Fischer et al. 1998). As a measure of that part of explicit personality which is represented by general behaviour patterns and preferences, it is probably the most comprehensive and reliable model (eg: Ozer and Reise 1994). Comparison of the Enneagram types to the Five Factors has

been touched on before (Newgent, Parr et al. 2004) and results were promising. This study is partially an attempt to replicate those findings using different methodology and measures.

To assess the Five Factors a 50-item questionnaire from the International Personality Item Pool (IPIP) was used. This instrument is freely available and in the public domain (IPIP 2001) and supported by very large scale research (Buchanan, Johnson et al. 2005). The reported alpha reliabilities for each of the traits are as follows (IPIP 2001): Agreeableness 0.82, Extraversion 0.87, Conscientiousness 0.79, Emotional Stability 0.86, Openness to Experience 0.84. For each of the items, a five-point Likert scale is used, from 1 (Strongly Disagree) to 5 (Strongly Agree). Scores for the traits were created by taking the mean score for the items that made up each scale.

9.2.1.2 Values

Values are defined as beliefs about desirable outcomes or behaviours which guide both the choice and the evaluation of behaviour or events across many different situations (Schwartz 1992). Schwartz and his colleagues have developed a circumplex model of ten values, where neighbouring values on the circle are more compatible with each other than are values opposite each other (Roccas, Sagiv et al. 2002). The model was confirmed with very few deviations in all of the samples studied and provides one of the most robust and reliable models of personal values available (Schwartz 1992).

The Schwartz model of human values has been extensively tested and the structure supported in over 20 countries and with many occupational groups (Schwartz 1992; Schwartz and Sagiv 1995). The original Schwartz Value Survey consists of 56 items, however the author recommends only using those items which emerge consistently in the correct domain across the varied cultural samples, that is, 44 items (Schwartz and Sagiv 1995). This abbreviated version of the survey was used to assess values. Reported alphas are as follows (Roccas, Sagiv et al. 2002): Benevolence 0.62, Conformity 0.63, Tradition 0.61, Security 0.61, Power 0.72, Achievement 0.72, Hedonism 0.64, Stimulation 0.70, Self-direction 0.60, Universalism 0.72. While some of these values are lower than the recommended level of 0.7 for a reliable scale (Nunnally 1978), Schwartz and Sagiv (1995) suggest that lower reliabilities may be due to important culture-specific variation. The authors present alternate ways of estimating reliability, including how often a single value item emerges in the expected domain. These alternate approaches indicate a good level of reliability for this instrument.

The Schwartz Value Survey asks respondents to rate each item as a "guiding principle in my life" on a 9-point response scale ranging from -1 (opposed to my values) to +7 (Of supreme importance).

Value scores were created in a similar manner to trait scores by taking the mean of the scores for each of the relevant items. However, values are theorised to be organised in a

hierarchical manner (Schwartz 1992). This means that when respondents are completing the values questionnaire, they are scoring values by referring to an internal hierarchy of values. It is therefore necessary to take account of the individual differences in scale use and convert these scores to a more truly normative score. This is done by subtracting the individual's overall mean from the mean score for each value. These are referred to as "centred scores" and are suitable for use in t-tests, ANOVA, regression and correlation (Schwartz 2003).

9.2.1.3 Implicit Motives

The third model, McClelland's Implicit Motives, looks at the unconscious or implicit reasons for people's behaviour. Implicit motivations (also referred to as needs) are subconscious desires for particular emotional outcomes rather than cognitively-based motivations values (McClelland, Koestner et al. 1989). The use of projective methods such as story-telling and use of fantasy has allowed researchers to identify three major implicit motives: achievement, power and affiliation (see for eg: Schultheiss and Brunstein 1999).

Unfortunately, projective measures require a significant amount of time from both respondents and the researcher and are unsuited to large-scale surveys. A recent development in measuring implicit motives that addresses this problem is the Multi-Motive Grid, a semi-projective measure (Sokolowski, Schmalt et al. 2000). It is semi-projective in that it is still asking participants to respond to an ambiguous stimulus (in this case, a simple drawing of an everyday situation), but their response is restricted to a choice between several alternatives. These alternatives have been designed to assess the Hope and Fear aspects of the three motives.

The short version of the Multi-Motive Grid (MMG-S) (Sokolowski, Schmalt et al. 2000) was used. This instrument displays 14 ambiguous pictures and asks participants to select from several statements (four to 12 statements per picture) to describe what the picture represents. For the short version, only the statements that best represented the three motives were retained. Participants can choose as many or as few statements per picture as they wish.

Scoring the motives scales was slightly different to the other two models, as the motive score was the sum of all positive responses to the items that represented each motive. In addition, there is more than one way to combine these scores, expressing slightly different things about the motives. First, there is a score for each approach and avoid component of each motive (Hope of Affiliation, Success and Power, and Fear of Rejection, Failure and Power). Summing the total number of times a respondent chose the items measuring each of these components gave a "motive strength score" for each scale out of a maximum of 12.

The reported alphas for these scales are as follows (Sokolowski, Schmalt et al. 2000): Hope of Success 0.69, Hope of Affiliation 0.61, Hope of Power 0.72, Fear of Failure 0.67, Fear of Rejection 0.72, Fear of Power 0.67. Although the reliabilities of the scales in the shorter version are lower than in the complete version, it was felt that the longer version took an

inhibitive length of time to complete (45 minutes). In addition, it should be remembered that the MMG is still the only available semi-projective method to measure implicit motives.

Second, these individual scales can also be combined into higher order scales. Following common practice (Puca, Rinkenauer et al. 2006), a combined score for each motive was created by subtracting the avoid component from the appropriate approach component. For example, Fear of Rejection was subtracted from Hope of Affiliation to give an overall indication of how motivated the individual was to seek out Affiliative opportunities. This resulted in overall scores for the three implicit motives: Achievement, Affiliation and Power. There are no alphas for these scales reported in the literature.

And finally, Sokolowski et al (2000) recognised a general "approach" and general "avoid" factor. To create scores for these scales, the three approach scores were combined (Hope of Affiliation, Success and Power) and the three avoid scores were combined (Fear of Rejection, Failure and Power). Both the individual motives scales and the higher order scales were used in the following analyses.

9.2.2 Research Question 2: Enneagram Types and Occupational Outcomes

Occupational outcomes considered in this study included job attitudes and job choices, both of which have been shown to be related to personality (eg: Shafer 2000). The following job attitudes were assessed: Internal Work Motivation, Job Satisfaction, Job Involvement, Organisational Commitment, Turnover Intention, Job Self-efficacy and Perceived Stress. Four further outcomes were assessed, referred to as "job choices": type of Occupation, type of Industry, whether Self-employed or not, and level of Education.

9.2.2.1 Job Attitudes

The general criteria for choosing each of the following scales were that they should have good psychometric properties, validated on a variety of employees, and be simple to complete. In addition, shorter scales were preferred over those with larger numbers of items to ensure that the total questionnaire length was kept as short as possible. Unless otherwise noted, these criteria were met by the following scales.

Internal Work Motivation (reported $\alpha = 0.6$), Job Satisfaction ($\alpha = 0.77$), Job Involvement ($\alpha = 0.63$) and Turnover Intention ($\alpha = 0.83$) were assessed with 3 items each from the Michigan Organizational Assessment Questionnaire (Cammann et al, 1979, in Cook, Hepworth et al. 1981). The psychometric properties for these scales are well documented and satisfactory. Using several scales from the same questionnaire gave a parsimonious solution to the problem of needing to assess so many different attitudes. It ensured that the same response format could be used for all of them, making the questionnaire simpler for respondents to

complete. They were scored on a seven point Likert scale from 1 (Strongly Disagree) through to 7 (Strongly Agree).

Organisational Commitment ($\alpha = 0.79$ to 0.87) was assessed using the six item affective component of Meyer and Allen's (1993) commitment scale. Although the Organisational Commitment Questionnaire (Porter, Steers et al. 1974) is the most widely used measure of this attitude (Mathieu and Zajac 1990), it is more than twice the length of this scale. In addition, the Meyer and Allen scale has been shown to converge with the OCQ (Randall, Fedor et al. 1990). This scale used with the same seven point Likert scale as for the Michigan Organizational Assessment Questionnaire above.

Self-Efficacy ($\alpha = 0.86$ to 0.90) was measured using the eight item scale developed by Chen et al (2001), which asks participants to indicate on a five point Likert scale the extent to which they agree with statements about their ability to do their job. Despite there being a plethora of measures of self-efficacy, very few had been rigorously tested and this was the only one available that had been specifically tested in the workplace. The test-retest reliability coefficients were high: $r_{t1-t2} = .65$, $r_{t2-t3} = .66$, $r_{t1-t3} = .62$ (Chen, Gulley et al. 2001)

Perceived levels of stress were assessed with the commonly used 4-item Perceived Stress Scale ($\alpha = 0.72$) (Cohen, Kamarck et al. 1983). Psychological stress is concerned with how stressful a situation is appraised as by the person, rather than external measures of the stress in the situation. The PSS items tap how unpredictable, uncontrollable or overloaded respondents find their lives. This scale asks respondents to indicate on a five point Likert scale ranging from 1 (Never) to 5 (Very Often) how often in the preceding month they have felt under stress or able to deal well with life.

In scoring all of these scales, a mean score was computed from the relevant items.

9.2.2.2 Job Choices

Respondents' occupations were classified according to the Standard Occupational Classification 2000 (Office of National Office for National Statistics 2000), which contains nine broad categories designed to cover the whole range of occupations. The industrial sector that respondents worked in was classified using the UK Standard Industrial Classification of Economic Activities, which contains 20 categories. While these classifications were developed for UK occupations and industries, they were designed to be as close as possible to EU and international classification systems (Office for National Office for National Statistics 1992).

Level of Education was assessed by asking participants to indicate their highest level of formal education on a 7 point scale, ranging from compulsory schooling only to doctoral level degree. The points were described using both the UK and US education systems and checked with natives of each country to ensure they were clear and comparable.

Respondents were also asked to indicate whether they were self-employed or not. Those who were not in any kind of employment were instructed to skip the occupational questions.

9.2.3 Questionnaire format

Both online and postal versions of the questionnaire were available to ensure that a maximum number of responses could be gathered. Paper copies of the questionnaire were sent to those participants who could not be reached by email, either because the email address was faulty or because it was unavailable. In addition, the emailed invitation to take part offered participants the opportunity to receive the questionnaire by post rather than fill it in online.

Most participants chose to complete the questionnaire online, with only 9.4% completing the paper version. T-tests were conducted to determine if questionnaire format had any effect on response style. A significant difference was found on only one of the scales, the Achievement Value (t (413) = -2.39, p < 0.05) and it can therefore be concluded that responses were not influenced by the questionnaire format.

9.3   Pilot Study

A pilot study was conducted in order to test out the combination of questionnaires that make up the battery to be used in the main study. Specifically, it was important to verify the time taken to complete the whole questionnaire, the clarity of the questionnaire instructions and the appropriateness of scale responses to the various items. In addition, the pilot study provided data which closely resembled that which would be produced by the main survey, allowing the researcher to gain familiarity with it and identify any early problems.

The questionnaire consisted of all the personality scales to be used in the main study as well as the job attitude scales (see Section 9.2 for details of the scales). Space was also given for respondents to comment on the questionnaire, how long it took them, what it was like to answer, any improvements they could suggest, and any other general comments.

9.3.1 Respondents

The pilot study questionnaire was given to a convenience sample and eleven people responded to it. Nine respondents had been interviewed by the author to determine Enneagram type but this can only be taken as a guideline as determination of type involves self-observation and reflection as well. Table 5 shows the demographic information about the participants.

Table 5: Pilot Study Participants

Participant No.	Nationality	Sex	Age	EType
1	British	Male	26	9
2	South African	Male	25	7
3	British	Female	24	6
4	British	Female	25	6
5	South African	Male	31	5
6	British	Male	53	8
7	British	Female	53	5
8	British	Female	28	7
9	British	Female	28	4
10	Taiwanese	Female	33	7
11	British	Male	38	1

9.3.2 Results and discussion

9.3.2.1 Questionnaire clarity and appropriateness

9.3.2.1.1 Five Factor Model

None of the respondents made any comments about this section. The scale worked well, the data were easily manipulated and the results looked appropriate. However, the random order that the items were originally placed in made the calculation of the overall scores somewhat time-consuming and confusing. Items were reordered so that every fifth item represented the same factor. For example, Extraversion was measured by items 1, 6, 11, 16, 21, 26, 31, 36, 41 and 46. Items were also reordered to ensure a mix of positively and negatively scored items.

9.3.2.1.2 Values

One respondent commented that the extra information given to define the value was very useful in helping to understand what was meant by the name. As this was also part of the accepted questionnaire format, it was retained.

Initially there were concerns that the response range on this scale could be relatively long (-1 to +7) and cumbersome, or difficult for respondents to understand. However, no respondents commented on the scale or indicated they had any difficulty with it. Schwartz (1992) who created this rating scale, claims that as most people will respond positively to most of the values, it is necessary to have an extended positive response range. A graph of the overall frequencies of response supports this (Figure 3). The "-1" rating accounted for only 2.9% of responses, but captures essential information.
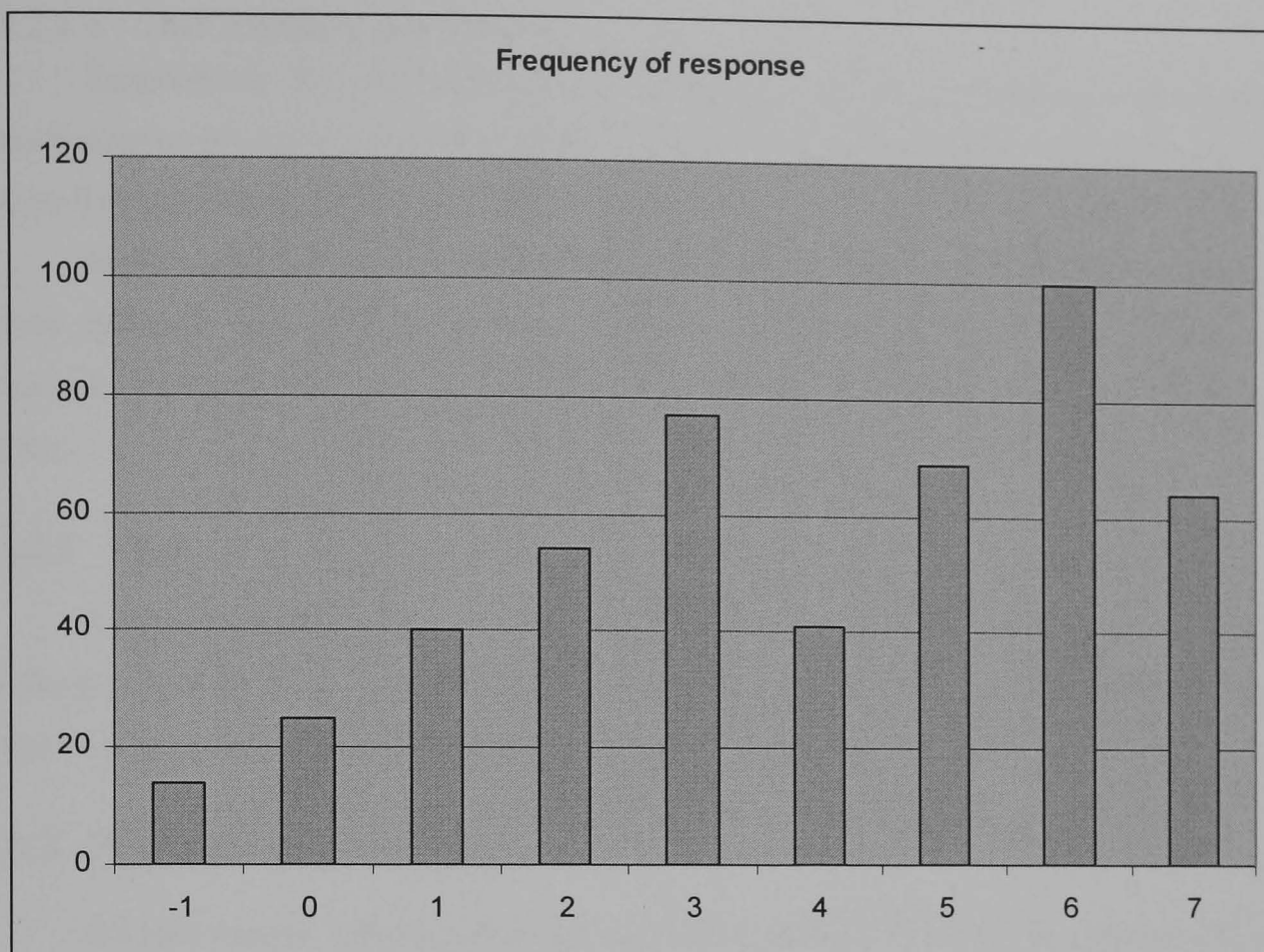
Figure 3: Overall frequency of response for each rating on the Values scale

Generally, the data indicated that the values were being rated in accordance with the circular structure of Schwartz et al, where values on opposite sides are in competition.

9.3.2.1.3 *Multi-Motive Grid*

Several respondents indicated that they found this section slightly more difficult than the others, although they all completed it. From the comments, it seemed the instructions could be clarified. Discussions with the respondents gave suggestions for this. The instructions were changed to encourage respondents to "Take a moment to look at each picture and imagine what might be going on". In addition, respondents are clearly told that they can choose as many or as few responses for each picture as they like.

In putting the questionnaire online, it was necessary to simplify the response format so that instead of respondents having a forced choice (yes/no) response for each statement, they were asked to tick the statements that seemed appropriate. In essence this is the same as a forced choice and does not change how the motive scores are calculated (simple summation of the "yes" responses).

It was expected that this section would prove slightly more difficult than the others as it requires a very different approach from most questionnaires. But as the measurement of unconscious motives necessitates some kind of projective measure, the Multi-Motive Grid remains the simplest way of doing this.

9.3.2.1.4 *Job Attitudes and Choices*

Respondents did not indicate any difficulty with the occupational or industrial classifications, although one commented that it might be useful to include "self-employed" as an option. The questionnaire was amended to include this.

Respondents did not indicate any difficulties with the various job attitude measures and results indicated clear differences among individuals. As these scales have all been well validated by other authors and no problems were reported here, they were used for the main survey.

9.3.2.2 Time

Respondents took between 15 and 50 minutes to complete the survey, with the majority finishing in half an hour. This was felt by respondents to be an acceptable length of time to spend on it in exchange for a feedback report on their answers.

9.3.3 Pilot Study Summary

Overall, results indicated that the chosen questionnaires were appropriate and, with slight changes in instructions, easily completed. A few small changes to the layout were adopted. The time to complete the battery of questionnaires was reasonable.

9.4 Participants

The most reliable way of determining someone's Enneagram type is through a long-term process of self-discovery (Wagner 1983; Gamard 1986). This is often done on a workshop which introduces the Enneagram to participants and describes the inner motivations of each type. In order to ensure that Enneagram typing was as accurate as possible, only participants who had attended the week-long *Intensive Enneagram* course run by the Trifold School[7], or at least three weekend Enneagram courses by other tutors, were invited to take part.

Participants were recruited through the mailing lists of Enneagram tutors. Participants were invited to take part in the survey, told how long it would take and offered a Personality Report on their responses to the Five Factors, Values and Motives section in exchange for completing the survey. This offer was made as research indicates an improved response rate for surveys offering some kind of compensation to participants (Edwards, Roberts et al. 2002). The Report introduced each of the three models and provided participants with their individual scores and an interpretation. It also thanked participants for their contribution, debriefed them about the aims of the research and gave a contact email if they had further questions.

---

[7] This forms the first week of the Enneagram Teachers' course.

As Data Protection rules did not permit the researcher access to other Enneagram teachers' mailing lists, the invitation to take part was forwarded by the teachers to eligible people. This meant that an overall response rate could not be calculated. The one mailing list that was made available to the researcher (for the *Intensive Enneagram* course) showed a response rate of 29%. Response rates to email surveys have been declining since the mid-1980s, with the mean response rate around the year 2000 at 24% (Sheehan 2001). According to Sheehan (2001), this decline may be because email surveys have lost their novelty value and potential respondents are being over-surveyed. Although rates of response show a large amount of variation, at least half of all surveys conducted by one of the largest online survey companies showed a response rate of 26% (Hamilton 2003). This indicates that the rate for the mailing lists to which the researcher did not have access is likely to have been similar.

In all, 416 responses were received (75% female, mean age 53.5 years, S.D. = 10.7 years). Due to a problem with the online questionnaire, 43% of respondents did not give their ethnic origin. Of the remaining respondents, 95% were white.

Most participants were of British (46%) or American (37%) nationality. The effect of Nationality on responses was investigated using t-tests. Significant differences were found for 13 of the 31 scales (see Table 6). The only difference in the Five Factor traits was that British respondents were slightly lower on Emotional Stability than Americans. There were several differences between the two nationalities in the Values system, which is in line with previous research indicating that different countries have differing value priorities (Schwartz 1992). In addition, British respondents were lower on Hope of Success and higher on Fear of Rejection than Americans. This was carried over into corresponding differences in the higher order motives of Achievement and Affiliation. The two nationalities also differed on Job Self-Efficacy (Americans higher) and Job Stress (Britons higher).

Table 6: Mean scores and t-test results for British and American respondents (significant differences in bold)

	British mean	American mean	t	df	p
Agreeableness	4.1	4.2	-1.694	341	.091
Conscientiousness	3.6	3.7	-1.271	341	.205
Extraversion	3.2	3.4	-1.915	341	.056
EmotionalStability	**3.0**	**3.2**	**-2.646**	**340**	**.009**
OpennesstoExperience	3.9	4.0	-1.743	341	.082
Benevolence	5.3	5.5	-1.288	339	.199
Conformity	**4.4**	**4.1**	**2.154**	**340**	**.032**
Tradition	**3.3**	**2.9**	**2.664**	**337**	**.008**
Security	3.7	3.7	.153	339	.878
Power	2.0	2.3	-1.772	340	.077
Achievement	**4.0**	**4.4**	**-2.939**	**340**	**.004**

	British mean	American mean	t	df	p
Hedonism	3.5	4.2	-3.665	341	.000
Stimulation	3.7	3.9	-1.070	340	.285
Selfdirection	5.0	5.4	-2.965	340	.003
Universalism	5.1	5.3	-2.191	341	.029
HopeSuccess	3.3	4.0	-2.259	341	.025
HopeAffiliation	3.4	3.6	-.766	341	.444
HopePower	2.9	3.0	-.277	341	.782
FearFailure	2.6	2.5	.772	341	.441
FearRejection	2.8	2.1	2.706	341	.007
FearPower	1.8	1.6	1.173	341	.242
AchFail	.7	1.5	-2.404	341	.017
AffRej	.7	1.5	-2.733	341	.007
PowFP	1.1	1.4	-1.073	341	.284
WorkMotivation	6.3	6.3	.649	259	.517
JobInvolvement	4.3	4.1	1.288	258	.199
JobSatisfaction	5.7	5.7	-.155	257	.877
OrgCommit	4.9	5.2	-1.742	252	.083
TurnoverIntent	2.7	2.8	-.129	258	.898
Job Self-Efficacy	3.8	4.2	-4.855	257	.000
Job Stress	2.5	2.2	3.511	258	.001

A Chi-squared test was carried out to determine whether Nationality had a significant effect on what Enneagram Type respondents identified themselves as. Although inspection of the cross-tabulations table indicated that Britons were slightly more likely than Americans to identify themselves as Type 5, and Americans more likely than Britons to identify themselves as Type 6, nationality differences did not reach significance (χ^2 (8) = 13.62, p > 0.05). This indicates that, despite some nationality differences on personality and job attitude scales found above, identification with a particular Enneagram Type is not related to nationality.

The frequencies of the Enneagram Types are shown in Figure 4. Given the specific recruiting strategy employed in this study, the frequencies here should not be taken as a reflection of the spread of Types in the general population. However, it is of interest that Type 1s and 6s, described as the most responsible and duty-driven of the Enneagram Types, had the highest frequency of survey completion.
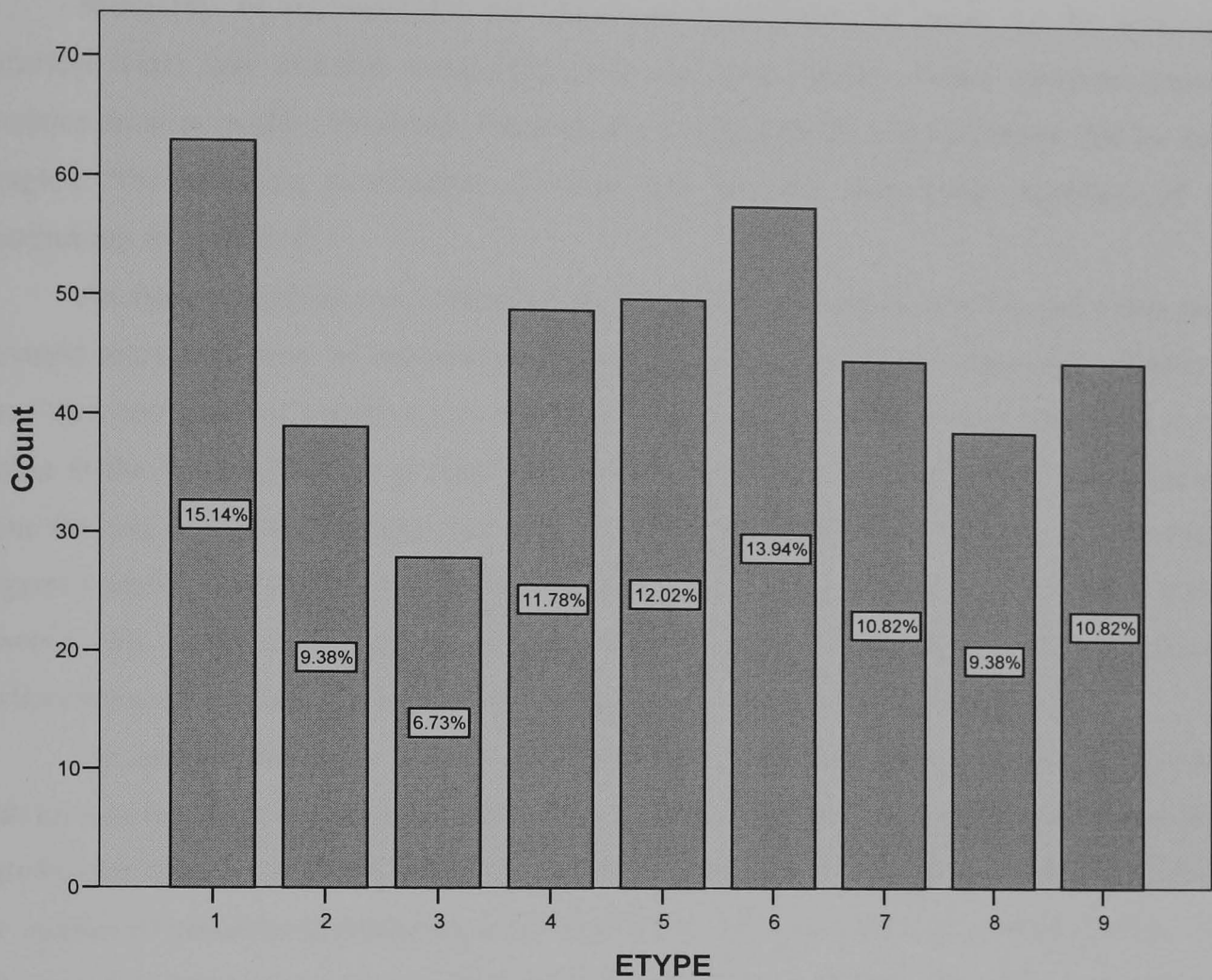
Figure 4: Frequency of Enneagram Types in this study

The sample was highly educated, with 50% having a master's degree or higher. Twenty-three percent of respondents were not in employment and therefore did not answer the section about job attitudes and choices. Thirty-seven percent were employed and 40% were self-employed, particularly in consultancy, coaching and counselling. This high proportion of self-employed respondents understandably had knock-on effects when it came to measuring job attitudes such as Job Involvement and Organisational Commitment, meaning that effects of personality type here may have been lost among the larger effects of type of employment. However, with such an even split between self-employed and employed, it does means that the results can be generalised to both populations.

9.5 Results

9.5.1 Data screening and assumption checking

Two cases were deleted due to incomplete data. In addition, a few cases had missing data confined to one section (i.e.: just motives or just values). These cases were excluded from analyses that used those sections.

Normality of the variables (an important assumption for many of the following statistical tests) was assessed using Q-Q plots for each variable. Some variables showed deviation from normality. However, Tabachnick and Fidell (2001, p72) point out that for large samples, "the sampling distribution of means are normally distributed regardless of the distributions of variables".

Analysis of outliers was conducted by inspection of boxplots in SPSS and a few cases emerged more than once as univariate outliers. However, none of the cases were outliers in more than one group of variables (i.e.: an outlier in several of the Five Factor scales was not an outlier in the Values, Motives or Job Scales). In addition, none of these outliers was separated from the rest of the distributions but were all legitimate parts of the sample. Some authors suggest transforming variables to reduce the impact of outliers (Tabachnick and Fidell 2001), however this results in problems with later interpretation of the results (Field 2000). As the outliers were not a serious problem with this sample, no variables were transformed.

To assess multivariate outliers, the Mahalanobis distance was calculated for all cases with no missing data and saved as a new variable. To evaluate the Mahalanobis distance, a strict significance value of $p<0.001$ for the chi-squared test is used, with degrees of freedom equal to the number of variables (Tabachnick and Fidell 2001). As there were 28 variables (5 traits + 10 values + 6 motives + 7 job attitudes), this gives $\chi^2 (28) = 56.892$. Therefore, any value of Mahalanobis distance over 56.9 indicates a possible multivariate outlier. There were a total of nine cases above this value. Multivariate outliers can cause problems for some statistical tests (such as multiple regression), but deleting the cases results in a changed data set where legitimate variations are removed. Particularly as Tabachnick and Fidell (2001) recommend caution in interpreting these results and the outliers accounted for less than 2.25% of the sample, the cases were retained.

Another important assumption of many statistical tests is that there is no significant multi-collinearity among the variables, as this can distort results. This was assessed using the collinearity diagnostics in SPSS. Multicollinearity is present if a dimension has a Condition Index > 30 and the individual variable has two or more variance proportions > .50 (Tabachnick and Fidell 2001). This sample was free from significant multicollinearity.

In all the following analyses, the commonly used cut-off for significance is used, namely $p<0.05$.

9.5.2 Overview of Results

Table 7 displays the means, Cronbach alpha reliabilities and intercorrelations for all of the scales used in this study. Table 8 displays the same information for the higher level motive scales.

Table 7: Means, alphas and Pearson correlations for variable scales

	Mean	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Agreeableness	4.14	(.82)														
2. Conscientiousness	3.67	.05	(.89)													
3. Extraversion	3.25	.28**	-.04	(.79)												
4. Emotional Stability	3.13	.04	.11*	.19**	(.88)											
5. Openness to Experience	3.96	.10*	-.06	.21**	-.06	(.76)										
6. Benevolence	5.40	.23**	.15**	.09	-.01	-.08	(.61)									
7. Conformity	4.22	.1	.28**	-.04	.05	-.14**	.55**	(.69)								
8. Tradition	3.17	.04	.15**	-.10*	-.01	-.16**	.41**	.61**	(.63)							
9. Security	3.74	.05	.30**	.13**	.04	-.05	.43**	.57**	.43**	(.64)						
10. Power	2.14	-.09	.15**	.24**	.02	.03	.13**	.30**	.21**	.48**	(.60)					
11. Achievement	4.14	.05	.23**	.27**	.04	.06	.39**	.39**	.20**	.48**	.57**	(.75)				
12. Hedonism	3.84	.15**	-.05	.28**	.10*	.1	.12*	.09	-.02	.32**	.32**	.33**	(.75)			
13. Stimulation	3.78	.05	-.08	.34**	.04	.26**	.18**	.08	-.01	.27**	.36**	.46**	.51**	(.74)		
14. Self-direction	5.13	.13*	.05	.19**	.03	.34**	.37**	.18**	.09	.32**	.18**	.46**	.40**	.55**	(.71)	
15. Universalism	5.19	.14**	.01	-.01	-.01	.06	.55**	.31**	.26**	.31**	.04	.28**	.26**	.27**	.47**	(.74)
16. Hope Success	3.63	.01	-.07	.10*	.06	.01	.05	.07	.02	.09	.09	.13**	.15**	.05	.08	0
17. Hope Affiliation	3.49	.08	-.04	.16**	.05	-.04	.11*	.07	-.01	.08	.03	.03	.12*	.11*	.06	.06
18. Hope Power	2.91	0	-.1	.07	-.02	-.08	.05	.02	-.03	.06	.11*	.13**	.05	.02	-.03	.02
19. Fear Failure	2.50	.02	-.06	-.10*	-.12*	.01	.01	.04	0	-.04	-.06	-.07	-.05	-.01	.04	.02
20. Fear Rejection	2.42	-.06	-.03	-.21**	-.24**	0	.03	.05	.06	-.02	-.02	-.05	-.17**	-.10*	-.02	-.01
21. Fear Power	1.80	-.01	-.01	-.14**	-.16**	.01	0	.03	.06	.01	.02	-.04	-.06	-.08	0	.03

Alpha reliabilities are given in brackets on the diagonal

* indicates p<0.05, ** indicates p<0.01

Table 7 continued (vertically)

	Mean	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
22. Work Motivation	6.27	.23**	.22**	-.02	-.06	.01	.15**	.19**	.08	.04	.01	.08	-.07	-.06	.05	.08
23. Job Involvement	4.16	0	.06	.08	-.03	-.01	.08	.06	.04	.05	.22**	.21**	-.03	.19**	.05	.08
24. Job Satisfaction	5.73	.14*	.07	.18**	.23**	.01	.09	.09	.06	.07	.08	.07	.05	.04	.01	.11
25. Org Commit	4.99	.1	.04	.16**	.07	.05	.14*	.05	.02	.04	.13*	.13*	.04	.08	.04	.11*
26. Turnover Intent	2.79	-.01	-.1	-.09	-.20**	-.03	-.09	-.11	-.05	-.14*	-.12*	-.08	-.07	-.03	-.01	-.09
27. Job Self-Efficacy	3.95	-.02	.24**	.28**	.26**	.18**	.08	.09	-.09	.14*	.25**	.35**	.14*	.31**	.26**	.08
28. Job Stress	2.33	-.07	-.15**	-.25**	-.50**	-.06	.03	-.02	0	-.11*	-.1	-.05	-.06	-.02	-.02	.01

Table 7 continued (horizontally)

		16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.
16.	Hope Success	(.74)												
17.	Hope Affiliation	.46**	(.52)											
18.	Hope Power	.52**	.41**	(.59)										
19.	Fear Failure	.16**	.31**	.32**	(.62)									
20.	Fear Rejection	.07	.17**	.26**	.60**	(.75)								
21.	Fear Power	.18**	.14**	.33**	.49**	.49**	(.52)							
22.	Work Motivation	-.03	.06	-.01	-.02	-.07	-.06	(.49)						
23.	Job Involvement	.02	.02	.05	0	.05	-.05	.26**	(.68)					
24.	Job Satisfaction	-.04	.1	0	0	-.09	-.16**	.34**	.36**	(.90)				
25.	Org Commit	.01	.01	.02	-.07	-.11*	-.16**	.27**	.48**	.63**	(.79)			
26.	Turnover Intent	.03	-.06	-.03	-.09	-.01	.09	-.15**	-.26**	-.73**	-.60**	(.60)		
27.	Job Self-Efficacy	.07	.06	.03	-.14*	-.18**	-.21**	.07	.17**	.21**	.26**	-.19**	(.89)	
28.	Job Stress	-.05	-.06	.06	.14*	.23**	.15**	-.11*	-.02	-.38**	-.27**	.32**	-.39**	(.75)

Table 8: Means, alphas and Pearson correlations for the combined motive scales

Model	Scale	Mean	Achieve-ment	Affilia-tion	Power	Approach	Avoid
Combined Motives	Achievement	1.14	(0.57)				
	Affiliation	1.07	.42**	(0.56)			
	Power	1.11	.34**	.30**	(0.60)		
	Approach	10.04	.48**	.41**	.60**	(0.80)	
	Avoid	6.72	-.46**	-.51**	-.18**	.32**	(0.77)
Five Factor	Agreeableness		.00	.11*	.01	.04	-.03
	Conscientiousness		-.02	-.01	-.09	-.09	-.04
	Extraversion		.16**	.29**	.17**	.14**	-.19**
	Emotional Stability		.14**	.23**	.09	.04	-.21**
	Openness to Experience		.04	-.03	-.08	-.04	.01
Values	Benevolence		-.05	-.02	.01	.00	.04
	Conformity		-.04	-.06	-.04	-.00	.08
	Tradition		-.04	-.12*	-.11*	-.08	.06
	Security		.06	.03	.03	.04	-.02
	Power		.07	-.01	.07	.04	-.02
	Achievement		.14**	.02	.18**	.09	-.08
	Hedonism		.13**	.20**	.08	.09	-.12*
	Stimulation		-.04	.14**	.06	.02	-.08
	Self-direction		-.03	-.00	-.08	-.03	.03
	Universalism		-.12*	-.03	-.05	-.06	.04
Job Attitudes	Work Motivation		-.01	.10	.03	.01	-.06
	Job Involvement		.02	-.03	.09	.04	.01
	Job Satisfaction		-.03	.15**	.11*	.02	-.09
	Org Commit		.06	.10	.13*	.02	-.13*
	Turnover Intent		.09	-.04	-.10	-.02	-.02
	Job Self-Efficacy		.15**	.20**	.18**	.07	-.21**
	Job Stress		-.14*	-.24**	-.05	-.02	.21**

Alpha reliabilities are given in brackets on the diagonal

* indicates $p<0.05$, ** indicates $p<0.01$

9.5.2.1 Alpha reliabilities

Nunnally (1978) recommends an alpha of 0.7 as indicating acceptable reliability. The majority of the scales were above this level and were comparable with reported alphas in the literature (Cook, Hepworth et al. 1981; Cohen, Kamarck et al. 1983; Sokolowski, Schmalt et al. 2000; IPIP 2001; Roccas, Sagiv et al. 2002). However several scales had an alpha of between 0.6 and 0.7, indicating that the scale is questionable (George and Mallery 2003), and four had poor reliability ($\alpha < 0.6$).

9.5.2.1.1   Scales with α < 0.7

Five of the values (Benevolence, Conformity, Tradition, Security, Power) were among the scales with questionable reliability. While not ideal, these reliabilities are consistent with that reported in the literature (eg: Roccas, Sagiv et al. 2002). This model of values has been tested in over 20 countries and has sound theoretical reasons behind its construction (Schwartz 1992). As mentioned previously, alternate methods of assessing the reliability of this instrument have demonstrated good reliability despite these lower alphas (Schwartz and Sagiv 1995) and the values were therefore retained as is.

Turnover Intent had an alpha of only 0.6, despite the literature reporting a reliability of 0.83 (Cook, Hepworth et al. 1981). The reasons for this remain unclear and are possibly a unique feature of this sample. Deleting items to improve reliability is not possible in this case as there were only two items. It must therefore be borne in mind during subsequent analyses that relationships with other scales may be unclear.

9.5.2.1.2   Scales with α < 0.6

The four alphas which fell below 0.6 were Hope of Affiliation ($\alpha = 0.50$), Hope of Power ($\alpha = 0.59$), Fear of Power ($\alpha = 0.52$) and Internal Work Motivation ($\alpha = 0.49$).

Internal Work Motivation was further analysed and it was found that the alpha level increased dramatically (to 0.74) if one of the items was deleted. Inspection of the items revealed that people responded differently to the item which assessed negative feelings for a poor job than they did to the items about positive feelings from a good job. This could indicate that Internal Work Motivation is a two-part concept. The item assessing negative feelings was therefore dropped and all subsequent analyses were carried out using the two item scale.

There was some difficulty in calculating Cronbach alphas for the motives scales. The score for each motive is the number of times the two items measuring it were chosen. So, for example, the two statements representing Hope of Affiliation were: "Feeling good about meeting other people" and "Hoping to get in touch with other people". In the online questionnaire data, each respondent had a score for how often they had chosen each of these items overall, but not what their response was to a particular picture. This meant that the alphas could not be calculated from the 12 dichotomous (yes / no) items, but had to be calculated from the two summed items instead. As alpha levels drop with fewer items, this had a negative impact on the reliability levels.

In order to determine a more accurate alpha level for the motives questionnaire, analyses were also carried out on the postal questionnaire data only (N = 79). This included the data for each statement in its original dichotomous form, before summation. Reliability alphas on this data set were generally higher and more acceptable, as Table 9 indicates.

Table 9: Motive alphas for postal data

	Motive scale	α
Motive components	Hope of Success (HS)	0.67
	Hope of Affiliation (HA)	0.66
	Hope of Power (HP)	0.74
	Fear of Failure (FF)	0.55
	Fear of Rejection (FR)	0.72
	Fear of Power (FP)	0.59
Combined motives	Achievement (HS – FF)	0.56
	Affiliation (HA – FR)	0.68
	Power (HP – FP)	0.72
General motives	Approach	0.81
	Avoid	0.83

The higher reliabilities for the postal data indicate that the reliability co-efficients for the motives in the whole data set are likely to be under-estimations. Fear of Failure and Fear of Power, and the combined measure of Achievement still show poor reliability however. It is possible that these lower reliabilities reflect the difficulty of measuring unconscious motives, which are highly dependent on the eliciting situation (Sokolowski, Schmalt et al. 2000). As this instrument is, however, the best option available for measuring these motives, the scales were retained for this analysis on the understanding that the lower reliability may mean weaker relationships with other variables. The higher reliabilities of the higher level motive scores indicate that it is preferable to use these scales in the analyses.

9.5.2.2 Intercorrelations

The table of correlations showed that many scales were correlated with each other. The Five Factor traits had a few low correlations with each other. This is consistent with current thinking that while the five factors are relatively independent of each other they are not completely orthogonal (Saucier and Goldberg 2003). The Five Factor scales also correlated with the Values to some extent but had very few correlations with the Motives. This indicates that traits are somewhat related to values, the other aspect of explicit personality, but not very related to implicit personality. Correlations with some Job Attitudes indicate that traits have some relationship with how people perceive their work.

The Values correlate extensively with each other, which is expected of a circular structure capturing the inter-relations among the values (Schwartz 1992). Again, there were very few correlations with Motives, indicating that values and motives are different systems of personality. The few correlations with Job Attitudes means that a person's values may bear some relation to their attitudes to work.

The Motives were correlated extensively with each other, which again is expected of an inter-related motivational system (McClelland, Koestner et al. 1989).

The Job Attitudes were also correlated with each other. Particularly high were Job Satisfaction and Organisational Commitment and the negative correlation of these two with Turnover Intention. This is in line with previous research (Cook, Hepworth et al. 1981) and is to be expected as Turnover Intention measures the likelihood of leaving the current job, which is related to how satisfied and committed the person is.

While there were many significant correlations, only the three job scales outlined above were over 0.6. This indicates that the scales are assessing different things and that there is little danger of redundancy or singularity that could interfere with future analyses.

9.5.2.3 Factor analyses

9.5.2.3.1 Five Factor

Five principal components were extracted and rotated using the Varimax procedure, as recommended by Buchanan et al (2005). The items were then checked to see if they had their highest loading on the expected factor (see Table 39 in Appendix C - Questionnaire structure Factor Analysis). Only one item (BFitem17) did not have a clear loading on the single, expected factor, loading instead equally well on an additional factor. In addition, only four items had loadings of 0.3 or higher on any of the other factors. This indicates an extremely robust solution which clearly replicates the theoretical structure (Buchanan, Johnson et al. 2005).

9.5.2.3.2 Values

The structure of the Values model should be assessed using Multidimensional Scaling not factor analysis (Roccas, Sagiv et al. 2002), as theory states the values are necessarily related to one another, thus influencing the correlations and violating one of the assumptions of exploratory factor analysis. Multidimensional Scaling (PROXSCAL) was conducted on the data using correlation matrices and Figure 5 shows the results in two dimensions, with Value domains superimposed. The two dimensional solution provided a good fit (S-Stress = 0.13), comparable with previous research on the model (Roccas, Sagiv et al. 2002).

In their comprehensive review of the Schwartz Value system, Schwartz and Sagiv (1995) note that all ten values only emerge distinctly in about 26% of the samples studied and that it is common for Hedonism and Stimulation values not to separate, hence the dotted line between them on the model. This is what emerged in this sample, with Stimulation and Hedonism being intermixed. Besides this, the Security value was the least distinct, having three of its five items in the incorrect domain. Four other items emerged in the wrong domain, though all of them were in a neighbouring (and therefore more similar) value domain.
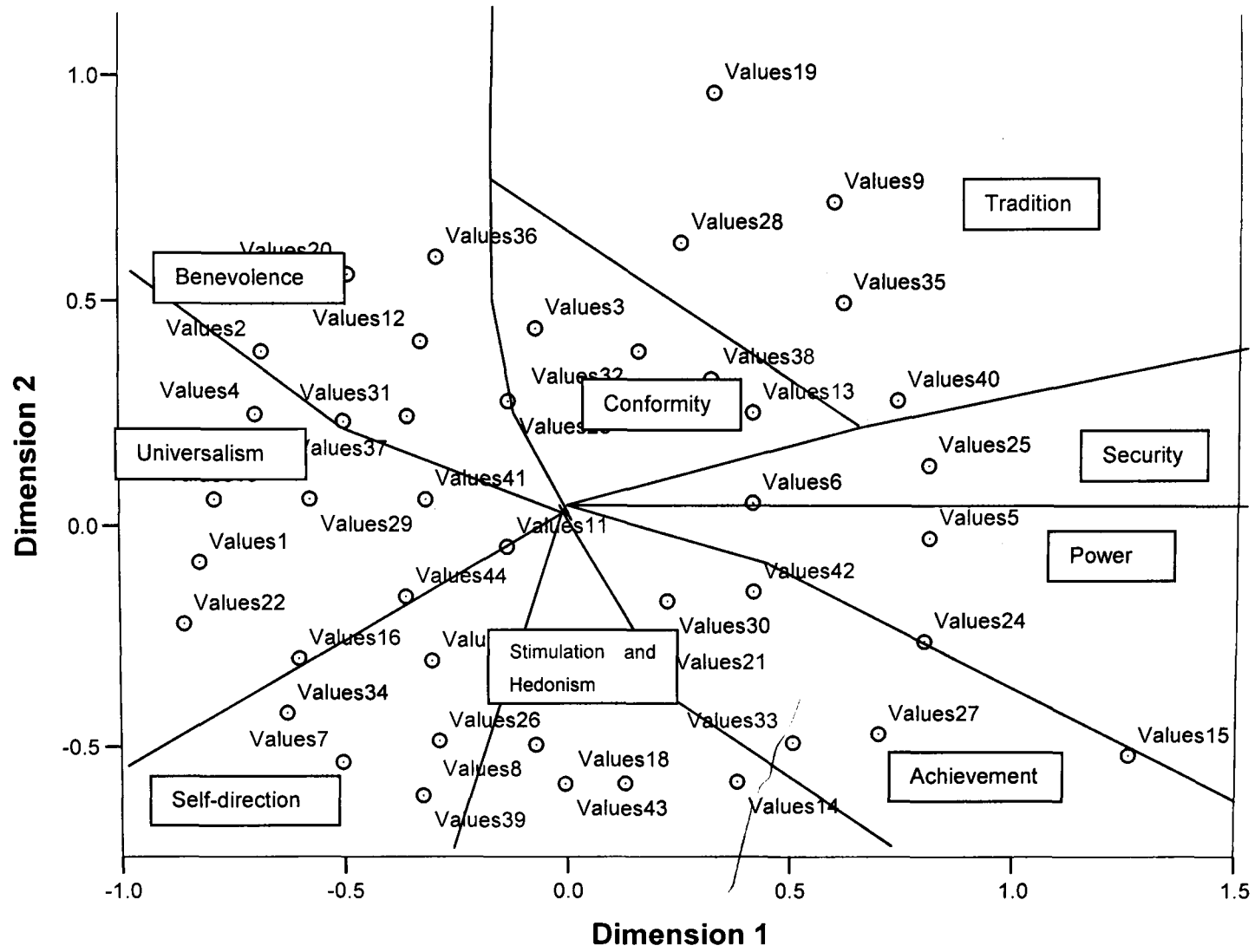
Figure 5: Plot of Value items in two dimensions from MDS analysis

Overall, the plot in two dimensions showed that the values followed the theoretical circumplex structure very closely, with similar value domains next to each other and across the origin from opposing values.

9.5.2.3.3 MMG

Exploratory principal components analysis was carried out with varimax rotation, as in the original research on this model (Sokolowski, Schmalt et al. 2000). Two factors emerged, a general fear factor and a general hope factor, as expected. For factor loadings, see Table 40 in Appendix C - Questionnaire structure Factor Analysis.

In addition, confirmatory factor analysis (principal components) was carried out, extracting 6 factors (to represent the hope and fear component of each of the three motives) and using varimax rotation. Inspection of the highest loadings of each item (Table 41 in Appendix C - Questionnaire structure Factor Analysis) indicated that the first factor was a combination of Fear of Failure and Fear of Rejection. Three of the remaining factors represented Hope of Success, Hope of Power and Fear of Power exclusively, while the items for Hope of Affiliation were split between the final two factors. This indicates that the MMG-S structure was relatively well supported in this sample (Sokolowski, Schmalt et al. 2000).

9.5.3 Research Question 1 Analysis – Personality Models

9.5.3.1 Overview of the Enneagram Types

Table 10, Table 11 and Table 12 display the mean scores on the personality scales for each of the Enneagram Types. Types are grouped by their "centre" according to Enneagram theory: the Heart types 2, 3 and 4; the Head types 5, 6 and 7 and the Gut types 8, 9 and 1. Graphs comparing the Enneagram Type scores on each scale can be found in Appendix D.

Table 10: Mean scores of Enneagram Types compared with the rest of the sample (Heart Types)

		Type 2		Type 3		Type 4	
		Group	EType2	Group	Etype3	Group	EType4
Five Factor	Agreeableness	4.09	4.64	4.14	4.13	4.12	4.28
	Conscientiousness	3.68	3.63	3.66	3.89	3.69	3.54
	Extraversion	3.21	3.62	3.22	3.71	3.26	3.19
	Emotional Stability	3.11	3.27	3.11	3.33	3.20	2.56
	Openness to Experience	3.98	3.82	3.97	3.78	3.93	4.21
Values	Benevolence	1.12	1.30	1.16	0.82	1.14	1.14
	Conformity	-0.03	-0.19	-0.06	0.11	-0.03	-0.17
	Tradition	-1.10	-1.16	-1.08	-1.42	-1.11	-1.02
	Security	-0.52	-0.55	-0.54	-0.31	-0.49	-0.78
	Power	-2.11	-2.23	-2.16	-1.59	-2.07	-2.54
	Achievement	-0.16	0.13	-0.20	0.80	-0.11	-0.27
	Hedonism	-0.48	0.08	-0.40	-0.80	-0.37	-0.84
	Stimulation	-0.47	-0.60	-0.50	-0.32	-0.55	0.02
	Self-direction	0.87	0.83	0.87	0.77	0.83	1.11
	Universalism	0.94	0.80	0.95	0.56	0.90	1.08
Motives	Hope Success	3.62	3.79	3.56	4.71	3.71	3.10
	Hope Affiliation	3.52	3.23	3.46	3.93	3.49	3.55
	Hope Power	2.93	2.72	2.83	3.93	2.99	2.29
	Fear Failure	2.58	1.77	2.56	1.68	2.44	2.94
	Fear Rejection	2.52	1.51	2.47	1.71	2.34	3.06
	Fear Power	1.84	1.46	1.83	1.36	1.75	2.18
	Achievement	1.04	2.03	1.00	3.04	1.26	0.16
	Affiliation	1.00	1.72	0.99	2.21	1.15	0.49
	Power	1.09	1.26	1.00	2.57	1.24	0.10
	Approach	10.06	9.74	9.85	12.57	10.18	8.94
	Avoid	6.93	4.74	6.87	4.75	6.53	8.18
Job Attitudes	Work Motivation	6.28	6.18	6.26	6.39	6.28	6.22
	Job Involvement	4.16	4.11	4.16	4.12	4.18	3.99
	Job Satisfaction	5.72	5.78	5.72	5.80	5.75	5.60
	Org Commit	4.97	5.21	5.00	4.92	4.99	5.03
	Turnover Intent	2.80	2.68	2.77	2.95	2.77	2.92
	Job Self-Efficacy	3.95	3.94	3.91	4.45	3.97	3.83
	Job Stress	2.34	2.23	2.34	2.15	2.30	2.51

Table 11: Mean scores of Enneagram Types compared with the rest of the sample (Head Types)

		Type 5		Type 6		Type 7	
		Group	EType5	Group	EType6	Group	EType7
Five Factor	Agreeableness	4.20	3.69	4.14	4.11	4.15	4.02
	Conscientiousness	3.67	3.70	3.66	3.77	3.71	3.40
	Extraversion	3.36	2.44	3.28	3.05	3.17	3.88
	Emotional Stability	3.12	3.22	3.16	2.92	3.08	3.54
	Openness to Experience	3.97	3.92	3.95	4.03	3.93	4.24
Values	Benevolence	1.14	1.14	1.12	1.25	1.16	0.93
	Conformity	-0.06	0.07	-0.05	-0.01	-0.02	-0.31
	Tradition	-1.15	-0.77	-1.11	-1.03	-1.08	-1.31
	Security	-0.52	-0.55	-0.56	-0.29	-0.51	-0.61
	Power	-2.08	-2.43	-2.16	-1.92	-2.10	-2.29
	Achievement	-0.06	-0.63	-0.14	-0.09	-0.12	-0.24
	Hedonism	-0.39	-0.72	-0.39	-0.67	-0.54	0.49
	Stimulation	-0.42	-0.96	-0.42	-0.90	-0.58	0.30
	Self-direction	0.84	1.06	0.88	0.75	0.81	1.31
	Universalism	0.89	1.18	0.94	0.84	0.95	0.72
Motives	Hope Success	3.69	3.22	3.65	3.57	3.61	3.80
	Hope Affiliation	3.51	3.38	3.56	3.09	3.46	3.78
	Hope Power	2.97	2.44	2.86	3.17	2.90	2.93
	Fear Failure	2.50	2.52	2.52	2.38	2.47	2.71
	Fear Rejection	2.41	2.52	2.39	2.64	2.52	1.64
	Fear Power	1.79	1.88	1.76	2.03	1.87	1.22
	Achievement	1.19	0.70	1.13	1.19	1.14	1.09
	Affiliation	1.10	0.86	1.17	0.45	0.94	2.13
	Power	1.18	0.56	1.10	1.14	1.03	1.71
	Approach	10.17	9.04	10.07	9.83	9.98	10.51
	Avoid	6.70	6.92	6.67	7.05	6.86	5.58
Job Attitudes	Work Motivation	6.29	6.18	6.27	6.30	6.30	6.06
	Job Involvement	4.20	3.89	4.13	4.35	4.19	3.93
	Job Satisfaction	5.72	5.79	5.73	5.70	5.71	5.91
	Org Commit	5.01	4.81	4.99	4.99	5.01	4.84
	Turnover Intent	2.82	2.55	2.79	2.78	2.80	2.68
	Job Self-Efficacy	3.98	3.75	3.95	3.95	3.93	4.12
	Job Stress	2.32	2.37	2.33	2.35	2.35	2.16

Table 12: Mean scores of Enneagram Types compared with the rest of the sample (Gut Types)

		Type 1		Type 8		Type 9	
		Group	EType1	Group	EType8	Group	EType9
Five Factor	Agreeableness	4.14	4.15	4.17	3.86	4.10	4.43
	Conscientiousness	3.59	4.14	3.69	3.56	3.72	3.29
	Extraversion	3.26	3.20	3.22	3.52	3.27	3.09
	Emotional Stability	3.15	3.01	3.13	3.13	3.09	3.43
	Openness to Experience	3.98	3.85	3.96	3.95	3.98	3.77
Values	Benevolence	1.14	1.12	1.15	1.09	1.12	1.34
	Conformity	-0.10	0.25	-0.01	-0.37	-0.06	0.06
	Tradition	-1.11	-1.05	-1.04	-1.73	-1.15	-0.73
	Security	-0.53	-0.49	-0.53	-0.45	-0.51	-0.66
	Power	-2.13	-2.09	-2.20	-1.44	-2.10	-2.32
	Achievement	-0.16	0.02	-0.15	0.02	-0.08	-0.52
	Hedonism	-0.39	-0.63	-0.44	-0.27	-0.44	-0.31
	Stimulation	-0.43	-0.78	-0.56	0.19	-0.43	-0.93
	Self-direction	0.91	0.61	0.86	0.87	0.90	0.53
	Universalism	0.92	0.92	0.93	0.85	0.89	1.20
Motives	Hope Success	3.68	3.40	3.59	4.05	3.62	3.76
	Hope Affiliation	3.55	3.19	3.47	3.69	3.43	4.00
	Hope Power	2.95	2.67	2.87	3.28	2.86	3.27
	Fear Failure	2.47	2.68	2.50	2.49	2.46	2.84
	Fear Rejection	2.38	2.67	2.44	2.31	2.34	3.11
	Fear Power	1.76	2.00	1.80	1.85	1.80	1.82
	Achievement	1.21	0.71	1.09	1.56	1.16	0.91
	Affiliation	1.17	0.52	1.04	1.38	1.09	0.89
	Power	1.18	0.67	1.07	1.44	1.06	1.44
	Approach	10.17	9.25	9.93	11.03	9.91	11.02
	Avoid	6.61	7.35	6.73	6.64	6.60	7.78
Job Attitudes	Work Motivation	6.23	6.60	6.28	6.20	6.27	6.30
	Job Involvement	4.11	4.48	4.10	4.68	4.19	3.87
	Job Satisfaction	5.73	5.73	5.75	5.57	5.73	5.71
	Org Commit	4.97	5.11	4.96	5.24	5.02	4.77
	Turnover Intent	2.78	2.84	2.79	2.77	2.77	2.96
	Job Self-Efficacy	3.96	3.92	3.92	4.21	3.99	3.65
	Job Stress	2.30	2.54	2.34	2.23	2.34	2.26

9.5.3.2   Test of hypotheses

The hypotheses indicated whether the Type was expected to score significantly higher or lower than the rest of the group on each of the personality scales. Enneagram Type was originally coded as a categorical variable (Type 1 to 9), and this is inappropriate for many statistical tests. Enneagram Type was therefore recoded into nine dummy variables (ETtype 1, EType 2 etc), with 1 indicating a case was this type and 0 indicating it was not. The new variables could then be treated as continuous data and used in regression and correlational analyses.

With only two levels of independent variable (Type vs Group) the t-test is the appropriate way to test individual hypotheses. T-tests were used rather than ANOVA as the aim was to describe how each Type differed from the rest of the sample, rather than how all nine Types differed from each other. For the t-tests, the dummy variables were used to compare participants of a particular Type (coded 1) to participants who were not that type (coded 0). Where directional hypotheses have been made, a one-tailed t-test is used and the following analyses therefore report the one-tailed significance levels.

9.5.3.2.1   Five Factor Model

Twenty-eight hypotheses were made about how the ETypes would score on the Five Factor traits. Of these, 21 were confirmed with $p<0.05$ (see Table 13). Three of the seven relationships that were not confirmed showed a trend in the expected direction but failed to reach significance. Appendix E contains the results of all the t-tests conducted.

Table 13: Five Factor Hypotheses and t-test results (confirmed hypotheses in bold)

Hypothesis	t	df	p
H1a Type 1s will score higher than the group on Conscientiousness	**-6.51**	**414**	**0.001**
H1b Type 1s will score higher than the group on Emotional Stability	1.24	413	0.107
H1c Type 1s will score lower than the group on Openness to Experience	**1.80**	**414**	**0.036**
H2a Type 2s will score higher than the group on Agreeableness	**-5.75**	**414**	**0.001**
H2b Type 2s will score higher than the group on Extraversion	**-2.98**	**414**	**0.002**
H2c Type 2s will score lower than the group on Emotional Stability	-1.17	413	0.120
H3a Type 3s will score higher than the group on Conscientiousness	**-1.86**	**414**	**0.032**
H3b Type 3s will score higher than the group on Extraversion	**-3.04**	**414**	**0.001**
H4a Type 4s will score lower than the group on Extraversion	0.58	414	0.282
H4b Type 4s will score lower than the group on Emotional Stability	**5.47**	**413**	**0.001**
H4c Type 4s will score higher than the group on Openness to	**-3.44**	**414**	**0.001**

Hypothesis	t	df	p
Experience			
H5a Type 5s will score lower than the group on Agreeableness	**6.03**	**414**	**0.001**
H5b Type 5s will score higher than the group on Conscientiousness	-0.30	414	0.384
H5c Type 5s will score lower than the group on Extraversion	**7.90**	**414**	**0.001**
H5d Type 5s will score lower than the group on Emotional Stability	-0.86	413	0.194
H6a Type 6s will score higher than the group on Conscientiousness	-1.24	414	0.107
H6b Type 6s will score lower than the group on Emotional Stability	**2.15**	**413**	**0.016**
H6c Type 6s will score lower than the group on Openness to Experience	-1.03	414	0.152
H7a Type 7s will score lower than the group on Conscientiousness	**3.10**	**414**	**0.001**
H7b Type 7s will score higher than the group on Extraversion	**-5.56**	**414**	**0.001**
H7c Type 7s will score higher than the group on Emotional Stability	**-3.65**	**413**	**0.001**
H7d Type 7s will score lower than the group on Openness to Experience	**-3.61**	**414**	**0.001**
H8a Type 8s will score lower than the group on Agreeableness	**3.11**	**414**	**0.001**
H8b Type 8s will score higher than the group on Extraversion	**-2.14**	**414**	**0.017**
H9a Type 9s will score higher than the group on Agreeableness	**-3.59**	**414**	**0.001**
H9b Type 9s will score lower than the group on Conscientiousness	**4.28**	**414**	**0.001**
H9c Type 9s will score higher than the group on Emotional Stability	**-2.67**	**413**	**0.004**
H9d Type 9s will score lower than the group on Openness to Experience	**2.47**	**414**	**0.007**

Three further relationships were found which had not been hypothesised. Type 3 was found to be lower on Openness to Experience than the group ($t_{414} = 1.82$, $p < 0.05$). Type 4 scored higher on Agreeableness than the group ($t_{414} = -1.82$, $p < 0.05$) and Type 6 scored lower than the group on Extraversion ($t_{414} = 2.0$, $p < 0.05$).

9.5.3.2.2 Values

Twenty-three hypotheses were made about how the ETypes would rate the importance of the Value domains. Of these, 21 were confirmed with $p<0.05$ (Table 14). One of the two relationships that were not confirmed (Type 2 scoring higher than the group on Benevolence) showed a trend in the correct direction but failed to reach significance.

Table 14: Values hypotheses and t-test results (confirmed hypotheses in bold)

Hypothesis	t	df	p
H1d Type 1s will score higher than the group on Conformity	-2.67	413	0.004
H1e Type 1s will score lower than the group on Stimulation	1.85	413	0.032
H1f Type 1s will score lower than the group on Self-direction	2.34	413	0.010
H2d Type 2s will score higher than the group on Benevolence	-1.42	412	0.079
H3c Type 3s will score higher than the group on Power	-2.41	413	0.008
H3d Type 3s will score higher than the group on Achievement	-5.01	413	0.001
H4d Type 4s will score higher than the group on Self-direction	-1.92	413	0.028
H4e Type 4s will score higher than the group on Stimulation	-2.81	413	0.003
H5e Type 5s will score higher than the group on Security	0.24	412	0.406
H5f Type 5s will score lower than the group on Stimulation	2.68	413	0.004
H6d Type 6s will score higher than the group on Security	-2.21	412	0.014
H7e Type 7s will score lower than the group on Conformity	1.90	413	0.029
H7f Type 7s will score higher than the group on Hedonism	-4.50	414	0.001
H7g Type 7s will score higher than the group on Stimulation	-4.14	413	0.001
H7h Type 7s will score higher than the group on Self-direction	-3.32	413	0.001
H8c Type 8s will score lower than the group on Conformity	2.23	413	0.013
H8d Type 8s will score higher than the group on Power	-3.76	413	0.001
H8e Type 8s will score higher than the group on Stimulation	-3.31	413	0.001
H9e Type 9s will score higher than the group on Benevolence	-1.88	412	0.030
H9f Type 9s will score higher than the group on Tradition	-2.21	410	0.014
H9g Type 9s will score lower than the group on Achievement	2.68	413	0.004
H9h Type 9s will score lower than the group on Self-direction	2.53	413	0.006
H9i Type 9s will score higher than the group on Universalism	-2.40	414	0.009

Sixteen further relationships were found which had not been hypothesised. Most of these were the result of the circular structure of the value domains: Types which scored high on one value tended to score low on the opposing value, even where this had not been explicitly hypothesised. Thus, Type 3 scored lower than the group on Benevolence and Universalism. Type 4 scored lower than the group on Security and Power, Type 5 was higher on Tradition and Universalism and lower on Power and Achievement. Type 6 rated Stimulation lower than the group while Type 7 rated Benevolence and Universalism lower than the group. Type 8 considered Tradition less important than the rest of the group and Type 9 rated Stimulation lower than the group. Detailed statistics are presented in Appendix E.

In addition, Type 2s were found to rate Achievement and Hedonism higher than the rest of the group did. This was unexpected as it was hypothesised that this Type would rate the opposing value (Benevolence) highly.

9.5.3.2.3 Motives

Eighteen hypotheses were made about how the ETypes would score on the implicit motives. Of these, 11 were confirmed with $p < 0.05$ (Table 15). Three of the remaining hypotheses showed a trend in the expected direction but failed to reach significance. One of the hypothesised relationships (H6e) showed a significant difference in the opposite direction to that predicted.

Table 15: Implicit Motives hypotheses and t-test results (confirmed hypotheses in bold)

Hypothesis	t	df	p
H2e Type 2s will score higher than the group on Hope of Affiliation	0.93	56	0.178
H2f Type 2s will score lower than the group on Fear of Rejection	**3.70**	**60**	**0.001**
H2g Type 2s will score higher than the group on Affiliation	**-2.03**	**55**	**0.024**
H3e Type 3s will score higher than the group on Achievement	**-3.37**	**407**	**0.001**
H3f Type 3s will score higher than the group on Power	**-3.33**	**407**	**0.001**
H3g Type 3s will score higher than the group on Hope of Success	**-2.20**	**407**	**0.014**
H4f Type 4s will score lower than the group on Achievement	**2.33**	**407**	**0.010**
H4hType 4s will score lower than the group on Power	**3.11**	**407**	**0.001**
H4g Type 4s will score lower than the group on Affiliation	1.39	407	0.083
H4i Type 4s will score higher than the group on Fear of Rejection	**-2.24**	**407**	**0.013**
H5g Type 5s will score lower than the group on Power	**1.72**	**407**	**0.044**
H5h Type 5s will score lower than the group on Hope of Affiliation	0.32	407	0.375
H6e Type 6s will score higher than the group on Affiliation	**1.74**	**407**	**0.041**
H7i Type 7s will score higher than the group on Affiliation	**-2.53**	**407**	**0.006**
H7j Type 7s will score higher than the group on Power	**-1.73**	**407**	**0.042**
H8f Type 8s will score higher than the group on Hope of Power	-1.16	407	0.124
H8g Type 8s will score higher than the group on Fear of Power	-0.27	407	0.393
H9j Type 9s will score higher than the group on Affiliation	0.45	407	0.326

Fourteen further relationships were found which had not been hypothesised. Type 1 had a lower need for Affiliation than the group, while Type 2 was found to be lower on Fear of Failure and higher on need for Achievement than the group. Type 3 was higher than the group on Hope of Power and need for Affiliation, as well as lower on Fear of Failure and Fear of

Rejection. Type 4 was lower on Hope of Power and higher on Fear of Failure and Fear of Rejection than the group. Type 6 was lower than the group on Hope of Affiliation while type 7 was lower than the group on Fear of Rejection and Fear of Power. Type 9 was higher than the group on Fear of Rejection.

This spread of results indicates that the EType descriptions could be further refined using implicit motives, but that predicted relationships between the two models are predominantly in the expected direction.

9.5.3.2.4 Summary of Hypothesis Tests

The following tables summarise the hypotheses about how the Enneagram Types relate to the Five Factor (Table 16), Values (Table 17) and Motives (Table 18 and Table 19) models. Green highlighting indicates the hypotheses were confirmed. Red highlighting indicates relationship in opposite direction to hypothesis.

Table 16: Hypothesis Tests summary for Five Factor

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Agreeableness		H2a			H5a			H8a	H9a
Conscientiousness	H1a		H3a		H5b	H6a	H7a		H9b
Extraversion		H2b	H3b	H4a	H5c		H7b	H8b	
Emotional Stability	H1b	H2c		H4b	H5d	H6b	H7c		H9c
Openness to Experience	H1c			H4c		H6c	H7d		H9d

Table 17: Hypothesis tests summary for Values

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Benevolence		H2d							H9e
Conformity	H1d						H7e	H8c	
Tradition									H9f
Security					H5e	H6d			
Power			H3c					H8d	
Achievement			H3d						H9g
Hedonism							H7f		
Stimulation	H1e			H4d	H5f		H7g	H8e	
Self-direction	H1f			H4e			H7h		H9h
Universalism									H9i

Table 18: Hypothesis tests summary for Motives

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
HS			H3e						
HA		H2e			H5g				
HP								H8f	
FF									
FR		H2f		H4f					
FP								H8g	

Table 19: Hypothesis tests summary for higher order Motives

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9
Achievement			H3f	H4g					
Affiliation		H2g		H4h		H6e	H7i		H9j
Power			H3g	H4i	H5h		H7j		

9.5.4 Research Question 2 Analysis – Job Attitudes and Choices

Not all those who completed the questionnaire were in full-time employment. The following analyses are based only on those who were in employment, approximately 75% of the whole sample (n=318).

9.5.4.1 Test of hypotheses

Enneagram Types were hypothesised to have specific relationships with certain Job Attitudes and Cognitions. As before, these hypotheses were tested using one-tailed t-tests (results in Table 20).

Table 20: t-tests of Job Attitude Hypotheses
(Confirmed hypotheses in bold)

Hypothesis	t	Df	p
H1g Type 1s will score higher than the group on Internal Work Motivation	**-2.85**	**78**	**0.003**
H1h Type 1s will score higher than the group on Job Involvement	**-1.75**	**306**	**0.040**
H1i Type 1s will score higher than the group on Organisational Commitment	-0.65	305	0.258

Hypothesis	t	Df	p
H1j Type 1s will score higher than the group on Perceived Stress	**-1.83**	**45**	**0.037**
H3h Type 3s will score higher than the group on Job Involvement	0.08	306	0.467
H3i Type 3s will score higher than the group on Job Self-Efficacy	**-3.89**	**306**	**0.001**
H4k Type 4s will score higher than the group on Turnover Intention	-0.66	306	0.255
H4l Type 4s will score higher than the group on Perceived Stress	**-1.61**	**306**	**0.054**
H5i Type 5s will score lower than the group on Job Involvement	**1.70**	**306**	**0.046**
H5j Type 5s will score lower than the group on Job Self-Efficacy	**1.81**	**306**	**0.035**
H6f Type 6s will score higher than the group on Organisational Commitment	-0.01	306	0.498
H7k Type 7s will score higher than the group on Job Satisfaction	-0.92	306	0.180
H7l Type 7s will score lower than the group on Organisational Commitment	0.69	306	0.247
H7m Type 7s will score higher than the group on Turnover Intention	0.29	306	0.385
H8h Type 8s will score higher than the group on Internal Work Motivation	0.15	306	0.438
H8i Type 8s will score higher than the group on Job Involvement	**-2.47**	**306**	**0.007**
H8j Type 8s will score higher than the group on Job Self-efficacy	0.76	306	0.224
H9k Type 9s will score lower than the group on Internal Work Motivation	-0.55	306	0.291
H9l Type 9s will score lower than the group on Job Self-efficacy	**2.94**	**306**	**0.002**

Of the 19 individual hypotheses made about Enneagram Type and Job Attitudes, nine were supported. Most of the hypotheses which were not supported were confined to three Job Attitudes: Job Satisfaction, Organisational Commitment and Turnover Intention. These three variables had a skewed distribution (overwhelmingly positive for JS and OC, negative for TI), indicating that the participants in this study were generally satisfied with their jobs, committed to their organisations and not considering leaving. This may have disguised any personality variations. If the hypotheses related to the skewed distributions are ignored, all but two of the remaining hypotheses were confirmed.

The skew in the results may have been due to the high proportion of self-employed respondents, so the analyses were rerun using only employed (i.e.: not self-employed)

respondents. For several of the EType groups, this meant that sample size was dramatically reduced (and hence reducing the power of the test to detect significant effects) and only one of the hypotheses, **H7l: Type 7 will score lower than the group on Organisational Commitment** was confirmed ($t_{148} = 2.378$, $p < 0.05$).

9.5.4.2 Prediction of Job Attitudes by Personality Models

To determine whether each of the personality models could predict job attitudes, multiple regressions were run. As with the t-tests, dummy variables were used to code the Enneagram Types and allow regression analysis to be carried out. The scales for each model were entered as a block, using the Stepwise procedure, which Field (2000) describes as appropriate for exploratory work. An F-value of 0.05 was used for inclusion of a variable, and variables were excluded again if their F-value reached 0.1.

Normally, the Values would not all be entered together in a regression analysis because their circular structure implies a certain level of correlation between the values. However, when the aim of the analysis is simply to identify the amount of variance accounted for by the model as a whole, rather than identify the regression co-efficients for each value, it is possible to use all ten values {Schwartz, #361}.

In the case of the Motives, an analysis was run for the six lower-order scales separately from the analysis for the three higher-order scales, to avoid problems with collinearity.

A certain amount of the variance in Internal Work Motivation scores could be explained by variables from the Five Factor model ($R^2 = 0.089$, $F (2, 313) = 17.2$, $p < 0.001$) or the Enneagram ($R^2 = 0.013$, $F (1, 315) = 4.09$, $p < 0.05$).

Job Involvement, on the other hand, could be significantly predicted by variables from the Enneagram ($R^2 = 0.031$, $F (2, 318) = 5.08$, $p < 0.01$) or the Values ($R^2 = 0.084$, $F (4, 308) = 7.09$, $p < 0.001$) models.

Job Satisfaction was predicted by the Five Factor Model ($R^2 = 0.074$, $F (2, 311) = 12.47$, $p < 0.001$), as well as by the Motives (both the six individual motives model: $R^2 = 0.041$, $F (2, 312) = 6.716$, $p < 0.001$ and the three higher order motives model: $R^2 = 0.022$, $F (1, 313) = 7.01$, $p < 0.01$).

Similarly, Organisational Commitment was also predicted by the Five Factor Model ($R^2 = 0.027$, $F (1, 305) = 8.32$, $p < 0.01$) or Motives (6 motives: $R^2 = 0.026$, $F (1, 306) = 8.2$, $p < 0.01$; 3 higher order motives: $R^2 = 0.016$, $F (1, 306) = 5.07$, $p < 0.05$).

Turnover Intention was the only attitude that could only be predicted by one model, namely the Five Factor Model ($R^2 = 0.042$, $F (1, 313) = 13.57$, $p < 0.001$).

Job Self-efficacy could be predicted by all four of the personality models: the Five Factor Model ($R^2 = 0.208$, $F (5, 308) = 16.23$, $p < 0.001$), Values ($R^2 = 0.137$, $F (2, 309) = 24.44$, $p < 0.001$), Motives (6 motives: $R^2 = 0.068$, $F (3, 311) = 7.53$, $p < 0.001$; 3 higher order

motives: $R^2 = 0.054$, $F (2, 312) = 8.96$, $p < 0.001$) or the Enneagram ($R^2 = 0.102$, $F (4, 310) = 8.78$, $p < 0.001$).

Similarly, Perceived Stress was predicted by all four models, though in this case the Five Factor Model accounted for a substantially larger amount of variance ($R^2 = 0.291$, $F (3, 312) = 42.71$, $p < 0.001$) than the Values ($R^2 = 0.013$, $F (1, 312) = 3.99$, $p < 0.05$), Motives (6 motives: $R^2 = 0.064$, $F (2, 314) = 10.81$, $p < 0.001$; 3 higher order motives: $R^2 = 0.056$, $F (1, 315) = 18.66$, $p < 0.001$) or the Enneagram ($R^2 = 0.027$, $F (2, 314) = 4.33$, $p < 0.05$).

These results indicate that variables from each of the models were responsible for a small but significant amount of the variance for several job attitudes. The Five Factor model was the most successful, accounting for 29% of the variance in Perceived Stress scores, and was uniquely able to predict Turnover Intention (4%). However, the Enneagram and the Values models were able to predict Job Involvement where the Five Factors could not.

9.5.4.2.1.1 Effect of controls

Job Attitudes are known to be influenced by more than just personality variables (Furnham 1997). Factors such as age, sex and country of origin can affect peoples' attitudes towards aspects of their jobs. Demographic variables were therefore used as controls to clarify the personality effects. Categorical variables (such as Nationality) were converted to dummy variables for this analysis. Blocks of variables entered as follows:

- First Block (control variables)
  - Age
  - Sex
  - Nationality
  - Employment (self-employed or not)
- Second Block (Personality models)
  - 5 Five Factor scales
  - 10 Values (centred scores)
  - Motives (AchFail, AffRej, PowFP)
- Third Block (Enneagram)
  - Nine types as dummy variables

The stepwise procedure of variable entry used above indicated that variables from each of the models were useful in predicting the job attitudes. However, in this case it is the total variance accounted for by the model that is of interest, and to make the comparisons between models more apparent, the forced entry method was used instead. This method enters all variables in a block at once, rather than having entry reliant on statistical criteria. Using this method means that direct comparisons between the models as a whole can be made.

The results (Table 21) showed that the Enneagram Types did not explain additional variance in job attitudes than the other three personality models combined. In addition, the prediction of Organisational Commitment by the Five Factors and Motives, which was found in the stepwise analysis above, was shown to be subsumed by the inclusion of controls. This indicates that Organisational Commitment can be better predicted by differences in demographic variables than personality variables.

The next step was to determine whether the Five Factors, Values and Motives models could predict variance in the job attitudes beyond what the Enneagram accounted for. Multiple regression analyses were conducted with the same three blocks as above, but in a different order: First Block – Control variables, Second Block – Enneagram Types, Third Block – Five Factors, Values and Motives.

Table 22 shows that Enneagram Type predicted a small amount of variance for one of the variables (Job Self-efficacy) but subsequent addition of the other personality scales improved prediction significantly.

9.5.4.2.1.2 Unique Variance accounted for by the Enneagram

In order to determine whether the Enneagram could account for unique variance in the Job Attitude predictions beyond each of the other three models independently, further regressions were carried out. Regressions were run only for those Job Attitudes for which the Enneagram Types had some level of prediction (refer to the beginning of this section: 9.5.4.2).

The controls were again entered as the first block, block two consisted of the scales for the particular personality model (Five Factors, Values or Motives) and the final block was the Etypes. Results are shown in Table 23 and indicate that the Enneagram accounts for a small but significant unique percentage of the variance in Job Self-efficacy (4.6% to 8.1%), when compared to the three models independently.

Table 21: Improvement in prediction of job attitudes by Enneagram[8]

		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-efficacy	Perceived Stress
Model 1 (Controls)	F	5.22	3.58	9.46	18.31	6.57	7.23	10.18
	R^2	0.08	0.057	0.137	0.24	0.099	0.108	0.146
	df (1)	5	5	5	5	5	5	5
	df (2)	299	298	297	290	298	297	299
	p	0.001	0.004	0.001	0.001	0.001	0.001	0.001
Model 2 (Personality models)	F	3.05	2.42	3.89	4.65	2.78	7.31	8.90
	ΔR^2	0.119	0.109	0.106	0.042	0.087	0.268	0.276
	df (1)	18	18	18	18	18	18	18
	df (2)	281	280	279	272	280	279	281
	p	0.002	0.009	0.005	0.595	0.048	0.001	0.001
Model 3 (Enneagram)	F	2.55	2.07	2.96	3.55	2.10	5.96	6.48
	ΔR^2	0.025	0.025	0.01	0.012	0.007	0.029	0.003
	df (1)	8	8	8	8	8	8	8
	df (2)	273	272	271	264	272	271	273
	p	0.36	0.389	0.891	0.811	0.96	0.105	0.996

df(1) = regression degrees of freedom, df (2) = residual degrees of freedom

---

[8] β values for the individual scales of the personality models are given in Appendix F but are not interpreted, as the aim of this analysis was to find the amount of variance predicted by the model as a whole, rather than the contribution of specific factors, value domains, motives or types. In addition, the co-efficients of the Values domains will be uninterpretable due to the circumplex nature of the model.

Table 22. Improvement in prediction of job attitudes by three models

		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-efficacy	Perceived Stress
Model 1 (Controls)	F	5.22	3.58	9.46	18.31	6.57	7.23	10.18
	R^2	0.08	0.057	0.137	0.24	0.099	0.108	0.146
	df (1)	5	5	5	5	5	5	5
	df (2)	299	298	297	290	298	297	299
	p	0.001	0.004	0.001	0.001	0.001	0.001	0.001
Model 2 (Enneagram)	F	2.80	2.49	3.90	7.42	2.64	5.67	4.80
	ΔR^2	0.031	0.044	0.012	0.015	0.007	0.095	0.031
	df (1)	8	8	8	8	8	8	8
	df (2)	291	290	289	282	290	289	291
	p	0.264	0.086	0.85	0.691	0.977	0.001	0.211
Model 3 (Personality Models)	F	2.55	2.07	2.96	3.55	2.1	5.96	6.48
	ΔR^2	0.114	0.091	0.104	0.039	0.087	0.202	0.247
	df (1)	18	18	18	18	18	18	18
	df (2)	273	272	271	264	272	271	273
	p	0.003	0.041	0.007	0.681	0.05	0.001	0.001

Df(1) = regression degrees of freedom, df (2) = residual degrees of freedom

Table 23. Unique Variance accounted for by Enneagram

		Internal Work Motivation	Job Self-efficacy	Job Self-efficacy	Job Self-efficacy	Job Involvement	Perceived Stress
Model 1 (Controls)	F	5.13	7.15	7.31	7.24	3.34	9.42
	R^2	0.078	0.106	0.109	0.107	0.053	0.134
	df (1)	5	5	5	5	5	5
	df (2)	304	297	298	303	299	304
	p	0.001	0.001	0.001	0.001	0.006	0.001
Model 2 (Personality models)	Model	FFM	FFM	Values	Motives	Values	FFM
	F	5.46	10.52	7.38	6.29	3.41	16.85
	ΔR^2	0.076	0.156	0.168	0.037	0.097	0.226
	df (1)	5	5	10	3	10	5
	df (2)	299	297	288	300	289	299
	p	0.001	0.001	0.001	0.005	0.001	0.001
Model 3 (Enneagram)	F	3.59	7.39	5.83	5.29	2.55	9.45
	ΔR^2	0.027	0.054	0.046	0.081	0.022	0.009
	df (1)	8	8	8	8	8	8
	df (2)	291	289	280	292	281	291
	p	0.291	0.005	0.017	0.001	0.481	0.86

Df(1) = regression degrees of freedom, df (2) = residual degrees of freedom

9.5.4.3 Differences in Job Choices among Enneagram Types

Chi-squared tests were carried out to compare each Enneagram type with the rest of the group (again using dummy variables) for Education, Occupation, Industry and Employment. Occupation and Industry variables were recoded so that the smaller counts were combined into "other". This was to reduce the number of cells falling below the minimum count and improve the validity of the test (Field 2000). Significant differences were found for:

Education: Type 2 had a greater percentage at a lower level of education (A-level and Vocational) than the rest of the group. $(\chi^2 (7) = 20.17, p < 0.01)$

Occupation: Type 8 had a significantly different spread of results from the rest of the group, $(\chi^2 (3) = 14.91, p < 0.01)$. There were less 8s in the professional occupations and correspondingly more in both Manager/Senior Official roles as well as Associate Professional and Technical roles.

Industry: Type 1s differed from the group as a whole on the type of industry they worked in, $(\chi^2 (5) = 13.98, p < 0.05)$. Type 1s were more likely to work in Education and Other (checking the original data indicated that this was due to a higher number of 1s working in IT), and less likely than other types to work in Business Services or Professional Services.

Employment status: Type 1s were more likely not to be in employment (i.e. retired or unemployed) than the rest of the group, and less Type 1s were self-employed than the group as a whole, $(\chi^2 (2) = 7.99, p < 0.05)$.

9.5.4.4 Prediction of Job Choices by Personality models

Discriminant analysis identifies the combination of variables that best predicts membership of cases in a categorical dependent variable. It can be used similarly to regression, but to predict a categorical variable, in this case Occupation or Industry of respondents. The independent variables were entered as a block as the aim was to see how well the model as a whole could predict occupation or industry choice.

9.5.4.4.1 Occupation

9.5.4.4.1.1 Enneagram

As in previous analyses, Enneagram Type was coded as nine dummy variables to predict Occupation. There was a problem with this sample, as Type 9 failed the tolerance test and was not included in the analyses. This was simply due to Type 9 being the final dummy variable to be entered and it was therefore redundant. (i.e.: A person of Type 9 could be coded as 0 for all other eight Types rather than as a 1 for Type 9.) This variable was therefore excluded from the analysis.

Under conditions of high multicollinearity, power is low, meaning that there is a higher chance of Type II error (a significant relationship may not be detected). While the estimates remain unbiased, the relative strengths of the predictor variables' relationship with the outcome are unreliable (Garson 2007). In practice, this means that if a function is found for Enneagram Type that discriminates between Occupational categories, the relationship of the individual Types to occupation cannot be interpreted.

While the first discriminant function explained 63% of the variance, it had a very small eigenvalue (indicating very little contribution to the spread of cases) and Wilks' lambda did not reach significance. It therefore cannot be interpreted further.

Equal *a priori* probabilities were assigned to groups so classification was not influenced by relative sample sizes (Tabachnick and Fidell 2001). As there are four occupational categories (Manager / Senior Official, Professional, Associate Professional and Technical, and Other), the correct occupation for any case could be predicted by chance 25% of the time. Classification of the cases based on classification functions indicated that 40.3% of cases were correctly classified. Use of these functions therefore improves predictability above what would be expected by chance.

However, this method of classification does not give a truly accurate picture of how well the function will classify in the general population as it often over-fits to the data (Tabachnick and Fidell 2001). One way of correcting for this is by cross-validating the functions, using a function derived from all cases but one to predict the remaining case. This is done for all cases and the results give a more accurate indication of how well the cases can be classified in the general population. For this analysis, cross-validation predicted occupation correctly for 36.5% of cases, still well above chance.

Overall, these results indicate that although a person's Occupation cannot be accurately predicted from EType, there is some relationship between Type and occupation which is above chance.

9.5.4.4.1.2 Five Factor Model

Eigenvalues were low (the highest being 0.05, explaining 69.7% of variance) and Wilks' lambda did not reach significance for any of the functions, so they are not interpreted further.

Classification functions correctly classified 31.5% of cases. The more accurate estimation using cross-validation showed 25.9% correctly classified, which is no different from chance.

9.5.4.4.1.3 Values

Wilks' lambda for the first discriminant function was significant (Wilks' lambda = 0.843, χ^2 (30) = 51.98, p < 0.01), with an eigenvalue of 0.11, substantially larger than the other models and indicating a reasonable contribution to the spread of cases. Subsequent discriminant functions did not reach significance.

Standardised discriminant function coefficients demonstrate the unique contribution of each independent variable to the function. The following table indicates that the Achievement value contributes most to the first discriminant function, followed by negative Tradition.

Table 24: Values predicting Occupation - Standardized Canonical Discriminant Function Coefficients

	Function 1
Achievement	.806
Power	.344
Conformity	.220
Universalism	.214
Stimulation	.111
Selfdirection	-.028
Security	-.060
Benevolence	-.384
Hedonism	-.387
Tradition	-.548

The structure coefficients show correlations between the independent variable and the discriminant function and are used for interpreting the function similarly to interpreting factors in factor analysis.

Table 25: Values predicting Occupation - Structure coefficients

	Function 1
Achievement	.731
Power	.563
Stimulation	.309
Selfdirection	.194
Security	.157
Conformity	.103
Universalism	.077
Hedonism	.060
Benevolence	-.037
Tradition	-.305

These results indicate that the function differentiates those who scored high on Achievement, Power and Stimulation and low on Tradition. To determine which occupations this function is discriminating between, the group centroids must be examined.

Table 26: Values predicting Occupation - Functions at Group Centroids

	Function 1
Manager / Senior Official	.408
Professional (teaching, health, legal, science)	-.020
Associate Professional and Technical	.479
Other	-.708

The group centroids indicate that low scores on this function are associated with an "Other" occupation, while high scores indicate either Manager or Associate Professional / Technical. Scores in the mid range indicate Professional occupations. Overall, therefore, respondents scoring high on Achievement and Power, as well as low on Tradition, were likely to be in Management or Associate Professional / Technical occupations. Respondents who valued Tradition highly and Achievement and Power less were more likely to be in Other occupations (including for example, IT).

Classification functions correctly classified 36.4% of cases. The more accurate estimation using cross-validation showed 29.7% correctly classified, which is slightly higher than chance.

9.5.4.4.1.4 Motives

Eigenvalues were low (the highest was 0.016, explaining 72.7% of variance) and Wilks' lambda did not reach significance for any of the functions so they cannot be interpreted.

Classification functions correctly classified 27.4% of cases. The more accurate estimation using cross-validation showed 22.3% correctly classified, indicating no improvement over chance.

9.5.4.4.1.5 All three models

To determine whether there was any improvement in prediction from including all three of the models, the scales from the Five Factor Model, Values and Motives were entered together into the Discriminant Function analysis. Only the first function was significant (Wilks' lambda = 0.783, χ^2 (54) = 73.25, p < 0.05), with an eigenvalue of 0.132.

Table 27: 3 Models predicting Occupation - Structure coefficients

	Correlation with Function 1
Achievement	-.753
Tradition	.464
Power	-.358
OpennesstoExperience	-.329
Benevolence	.306
Extraversion	-.252
EmotionalStability	-.251
PowFP	-.217
Stimulation	-.198
Agreeableness	.181
AchFail	-.128
Universalism	.115
Conscientiousness	-.101
Conformity	.079
Hedonism	.074
AffRej	.045
Security	.028
Selfdirection	-.020

In line with the individual model results, the major contributors to the function were the Values of Achievement, Tradition and Power. However, other predictors from the Five Factor Model and Motives also showed some correlation with this function.

Table 28: 3 Models predicting Occupation - Functions at Group Centroids

	Function 1
Manager / Senior Official	-.508
Professional (teaching, health, legal, science)	.006
Associate Professional and Technical	-.294
Other	.796

Table 28 indicates that the inclusion of predictors from other models means that the function can now discriminate somewhat between Management and Associate occupations. These groups could not be distinguished solely on the basis of the Values model.

Forty-four percent of the cases could be classified correctly and this was still above chance when the analysis used cross-validation (32.4%). Taken with the results above, this indicates that prediction of occupational choice can be improved by the use of all three personality models rather than just the Values. However, this improvement is only about 3%

and the extra time and expense that would be incurred measuring the additional personality scales is unlikely to be worth it.

9.5.4.4.2 Industry

9.5.4.4.2.1 EType

Eigenvalues were low (highest was 0.072, explaining 41% of variance) and Wilks' lambda did not reach significance for any of the functions, though it approached significance for the first function (Wilks' lambda = 0.843, χ^2 (40) = 52.474, p < 0.1). Again there was the same issue of one of the dummy variables failing the tolerance test and therefore not being included in the analysis. As explained before, however, this did not affect the final outcome.

Classification results showed that 27.8% of cases were correctly classified. Cross-validation indicated that this was not an over-estimation as 27.8% were still correctly classified using this method. With six industrial groups, prediction by chance would be correct 16.7% of the time. The Enneagram Types therefore show a higher than chance relationship with the respondents' choice of Industry.

9.5.4.4.2.2 Five Factor Model

Despite the eigenvalues being low for the first two discriminant functions, (Function 1 eigenvalue = 0.065, explaining 42.5% of variance, Function 2 eigenvalue = 0.058, explaining 37.5% of variance), Wilks' lambda was significant for both. Function 1: Wilks' lambda = 0.861, χ^2 (25) = 46.121, p < 0.01. Function 2: Wilks' lambda = 0.917, χ^2 (16) = 26.651, p < 0.05.

Table 29: Five Factors predicting Industry - Structure coefficients

	Function 1	Function 2
Agreeableness	.739	.197
Extraversion	.103	.967
OpennesstoExperience	-.136	.266
Conscientiousness	-.298	-.217
EmotionalStability	.480	.038

Table 30: Five Factors predicting Industry - Functions at Group Centroids

	Function 1	Function 2
Business services (eg: recruitment, consultancy)	-.089	.523
Education	-.004	-.135
Health & social work	-.010	-.168
Personal services (counselling, therapy, care)	.525	.032

	Function 1	Function 2
Professional services	-.241	.208
Other	-.208	-.190

Referring to Table 29 and Table 30 allows interpretation of these two functions. The first function is a combination of high Agreeableness and high Emotional Stability. This function best discriminates those in Personal Services industries (high scores) from those in Professional or Other industries (low scores). The second function can be described by high Extraversion scores and best discriminates those in Business Services from those in Other industries.

Classification results showed that 26.7% of cases could be correctly classified, dropping to 22.5% when using cross-validation. This is above chance but slightly less than the EType classification percentages.

9.5.4.4.2.3 Values

Only the first discriminant function reached significance (Wilks' lambda = 0. 787, χ^2 (50) = 72.37, p < 0.05). The eigenvalue was 0.135 and the function explained 54.1% of variance in the sample.

Table 31: Values predicting Industry - Structural coefficients

	Function 1
Achievement	.607
Power	.594
Selfdirection	.461
Stimulation	.459
Tradition	-.270
Security	.207
Hedonism	.115
Conformity	-.099
Benevolence	-.087
Universalism	-.085

Table 32: Values predicting Industry - Functions at Group Centroids

	Function 1
Business services (eg: recruitment, consultancy)	.859
Education	-.187
Health & social work	-.273
Personal services (counselling, therapy, care)	-.304
Professional services	.116
Other	.053

Again, reference to Table 31 and Table 32 allows interpretation of this function. The structure coefficients indicate that high scores on Achievement, Power, Self-direction and Stimulation best describe the function. This function best discriminates between those in Business Services (high score on function) and those in Personal Services, Social Work and Education (low scores).

Classification results show that 28.9% of cases were correctly classified, dropping to 19.9% when cross-validated, which is slightly above chance.

9.5.4.4.2.4 Motives

Eigenvalues were low (the highest was 0.032, explaining 59.6% of variance) and Wilks' lambda did not reach significance for any of the functions so they are not interpreted.

Classification Results show that 24.7% of cases were correctly classified using these discriminant functions. Cross-validation showed 21.2% correctly classified. Again, this is slightly above chance.

9.5.4.4.2.5 All three models

As for Occupation, all three models were combined to determine whether there was an improvement in prediction. Only the first discriminant function reached significance (Wilks' lambda = 0.672, χ^2 (90) = 118.06, p < 0.05). The eigenvalue was 0.172 and the function explained 41% of variance in the sample.

Table 33: 3 models predicting Industry - Structural coefficients

	Function 1
Achievement	.594
Power	.470
Extraversion	.451
Selfdirection	.330
Stimulation	.318
AchFail	.224
PowFP	.206
OpennesstoExperience	.079
Security	.043
AffRej	.029
Conscientiousness	.014
Hedonism	-.027
Agreeableness	-.088
EmotionalStability	-.108
Conformity	-.300
Universalism	-.324
Benevolence	-.355
Tradition	-.420

Table 34: 3 models predicting Industry - Functions at Group Centroids

	Function 1
Business services (eg: recruitment, consultancy)	.982
Education	-.268
Health & social work	-.258
Personal services (counselling, therapy, care)	-.315
Professional services	.092
Other	.056

Structural coefficients (Table 33) indicate that the function can be described as high on Achievement, Power and Extraversion and low on Tradition. It best discriminates those in Business Services from the other industries.

Classification results showed that 35.8% of cases were correctly classified, dropping to 19.4% when cross-validation was used. This is lower than the Five Factor Model alone, and indicates that the addition of extra variables does not improve prediction of the type of Industry people work for. There is thus no advantage to be gained in combining the models.

Chapter 10   Discussion of Study 1

Detailed discussion of the results is organised around each Enneagram Type for ease of understanding.

10.1 Description of the personality types

10.1.1   Type 1 – the Perfectionist

In line with the hypotheses, Type 1s were found to be more Conscientious and less Open to Experience than the rest of the group. Although Brown and Bartram's (2005) report did not indicate significance levels, this was similar to their findings. Newgent et al (2004) also found a significant correlation between the Type 1 items on the Riso-Hudson questionnaire and a high level of Conscientiousness. The consistency of these results indicates that an important part of the description of the conscious personality of this Type includes their reliability and dedication to completing tasks, as well as their tendency towards a rigid, rule-bound approach to life.

Newgent (2001) found a significantly positive correlation between Type 1 items and Emotional Stability, while Brown and Bartram found a relationship in the opposite direction. This research hypothesised a positive relationship between Type 1 and Emotional Stability, which was not, however, supported. This suggests that Type 1s are not significantly different from the rest of the group on this personality trait, and the inconsistencies of previous research indicate that the relationship may not be consistent across different groups.

The results from the Values section indicate that, as expected, Type 1s value Conformity more than other people and believe it is important to adjust their own desires to what is acceptable in society. They assign a correspondingly lower importance to Self-direction and seeking out Stimulation. This corresponds with the descriptions of Type 1 in the Enneagram literature (eg: Palmer 1988), which portray this Type as having a strong belief that they should always act "correctly" and not indulge their own wishes.

No relationships were hypothesised between Type 1s and implicit motives, however this research found that Type 1s are significantly less motivated by Affiliation than the rest of the group. Referring back to the subscales, this may be due to the combination of a lower Hope of Affiliation and a higher Fear of Rejection than other people, though it was only the difference in the higher level implicit motive that reached significance. Type 1s often come across as task rather than people focused (Nathans 2004), with their efforts expended towards making sure

things are "done right" rather than towards building warm relationships with others. Their lower level of Affiliative motivation may go some way towards explaining this.

In the workplace, Type 1s are more internally motivated in their work than others and also feel a stronger involvement in their work. Type 1s are often described as perfectionists (Palmer 1988); these job attitudes reflect the importance they ascribe to doing a job properly and believing that the way they work is a reflection on themselves as individuals. It is perhaps unsurprising, therefore, that Type 1s also report higher levels of perceived stress from work: they are unwilling to leave tasks incomplete and often find it difficult to believe that anything less than perfect is good enough (Palmer 1995). It was expected that this Type's strong feelings of duty would be captured in a feeling of commitment to the organisation, but this was not found. This may be due to Type 1s being committed to their own internal standards of right and wrong rather than to an organisation's standards.

It was with the Type 1s that the only differences in type of Industry or Employment status were found. It should be remembered that this was an unusual sample in that it had a high percentage of teachers and consultants, as well as a high proportion of self-employed people. Within this group, however, Type 1s were less likely to be self-employed and more likely not to be in employment, though no reason for this difference can be formulated without further research.

Type 1s were more likely to be working in the Education and IT sectors than other types. Riso and Hudson (1999) refer to Type 1s as the Reformers, highlighting how important people of this Type find it to try to improve the world or teach people the right way of doing things. This could explain the higher proportion drawn to the Education sector. The Type 1's rule-focus and skill with detail could also explain the attraction of the IT sector to them.

Overall, the hypotheses about conscious personality were well supported for Type 1s, as were the Job Attitudes. In addition, an unexpected implicit motivation was found which could help to explain an important aspect of this Type that has not been addressed before. Type 1s showed several differences from the group on their Job Attitudes and Industry sectors which are in line with expectations from personality descriptions.

10.1.2   Type 2 – The Giver

The predictions that Type 2s would be more Agreeable and Extraverted than the rest of the group were confirmed, supporting the trend found in Brown and Bartram's research (2005). The relationship between this Type and high Extraversion scores was also found by Newgent et al (2004), although this was not true of Agreeableness. The Type 2s orientation towards people is captured well by their scores on these two scales.

The expected relationship with Emotional Stability was not found however, and this could be because the scale focuses on negative emotionality rather than all emotional experience(McCrae and John 1992).

Because Type 2s devote themselves to helping others, they were hypothesised to score highly on the value of Benevolence. Contrary to this, Type 2s actually scored higher than the group on two values which are in direct opposition to Benevolence, namely Achievement and Hedonism. This ties in with deeper descriptions of the Type which point out that the 2's giving is often done for selfish reasons, to disguise the person fulfilling their own wishes (eg: Palmer 1988).

Type 2s were found to have a higher need for Affiliation (nAff) than the rest of the group, as hypothesised from an understanding of this Type being very other-focused and keen to build relationships. However, consideration of the lower order components indicates that this high nAff motive is due more to a lower Fear of Rejection than Hope of Affiliation. Having a lower implicit fear of rejection by others could go some way to explaining why Type 2s are so outgoing and friendly towards others.

Unexpectedly, this Type also had a higher need for Achievement (nAch) than the rest of the group, and inspection of lower level components showed that this was mostly due to a lower Fear of Failure than other Types. This ties in with the finding that Type 2s also scored high on the Achievement Value and indicates that an important reason for this Type's behaviour is both a conscious and an unconscious desire to do well compared to others. It is interesting that this aspect of the Type is not discussed in the Enneagram literature and indicates that the Type descriptions could be further refined by inclusion of this aspect.

No significant results were found for the Type 2s and Job Attitudes. Although one could hypothesise that Type 2s would be more likely to be found in the helping professions, this could not be measured with the occupational classification used in this research and a more diverse occupational sample would be needed to investigate further. This study found that Type 2s had a lower level of formal education than other Types. It would be interesting to see in future research whether this is due to 2s being more likely to enter vocational training or focus on family rather than education.

Overall, the hypotheses for Type 2 were relatively well supported, although several unexpected findings emerged. It is interesting that other research has concluded that Type 2 was the least well identified by personality trait results (Brown and Bartram 2005). It appears that there is further work to do on defining this personality type clearly and the findings in this study provide a basis for this.

10.1.3 Type 3 – The Achiever

Type 3s were hypothesised to score higher than the group on both Conscientiousness, because of their focus on completing tasks, and Extraversion, because they are described as outgoing and positive. Both these hypotheses were confirmed, providing support for the Type description. The high score on Conscientiousness was also found in Newgent's research (Newgent 2001), and high scores on both these traits were also described in Brown and Bartram's research (2005).

In addition, a significant difference was found on Openness to Experience, with Type 3s having lower scores on this trait than others, which has not been found in previous research. This can be explained by the tendency that 3s have to stick to the territory they know so that they can be assured of succeeding and achieving their goals. The negative relationship between Type 3 and Agreeableness found by Newgent et al (2004) was not reproduced with this sample, and was not hypothesised as it seems contrary to the descriptions of the Type in the literature.

The values of Power and Achievement were hypothesised to be important to this Type, because of the importance that 3s attach to recognition of their efforts by others. Both these hypotheses were confirmed, with a corresponding lower importance given to the values in competition with these, namely Benevolence and Universalism. Although these latter relationships were not explicitly hypothesised, they are in line with Schwartz's circumplex model (Schwartz 1992).

Type 3s had higher scores on all three of the implicit motives, though only a relationship with Achievement (nAch) and Power (nPow) had been hypothesised. The high nAch score was due both to a higher than average score on Hope for Success and a lower than average score on Fear of Failure. This latter finding, although not hypothesised in this research, may explain why an experience of failure can be so devastating to Type 3s (Palmer 1995) as it is so unexpected. In contrast to this, the high nPow score is due mostly to the higher score on the Hope of Power component, indicating that 3s are motivated to seek out situations where there is the possibility of impressing or influencing others.

The finding that 3s are more motivated by Affiliation (nAff) than others was not hypothesised and inspection of the component scores indicates it is due mostly to a lower Fear of Rejection than others have. This means that 3s will not view Affiliative situations as likely to result in rejection and will therefore be more likely to engage with others and build relationship with them. Several authors (eg: Nathans 2004) describe the Type 3 as an expert net-worker, and this finding would certainly support that.

It is worth noting here that despite having the same labels, the concepts of power and achievement that are being assessed in the Values and Motives systems are different. It is quite possible for a person to explicitly value power yet not have a high implicit need for power (as is

the case with Type 8). In the case of 3s, not only do they explicitly value Power and Achievement, they also have an implicit need for both. This goes a long way to explaining the strong competitive drive that 3s have, their need to do things better than others (nAch) and to have impact or influence over others, particularly in impressing them (nPow). The Type 3s whole image is that of a "successful person" (Wagner 1996) and it is easy to see how this is reflected in their values and motivated by their implicit needs.

It was expected that Type 3s would have a higher than average level of Job Involvement because of the importance of their jobs to their self-image, but this was not found. The higher level of Job Self-Efficacy hypothesised was found, however. This helps to clarify an important difference for 3s: that while they may be supremely confident of their abilities in their job, they do not feel any more personally involved in their jobs than other people.

The findings for Type 3 were remarkably consistent with expectations of how this Type could be described by the three personality models and the effects that personality would have on job attitudes. There were also a couple of important findings that had not been expected but that help to shed light on the personality make up of this Type.

10.1.4   Type 4 – The Idealist

As expected, Type 4s were found to be high on Openness to Experience, a trait which captures both their desire to experience life to the full and their creative approach to life. Although this was not found in Newgent's (2001) work, a trend in this direction can be seen in Brown and Bartram's (2005) research. The low score on Emotional Stability that was found in previous research (Newgent, Parr et al. 2004; Brown and Bartram 2005) was again confirmed here. Type 4s tend to experience more negative emotional affect than others as well as more frequent or extreme changes in mood.

In addition, 4s were found to be higher than average on Agreeableness. This was unexpected and was not found in previous research. While it remains to be confirmed with other samples, a possible explanation is that the Agreeableness trait includes items about empathy and 4s are particularly able when dealing with their own and others' emotions.

It was hypothesised that Type 4s would be lower than average on Extraversion, in line with previous research. Despite a trend in this direction, however, this difference did not reach significance. Given the theoretical expectations and research evidence so far, the lack of confirmation may just be an artefact of the particular sample and it remains for future research to investigate further.

As hypothesised, Type 4s rated Stimulation and Self-direction as more important than did other people, reflecting their beliefs that following their own unique path to experience life is important. Although not specifically hypothesised, there was a corresponding lower than average score for the values opposite on the circumplex, Security and Power as predicted by

Schwartz's model (Schwartz 1992). The expected negative relationship with Conformity was not found, indicating perhaps that it is more important to 4s to ensure they are directing their own lives than that they are specifically not conforming to society.

Type 4s attached less importance to Hedonism than did other types, which had not been hypothesised. This may reflect the disdain that 4s often express for "shallow pleasures" or things they consider not to have depth and meaning. Interestingly, the Hedonism value borders Stimulation, which 4s rated highly. Schwartz (1992) suggests that having very different scores on neighbouring values is likely to lead to internal conflict. Further research could help to clarify the effects of this on the Type 4.

Because of the common feelings of ambivalence that 4s report, they were expected to score lower on all of the higher order motives – a reflection of the competing approach and avoid aspects of each motive. This was confirmed for nAch and nPow but not for nAff. Referring to the lower level components, the 4s scored higher than average on all three of the avoid components (Fear of Failure, Rejection and Power) and lower than average on the Hope of Power aspect. This means that Type 4s can be better described as high on avoidance, rather than caught between approach and avoidance motives.

The "push-pull" feelings that 4s report were also the basis of the hypothesis that they would be higher on Turnover Intention than other types. Given that this reasoning was not supported by the Motives results, it is not surprising that this hypothesis was not confirmed in the Job Attitudes either. However, the hypothesised higher score on Perceived Stress was confirmed and it is likely that the higher levels of stress for this Type are related to lower Emotional Stability, as has been reported in previous research on workplace stress (Judge 1991).

Overall, the hypotheses for Type 4 personality were confirmed, and several new relationships were uncovered. Particularly noteworthy is that it was the value scores that indicated the possibility of conflict in deciding on action, rather than the implicit motives as had been thought.

10.1.5   Type 5 – The Observer

Type 5s are very private people and this was expected to show up as a low score on Extraversion, which, in line with previous research (Newgent, Parr et al. 2004; Brown and Bartram 2005), it did. This Type was also lower than average on Agreeableness, a reflection of the 5's independent mindedness and preference for detaching themselves from others rather than adapting to them. Although this was not a significant finding in Newgent's research, there was a trend in this direction in Brown and Bartram's work.

The expected higher scores on Conscientiousness and Emotional Stability were not found and 5s did not differ from the rest of the group on these. While this Type might be renowned for their ability to concentrate on one thing for extended periods of time, it seems

they are not necessarily any better at completing tasks or being reliable than others. It also appears that the unemotional calm that 5s exhibit is not captured adequately by the Emotional Stability scale.

The value of Tradition was rated as particularly important to Type 5s. A main focus of attention for 5s is trying to anticipate demands that may be made on them and not being taken by surprise (Salmon 2003), and respect for the traditional ways of doing things may well be because of the predictability it provides. This could also explain the low score that 5s gave to Stimulation. Seeking stimulation necessarily involves exposing oneself to new, unpredictable things.

Type 5s are also known for accepting people and things as they are, rather than trying to change them, and this could be part of the importance they ascribe to Universalism: a general (but detached) feeling of goodwill towards the world. There is a corresponding low score for the Power and Achievement values, which would involve putting oneself forward and being very visible: something Type 5s strongly avoid.

The detachment from people and the world which is such a central part of the Type 5 personality is again captured in the lower than average score for nPow. 5s are less motivated than other Types to have impact on people, they prefer to fade into the background and not be noticed. The low score on Hope of Affiliation that was expected did not emerge in this sample and it appears Type 5s are no less hopeful of building relationships with others than the other Types.

Lack of involvement in life in general is reflected in the Type 5's lower than average Job Involvement. Restricting their involvement is one way that 5s can ensure that demands for time or effort do not overwhelm them. The 5's low Job Self-efficacy could also be related to their belief that they cannot meet the demands that life and work place on them. There is of course no indication that 5s are less capable than other types, just that they believe themselves less able to effectively do their jobs. 5s may well be an untapped resource who could well go unnoticed in the workplace due to their preference to avoid the limelight and their lack of confidence in their abilities.

A surprising number of relationships between the Type 5 and values emerged in these results, indicating that the descriptions of this Type could be greatly enhanced by further consideration of the things that 5s believe are important. Personality type was also related to several Job Attitudes, as expected.

10.1.6   Type 6 – The Questioner

Type 6s were hypothesised to be lower than average on Emotional Stability because they tend to be anxious and worry about things more than others do. Previous research had already highlighted this relationship (Newgent, Parr et al. 2004; Brown and Bartram 2005) and

the current research confirmed it. Newgent's (2001) work also found a relationship between Type 6 and low Extraversion, which this study also confirmed, despite there being little information about this in the Enneagram literature. It could be that the important aspects of low Extraversion with this Type are a lack of confidence (6s often report feeling unsure and doubting themselves) rather than being reserved.

It was also expected that 6s would score high on Conscientiousness because they are known to be reliable and loyal, but this was not found. This could be because the Conscientiousness trait mostly assesses work-related behaviour rather than general reliability.

The low score on Openness to Experience that previous research found was not confirmed in this study. However the high importance ascribed to the Security value and the correspondingly low score for Stimulation reflects the underlying concern for safety and predictability. Being able to predict things and be prepared for what might happen is important to 6s, and this clarifies why seeking out new challenge and experience would be something 6s would not value highly.

Although no hypotheses were proposed for Type 6 and the lower order implicit motives, a lower than average score on Hope of Affiliation was uncovered. This resulted in a low nAff score as well, which was contrary to what was expected. As this was the only hypothesis that was directly contradicted, it is worth exploring further. A low score on nAff indicates that people of this Type are more likely to avoid an Affiliative situation than other people would, because they do not believe it is likely to result in positive relationships. This may be a reflection of the general mistrust that 6s often report feeling about the world. If they are concerned about others' motives, it follows that Type 6s will be less motivated to engage in affiliative activities.

Only one hypothesis was made about Type 6s and the Job Attitudes and this was not confirmed. Because 6s are described as loyal, it was expected they would be more committed to their organisations than other people, but this was not found. It may be that the loyalty Type 6s are known for is more to individuals (such as friends and family) than to organisations. A measure of commitment to particular members of the team or the boss may well show up the expected higher than average score.

There were relatively few significant results for the Type 6, indicating that this Type may not differ as clearly from the average as other Types do. Within the Enneagram literature, two different "kinds" of Type 6s are recognised: the "phobic" who tend to avoid things that cause them anxiety and appear more anxious and the "counter-phobic" who tend to challenge the things they are anxious about and appear more aggressive. It is possible that further research delineating these two types of 6 may well find clearer relationships with the personality models.

10.1.7   Type 7 – The Epicure

All four of the hypotheses about how Type 7s would score on the Five Factors were confirmed. Three of these had been previously found in Newgent's research (2001). Type 7s were found to be more Extraverted, Emotionally Stable and Open to Experience than the average, reflecting the outgoing, cheerful and try-anything-once character of this Type. The low score on Conscientiousness reflects the difficulty this Type has with completing projects they begin or sticking with tasks when they get boring. Type 7s are often referred to as the "Peter Pan" type and this trait profile would certainly support that.

The values that 7s consider important also reflect this carefree, curious attitude. High scores for Hedonism, Stimulation and Self-direction were hypothesised and confirmed in this study. Type 7s appear to believe it is important to enjoy the good things in life, seek out new experiences and to go their own way. They ascribe a correspondingly lower than average importance to Conformity, or adapting their own wishes to what society expects. It is also less important to 7s than to others to care for the welfare of the world in general and the people they are in close contact with. This is not to say that it these values are not important to them, but it does highlight that they are less important to 7s than to others.

Type 7s were hypothesised to have a high nAff, because they try to keep relationships with others upbeat and positive and a higher nPow than others because they like to persuade people to their own course of action. Both of these relationships were confirmed and seemed to be due to a lower Fear of Rejection and lower Fear of Power than others have. This means that 7s will not avoid affiliative or power situations out of fear of what could happen.

Only one of the Job Attitude hypotheses was confirmed for Type 7 and they were found to be lower on Organisational Commitment than the average. This reflects the 7's wish to remain unlimited and to always have an "escape plan" instead of committing to something. The lack of support for the other two hypotheses could well be due to the unusual sample, as there is no theoretical reason to suppose they should not be found. It may be that future research with a more diverse sample will uncover these relationships.

Overall, the hypotheses for the Type 7 were supported and there were no unusual relationships uncovered. Given the generally optimistic outlook of this type, it is interesting that the higher score on nAch and nPow were due to a lower Fear aspect rather than a higher Hope aspect. It is also likely that the effect of this personality type on job attitudes is more widespread than found in this research.

10.1.8   Type 8 – The Protector

Type 8s were expected to be lower than average on Agreeableness because they are comfortable with conflict and stand up for their own views. This was confirmed in this study

and is in line with previous research (Newgent, Parr et al. 2004; Brown and Bartram 2005). This Type was also found to be high on Extraversion, as expected because of their direct, open manner and high level of confidence. Other research has found a positive relationship with Emotional Stability but this was not confirmed in the present research and there is no obvious theoretical reason for it.

8s often take control of any situation they find themselves in and were hypothesised to value Power highly. This was confirmed, as was the hypothesis they would value Stimulation because of their wish to enjoy life to the full. They also ascribed a lower than average importance to Conformity, as was expected due to this Type's natural rebelliousness. It was also found that Type 8s felt that the neighbouring value, Tradition, was less important than did other people. This corresponds with 8s' reputation for changing things often just for the sake of it.

The two hypothesised differences between Type 8s and the rest of the group for the implicit motives were not confirmed. 8s were expected to show a difference on both the components of the nPow because the issue of control and power is such a central motivation of this Type. However, it appears that it is more likely to be reflected in the conscious value structure than in the implicit motive strength.

In fact, this was the only Type for which no significant results were found on the implicit motive model. Initially this may be appear to be due to a particular difficulty with the measure leading to a lack of response. But if this had been the case, the 8s would have scored consistently lower than all the other Types on this measure, and they did not. It therefore seems that the implicit motives model may be less useful in describing this type than others.

Type 8s were more likely to be in higher management roles than other types and this is likely to reflect the desire 8s have to be in control: another of the names for this Type is the Boss. The lower proportion of Type 8s in professional occupations and higher proportion in associate professional or technical roles may be because of the 8's preference for direct, practical activity.

Type 8 personality was hypothesised to have an effect on three Job Attitudes, but only one of these was confirmed. People of this Type were found to have a higher than average Job Involvement, possibly a reflection of their tendency to throw themselves into life without reservation. Again, the lack of confirmation of the other hypotheses (high scores on Internal Work Motivation and Job Self-Efficacy) could well be an artefact of this particular sample.

This Type was very clearly described in terms of traits and values but showed no unique relationships with the implicit motives. This means that Type 8s have average levels of implicit motives and the uniqueness of this Type can be best described by the conscious measures of personality.

10.1.9 Type 9 – The Mediator

Known as the mediators, Type 9s are excellent at helping people to find common ground and skilled at bringing conflicting parties together. This is reflected in the high score on Agreeableness, which was also found in previous research (Newgent, Parr et al. 2004; Brown and Bartram 2005).

As expected from their calm and unruffled demeanour, 9s also had high Emotional Stability scores, a trend noted in Brown and Bartram's research. In addition, 9s were hypothesised to be lower than average on Conscientiousness as they are described as easily distracted from their own agenda and priorities. This was confirmed, as was a lower score than average on Openness to Experience: this Type prefers a steady, stable life and dislikes change.

This Type is particularly concerned for the world at large and for the people they are in contact with, often displaying a real concern and care for them. As hypothesised, this was captured by the higher than average importance they ascribed to Benevolence and Universalism. This orientation towards others rather than their own wishes was also apparent in the lower than average scores they gave to both Self-direction and Stimulation.

Type 9s find it difficult to prioritise their own needs and wishes, and were therefore expected to rate Achievement as less important than others would. This was confirmed, as was the high importance attached to Tradition. This latter was expected for similar reasons that 9s were expected to score low on Openness to Experience, namely that 9s dislike change.

Harmony is very important to 9s and a high nAff was expected for this Type. However, this was not found and instead there was a higher than average score for Fear of Rejection. Type 9s often talk about feeling "unimportant" and the reason they orient themselves towards others' needs rather than their own is out of a concern that conflict will ruin the relationship. It appears that 9s are concerned their relationships with others will not survive a conflict and the 9 will be rejected.

The lower than average score for Internal Work Motivation that was expected for this Type was not found, indicating that 9s are no more or less internally motivated in their jobs than other people. However, 9s did show a lower job-related Self-Efficacy than the rest of the group. One of the distinguishing features of this Type is their forgetfulness about their own abilities and achievements and in the absence of any information about 9s actually being less good at their jobs than others, this lower job self-efficacy would appear to be a reflection of that self-forgetfulness.

Overall, the Type 9 showed a remarkably high number of different scores on both the traits and the values models. It appears the descriptions of this Type are accurate in the way they refer to general behavioural traits and the guiding principles behind behaviour. The finding about Fear of Rejection puts the 9's fear of conflict into perspective.

10.2 Prediction of Job Attitudes and Choices by Personality

Multiple regression analyses indicated that variables from each of the personality models (Five Factors, Values, Motives and Enneagram) accounted for a small but significant percentage of the variance in job attitudes. This supports findings that attitudes towards work such as job satisfaction are as much a product of the person as the situation (Staw 2004).

Overall, the Five Factor trait model was most successful in predicting job attitudes, accounting for between 3% and 29% of the variance of several job attitudes. This provides further evidence that the Five Factor Model is a parsimonious and powerful model of personality with applications in the occupational field (McCrae and Costa 2003). However, this model could not contribute to the prediction of all of the job attitudes in this research, indicating the value of other models which can capture different aspects of personality.

The Values were able to predict between 1% and 13% of the variance for several job attitudes. Although smaller than the Five Factor Model, this was still a significant contribution to the variance in job attitudes among different people. Additionally, the Values predicted one attitude (Job Involvement) that the Five Factors did not.

The Implicit Motives had much lower levels of prediction than the traits or values, which is to be expected as they have a larger impact on long-term life outcomes than on momentary attitudes (McClelland, Koestner et al. 1989). Despite this, they predicted between 2% and 7% of variance for several job attitudes and were able to predict Job Satisfaction and Organisational Commitment, which the Values model could not.

The Enneagram predicted between 1% and 10% of the variance in four of the job attitudes and had a unique pattern of results. Like the other three models, the Enneagram predicted Job Self-Efficacy and Perceived Stress. Unlike the Five Factors, the Enneagram could predict Job Involvement and unlike the Values, this model could predict Internal Work Motivation. This implies that the Enneagram personality types capture useful information about individuals which is not limited to a single personality model.

Including control variables in the regression analyses allowed investigation of whether personality could predict job attitudes beyond demographic information such as a person's sex or nationality. The combination of the Five Factors, Values and Motives models was able to improve prediction between 9% and 28% for all job attitudes except Organisational Commitment. However, the Enneagram could not add any significant prediction beyond this, indicating that this combination of the three personality models includes all aspects of personality captured by the Enneagram that are relevant to predicting job attitudes.

When entered into the regression after the demographic variables, Enneagram Type predicted a small amount of variance for Job Self-efficacy but subsequent addition of the other personality scales improved prediction significantly. When compared to each of the models

individually, the Enneagram accounted for a small but significant unique percentage of the variance in Job Self-efficacy. This again is an indication that the aspects of personality described by the Enneagram Types are not limited to a single model but capture important patterns among all three models.

The results of the discriminant analyses indicated that the Values model was able to predict occupational choice above chance, and specifically able to discriminate Management or Associate Professional / Technical occupations from Professional and from Other occupations. There has been much previous research on the role of a person's values in choosing a career (see for e.g.: Spokane, Meir et al. 2000), and the present study lends support to the argument of the importance of personal values in guiding occupational choice.

It was found that combining all three models improved the prediction of occupation by personality. This demonstrates the value of using a more complete description of personality when predicting certain job choices. Not only does choice of occupation involve reference to a person's values, but it is also influenced by the person's general patterns of behaviour and unconscious motives. In practice, however, the very small gain in predictability is unlikely to be worth the extra expense of measuring these other two models.

Interestingly, the Enneagram model, which has been shown to capture important differences between people on all three models, could predict occupation at a level above chance and more accurately than the other models. It seems that the aspects of personality described by Enneagram Type have an influence on the type of job a person enters. However, the specific functions were not significant so clear predictions from a person's Type to occupation could not be made. While there is a relationship between Type and occupation therefore, further research is needed to more accurately describe this relationship. A more varied sample in terms of types of occupation would be desirable in future research.

In contrast to the findings on occupational choice, the type of industry that people worked in was predicted by both the Five Factors and the Values models independently. Participants with high Agreeableness and Emotional Stability were found to be working in the Personal Services sector, where their natural inclinations are sure to be assets in work so focused on other people. Those high on Extraversion were likely to be in the Business Consultancy sector, where being confident and outgoing would help to bring in business.

People in the Business Services sector were also discriminated from others by the Values: they were high on Achievement, Power, Self-direction and Stimulation. All these values place the importance of the individual above the group and can be seen to fit in with the competitive business environment. Those scoring low on this function were involved in more people-focused sectors such as Education or Personal Services.

Combining the three models to predict Industry did not, however, improve the percentage of cases classified correctly. This indicates that the inclusion of extra variables was

redundant and that, unlike with occupation, a person's chosen industry is best predicted by the Five Factor Model functions alone.

Significant discriminant functions could not be found for the Enneagram model, although like the occupation results, ETypes predicted Industry above the level of chance. Again, this indicates that there is a relationship between personality as described by the Enneagram Types and the choice of industrial sector. The percentage of correctly classified cases was higher for the Enneagram than for the other three models and this may indicate that some important part of personality influence on industry choice is being captured by the EType. This aspect of personality must be different to that assessed by the other three models here as they were not able to match the level of accuracy in prediction.

Overall, there is good evidence that personality, whether assessed by the Five Factor Model, Values, Motives or the Enneagram, has an influence on important work-related outcomes. Personality was found to affect job attitudes and job choices, and different aspects of personality had different influences. While the Five Factor Model comes out as the most useful model of personality in predicting the majority of the outcomes assessed here, in line with general consensus, there is clear value in using other models as well. In addition, it is clear that the Enneagram model of personality can predict attitudes and job choices as well as these three other models. In some cases the Enneagram is even able to show unique or more accurate predictive ability, an indication that it may be a useful model to adopt in an occupational setting.

10.3   Research Question 1: Can the Enneagram provide a structure for linking models of explicit and implicit personality?

Personality is a large field of study and there are many competing models and theories which attempt to describe it. One of the drawbacks of having so many different models is that each of them focuses on a particular area of personality, for example, generalised behavioural traits, and excludes other areas, such as values. One of the aims of this study was to find out whether a model new to academic psychology, the Enneagram, could provide a structure for linking models of explicit and implicit personality. The personality type descriptions in the Enneagram cover behavioural traits, personal values and unconscious motivations, capturing important patterns across all three models. This is one of the major contributions that a type approach to personality can make (Asendorpf 2002).

The results showed clear and significant differences between the nine Enneagram Types on all three personality models. This indicates first, that the ETypes are capturing important differences between people and second, that these differences are not limited to one model of personality but include behavioural traits, personal values and implicit motives. It is a promising

first step in demonstrating that the Enneagram may provide a structure for linking these three models. In addition, this study is further evidence for the validity of the Enneagram model of personality.

Each EType was hypothesised to show specific relationships with traits, values and motives models and testing these hypotheses gave clear supportive evidence for the way the Enneagram relates to the other three models. The majority of the hypotheses were supported, with only a single hypothesised relationship coming out in the opposite direction to that expected. This indicates that the types in the Enneagram can be clearly described by a specific pattern of results on a combination of personality models. The Enneagram provides a way for researchers to relate different aspects of personality to each other. For example, a person of Type 4 is likely to be less Emotionally Stable and more Open to Experience than the general population, as well as valuing Stimulation and Self-direction and being more implicitly motivated by Fear of Rejection than others.

Awareness of these individual combinations of traits, values and motives can have far-reaching consequences, from helping an individual to choose the most suitable job to highlighting particular difficulties they may face in the workplace. It would then be possible for employers to provide access to appropriate support or training for their employees. Providing tailored support is essential: Types 7 and 4 are unlikely to need support for dealing with organisational change as they actively seek out new experiences and are open to change, whereas Types 1 and 9 would be very likely to benefit, not only finding change difficult but actively valuing traditional ways of doing things. On the other hand, 7s are likely to benefit from training designed to help them towards completion of projects.

These results also indicate ways that the descriptions of the Enneagram Types could be refined. With so many authors providing their own descriptions of the Types, there is bound to be some muddying of the waters. Demonstrating the pattern of results the Types show on each of the models can help to clarify the situation and ensure that practitioners use the same basis for teaching the Enneagram. This approach could be further refined by analysing which of the personality scales best discriminates between the different Types, but unfortunately this is outside the scope and aims of the current research.

10.4   Research Question 2: Do the Enneagram types show unique patterns of relationships with job outcomes?

Concurrent validity of a model is demonstrated by finding support for expected relationships between that model and others which assess similar things. Predictive validity can be demonstrated by finding support for hypothesised relationships between the model and external criteria.

Hypotheses were made about how Enneagram Type would affect job attitudes and 10 of the 19 hypotheses were supported. Reasons for this lower success rate were discussed previously, but it is likely that the results were affected by the high proportion of self-employed people in this sample. Also, personality is only one of several factors that can influence one's attitude towards a job and the results can therefore be expected to be less clear-cut than those between different personality models. Despite these considerations, the ETypes showed significant relationships with the job attitudes and this provides evidence for the external validity of the model.

Based on these results, several suggestions can be made for employers. For example, Type 1s and 4s are likely to perceive they are under higher levels of stress than other types. Knowing an employee's Enneagram Type would enable employers to be aware that these types may need extra support during stressful times. Similarly, Type 5s and 9s may benefit from training designed to improve their job-related self-efficacy, that is, their confidence in their ability to do their job. Type 1s are likely to be more motivated than most to do a good job, without any interventions or rewards from management. A word of caution is necessary here however, as this research does not give any indication of the effect of these individual differences on job performance and the Enneagram is therefore not suited to use as an employee selection tool.

Comparison of the different personality models indicated that the Five Factor traits model was the most successful in predicting job attitudes when no control variables were used. Two important findings emerged in the regression analyses. The first was that some job attitudes could only be predicted by one model, indicating that only the aspect of personality captured by that model is related to a particular attitude. The second finding was that the job attitudes were best predicted by a combination of models and demographic variables. Internal Work Motivation, Organisational Commitment and Perceived Stress were best predicted by traits and demographics, while Job Involvement was best predicted by values and demographics. The remaining attitudes required a combination of models for prediction. Implicit motives seemed to have less effect, which is not unexpected as they are theorised to have their largest effects on longer-term life outcomes rather than momentary attitudes (McClelland, Koestner et al. 1989).

The Enneagram model did not add any predictive ability above and beyond the combination of the three other models. When the Enneagram was entered into the regression before the traits, values and motives, it predicted a small amount of variance for some attitudes but addition of the other models improved prediction significantly. Compared with each of the other models individually, the Enneagram could account for a significant percentage of variance in three of the job attitudes. Overall, the results indicate that while the Enneagram may not be as

effective in predicting job attitudes as the Five Factor Model, it is on a par with the Values or Motives models.

The relationship between personality and job choices was also investigated, though no hypotheses were made in this section as it was exploratory in nature. Comparison of the Enneagram Types uncovered some differences between them on all four of the variables: Education, Occupation, Industry and Employment status. Using personality variables to try and predict participants' occupation or industry showed that the Values model was most successful in predicting occupation, followed by the Enneagram, while all three predicted industry above chance. There was no advantage gained here in combining personality models.

10.5 Sample differences

While most of the relationships between Enneagram Types and the Five Factor Model found in previous research (Newgent, Parr et al. 2004; Brown and Bartram 2005) were confirmed in this study, several were not and this research also uncovered relationships not found previously. There are several possible reasons for this.

First, the research used slightly different samples. Newgent's research was based entirely in the USA and used only American participants. Given that there are known cultural effects on Five Factor traits (McCrae and Costa 1997), it is not unexpected to find differences between the samples. As the results of this research showed, there were some significant differences between the two main nationality groups (British and American) on all three of the models. It is possible that these differences affected the relationships between Type and the other models found in this study. Brown and Bartram's research used an international sample but had fewer participants than the current study and therefore did not have as much statistical power to detect differences. However, as it also did not report significance levels for the Five Factor Model, it is difficult to make direct comparisons.

Second, the participants in the Brown and Bartram study were recruited through the Enneagram Institute while participants for this study were recruited through contacts with the Trifold School. These two organisations have slightly different approaches to teaching the Enneagram to participants on their courses and there are some differences in their descriptions of the Types. While the basis of the Type is motivational and shows clear similarity across the schools, descriptions of common behaviours are also given, which can sometimes differ among schools. This may lead to small differences in the trait profiles of those who identify themselves as a particular Type.

Third, the confidence in a person's Type being correctly identified differs among the three studies. Newgent did not specify that participants had to know their Enneagram Type. The focus of her research was to investigate a questionnaire designed to identify Enneagram type

and comparisons were made between the proposed Type-specific items and the NEO-PI-R (a measure of the Five Factor trait model). Brown and Bartram's research used participants whose "types were mainly established through training courses and interviews run by the Enneagram Institute" (p3 Brown and Bartram 2005). The current study had the most rigorous sampling procedure, only recruiting participants who had identified their Type through at least a week-long intensive training course and had known about the Enneagram for at least a year.

Finally, some differences could be due to slight variations in the instrument used to measure the five traits. This study used the IPIP 50-item form, Newgent's study used the NEO and the Brown and Bartram study calculated Five Factor scores from SHL's OPQ. However, these differences are likely to be small as the three measures have been shown to have high correlations with each other (IPIP 2001; Brown and Bartram 2005).

10.6   Limitations

Limitations of the research have been discussed throughout, but some general points deserve highlighting. The first is the effect of having such a specific sample. Although a necessary limitation, the specific recruiting strategies mean that these results may not generalise to the wider population.

In addition, all participants had completed their Enneagram training with the same school and may have a difference in their understanding of the types compared to teachers in other schools, and therefore have identified themselves as a different type. However, initial comparisons with published results from another large Enneagram teaching school, the Enneagram Institute (Newgent 2001; Brown and Bartram 2005) show remarkably similar findings, despite the effect of nationality differences discussed above, indicating that the schools are teaching very similar descriptions of the Types.

The slightly disappointing results related to the Implicit Motives are probably a reflection of the difficulty of gaining a good measure of this part of personality without using extensive, time-consuming methods. While the Multi-Motive Grid was difficult for some participants to respond to, it was still the best option available for a large scale survey. It may be that a more in-depth study of the motives as they relate to Enneagram Types would be able to clarify this area more.

This research used measures of job attitudes rather than objective measures of specific work behaviours and outcomes. While it would have been interesting to investigate the relationships between Enneagram Type and such outcomes as work performance, turnover or absence rates, it was unfortunately beyond the scope of this thesis. The findings reported here do, however, provide a basis for future hypotheses and research in this area.

10.7   Summary

Given the small (or zero) improvements in prediction of job attitudes and choices that result from combining the models of personality, it is unlikely that this will be an attractive option in the workplace, especially given the increase in time and expense it would entail. Overall, it would seem that the Enneagram is at least as good as two of the models but does not provide a strong enough challenge to the Five Factor model, which in line with previous research (eg: Barrick and Mount 1991) has emerged as the most significant personality predictor of job-related outcomes.

There is some indication in these results, however, that combining personality models can provide improvement in prediction of important occupational attitudes and choices. Further refinements may be able to advance understanding in this area. As referred to earlier, an important application of these results is in providing tailored support and training to employees, and it is to this that the study now turns.

Chapter 11   Study 2

11.1   Research Questions

The underlying assumption of many personality-based interventions is that helping employees become more aware of their behaviour, attitudes or preferences (i.e.: improving self-awareness) will improve their work life. Improvement in self-awareness is certainly one of the outcomes claimed for many Enneagram training programmes. However, these assumptions have not been tested. Thus, the following research questions investigate whether self-awareness can be improved in an occupational setting and whether Enneagram-based training provides any advantage over general self-awareness training.

→ **Research Question 3a: Can self-awareness be improved?**

→ **Research Question 3b: Does Enneagram-based training (i.e.: tailored to the individual) improve self-awareness more than generic self-awareness training?**

The results of self-awareness, although researched in other arenas, have not been extensively investigated in the workplace. This thesis aims to identify some of the occupationally-related outcomes related to high self-awareness.

→ **Research Question 4: What outcomes are related to high self-awareness?**

11.2   Research Design

There were several important factors to consider in this research design. The first was the difficulty of doing research on self-awareness. It is possible that simply asking people to complete a questionnaire about self-awareness could affect their base level. This means that the measure itself had to be included as a variable. By treating the self-awareness measure as an experimental manipulation in itself, the research design can control for its effects.

Another important issue is that it is difficult to justify having a control group in research which takes place in the workplace. Gaining access to companies is not easy and it is unlikely that a company will agree to take part in research which will exclude certain employees from potential benefits while still expecting them to complete questionnaires. There are also social issues such as compensatory rivalry or demoralisation to deal with if one group of participants is denied training.

A related issue to the difficulty of gaining access to organisations is that of recruiting enough participants to be able to conduct meaningful statistical analyses. It is therefore an advantage to use a design which requires as few groups as possible, thereby maximising the number of participants in each group and improving reliabilities.

A research design which addresses these factors is the switching replications design (Trochim 2006). The basic design involves dividing participants into two groups as follows, where Group 2 initially acts as a "control" group to determine whether simply completing the self-awareness questionnaire affects the participants' self-awareness scores.

Group	Test	Training (i.e.: Enneagram workshop)	Test	Training (i.e.: Enneagram workshop)	Test
1	✓	✓	✓		✓
2	✓		✓	✓	✓

To ensure that participants' responses were not affected by their previous completions of the questionnaire, there was a minimum of three weeks between successive tests. Research by McKelvie (1992) indicates that even when specifically asked to remember their responses, participants completing the same questionnaire after a three week interval were no more consistent in their responses than participants who were not relying on memory. This indicates that a delay of three weeks is sufficient to ensure that responses are not biased by participants' memory of their previous responses.

As this research aims to compare the Enneagram training to the general Self-Awareness training, a third group was added to the design. The first two groups sufficed for checking the effect of the self-awareness questionnaire so it was not necessary for those on the Self-Awareness workshop to complete the questionnaire at different times. Therefore, this group simply used the same testing pattern as Group 1.

Group	Test	Training (i.e.: Self-awareness workshop)	Test	Training (i.e.: Self-awareness workshop)	Test
3	✓	✓	✓		✓

Besides allowing for control of the effect of the questionnaire itself on self-awareness, the research design allows both short-term (1 week) and longer-term (4 weeks) effects of the workshops to be assessed, as indicated in Table 35.

Table 35: The research design

Time	x-5 weeks	x-2 weeks	x	x+1 week	x+4 weeks
Group 1		Q1	Enneagram	Q2	Q3
Group 2	Q1	Q2	Enneagram	Q3	
Group 3		Q1	Self-awareness	Q2	Q3

Control

Short-term effects

Long-term effects

11.3   The Training programmes

A generic self-awareness training programme was developed which focused on teaching participants skills such as journaling, reflection, self-analysis and awareness of other people's perceptions. This was done in collaboration with the tutors of the Person-Centred Counselling postgraduate certificate at Warwick University. Person-Centred counselling demands a high level of self-awareness on the part of therapists, and developing this is an essential part of the course as taught at Warwick University. (See Appendix G for the outline of this workshop).

An introductory Enneagram workshop that has been used in organisations to improve self-awareness and team-building[9] was used as the tailored self-awareness workshop. This workshop is designed to introduce people to the nine types of the Enneagram, thereby developing understanding of individual biases in perception, exploring habitual responses and deepening awareness of the differences in how others view the world. (See Appendix H for an outline of this workshop).

The two workshops were designed to be as similar as possible in their approaches to developing self-awareness so that an analysis of the effects of generic and tailored self-awareness training could be justifiably carried out. Appendix I provides a detailed break down of each of the exercises in the workshops and illustrates how the two workshops are comparable.

11.4   Participants

Participants were recruited through personal contacts in senior management positions in university and NHS departments and subsequently by word of mouth from previous participants who encouraged colleagues to attend. Senior managers were contacted in order to maximise

---

[9] Developed by Paul and Rosemary Cowan, The Client Relationship Consultancy, London

buy-in and visible support for the workshop, so that it was seen as a valuable training opportunity in itself as well as a research exercise. After the initial meeting with the senior manager, an email with attached flyer was sent from the manager to their staff, encouraging people to attend. Because the advertising necessarily included information about the contents of the workshop, separate recruitment drives had to be conducted for the Enneagram and generic training. Attendance was entirely voluntary.

Participants signed up for the workshops by emailing the researcher, whereupon the link for the first online questionnaire was sent to them with further details of the time and location of the training programme. Those participants signing up to the Enneagram workshop were randomly assigned to group 1 or 2, with the second group completing both the first and second questionnaires before the workshop, as described above. Group 1 and participants signing up to the Self-Awareness training completed the first questionnaire before the workshop and the second and third after the workshop.

Table 36 shows the breakdown of numbers for each workshop and completion of each of the questionnaires. Reminder emails were sent to participants who had not completed the questionnaires within one week of being asked. This meant that drop-out rates were kept to a minimum.

Table 36: Workshop and Questionnaire completion

Workshop Group	Completed Q1	Attended workshop	Completed Q2	Completed Q3
Enneagram workshop 1	37	31	27	26
Enneagram workshop 2	39	35	37 [10]	35
Self-Awareness workshop	24	22	20	18
Total	**100**	**88**	**84**	**79**

The lower numbers signing up to the Self-Awareness workshop and subsequently completing the questionnaires may be attributable to the fact that this part of the study was carried out over the summer when more employees were away on holiday. All subsequent descriptions and statistics use only those participants who attended the workshops (N=88).

---

[10] Note that for this group, the second questionnaire was completed BEFORE attendance on the workshop.

The first questionnaire also asked participants for demographic information, including age, sex, occupation, industry, ethnicity, job tenure and organisational tenure. British participants made up 89% of the sample. Seventy three percent were white, with 9% of other ethnic backgrounds and 18% not providing information about their ethnicity. The majority of the sample (67%) were female.

Figure 6 shows the breakdown of occupations in this group as defined in the Standard Occupational Classification 2000 (Office for National Statistics 2000). As three occupations made up the majority of the sample, the remaining occupations were recoded into an "other" group for future analysis, leaving four groups: Administrative, Managerial, Professional and Other. The majority of participants were recruited through University or NHS contacts and this was reflected in the Industry Sector breakdown. Forty-eight percent of participants were employed in the Education sector, with 20% in the Health sector. The remaining participants were divided relatively equally between the ten other industry sectors (between 1 and 8%). For future analyses, Industry Sector was recoded into three groups: Education, Health and Other.
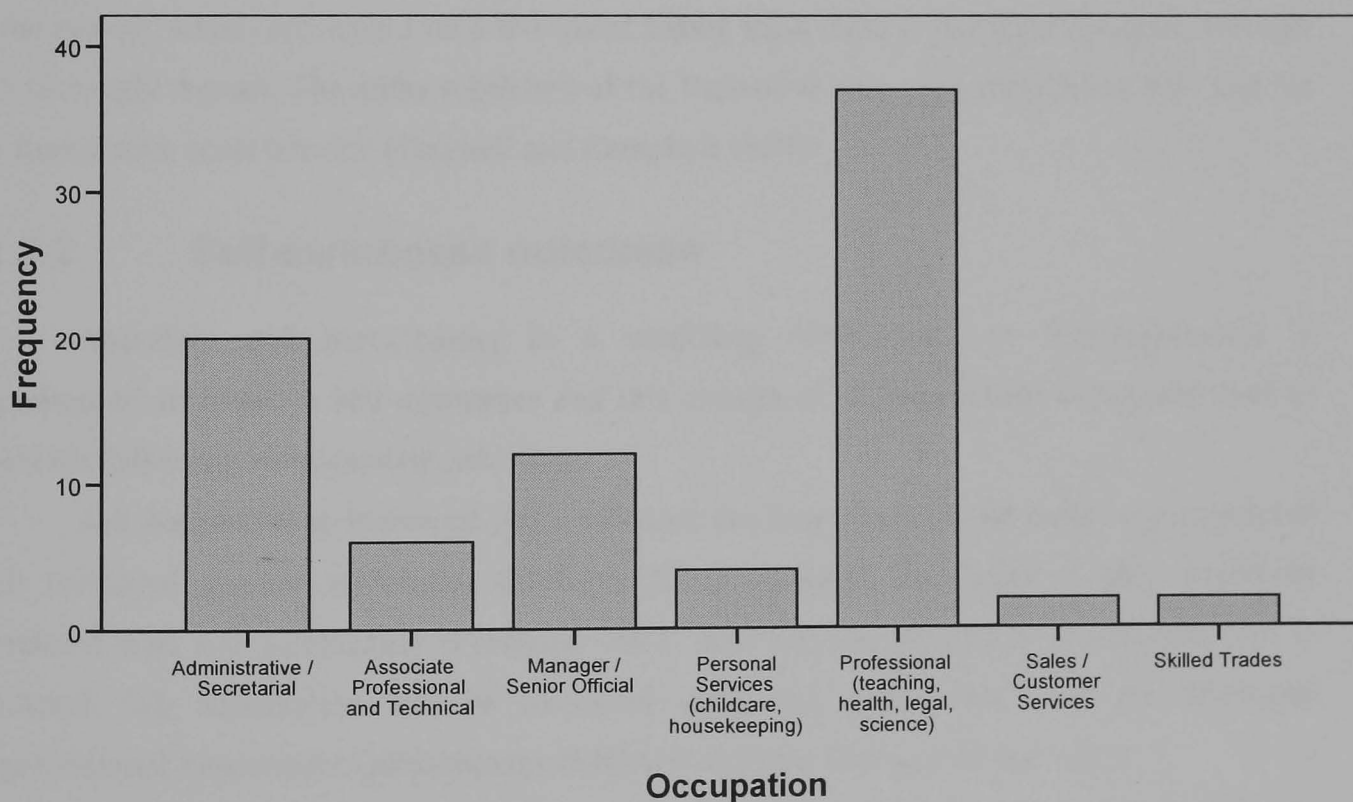
Figure 6: Participant occupation

11.5 Instruments

11.5.1 Self-awareness

Vogt and Randall (2005) recommend a multi-method approach to determine the accuracy of a person's self-knowledge. They use comparisons between self-report, other-report

and observed coding of behaviour in a laboratory setting to determine self-awareness levels. While this would be ideal, the complexity of the current study argues for as simple an approach to measurement as possible.

To this end, the Private Self-Consciousness scale, initially devised by Fenigstein et al (1975) was reviewed. While it cannot give a direct measure of the accuracy of a person's self-knowledge, this scale measures the extent to which a person attends to and reflects on him- or herself. It was the most widely used measure of this aspect of self-awareness for many years and has been extensively refined by Trapnell and Campbell (1999). This revision of the scale, called the Rumination-Reflection Questionnaire was chosen because it contains scales to assess the aspects of self-awareness that lead separately to positive and negative outcomes. It has two factors, Rumination and Reflection. The former is associated with negative self-awareness outcomes such as anxiety or depression, while the latter is associated with positive outcomes such as improved general well-being. It is important to measure both aspects to investigate differential effects of the training on participants.

The Rumination-Reflection Questionnaire (RRQ) consists of 24 items (12 each for both of the scales), which are scored on a five point Likert scale from 1 (Strongly disagree) through to 5 (Strongly Agree). The alpha reliability of the Reflective scale was reported as 0.91 and for the Ruminative scale was 0.9 (Trapnell and Campbell 1999).

11.5.2   Self-awareness outcomes

Attending and participating in a workshop (Enneagram or Self-awareness) is hypothesised to improve self-awareness and this change in self-awareness is hypothesised to affect the following work-related outcomes:

Job Satisfaction: Increased self-awareness has been found to be positively correlated with increased general well-being (Wilson, 2004). General well-being is also positively correlated with Job Satisfaction (Furnham, 2002) and thus an increase in Job Satisfaction is predicted. Job Satisfaction will be measured using the same scale from the Michigan Organisational Assessment Questionnaire (MOAQ) as in the first part of this study.

Internal Work Motivation: Rumination (the negative or unconstructive aspect of self-awareness) is correlated with a decrease in motivation. Additionally, positive self-awareness (or knowledge of one's strengths) is associated with increased motivation (Wilson, 2004). Therefore, Work Motivation is predicted to have a positive relationship with the Reflection (positive self-awareness) scale and a negative relationship with the Rumination scale. Internal Work Motivation will be measured using the Internal Work Motivation scale of the MOAQ, as in the first part of the study.

Job-related Well-being: This is another aspect which is expected to show different relationships with the Reflective and Ruminative subscales of self-attentiveness. Reflection has

been associated with positive feelings of well-being, while Rumination is associated with negative feelings of anxiety and depression (Trapnell and Campbell 1999). It is to be expected, therefore, that this will be captured in job-specific well-being too.

According to Warr (1990), there are three main axes in the structure of affective well-being that should be considered, based on the circular structure of affect commonly accepted by researchers in the field of emotion (see for e.g.: Feldman Barrett and Russel 1998). The first is a general displeased-pleased axis, which in I/O psychology is commonly operationalised as Job Satisfaction (Daniels, Brough et al. 1997). The remaining two axes are anxious-contended and depressed-enthusiastic, and it was to measure these two axes that Warr developed his measure of Job-related Affective Well-being.

This measure was developed specifically for use in occupational settings and tested using a British population of employees at all levels (Warr 1990). Although there has been some discussion over the exact factor structure and naming of the two scales in this measure (Daniels, Brough et al. 1997), Warr provided good psychometric validation of the two scales and showed how they were each related to unique occupational outcomes. A development of the measure was published by van Katwyk et al (2000), but the small gains in psychometric validity were not considered worth the increase in questionnaire length.

Warr's Job-related Well-being measure consists of 12 emotional adjective items assessing two scales: anxiety-contentment ($\alpha = 0.76$) and depression-enthusiasm ($\alpha = 0.80$). Respondents are asked to indicate on a six-point scale how much of the time their jobs have made them feel each of the adjective items.

Coping Behaviours: Although research on self-awareness in the occupational arena is lacking, many studies have been carried out in the medical world (eg: Anson and Ponsford 2006). These medical studies show that greater self-awareness is associated with people who use better coping strategies. These people's knowledge of their weaknesses leads to adoption of coping strategies. Therefore, coping behaviours are predicted to improve with self-awareness.

Coping behaviours are measured using the Proactive Coping Inventory (Greenglass et al, 2001), the only available questionnaire which has been specifically designed for and tested in an occupational setting. This inventory consists of seven subscales with a total of 55 items. In order to keep the total length of the questionnaire down, for this study only the Proactive Coping and the Instrumental Support Seeking subscales were used. The former focuses on positive aspects of self-awareness, such as believing in one's own abilities and strengths. The latter measures how much a person actively seeks help for recognised weaknesses. This means that the two subscales cover coping behaviours for both the positive and the negative aspects of self-awareness.

The Proactive Coping subscale consists of 14 items and has produced alpha reliabilities of 0.8 to 0.85 in various samples, while the Instrumental Support Seeking subscale consists of

eight items and has an alpha reliability of 0.85 (Greenglass, Schwarzer et al. 1999). Both scales have a four-point Likert scale for participants to indicate how true an item is of them, ranging from 1 (not at all true) to 4 (completely true).

11.5.3   Other outcomes

Two job-related attitudes were selected that were hypothesised to have no relationship with a change in self-awareness. This was done in order to provide a further control that the effects being measured were specific to the training, and not just fluctuations in attitude or well-being similar to the Hawthorne effect. With all of these outcomes, there is no indication in the literature or any theoretical reason why improved self-awareness would lead to a change in the attitude.

Satisfaction with pay: In line with the other job attitudes assessed in this research, the Pay Satisfaction scale from the MOAQ was used. The scale consists of three items measured on a seven-point Likert response scale. Two of the items ask respondents to indicate agreement, from 1 (Strongly disagree) through to 7 (Strongly agree). The third item asks respondents to indicate their satisfaction on a similar scale, from 1 (Completely dissatisfied) to 7 (Completely satisfied). An alpha reliability of 0.89 is reported (Cook, Hepworth et al. 1981).

Job Freedom: This was also measured with the MOAQ, so that respondents could be given a consistent questionnaire to respond to. The scale consists of three items, two of which are scored on the seven-point agreement scale above and the third of which is scored on a more specific seven-point scale ranging from 1 (Very little freedom) through to 7 (Very much). The scale has an alpha reliability of 0.75 (Cook, Hepworth et al. 1981).

11.6 Qualitative analysis

Because of the exploratory nature of this research, an open-ended question was included in the final questionnaire that participants completed, asking them what effects they had noticed from the workshop. This was to provide a richer source of data than could be achieved simply by use of scales and to uncover possible effects that were not hypothesised from the related literature.

The exact phrasing of the question was: "This questionnaire has asked you about some aspects of your work but there may be things that have not been covered. Looking back over the last few weeks, what effect do you think attending the workshop has had on you and your work life (if any)?" This question, like the rest of the questionnaire, was not compulsory and participants were free to respond if they wished to.

11.7 Study 2 Results

11.7.1 Overview of Results

Table 37 shows the means, alpha reliabilities and correlations obtained in the present study for all scales. Values are given for the Questionnaire 1 results (N=88). Due to a copying error in the online questionnaires, two of the three items for the Job Freedom scale were not present in the second and third questionnaires. This means that Job Freedom is measured using a single item when comparisons between the questionnaires are made. This is not ideal and caution should be used in interpreting these results.

11.7.1.1 Alpha reliabilities

Reliabilities were good to excellent and corresponded with reported alphas for all these scales except Internal Work Motivation, which had an alpha of 0.66. This was higher than that reported in the literature (Cook, Hepworth et al. 1981), and higher than was found in Study 1. Despite the slightly low reliability, this scale was retained in the original form because the sample was not felt to be large enough to justify dropping items as was done in the first study. For the same reason, factor analyses of the scales are not reported, the size of this sample being well below those used for the initial validation of these scales.

11.7.1.2 Intercorrelations

Correlations between the job attitude, well-being and coping scales are discussed here, while the correlates of self-attentiveness are discussed in section 11.7.3.

Job Satisfaction correlated significantly with all other job-related scales except Proactive Coping. In some measures, Satisfaction with Pay and Job Freedom are actually used as subscales, aggregated to create a measure of overall job satisfaction. It is therefore to be expected that they will show some relation to Job Satisfaction. Internal Work Motivation and Job Freedom were also reported to have positive correlations with Job Satisfaction by the authors of the MOAQ (Michigan Organisational Assessment Questionnaire), from which these scales are drawn.

Job Satisfaction, as the occupational operationalisation of the pleasure-displeasure axis of affective well-being, is expected to correlate with the other two axes, Anxiety-Contentment and Depression-Enthusiasm (Warr 1990). The circumplex structure of well-being also explains the correlation between the latter two scales.

The reason for the positive correlation with Instrumental Support Seeking is less clear as a direction for the relationship cannot be established at this stage. It may be that those employees who seek support from others are more satisfied with their jobs, or that being more satisfied with their job encourages them to seek support where it is needed.

Internal work motivation was correlated with Job Freedom, indicating that those participants in jobs with higher levels of freedom were also more highly motivated.

The Depression-Enthusiasm scale showed a positive relationship with Proactive Coping. This indicates that people who score towards the higher end of the Enthusiasm scale are more likely to engage in proactive coping strategies when faced with a problem. The negative association between Proactive Coping and Depression (low score on the scale) was consistently found in cross-cultural samples by (Greenglass, Schwarzer et al. 1999).

The two scales measuring coping strategies, Instrumental Support Seeking and Proactive Coping, showed a positive correlation, indicating that people who engaged in one type of coping strategy were also likely to engage in the other when necessary. Proactive coping was also positively correlated with Job Freedom, perhaps an indication that where a person has more freedom in their job they also have to be more proactive in dealing with problems.

Table 37: Means, alpha reliabilities and correlations for all scales

	Mean	1	2	3	4	5	6	7	8	9	10
1. Job Satisfaction	5.64	(.86)									
2. Internal Work Motivation	6.22	.47**	(.66)								
3. Pay Satisfaction	4.05	.33**	.17	(.92)							
4. Anxiety-Contentment	3.26	.28**	-.05	.13	(.78)						
5. Depression-Enthusiasm	3.9	.50**	-.01	.07	.60**	(.82)					
6. Proactive Coping	2.95	.18	.03	-.02	.14	.30**	(.84)				
7. Instrumental Support Seeking	2.98	.31**	.20	-.08	.08	.18	.28**	(.88)			
8. Rumination	3.05	-.24*	-.03	.00	-.20	-.27*	-.20	-.06	(.95)		
9. Reflection	3.34	-.053	-.21	.01	.24*	.25*	.10	-.12	.25*	(.89)	
10. Job Freedom	5.29	.34**	.25*	.07	.11	.20	.23*	-.01	-.25*	.20	(.83)
11. (Single item Job Freedom)	5.53	.30**	.13	-.07	.14	.21	.25*	.03	-.15	.25*	.82**

Alpha reliabilities are given in brackets on the diagonal.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

11.7.2   Research Question 3: Improving self-awareness

This study aimed to improve employee self-awareness through participation in one of two workshops, a generic Self-Awareness training and an introductory Enneagram workshop. Effects were measured both short term (1 week) and longer term (4 weeks).

11.7.2.1 Controlling for systematic differences

11.7.2.1.1 Effect of questionnaire on self-awareness

As described in the research design discussion, the act of completing a questionnaire assessing aspects of self-awareness could in itself affect an individual's level of self-awareness. To determine whether this was the case in this sample, a paired-sample t-test was conducted on the first and second completions of the questionnaire in Group 2 (this was the group which completed the questionnaire twice before attending the workshop).

Results indicated that participants' self-attentiveness did not change significantly the second time they completed the questionnaire. The mean difference between Rumination scores on the two questionnaires was 0.15, (t_{32} = 1.74, p > 0.05). The mean difference for Reflection scores on the two questionnaires was 0.07, (t_{32} = 1.11, p > 0.05). It can thus be concluded that completing the questionnaire did not significantly affect the participants' self-awareness and there is no need to control for it in future analyses.

In addition, completing the questionnaire did not significantly affect responses on the other measures (Appendix J). This indicates that any differences found in later analyses are due to the effect of the training rather than to directing respondents' attention towards the concepts these measures assess.

11.7.2.1.2 Differences between groups

Participants on the Enneagram workshops were assigned randomly to two groups which completed the questionnaires at different times. However, it was not possible to assign participants randomly to a type of workshop (that is, Enneagram or Self-Awareness), and this raises the possibility that there may be systematic differences between the people who volunteered for the self-awareness workshop (Group 3) and those who volunteered for the Enneagram workshop (Group 1 and 2).

Categorical demographic variables were analysed using Chi-square tests. Only Industry Sector showed a significant difference between the groups, χ^2 (4) = 20.7, p < 0.001 (non-significant results are reported in Appendix J). This was due to a lower than expected percentage of respondents in Group 3 from the Education sector and a correspondingly higher than expected percentage from the Health Services sector. Additionally, there was a lower than

expected percentage of respondents from Health Services in Group 2. This was due to the different organisations who agreed to take part in the research.

One-way ANOVA was conducted on the three ordinal demographic variables, Age (F $(2, 83) = 1.13$, $p > 0.05$), Job Tenure (F $(2, 80) = 1.51$, $p > 0.05$) and Organisational Tenure (F $(2, 80) = 0.44$, $p > 0.05$) and no significant differences between the groups were found.

To determine whether there were differences between the groups in the "base levels" of responses on the questionnaire measures, one-way ANOVA was conducted to compare the questionnaire 1 results for all three groups (full results in Appendix J). The only significant result was for the Rumination scale (F $(2, 85) = 3.7$, $p < 0.05$). Post-hoc Bonferroni tests revealed that this was due to Group 3 scoring significantly lower on Rumination than Group 2. Given that the only other difference between these two groups was in Industry Sector, it seems possible that respondents from the Health Services were less inclined to Rumination than others.

Overall, there were minimal differences between the two groups and it can be concluded that systematic differences which could interfere with statistical tests are not high.

11.7.2.2 Changes in self-awareness

The research design allows measurement of changes in self-awareness both short-term (1 week after the workshop) and longer-term (4 weeks after the workshop). This means that both the following hypotheses can be assessed over two time periods.

H10a: Training employees in self-awareness techniques will increase their self-awareness.

H10b: Providing self-awareness training tailored to employees' Enneagram personality type will improve self-awareness more than will providing generic training.

11.7.2.2.1 Short-term changes

Self-awareness was measured using the Reflection and Rumination scales. Paired t-tests were run to compare responses on these scales immediately before and after the workshop training to reveal whether self-awareness increased. Groups 1 and 3 completed the first questionnaire just before the workshop, whereas Group 2 completed the second questionnaire at this time. Thus, these questionnaires were combined to provide the pre-workshop level of self-awareness. The comparison group consisted of the second questionnaire for Groups 1 and 3 along with the third questionnaire for Group 2.

For the Enneagram workshop, there were no significant changes in Rumination ($t_{59} = 1.10$, $p > 0.05$) or Reflection levels ($t_{59} = 0.347$, $p > 0.05$). For the Self-Awareness workshop, Rumination did not change ($t_{19} = -0.138$, $p > 0.05$) but Reflection decreased significantly ($t_{19} = 2.159$, $p < 0.05$). This was contrary to expectations, and indicates that the exercises in the

workshop, although designed to improve participants' objective reflection on their lives, seemed to have an inhibitory effect instead.

Overall, hypothesis 10a could not be confirmed and there was no evidence that Enneagram-specific training was any more effective than general training in improving participant self-awareness.

11.7.2.2.2 Long term changes

Due to the research design, only the participants in Groups 1 and 3 had the full set of data necessary to analyse the long-term effects of the workshops. Figure 7 and Figure 8 show the changes in participant self-awareness one and four weeks after the workshop from the data used in the following analysis.
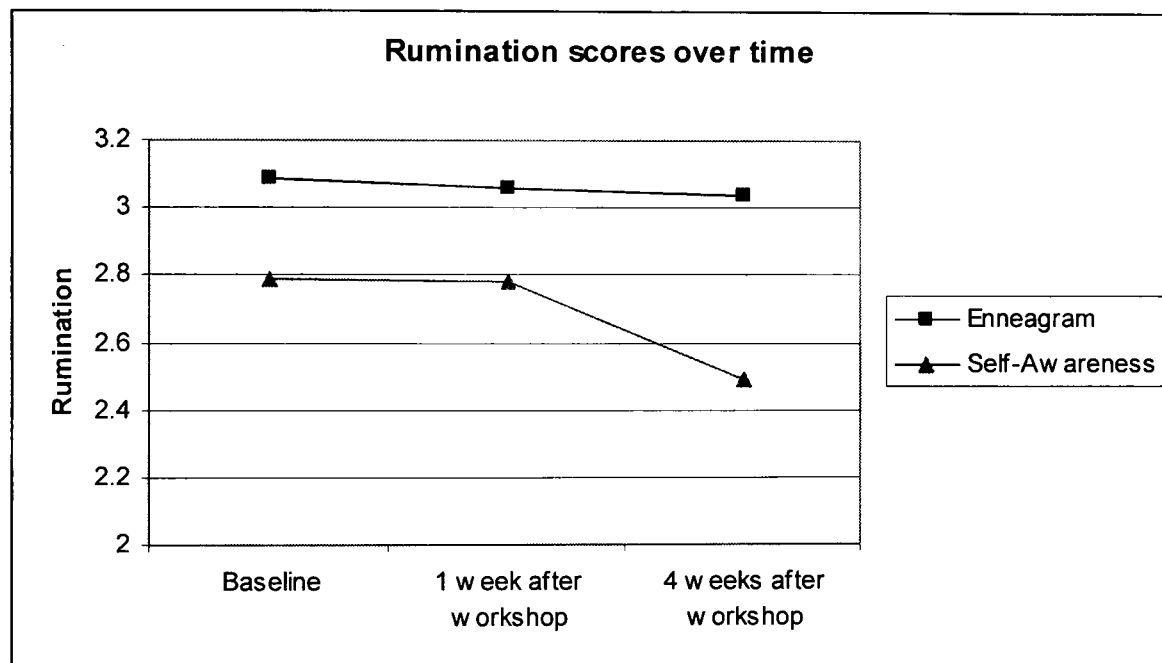
Figure 7: Effect of workshop on Rumination
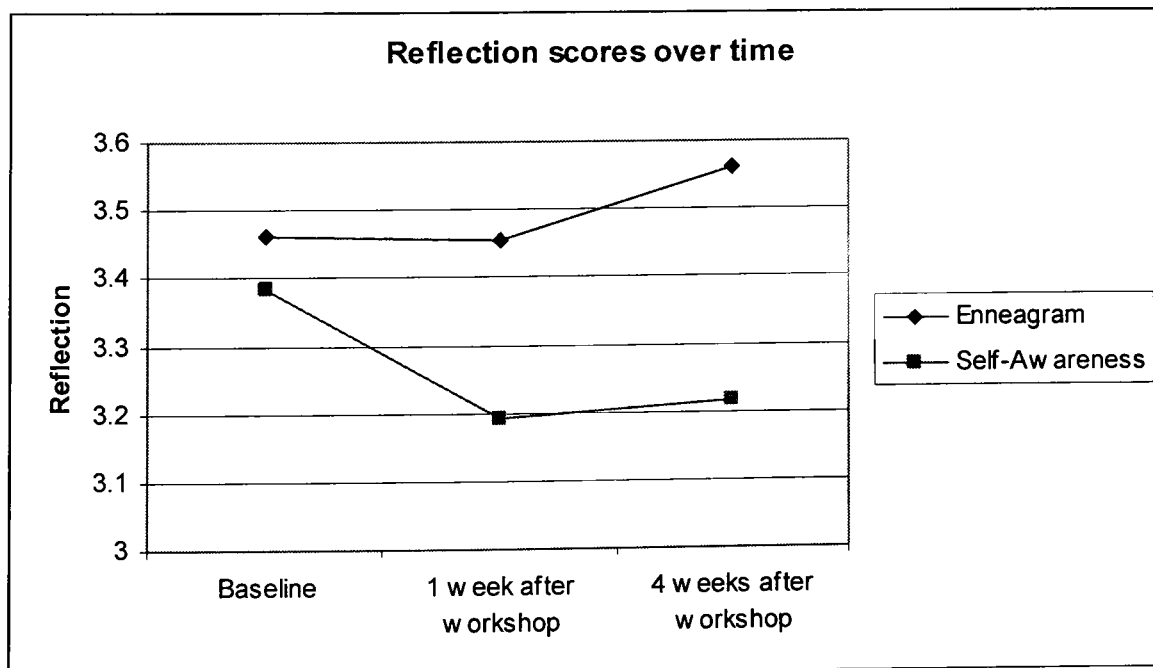
Figure 8: Effect of workshop on Reflection

To analyse the changes in self-attentiveness across the three time-points, MANOVA was used. The between-subjects factor was the type of workshop that participants attended and therefore had two levels: 'Enneagram' or 'Self-Awareness' workshop. The within-subjects factor was Time and had three levels: 'before the workshop', '1 week after' and '4 weeks after'. Because the data came from measures repeated at different times, participants' responses at the three different times are unlikely to be independent of each other. This means that MANOVA is appropriate as it avoids the problems inherent with the violation of the assumption of independence in ANOVA.

The effect of type of workshop was non-significant (F (2, 38) = 1.91, p > 0.05), indicating that in this study, the Enneagram workshop was not demonstrably better or worse than the Self-Awareness workshop in its effects on self-attentiveness. Time was also non-significant (F (4, 36) = 2.29, p > 0.05), and there was no significant interaction of workshop and time F (4, 36) = 1.78, p > 0.05). These results indicate that there is no evidence of a significant effect of the workshops on participants' self-attentiveness over the long-term.

Although the effect did not reach significance, the graphs above show a slight decrease in Rumination at the final time of measurement for participants on both workshops, which was more marked for the Self-Awareness workshop. The initial drop in Reflection for the Self-Awareness workshop participants seems to be returning to base levels by the time of the final measurement. Additionally, there was an increase in Reflection in participants on the Enneagram workshop. Taken together, these results may indicate that a longer measurement time-scale could reveal a more significant long term improvement in self-attentiveness, including both a drop in negative self-attentiveness (Rumination) and an increase in positive self-attentiveness (Reflection).

11.7.2.3 Summary of findings

→ **Research Question 3a: Can self-awareness be improved?**

The results do not support the suggestion that the workshops significantly improve participant self-awareness. The Self-Awareness workshop caused a drop in Reflection immediately after the workshop, though this was returning to base level by the time of the final measurement. There is some indication that a longer time-scale may have resulted in more significant effects, namely a decrease in Rumination and an increase in Reflection. A larger sample size may also have improved the detection of significant differences.

→ **Research Question 3b: Does Enneagram-based training (i.e.: tailored to the individual) improve self-awareness more than generic self-awareness training?**

There was no evidence that a tailored self-awareness training program improved self-awareness more than the generic one. Again, a longer time-scale or greater sample size may have uncovered significant improvements in self-attentiveness.

11.7.3 Research Question 4: What outcomes are related to high self-awareness?

There was a positive correlation between Rumination and Reflection, a finding consistent with the evidence of previous research (Trapnell and Campbell 1999). This is because the two scales assess different aspects of a general tendency to spend time thinking about oneself and one's life: those who engage in reflection are also likely to spend time in rumination.

11.7.3.1 Job Satisfaction

H11a: Reflection will have a positive relationship with Job Satisfaction

H11c: Reflection will have a positive relationship with Job Contentment

H11e: Reflection will have a positive relationship with Job Enthusiasm

Contrary to expectations, the relationship between Reflection and Job Satisfaction was not significantly positive ($r = -0.053$, $p > 0.05$). The relationship between Self-Awareness and Job Satisfaction demonstrated by Luthans and Peterson (2003) used a different measure of self-awareness, namely employee-manager agreement, and it seems that the relationship does not generalise to a dispositional measure of self-awareness as used here. Those managers who rate themselves similarly to how their employees rate them tend to be more satisfied with their jobs, but these results show that it is unlikely to be due to an increased level of Reflection.

The Anxiety-Contentment scale was positively correlated with Reflection ($r = 0.241$, $p < 0.05$), indicating that those who reflect objectively on their lives are also more content in their work. This provides further support for the finding that increased self-awareness is associated with a higher sense of well-being (e.g.: Ownsworth, Desbois et al. 2006).

There was also a significant positive correlation between Depression-Enthusiasm and Reflection ($r = 0.252$, $p < 0.05$), showing that those employees who reflected objectively on their lives were more enthusiastic about their jobs. This echoes the finding above that well-being is associated with Reflection.

H11b: Rumination will have a negative relationship with Job Satisfaction

H11d: Rumination will have a negative relationship with Job Contentment

H11f: Rumination will have a negative relationship with Job Enthusiasm

A significant negative correlation ($r = -0.238$, $p < 0.05$) between Job Satisfaction and Rumination was found. This is likely to be due to the rumination scale partially tapping into negative affect (Watkins and Moulds 2005): as discussed previously, Job Satisfaction is related to affective well-being.

Rumination has been associated with higher levels of depression (Watkins and Moulds 2005) and this finding was supported in these results by the negative correlation between Rumination and Depression-Enthusiasm ($r = 0.5$, $p < 0.01$). However, the hypothesised negative relationship between Rumination and Anxiety-Contentment was not found in this sample. It appears that employees engaging in ruminative self-focus are more likely to be depressed and less likely to be satisfied with their jobs.

11.7.3.2 Internal Work Motivation

H11g: Internal Work Motivation will have a positive relationship with Reflection

H11h: Internal Work Motivation will have a negative relationship with Rumination

Internal Work Motivation did not show the expected relationships with either Reflection ($r = -0.205$, $p > 0.05$) or Rumination ($r = -0.031$, $p > 0.05$). Thus, Wilson and Dunn's (2004) finding that self-awareness was associated with motivation could not be replicated within a specific work setting. As with the Job Satisfaction and Reflection findings, the discrepancy may be due to the measure of self-awareness used in the studies Wilson and Dunn reviewed. Those studies specifically measured the extent to which people held accurate expectations about their performance, rather than the extent to which they were self-attentive as this study did.

11.7.3.3 Coping Behaviours

H11i: Coping behaviours are predicted to improve with Reflection

H11j: Coping behaviours are predicted to decrease as Rumination increases

As the self-awareness training did not have a significant effect on Reflection or Rumination, these two hypotheses could not be directly tested. It is possible, however, to investigate the relationships indirectly. In the first questionnaire, Reflection did not have a significant correlation with either Proactive Coping ($r = 0.104$, $p > 0.05$) or Instrumental Support Seeking ($r = -0.117$, $p > 0.05$) strategies. Rumination also had non-significant relationships with both Proactive Coping ($r = -0.203$, $p > 0.05$) and Instrumental Support Seeking ($r = -0.056$, $p > 0.05$).

However, over time, a negative relationship between Rumination and Proactive Coping strategies did emerge. In the second questionnaire, there was a significant negative correlation between the two scales ($r = -0.255$, $p < 0.05$) and the relationship grew even stronger in the final questionnaire ($r = -0.313$, $p < 0.01$). When the sample was limited to those participants who completed the questionnaires at the same relative time (Groups 1 and 3, completing questionnaire 1 before the workshop and questionnaire 2 and 3 afterwards), the relationship held for the final questionnaire ($r = -0.429$, $p < 0.01$), despite the smaller sample size (N=44).

11.7.3.4 Controls

H11k: Satisfaction with Pay will have no relationship with self-awareness

Neither Reflection ($r = 0.005$, $p > 0.05$) nor Rumination ($r = 0.000$, $p > 0.05$) had a significant correlation with Pay Satisfaction, thereby providing support for this hypothesis.

H11l: Job Freedom will have no relationship with self-awareness

Although there was no significant relationship between Reflection and Job Freedom ($r = 0.197$, $p > 0.05$), Rumination was found to be negatively correlated with this scale ($r = -0.247$, $p < 0.05$). It seems that those people with more freedom in their jobs were less likely to engage in ruminative self-focus. Whether this is because those who engage in less rumination are drawn to jobs with more freedom, or whether those with more freedom in their jobs are less likely to ruminate over their lives remains to be confirmed by further research.

11.7.3.5 Summary of findings

Reflective self-attentiveness was found, as expected, to correlate positively with job-related Enthusiasm and Contentment though not with Job Satisfaction. Ruminative self-attentiveness, on the other hand, was negatively related to Job Satisfaction and Enthusiasm as predicted, but unrelated to Contentment. This indicates that self-awareness has a significant and complex relationship with the three main axes of job-related affective well-being described by Warr (1990).

Contrary to expectations, self-awareness was generally not related to either Internal Work Motivation or Coping Behaviours. The exception to this was the negative correlation between Rumination and Proactive Coping behaviours which became stronger after the workshop.

Finally, the expected null relationships between self-awareness and two other job attitudes, Pay Satisfaction and Job Freedom, were generally confirmed apart from a negative relationship between Rumination and Job Freedom.

11.7.4   Qualitative Analysis

In the final questionnaire, participants were given the opportunity to describe the effect of the workshops on their lives in more detail. Of the 79 participants who completed the final questionnaire, 62 chose to answer this question. Of these, 21 respondents (67% female) were from Group 1, 31 respondents (68% female) from Group 2 and 10 respondents (70% female) from Group 3.

Analysis of the responses to this question allows a deeper investigation of Research Questions 3 and 4, uncovering themes that may not have been assessed in the quantitative analysis and developing a context and better understanding of the statistical findings. The data

were analysed using a combination of analytic induction and content analysis. Content analysis describes data using frequencies while analytic induction uncovers themes and meanings in the data. Themes which emerged from the initial cases were continually refined and developed by comparison with subsequent cases. Responses were coded for the presence of these themes and higher-level categories were then developed from them. When coding was complete, the frequencies of these themes in the responses were counted to provide an overview of the data.

Table 38 shows the themes and higher-order categories that emerged from the data, along with a breakdown of the frequency with which these themes were mentioned in the three different groups. These themes, and any differences between the groups, are discussed in detail below.

Table 38: Effect of the workshop - Themes

Category	Theme	Group 1	Group 2	Group 3	Total
Overall effect	No noticeable effect	7	9	3	19
	Short term negative effects	1	2	0	3
	Generally beneficial	3	6	0	9
Internal / reflective changes	Continuing reflection	5	2	3	10
	Understanding / acceptance of self, reassurance	11	20	4	35
	Understanding / acceptance of others, diversity	7	15	4	26
Specific effects	Confidence	0	2	1	3
	Made active changes	3	5	3	11
	Improved relationships / communication with others	3	0	2	5
	Thoughts about career options / current job	1	3	1	5
Future	Self-development	2	7	0	9

11.7.4.1 Overall Effect

11.7.4.1.1 No effect

Nineteen respondents said that the workshop had had little or no effect on their work lives. Some of the respondents were very clear about this: "I think that the workshop has had very little effect, if any, on my work life" [Participant 56]. Nearly all of these comments were set in the context of having found the workshop interesting and having learned a lot "It was very interesting and I enjoyed learning more about the Enneagram but it has made no difference to my work life" [Participant 7].

Of all the respondents who completed this question, however, only seven (spread evenly across the groups) limited their answer to saying there was little or no effect. The majority went on to talk about how it *had* affected them, despite indicating their belief that there had been no effect. Several explanations for this can be drawn from the data.

As with any learning, it is how a person chooses to use it that determines how effective it is. One respondent wrote that "This has been a relatively calm period at work without any reason for introspection or personal change" [Participant 9]. Another respondent wrote that she had not "really applied it yet to any degree" [Participant 3]. Both of these comments show an awareness that the effect of the workshop is in large part due to how the respondent him- or herself uses the information afterwards. This was very clearly demonstrated in another comment "Not a great deal [of effect]. My colleagues could do with attending such a workshop!" [Participant 8] This comment indicates that the respondent feels his/her colleagues need to change and that attending the workshop could help, but does not recognise any need for changing himself.

Other respondents felt that the timescale had not yet been long enough to notice any effects. "I will continue to think about the Enneagram over the coming months … So maybe it will have a slight long-term influence on my thoughts and behaviour – ask me again in a year!" [Participant 9] "I like to keep an open mind and will see how this recently acquired knowledge develops; I reserve judgement …!" [Participant 27].

11.7.4.1.2 Negative effects

The process of improving self-awareness can have negative side-effects, such as when one is faced with a particular area of weakness that one has been avoiding. Three of the respondents mentioned a short-term negative effect of the workshop on their lives. For example, "Immediately after the workshop I felt very vulnerable, and that was not good for me in the workplace." [Participant 15] These comments were confined to the respondents on the Enneagram course. This could be due to the fact that the Enneagram model specifically describes parts of personality that people often hide from themselves because they feel uncomfortable with them. Bringing these aspects to light can cause discomfort and a feeling of vulnerability. However, respondents indicated that this negative effect was short-lived: "…I am back to my normal optimistic self"[Participant 51].

The possible negative impact of the workshop on some participants had been foreseen and for this reason, all participants were given a handout at the end of the workshop with the contact details of the researcher and the British Psychological Society, encouraging them to contact either if they felt the need to discuss anything further. Two respondents took up this offer with the researcher and their concerns were resolved satisfactorily.

11.7.4.1.3 Generally beneficial

While most comments described specific effects, several indicated that the workshop had had a generally beneficial effect on them and their work lives. "It definitely had a positive effect" [Participant 2] and "I have found it beneficial in all areas of my life" [Participant 23]. These comments were confined to those who took part in the Enneagram workshops. Other comments give an insight into this: "I think this may have useful effects on some of my personal rather than my work relationships" [Participant 22] and "interesting topic of conversation with my wife" [Participant 9]. This may mean that the Enneagram workshop was felt to be beneficial in a broader arena, while the Self-Awareness workshop was limited to work-related effects.

11.7.4.2 Internal / Reflective Changes

11.7.4.2.1 Reflection and Objectivity

The workshops were the trigger for continuing reflection for several respondents "It has helped me be more reflective" [Participant 56] and a challenge to think further: "It has made me think hard..." [Participant 13] "It has challenged me to think..." [Participant 34] The increased reflection was evident even for one respondent who was unconvinced by the Enneagram system "I've been looking more at myself and what I do/ how I react – trying to see how the Enneagram fits with my personality." [Participant 26]

One participant even noted the distinction she had made between objective reflection and negative self-focus: "... alert to the perils of rumination – of which I am occasionally guilty! But less so as a result of the workshop." This parallels the small long-term decrease in rumination that was found for those on the self-awareness workshop.

For some, the workshop gave a framework for reflection and a way of taking a step back to consider the situation objectively: "[The Enneagram has] given me another frame in which to think about my own actions and those of others." [Participant 3] "did appreciate the methods of creating abstraction: using imagery [in the Self-Awareness workshop] ... to aid a deeper evaluation" [Participant 53]. "What has happened is that I have "observed" myself from a distance more, which is encouraging me towards greater self-awareness, which was the purpose of attending the course." [Participant 12]

11.7.4.2.2 Understanding / Acceptance of oneself

By far the most common reported effect was that of improved understanding or acceptance of oneself. Thirty-five respondents mentioned this in their comments. "The workshop gave me more insight into myself." [Participant 1] "It has helped me understand why I tend to do or avoid doing certain things, at least better than before." [Participant 14] "has helped me form some different perspectives about me as a person" [Participant 61].

Part of this understanding involved facing their weaknesses: "I have tried to look at ... what could be construed as my areas of weakness." [Participant 10] "The most useful aspect of the session has been to be 'forced' to look at myself a bit more closely and identify the strengths and weaknesses of the 'type' that I appear to be nearest to." [Participant 22]

Respondents also reported gaining a greater understanding of how they appeared to and interacted with others, and how they could deal with that. "It has also made me think about how others perceive me" [Participant 13], "To be aware of how I come across to others and temper it." [Participant 17] "This helps me avoiding taking the reactions of others personally and will help me deal with others better in the future." [Participant 41]

Several respondents wrote about how the workshop had helped them to accept themselves as they were. "Finally, it has resulted in me taking a more holistic view of my life, recognising ... challenges that I have overcome as success rather than major problems." [Participant 56] "Made me realise the type of person I am and having to learn to accept it, even though there were things that I didn't like." [Participant 19] "It has helped me to stop kicking myself ... accepting that this is me." [Participant 20]

Finally, the understanding and acceptance of themselves that people attained was often described as providing reassurance: "Feel better knowing that I am not the only person who behaves and thinks the way I do." [Participant 43], "It's a relief to know that self-criticism is not something only I suffer from" [Participant 41] and "This has been really reassuring to me." [Participant 49]

11.7.4.2.3 Understanding / acceptance of others

The other major effect that respondents wrote about was how their understanding of colleagues had improved. "I felt that it has given me a greater insight into how others behave at work – and with that perhaps more compassion and acceptance that it's 'just how they are'." [Participant 12]

The Enneagram workshops were felt to be particularly useful in giving participants a "framework to understand the different views that people have of the world" [Participant 14]. Respondents also reported a greater appreciation for this diversity of views "Made me appreciate there is more than one way to look at a work / home situation and not everyone sees the same situation in the same way." [Participant 16] This appreciation of diversity was also reported by respondents on the self-awareness workshop: "It was valuable to see how our differences have made us an excellent team" [Participant 59].

It was important to several respondents that they now had a better understanding of what might be motivating their colleagues: "made me more aware of why some colleagues may behave as they do at work" [Participant 11]; "useful to gain a greater understanding of how that

person is likely to behave" [Participant 12] and "It is also insightful and helpful to understand other personality types and what drives them" [Participant 41].

For several respondents, the workshops had a direct influence on how they worked with their colleagues. One person wrote about how he had moderated his expectations of others to be more realistic [Participant 28]. Another reported that she now gave "others the chance to problem solve" rather than taking charge immediately [Participant 36].

11.7.4.3 Specific effects

Besides the general effects described above, many respondents wrote about specific positive effects the workshop had on them.

11.7.4.3.1 Confidence

Three respondents described an improvement in their confidence or self-image, and the effect of this on their work lives: "It has given me more confidence" [Participant 49] and "It has improved my self-image which has made me more content with my own work situation" [Participant 35].

11.7.4.3.2 Made active changes

While most of the effects of the workshop were described in terms of changes in how participants viewed the world or internal changes, eleven participants wrote about how the workshop had encouraged them to make active changes at work. These changes ranged from how they treated others: "I have also realised that others in the team have vulnerabilities which has helped me to respond in a more effective / empathic way" [Participant 59] and "I try to be more team orientated and not take charge all the time" [Participant 36] to personal changes: "It has made me more assertive in making space for me" [Participant 21]. For others, the workshop enabled them to bring out a part of themselves that had been hidden: "It has brought more to the fore the pragmatic side of me which has always been present" [Participant 28].

11.7.4.3.3 Improved relationships / communication with others

One of the major internal changes that participants reported was an increased understanding of others. This internal change was echoed by a specific improvement in their relationships with others at work, from participants on both workshops. "The atmosphere in our meetings is more harmonious and open" [Participant 38] and "following the workshop I feel we are all interacting a lot better" [Participant 58]. This was seen to be due to both "understand[ing] how I work within a team" [Participant 1] and "improve[d] ... inter-personal communication" [Participant 13].

11.7.4.3.4 Career options

The final specific work-related effect of the workshops was thoughts about the participants' current job. For some, the workshop had opened up new career options: "I have thought about what my own 'type' might mean for my career and may well pursue certain options that were suggested by the model in the future" [Participant 3] and "it also brings into focus possible directions which I can consciously steer my career in" [Participant 35]. Another participant felt that the current job matched his personality traits well [Participant 28], while another, who was in the process of job-hunting, reported that he was now "more determined to find a job that I want to do, rather than feeling I have to take the first or second thing offered to me, or settle for choices that are unsuited to my wants and behaviours" [Participant 56].

While most comments in this theme were positive, focusing on seeing new directions, one participant wrote about recognising how her job stressed her and thinking "about whether I am doing the right job. My weaknesses, which were clarified in the workshop, mean that I am under considerable amounts of stress and worry in my current work" [Participant 34].

11.7.4.4 Self-development

Although the question asked participants to describe any changes they had noticed over the past weeks due to the workshop, several respondents described how they felt the workshop would continue to influence them in the future. These responses focused on self-development, how the participants planned to continue using the knowledge from the workshop to guide their future development.

Responses which included this theme were limited solely to those participants who had attended the Enneagram workshop. While acceptance of self (the major effect described by workshop participants) is an important starting point, the Enneagram personality system encourages further development by describing how people are restricting their own lives. As one participant described it: "The thing I liked about it was that it also includes how one can self develop as that type and how you may appear to others.... I still have to take the time out and really develop further as there are some parts (as with any [type]) of myself that do really need looking at in order for me to become a better person." [Participant 25]

Several specific changes that participants had made were discussed in the context of this continuing self-development and were often related to the Enneagram type they had identified themselves as. For example, a respondent who had identified herself as a Type 4 (who focuses on what is missing from her life) wrote that the workshop had helped her "be more present here and now. Instead of worrying about the things I don't have, enjoy the things I do" [Participant 50]. Another participant, who had identified himself as a Type 1 (perfectionistic) wrote that he now thought harder about whether "the 'perfect' solution to an issue or problem is always the most effective" [Participant 28].

One participant, identifying himself as a Type 5 (who prefers to keep distance between himself and others) reported that attending the workshop had "made me think hard about being rather a loner and whether that is ok, not only for myself but for people who are close to me. I know that having recognised this part of me I sometimes feel I miss out on things especially deeper relationships" [Participant 13]. A participant who had identified herself as a Type 7 (often overly optimistic) found it useful to notice how this aspect of her personality could sabotage her attempts to change: "My optimism that this will all mysteriously happen by itself overnight is not going to help this happen..." [Participant 46].

And finally, another participant wrote "Thinking of myself as a 9/mediator seems to help me worry less about how my actions might affect other people (something I am usually quite extreme in considering) which means I feel a bit more free and not so constrained. And the enneagram book lying by my bed represents some hope for the future" [Participant 47].

11.7.4.5 Summary of findings

→ Research Question 3a: Can self-awareness be improved?

By far the most common theme drawn out of the responses to the open-ended question was that of improvements in the participants' understanding and acceptance of themselves. They spoke about having learnt more about themselves and recognised hidden strengths and weaknesses. This indicates that despite the change in the Reflection / Rumination scales not reaching significance, the majority of participants on these workshops recognised an improvement in their self-awareness.

The answer to Research Question 3a is therefore a qualified yes. It is certainly the experience of the participants on the workshops that they were more aware of how they responded, thought and felt after the workshop. That this difference was not captured by the self-attentiveness scales indicates that more appropriate measures might be needed in future research.

→ Research Question 3b: Does tailored self-awareness training (i.e.: related to an individual's personality) improve self-awareness more than generic self-awareness training?

Although no differences were found between the Enneagram and generic self-awareness workshops in the statistical analysis, this deeper analysis appears to suggest that the two workshops did have differential effects. Most noticeable was that continued self-development was not mentioned by any participants on the self-awareness workshop but was a reasonably common theme among Enneagram participants. The Enneagram workshop was also felt to have farther-reaching effects than the self-awareness workshop, with participants mentioning its beneficial effects on their home lives as well.

While both workshops encouraged understanding and acceptance of others, participants described how the Enneagram had given them a framework for understanding other peoples' points of view which they could apply in many settings.

However, the perceived negative effects of the workshop were also limited to the Enneagram workshop, which caused a minority of participants to feel vulnerable. This underscores the importance of participants being provided with effective follow-up to resolve any concerns.

While it cannot be concluded that one type of workshop improves self-awareness more than another, the Enneagram workshop was certainly experienced as having a wider effect on participants' lives.

→ Research Question 4: What outcomes are related to high self-awareness?

The majority of participants reported an improvement in self-awareness and related it to several outcomes. These were reviewed in detail above and included understanding and acceptance of others, increased confidence, specific active changes, improved communication, reviewing career options and continuing reflection and self-development. The outcomes reported were overwhelmingly positive and reflected a general feeling that the workshops had been worthwhile.

This large array of effects that participants reported as due to improved self-awareness provides a balance to the less encouraging statistical findings. It is clear that improved self-awareness has an impact on people's work lives and future research can focus on these areas.

Chapter 12   Discussion of Study 2

The assumption that self-awareness can be improved, and that this will have a positive impact on the employee's work or relationships with colleagues, is central to many occupational psychology interventions. There are some indications that this assumption may be true, for example providing managers with feedback on their leadership skills can improve their subsequent ratings by subordinates (Atwater, Roush et al. 1995), but there has been relatively little research in this area.

While high self-awareness has been associated with positive outcomes in the general psychological literature (Wilson and Dunn 2004) and in studies of recovery after medical trauma (Anson and Ponsford 2006), little research has been conducted in an occupational setting. This study aimed to address this gap in the literature by attempting to improve self-awareness in the workplace and uncover some of the occupational outcomes associated with it.

12.1   Improving Self-Awareness

Two workshops were designed with the aim of improving employee self-awareness. The first consisted of exercises and discussions designed to enable employees to reflect on their work lives, that is, teaching them generic self-awareness skills and encouraging general self-development. The second workshop introduced employees to the Enneagram personality system and helped them explore some of their hidden strengths and weaknesses. This second workshop provided participants with "tailored" self-development strategies, dependent on their Type. The aim was to find out, first, whether self-awareness could be improved, and, second, whether a tailored workshop was of more use than a generic one.

The statistical analysis suggested that the Enneagram workshop may have had no significant effect on participants' self-awareness, either short- or long-term. The generic Self-Awareness workshop also appeared to have no effect long-term, but unexpectedly caused a decrease in participants' Reflection scores in the short-term. This may perhaps be explained by participants feeling they had "done enough" reflecting during the workshop and were disinclined to continue in the week following. By the time of the final measure of self-awareness, this decrease was no longer significant, meaning that participants' reflection scores were at pre-workshop levels.

While the changes brought about by the workshop were mostly non-significant, there was some indication in the results that the expected changes could have been found with a larger sample size or longer time scale. The Self-Awareness workshop, besides the significant short-term decrease in reflection, also resulted in a slight longer-term decrease in Rumination.

Rumination is associated with depression and ineffective coping, so an intervention which can bring about a long term decrease in this aspect of self-attentiveness could be very valuable for organisations.

Attendance on the Enneagram workshop, on the other hand, resulted in a small increase in participants' Reflection scores. This result, if confirmed by future research, could indicate that providing tailored self-development workshops can improve self-awareness, and hence the positive outcomes associated with it.

The non-significant trends found in the statistical analysis are strongly supported, however, by the qualitative results. Analysis of responses to the open-ended question about the possible effects of the workshop provided a rich source of information about participants' views of the usefulness and effectiveness of the two workshops.

12.1.1　Non-significant statistical results

There may be several reasons why the results did not reach statistical significance. First, the sample sizes may not have been large enough to produce statistically significant changes. Second, the qualitative analysis found that there was a variety of ways participants reported the workshops had affected their lives which, although contributing in many cases to an improvement in self-awareness, were not measured in the questionnaire. Third, the effects were found to be very varied among different participants, depending on their own personality and the situations they felt it most appropriate to apply their new learning in.

Fourth, it is also important to note that the aspect of self-awareness being investigated in this study was dispositional self-awareness, also known as psychological mindedness, which is the extent to which a person reflects on his or her self and life. Some authors have suggested that this dispositional self-awareness could be viewed as a stable personality trait, and therefore not easily changed (Trapnell and Campbell 1999). Self-awareness is a notoriously difficult concept to measure and future research using a more detailed measure, or a variety of measures, could capture the changes in self-awareness that the majority of respondents reported.

12.1.2　Effects of workshops

Only a small minority of participants felt the workshop had had no effect on their work-lives and comments indicated that most of these participants felt that this could change given a longer time-scale or an appropriate opportunity to act on what they had learnt. This provides some support for the suggestion above that significant statistical effects might have been found with a longer timescale.

The most commonly reported effects of the workshop were internal or reflective changes, changes in how the participants viewed themselves and others. Taking part in the

workshops encouraged an increase in reflection and an attempt by participants to take a more objective view of their lives and their relationships. Participants also began to address previously hidden weaknesses and come to a deeper understanding of their actions and personality. The result of this for many people was a feeling of reassurance and acceptance of themselves as they were. The other internal change reported was a greater appreciation and understanding of their colleagues and the diversity of viewpoints and personalities in their work teams.

Several specific effects of the workshops were also reported. One of these was an increase in confidence, which for one respondent at least had improved their feelings about their job. Consideration of possible career options in the light of what they had learnt on the workshop was another effect of the workshop. Some participants also reported that they had made active changes at work, such as becoming more team-oriented. The increased understanding of others that was reported as an internal change was mirrored by improved relationships and communication with colleagues. These specific effects obviously varied from person to person and this could be another reason why the statistical analysis of the effect of the workshops was inconclusive. It seems that improved self-awareness not only has wide-reaching effects but also that these effects vary widely depending on the individual and the current situation.

The comments also highlighted some differences between the two workshops. The Enneagram workshop was reported to have beneficial effects beyond the workplace, with participants describing it as useful in their personal relationships as well. There were no similar comments from the Self-Awareness workshop participants. One explanation for this is that the Self-Awareness workshop was perhaps more focused on the workplace and participants were therefore unable to apply what they had learnt outside that arena. However, as the two workshops were designed to be as comparable as possible, with an equal focus on work, this explanation seems unlikely. Another possible explanation is that the Enneagram workshop, as it gave participants information and insights tailored to their specific personality type, enabled them to use it in whatever situation they found themselves in.

Differences between the workshops also arose in the ways they directed participants' subsequent reflections. The Self-Awareness workshop was reported to be particularly useful in giving participants tools they could use to take a more objective view of things. The Enneagram workshop, on the other hand, gave participants a framework for their reflection on their own and others' actions. As expected, the generic skills training gave participants tools they could use in a variety of ways, while the tailored programme aided their reflections on specific behaviours by themselves or others.

The final difference between the two workshops was also the most pronounced and it focused on how participants felt they would continue to use what they had learnt. Only those

participants on the Enneagram course wrote about self-development, and their comments indicated that they were using the Type-specific knowledge they had gained to make positive changes in their lives. This is the best evidence yet that the tailored self-awareness programme had a more pronounced effect on self-awareness than the generic programme.

In summary, then, the effects of the workshops on self-awareness were not pronounced enough to be clearly evident in statistical analysis but were richly evident in the comments participants made. This is despite the participants not being "led" in any way to focus their answers on self-awareness. In addition, there were differences between the effects of the two workshops, with the generic workshop providing participants with tools to enable greater objectivity and reflection and the tailored workshop encouraging greater self-development and application in home as well as work lives.

12.2   Outcomes associated with high Self-Awareness

12.2.1   Well-being

Warr (1990) draws on the widely accepted circumplex structure of affect (defined in terms of two axes: pleasure and arousal) described in the general affect literature to delineate three axes of work-related affect. The first axis, job satisfaction-dissatisfaction, has been extensively investigated but the other two axes, enthusiasm-depression and contentment-anxiety, have historically been less important. This study investigates the relationship of all three axes to the two types of dispositional self-awareness, Reflection and Rumination. A complex relationship between them was uncovered.

Reflection had a positive correlation with both Job-related Contentment and Job-related Enthusiasm, two of the three well-being axes, but no relationship with Job Satisfaction. Rumination, on the other hand, was negatively correlated with Job Satisfaction and Job-related Enthusiasm. Referring to the original circumplex model (e.g.: Watson, Clark et al. 1988) indicates that Reflection is positively correlated with affect that is high-pleasure and either high or low arousal, while Rumination is positively correlated with low-pleasure and mid- to low-arousal affect (see Figure 9).
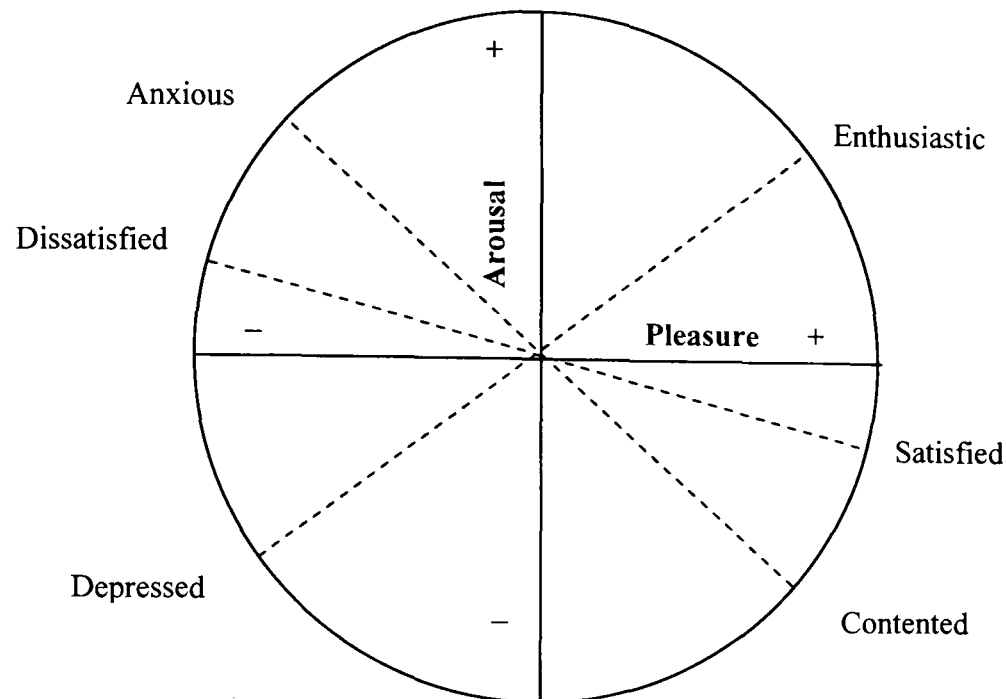
Figure 9: Circumplex model of affect (after Feldman Barrett and Russell, 1998) with Job-related affect scales

The association of Rumination and depressive affect is already well-documented (Watkins and Moulds 2005) and this study provides evidence that the relationship holds true in work-related affect as well. Depressed mood and ruminative thought patterns act as a vicious cycle and are implicated in reduced effectiveness at problem solving. There was some indication in both the quantitative and qualitative analysis that employees on the generic self-awareness workshop showed a drop in rumination in the longer-term. Organisations wishing to improve employees' affective well-being may find that teaching simple self-awareness tools could ultimately lead to improved problem solving by those employees.

The lack of relationship between Reflection and Job Satisfaction is puzzling, given not only previous positive findings (Atwater, Roush et al. 1995), but also the relationship between Reflection and the two other well-being scales. Previous research investigating the relationship has used a very different measure of self-awareness (similarity between self and other ratings) and this could explain why this research did not replicate the findings. There does seem a strong theoretical case for finding a relationship, regardless of method. This sample may well have been unusual for not showing the expected correlation.

However, there was a strong relationship between Reflection and the other two high-pleasure axes, which provides further support for the relationship between self-awareness and well-being reported by Wilson and Dunn (2004) in their review. Further research addressing the high and low poles of arousal on the affective circumplex could help to refine the known relationships between self-awareness and work-related well-being.

12.2.2   Internal Work Motivation

Self-awareness as measured in this study did not show the expected correlations with Internal Work Motivation. Although high self-awareness has been associated with increased motivation (Wilson and Dunn 2004), it seems that this is limited to accurate perceptions of one's performance ability rather than more general self-awareness, or that the relationship simply does not hold true within an occupational setting.

12.2.3   Coping strategies

Research into how people cope after medical trauma indicates that those with a clearer understanding of their limitations are more successful at coping with them (Anson and Ponsford 2006). As the workshops did not produce a significant improvement in self-awareness as measured by the Reflection and Rumination scales, it was not possible to directly test the hypotheses that coping behaviours would increase as individuals' self-awareness did. However, these hypotheses were tested indirectly and it was found that over time, Rumination developed a negative correlation with Proactive Coping. As results indicated that Rumination decreased following the workshop, this indicates that participants may have been engaging in ruminative self-focus less and increasingly choosing effective coping strategies when faced with problems. This is an encouraging beginning to the research on the relationship between self-awareness and coping in the workplace.

12.2.4   Other Effects

The qualitative analysis described several more effects that the workshops had had on participants which had not been measured in the rest of the questionnaire. Participants' responses focused on how their increased knowledge or understanding of themselves and others had impacted on their work lives, thus indicating that they felt the further effects of the workshop were due to an improvement in self-awareness. Further investigation of the outcomes of self-awareness in the workplace, therefore, could focus on the areas uncovered in this study, namely: increased confidence, appreciation of diversity, improved communication and relationships with colleagues, wider understanding of career options, and self-development.

Overall, this research demonstrates an important role for self-awareness in many outcomes of interest to occupational psychology, echoing the centrality of self-awareness in other psychological applications.

12.3 Limitations

Recruiting participants for this study proved difficult and hence the sample size was not large enough to uncover weak relationships between the concepts being studied. The difficulty

with recruitment was partly due to the time commitment involved: both workshops required a substantial investment of time and energy that was not directly related to the participants' jobs. Hopefully, the findings of this study will serve to encourage future potential participants (and their managers) in similar research of the usefulness of attending workshops designed to improve self-awareness.

Attempting to compare two different types of workshop reveals its own drawbacks. While every attempt was made to ensure the workshops were comparable, there will necessarily have been differences in the subject matter and how they were presented that could have unexpected influences on the participants. In addition, there is no guarantee that a different person conducting the same workshop would have the same effect on the participants. For these reasons, caution is recommended in interpreting and generalising the results of the comparisons.

Because volunteers had to be recruited for specific workshops, they could not be allocated randomly to a self-awareness or an Enneagram workshop and there remains the possibility that systematic differences may have interfered with the comparison of these two interventions.

Again, although every attempt was made to ensure that different groups on the same workshop had as similar an experience as possible, the fact that each group contained different people meant that there was necessarily some amount of variance in how the workshop was delivered and received. It is likely that future research conducted on similar lines will find slightly different results. This study is meant as a starting point rather than the definitive answer to the fascinating question of the role of self-awareness in the workplace.

12.4   Implications

Given the sometimes unexpected results found in this study, is it worthwhile for organisations to invest time and money into providing employees with self-awareness training? This question is perhaps wrongly formulated as it is a fact that organisations already invest in this type of training. Wherever employees are given feedback on personality questionnaires, ratings of their leadership attributes or sent on team-building exercises, the assumption is that increasing their awareness of themselves and how they interact with others will improve their work performance in some way. This research was an attempt to investigate the validity of that assumption.

The most commonly reported effects of these workshops were internal changes, changes in how people viewed the world. This may seem unimportant to the business world, but it is well-known that we do not react to an "objective" reality but rather our perception of it. Changing how employees view themselves and those they work with is therefore an incredibly powerful tool in bringing about change in behaviour.

In today's increasingly diverse workplace, a particularly important effect of these workshops must be participants' increased appreciation of colleagues and an increased acceptance of how their differences were natural and useful rather than due to others simply "getting it wrong". Mere tolerance of diversity is very different from active appreciation of it and workshops which encourage participants to reflect on themselves and others have been shown to encourage this appreciation.

This study also provides the first evidence of the effects of introducing the Enneagram to employees in a work setting. The workshop was overwhelmingly positively received and had wide-ranging effects on participants' work-lives. An introductory Enneagram workshop may be particularly appropriate where an organisation wishes to provide employees with a framework for understanding themselves and others, perhaps in team-building, or to encourage self-development.

As with any psychological intervention, it should be used responsibly and with appropriate follow-up, as a few comments from the participants indicated the feelings of vulnerability this workshop stirred up. It can be a difficult thing to face aspects of ourselves we have been avoiding and it is particularly important to remember this in the workplace, where most people wish to retain a good image.

12.5 Summary

In the first study, the usefulness of the Enneagram model of personality in predicting job attitudes was investigated. This second study then went on to examine the effects of an introductory Enneagram workshop on employees' self-awareness and the resulting influence on job attitudes and work lives. While statistically significant effects were few, the qualitative analysis revealed wide ranging effects on employees' approach to work, relationships with colleagues and understanding of themselves.

The discussion now turns towards uniting the findings of both of these studies and reflecting on the implications of this research for practitioners.

Chapter 13 Conclusions and Further Research

This thesis has focused on the Enneagram personality typology both as a model for combining explicit and implicit personality to predict workplace variables and as a tool to investigate self-awareness in the workplace. Several general conclusions can be drawn from these results, which this chapter now discusses. First, the validity of the Enneagram model of personality is reviewed in the light of these studies. The theoretical implications of this research for the typological approach to personality and self-awareness are then discussed. The implications of this research for practitioners (both I/O psycholologists and Enneagram teachers) are also considered and directions for future research are outlined throughout. Finally, the chapter details the limitations of the current research.

13.1 The Enneagram model of personality

When the state of the art in personality theory was reviewed in the opening chapters of this thesis, the three criteria of scientific rigour, comprehensiveness and usefulness were used to assess the various theories. The literature review demonstrated that, although many claims were made for the comprehensiveness and utility of the Enneagram, there was little scientific research to support these claims. On the basis of the current project, some of these claims can be revisited and assessed using the same three-fold criteria as for the other theories.

13.1.1 Scientific Rigour

Kelly (1955) outlined several criteria for a truly "scientific" theory. The first was that a good theory could inspire the production of new ideas; in the case of a scientific theory this would take the form of testable hypotheses. This study developed approximately 90 hypotheses relating the Enneagram types to established personality models and predicting job attitudes, and tested these relationships in a questionnaire study.

The Enneagram describes personality in terms of behavioural traits and motivational reasons, both conscious and unconscious, for these behaviours. These reasons were conceptualised in this research as values (conscious) and motives (unconscious). Although many Enneagram authors describe the nine personality types in terms of this combination of conscious and unconscious aspects of personality, no prior research has tested these assumptions.

The vast majority of the hypotheses generated from the Enneagram model were confirmed, which provides evidence of validity, Kelly's second criterion. The nine types can now be clearly described in terms of established, verified models of three specific aspects of

personality. Detailed, in-depth descriptions of the types, built up using the rich process of narrative methodologies and shared experiences, have been validated using rigorous quantitative approaches.

Finally, Kelly expected that a truly scientific theory in psychology should explain how and why categories were formed, rather than just describe them. While this part of the Enneagram model awaits further research to confirm the details, authors provide explanations for how the nine personality types could have originally formed and continue to reinforce themselves throughout life. These explanations revolve around the concept that the child develops a particular worldview in the early years and this influences future perception so that the worldview seems to be confirmed by experience.

13.1.2   Usefulness

Kurt Lewin claimed that there was nothing so practical as a good theory. This should surely be a criterion when evaluating theories of personality as they apply to the workplace. A really good theory will be one that practitioners can use, that can be easily applied to real life situations. In Study 1, it was shown that Enneagram Type was related to specific job attitudes, perception of stress and self-efficacy. In addition, there were initial indications that people of different types were attracted to different occupations and industries. The Enneagram model can aid practitioners in identifying employees who may benefit from specific interventions to improve their attitude towards work or their ability to deal with stressors. Rather than using a "one size fits all" approach to employee development, practitioners can use the Enneagram model to tailor their interventions to provide individuals with the help and development they really need.

An example workplace intervention was the focus of the second study. Many personality models are used in organisations based on the assumption that making employees more aware of their personality will improve their work and relationships with colleagues. The Enneagram particularly is often taught with the expressed aim of improving people's self-awareness by drawing their attention to unconscious habits and worldviews. Study 2 compared an Enneagram-based and a generalised intervention designed to improve self-awareness. The statistical analysis showed only a slight effect of the workshops on employee self-awareness, but the comments by employees indicated a wide range of positive effects on their work lives. The overwhelming finding was that employees had found both the workshops useful and that, as expected, the Enneagram workshop was felt to give more specific guidance for future development.

13.1.3 Comprehensiveness

A comprehensive theory of personality would have to be able to explain both the differences between people and the coherence within an individual. Investigation of the differences between people necessitates a focus on the variable level, averaging results across many people and losing sight of the individual (the nomothetic approach), while focusing on the person requires a detailed analysis of individual case studies and loses generalisability (the ideographic approach). The nomothetic and ideographic both have advantages and disadvantages when used exclusively but a Type approach provides a level of analysis that can integrate the two (Mandara 2003). The Enneagram typology describes both how people of the same type share an internal structuring of personality as well as how they are different from others.

Study 1 demonstrated that the Enneagram typology can be used to capture important similarities in patterns of personality organisation between people of the same type by describing specific co-occurences of trait scores, value ratings and motive strengths. It also demonstrated clear and significant differences between the types at the variable level, thus providing a fusion of nomothetic and ideographic approaches.

While this thesis has found evidence for the comprehensiveness of the Enneagram model in terms of describing adult personality, it remains to be discovered whether the theorised origins and development of personality can be confirmed.

13.1.4 Summary

Although increasingly popular and used for a wide range of occupational applications, the Enneagram model has had little scientific evidence to support its nine personality types. Previous work by Wagner (1983) had demonstrated links between the Enneagram types and the scales underlying the Myers-Briggs types, beginning the process of validating the model. Several more recent studies (Sharp 1994; Newgent, Parr et al. 2004) have investigated questionnaires designed to identify a person's Enneagram type, but despite some promising results, they have provided little direct evidence of the validity of the model.

This research has contributed towards validating the Enneagram theory of personality according to the three criteria identified in the literature review. There is now further evidence of the theory's scientific rigour, usefulness and comprehensiveness in the field of personality psychology.

13.2 Theoretical implications

Personality researchers have tended to confine their research to a single model which, while aiding simplicity and the definition of specific aspects of personality, has resulted in

separate models for what is really an integrated system of human functioning. Using a typology approach like the Enneagram widens the focus of personality theory to the level of the system rather than the variables.

13.2.1　　The Enneagram as a Typological Approach

The first study demonstrated that the Enneagram Types describe real patterns of personality across three very different aspects of personality. People of the same Type were found to have similar patterns of traits, values and implicit motives, which differed significantly from the rest of the group. In line with Asendorpf's (2002) expectations of the contributions a type approach can make, the Enneagram can provide researchers with a "map" of significant groupings of explicit and implicit personality patterns and perhaps a route towards integrating the over-abundance of personality models that the field currently suffers from.

However, the Enneagram Types cannot be completely summarised in terms of the three models studied here; even from the brief descriptions given in this thesis it is clear that there is much more to each of the Types than can be captured in models of traits, values and motives. Enneagram knowledge includes awareness of the particular struggles that people of each type will face in their lives, recommendations for self-development and much more that is of interest to psychology generally. It is possible that these nine Types represent emergent patterns such as can be found in other areas where dynamic systems concepts are applied (see for e.g.:Scott Kelso 1993). These type patterns have been recognised by observers and students of human behaviour and development over the centuries but, perhaps due to the scientific bias towards reductionism, have not been specifically identified by modern psychology. This typology promises to be a rich field for future research.

One specific area of future research could be on further defining the differences between the types on measures of implicit motives. The Enneagram groups the nine types into three sets of three by the primary "centre of intelligence" used by the type (see section 1.3.3.2). An interesting finding in this study was that the majority of significant relationships found between the Types and implicit motives were confined to the three Feeling or Heart types. A possible explanation is that the style of this questionnaire required respondents to imagine how the person in the picture was feeling or thinking, which could be indirectly influenced by a person's ability to empathise with others. Enneagram authors have related the heart centre of intelligence to the concept of Emotional Intelligence, of which empathy is a part. These findings indicate that more research into this connection could well be rewarding.

13.2.2   The measurement and effect of self-awareness

Self-awareness, as described in detail in the earlier chapters of this thesis, is a complex concept. Measuring it is fraught with difficulties as there is no clear "criterion measure" against which to compare one's results: who can be the best judge of an individual's self-awareness? The second study reported here faced some of these difficulties.

The first difficulty is that any measure of self-awareness necessarily directs a person's attention towards themselves and may thereby induce an increase in the very concept being measured. The research design used here controlled for this possibility and it is strongly recommended that future research use a similar approach.

There is still much discussion over whether self-awareness is a trait-like phenomenon, that is, whether it does not significantly change within an individual, or whether it can be improved by intervention (Trapnell and Campbell 1999). The second study demonstrated that participants on a course designed to improve self-awareness freely reported an increase in the amount they reflected on their lives and interactions with colleagues, but that this change was not found on the self-awareness measure used. This provides some evidence that the Reflection / Rumination measure used here assesses the more trait-like aspects of self-awareness, that is, a person's natural inclination to attend to the self. There is clearly a need for a different type of measure of this important concept, one that is able to capture the difference in self-awareness that participants on the workshop reported. The analysis reported here can provide a starting point for the construction of a new measure that will tap in to the expressions of increased self-awareness that participants reported.

The effects of self-awareness, while studied in the medical and therapeutic arenas, have not been extensively researched in I/O psychology. Given that so many occupational psychology interventions assume that self-awareness can be improved, it is surprising that so little work has been carried out in this area. Having outlined some of the important results reported by participants, this study provides a basis for future research on the effects of self-awareness in the workplace. Given the indications in the findings that effects of self-awareness training may emerge later than the six weeks this research was able to cover, or become stronger over time, investigation of the longer-term effects of self-awareness training promises to be a rewarding area of future study.

13.3 Implications for Practitioners

13.3.1   Occupational Psychologists

The Enneagram typology provides a new tool for I/O psychologists to use in employee development. The adoption of the Enneagram as a personality tool shows some similarities to

the spread of the Myers-Briggs Typology. There was a good deal of resistance among the psychological community to the MBTI when it was first published because it was developed by a mother and daughter team who were not qualified or trained psychologists (Briggs Myers and Myers 1995). The original Indicator was published in the late 1940s but only became widely available in the 1976 catalogue of the Consulting Psychologists' Press (Geyer 1988). In the intervening time, thousands of people had found the Myers-Briggs Typology useful in their day-to-day lives and the MBTI is now the most widely used personality test in the world.

Applied Psychologists must necessarily be cautious in the adoption of new personality models, having an ethical responsibility to ensure they only use validated models that will not adversely affect their clients. The difficulty arises when caution needs to be balanced against the benefits of innovation. The research reported here provides good evidence of the validity of the Enneagram personality typology and its usefulness in the workplace. Hopefully, this can go some way towards addressing psychologists' concerns and caution about this model and encouraging innovative use of a typology which many hundreds of people around the world have found helpful.

A truly reliable and valid questionnaire to identify Enneagram Type has yet to be developed, though there are some steps in that direction (see for e.g.: Newgent, Parr et al. 2004). It is the author's belief that a self-report questionnaire, while perhaps helpful as a type indicator, will never be truly accurate as it cannot assess the unconscious motives and worldviews that lie at the centre of the Enneagram Types. Instead, part of the value of the Enneagram Typology is in guiding people's self-awareness and understanding. The Enneagram is therefore particularly suited to employee development interventions, helping employees to explore their automatic responses and interactions with others. It is clearly unsuitable for selection purposes, not only because finding one's type can be a slow process, but because the typology in no way assesses ability to do particular jobs.

As described in the discussion of Study 1, once an employee's type is known, interventions can be tailored to suit him or her. Employees of different types are likely to face different difficulties or require support in different aspects of their work. For example, dealing with organisational change may be much more difficult for Type 9s, who value stability, than for Type 7s, who enjoy change. Substantial savings can be made for the organisation if only those employees who will benefit from particular training or development programmes are enrolled on them. In addition, by encouraging people to be involved in the identification of their Type, the Enneagram empowers employees to take part in their own development. Once an employee has identified his or her Type, a tailored development plan can be drawn up in consultation with the psychologist or line manager that addresses the particular issues for that Type. Employees who are involved in the process of choosing their development needs are more likely to be committed to the programme.

Besides the possible benefits of adopting the Enneagram typology in the workplace, this research also highlights the usefulness of self-awareness in general to organisations. Giving employees the space to reflect on their lives and training them in tools for improving self-awareness has the potential to greatly improve their work and relationships with colleagues. Reflective practice is already an essential component of many continuing professional development requirements and there is no reason why this should not be equally useful for non-professional employees. Indeed, this research demonstrates that employees in several different occupations and industries benefited from the workshops. Improved teamwork, communication, confidence in and understanding of oneself, and appreciation of diversity were just some of the results of attending these workshops.

13.3.2   Enneagram Practitioners

The focus of Enneagram training programmes has been on equipping participants to use the Typology for their own self-development and teaching others to do the same. The emphasis has been on individuals "testing" the model for themselves, based on whether it helps makes sense of their own lives. There has been little emphasis on evidencing claims using quantitative research. While narrative methodologies are excellent for meaning-making and developing depth of knowledge, they are not appropriate for making generalisations. Unfortunately, Enneagram practitioners have not often been trained to recognise this distinction, and hence make many claims without any evidence to support them. This is most obvious in the plethora of books which claim extensions or developments of the Enneagram based on a single person's unsystematic observations. The lack of commitment to evidence-based practice, or in some cases even resistance to scientific investigation, serves only to undermine the legitimacy of the Enneagram typology. However, for the many practitioners who are personally convinced of the validity of the Enneagram, this research provides further evidence of the generalisability of their observations.

This research outlines the major differences between Types in terms of the other three personality models and can therefore help practitioners to guide people in their discovery of Type. For example, a person who cannot decide between Type 1 and Type 5 may find it useful to know that 5s score lower on Agreeableness. Having clear descriptions of the Types and an awareness of the significant differences between them can provide a structure to what can sometimes be a confusing process of deciding between the Types.

Besides confirming many predictions of how the Enneagram Types relate to other personality models, this research also raises several interesting questions for practitioners and teachers. The relationships between the Enneagram and traits, values and motives describe the "average" person of each Type. Of course, the concept of prototypical rather than categorical types indicates that some people will be less like the typical profile than others. What challenges

do these individuals face? Do they find it more difficult to identify their type? Might they face particular struggles in life or have particular advantages due to not conforming as closely to the typical profile?

Finally, the evidence presented here of the positive impact of attending an Enneagram workshop can be useful to practitioners in marketing themselves to organisations. The list of benefits that participants reported, and the specific benefits of the Enneagram rather than the general self-awareness workshop, can aid Enneagram teachers in convincing potential customers or clients of the usefulness of the workshop in an occupational setting.

13.4   Limitations

Any research has to be assessed on three basic criteria: validity, reliability and the extent to which it can be generalised.

13.4.1   Validity

Throughout this project, concepts of interest were measured using published, validated instruments. Two areas of particular difficulty here, however, were those of the validity of participants' Enneagram Type in Study 1 and the validity of the self-awareness measure chosen for Study 2.

As the process of discovering one's Enneagram Type can be long and there is no outside criterion measure with which to compare it, it is possible that some participants were mistaken in their reported Type. To protect against this possibility, respondents were only recruited if they had attended at least a week-long workshop to identify their Type and had been familiar with the system for at least six months. However, this limitation of the accuracy of Type should be borne in mind and future research is necessary to confirm the findings reported here.

Self-awareness is a notoriously difficult concept to measure and this research necessarily took a limited approach to it. Self-awareness was defined as personal self-attentiveness and assessed with a well-researched instrument that measured both the positive and negative aspects of self-attentiveness. However, this limited definition of self-awareness is likely to be a contributing factor to the low number of significant results found in Study 2. Participants' written reports of improved self-awareness were not captured by the statistical analysis. Using a variety of measures of self-awareness is likely to prove more accurate (Vogt and Randall 2005) and therefore pick up on the changes that participants reported.

13.4.2 Reliability

As with the validity issues, the use of published reliable measures will have addressed this concern as far as possible. Several previous findings about the Enneagram and the Five Factor trait model (Newgent 2001; Brown and Bartram 2005), were replicated in this research despite using different measures. This provides some indication of the reliability of these results. However, clear demonstration of the reliability of this research awaits replication by other researchers.

13.4.3 Generalisability

Although restricting the sample for Study 1 was necessary to address issues of validity, it resulted in a biased, self-selecting sample. Only people who were already interested enough in the Enneagram to have taken part in an intensive workshop were recruited and this may mean that the findings here do not generalise to the population at large. Specifically, this sample was relatively high on self-employed participants and those who worked in the Education sector. Despite this limitation however, the parallels with similar research provide some indication that these findings may generalise to other populations.

Similarly, the participants in Study 2 were self-selecting: although promoted by senior management, none of the workshops were compulsory and so only employees who were interested in self-awareness or personality models would have come forward. It is conceivable that these people already have a higher level of self-awareness than the general population simply due to their interest in this area. Future research could perhaps address this issue by having a control group complete the measures without attending the workshop.

13.5 In conclusion

"Know Thyself"

Inscription on the Temple of the Delphi Oracle

This thesis has provided strong evidence of the validity of the Enneagram personality system, showing that it can be used as a way to bring together findings about both explicit and implicit personality. The use of the patterns of personality described by the Enneagram types can provide researchers and practitioners with a way to integrate models which until now have had little connection with each other. Personality is a complex area of research and investigation of the different aspects of what makes us who we are has resulted in an overwhelming array of different models. This thesis has emphasised the importance of seeing personality as a whole, using an integrative rather than a reductionist approach to understanding ourselves.

Many early psychologists (e.g.: Allport 1955) felt the whole point of their work was to aid people in their self-development and self-awareness. Yet this emphasis on development is often lost in research which concentrates on describing personality as it is now, and appreciation for the value of self-awareness is at a low ebb. This thesis goes someway towards correcting the balance by demonstrating the important and wide-ranging effects of self-awareness in a work setting.

We experience ourselves as integrated wholes and it is perhaps this experience that underlies the success of type models in an applied setting. This thesis has shown that a model exists that not only describes integrated patterns of conscious and unconscious personality, but also provides a guide for self-development. It is perhaps a step further along the road to self-knowledge that the Oracle at Delphi recommended more than 2000 years ago.

Chapter 14   Appendices

14.1   Appendix A – Detailed descriptions of the Enneagram types

These descriptions have been developed from the authors own notes and understanding of the types in combination with the descriptions in books by the following authors: (Daniels and Price 2000), (Goldberg 1999), (Naranjo 1994), (Nathans 2004),(Palmer 1988), (Riso and Hudson 1999), (Salmon 2003), and (Wagner 1996).

14.1.1   Type 1

14.1.1.1 Worldview, Vice and Virtue

Type 1s perceive a world which is judgemental and which punishes bad behaviour and impulses. They believe they can only gain love or acceptance through being good, correcting error and meeting their own high internal standards.

People of Type 1 come to expect to see things in the world that are wrong and direct their attention towards identifying the error so that it can be put right. Of course, not everything can be "put right" and seeing this leads to resentment (the lower mental state) and suppressed anger (the lower emotional state). These become habits of mind and emotion which bias the Type 1's perception even further, a vicious circle.

The path of development for 1s is to learn to accept that they cannot make everything conform to their ideal of perfection (the higher emotional state of serenity) and to learn to see the good that is already present in the world and themselves (higher mental state of perfection).

14.1.1.2 General description

Type 1s tend to block out the emotions they believe are "bad", only expressing them if they think there is good justification. The ruling passion of anger is therefore not openly visible to other people, who will probably only notice the derivatives or indirect expressions of anger. They may appear very polite even when angry underneath. This blocking out of their emotions can make it difficult for Type 1s to know what it is they want.

Their ability to see how good things could be, if only people tried harder, can make them seem overly critical or demanding. Type 1s are ruled by their "shoulds" and "oughts" and can be judgemental, both of themselves and of others, as well as unforgiving when their standards are not met. They get angry and uptight. Type 1s do not compromise easily and can be

seen as strict or overly serious. They are not afraid to challenge people when they believe something is being done incorrectly, and this may be viewed as interference by other people.

Type 1s are the great improvers, directing their effort at making things not only better but perfect. It is this refusal to compromise on what they believe is right that makes the Type 1s such dedicated idealists. They are always ready to stand up for their principles. They value integrity and honesty highly and can devote enormous amounts of effort to reaching their high standards. They are industrious, well-organised and thorough. Very responsible, Type 1s can be relied upon to do what they should and to do it properly. They come across as conscientious, ethical and self-disciplined. However demanding they might seem to others, they are always harder on themselves and never expect something from another that they do not demand of themselves.

14.1.1.3 In the workplace

Type 1 leaders do things by the book and focus on quality. They ensure that everyone knows precisely what he or she is responsible for, although they can have difficult delegating out of fear the work will not be done correctly. This means they often use quite a directive style of control. Very sensitive to those who are trying to improve, Type 1s will support and encourage their subordinates' development. They have a clear vision and know the principled way of achieving it and are excellent at planning and creating structure. They are not, however, free with praise and can seem critical even with reasonably good work.

Decision-making is difficult for Type 1s, who can be torn between what they want to do and what is right. However, they tend to decide on what is for the greater good and what most closely approaches the best way. They may have difficult with group decision making as they already believe they know the right way and can be reluctant to take on new information or reconsider the options.

In the workplace, Type 1s like to have a clear schedule and work within a formal structure, so that they can be sure where each person's responsibilities lie. Type 1s are often practical and detail-conscious, and prefer to avoid risk. They are meticulous and hard-working, and while wanting reward for their effort and competence, they will not think it right to ask for it. This means they can often go unappreciated as they down-play their contributions.

14.1.2   Type 2

14.1.2.1 Worldview, Vice and Virtue

Type 2s see a world in which in order to get, they must give. A person of this type tries to get his personal needs met by giving others what they need and expecting them to give in

return. There is an underlying belief that one can only be loved or accepted if one is needed and depended upon.

Type 2s direct their attention towards identifying other peoples' needs and their effort towards meeting those needs. They use flattery (the lower mental state) to keep people around them feeling good about themselves and attached to the 2. They develop pride (the lower emotional state) in believing that they are best able to give someone what he or she wants, that they are indispensable in that person's life. They can believe that others rely on them but they rely on no one, their resources are unlimited.

Type 2s develop through coming to accept their own boundaries and limits, the higher emotional state termed "humility" in the Enneagram literature. They realise that their resources are not unlimited and that they also need other people. They experience freedom (the higher mental state) from the compulsion to give to people and can both give and receive freely, without expectation of return.

14.1.2.2 General description

Type 2s often define their identity through their relationships with others, sometimes becoming over-involved. Emotions are very important to Type 2s and they are emotionally supportive to those around them, sensitive and empathic. The emphasis on their emotions can make them histrionic or anti-intellectual.

The Type 2s' obsession with giving and being indispensable can make them unwilling to receive from others or admit that they need anything themselves. Giving can become a way to control or manipulate others, and their focus on meeting peoples' needs may be intrusive or smothering. They do not generally like confrontation, as it serves to separate them from other people. The high levels of effort Type 2s put into their relationships can make them jealous, and they like to feel like the most important person in their circle.

On the positive side, Type 2s are very generous and helpful. They are appreciative of and concerned for other people, able to listen and encourage well. Others can experience them as gentle, caring and sympathetic and will value their support. Type 2s are happy to volunteer and make personal sacrifices for other people. They have excellent people skills and are often energetic and exuberant. They can see the value in other people and do not hesitate to express this as compliments or praise.

14.1.2.3 In the workplace

Type 2s have an indirect style of leadership, preferring to be the power behind the throne and to lead by enthusiastic encouragement. Their people skills make them excellent at attracting important people to become involved in whatever project they are working on. They are convenors, bringing all the right people together in the right place to make sure things

happen. Rather than relying on structure, they will develop their subordinates to ensure success; and this success is measured by its impact on people rather than anything else.

In making decisions, Type 2s weigh up the effects of different courses of action on the people who are important to them. They rely on their personal feelings as a guide to the correct choice and will often decide quickly on a "hunch" rather than be swayed by logical argument.

The Type 2s at work are very responsive to approval or praise but can be completely crushed by disapproval and may find it difficult to work with people they do not get on with. They are aware of all the intricacies of office politics and good at developing complex strategies to take advantage of this. They are experts at "managing the boss" and know precisely what to do to make the boss and the organisation look good, which is important to them because they tend to identify with the authorities. The reward they most appreciate at work is respect from the elite and direct acknowledgement of their contribution. Type 2s may need support at the beginning of a project, especially if it involves them taking the spotlight.

14.1.3   Type 3

14.1.3.1 Worldview, Vice and Virtue

Type 3s believe that the world only values people for what they do, rather than who they are. A person of this type believes she can only gain love or acceptance through achievement and success, by avoiding failure.

The attention of Type 3s is directed towards "doing", finding tasks and things to accomplish that will bring respect and approval from others. They develop an image of a successful person and portrays it both to others and themselves, changing who they are to suit whatever situation they find themselves in. This is the lower emotional state of deceit, not being true to oneself and doing whatever is required for success. The lower mental state is vanity[11] in their accomplishments, believing they are solely or mainly responsible for any success around them.

The path of development for Type 3s is honesty (higher emotional state), a truthfulness with themselves and others where their outer image matches the inner self more closely. Their obsession with "doing" can relax into a trust that everything will run smoothly even when they are not working (the higher mental state of hope).

---

[11] Note: Naranjo (1994) reverses this and calls the lower emotional state vanity and the lower mental, deceit.

14.1.3.2 General description

Type 3s seek identity through their role. They are very skilled in image management and good at marketing themselves. They are naturally competitive and success-oriented. oriented towards achievement. Their focus on getting things done makes them pragmatic, efficient and adaptable but this does mean they can overlook other people and the human impact of their actions. They may appear superficial and without contact with deeper emotions.

Because Type 3s are so adaptable to the people around them, they tend to adopt whatever values are currently prevalent. They can misrepresent facts or exaggerate their expertise if it is what they believe is required to get the job done. Type 3s are naturally political and can be seen as scheming or calculating in their attempts to get ahead. They are highly driven and can become workaholics or get lost in their work.

Type 3s are natural leaders, being personable, enthusiastic and self-assured. They focus on solutions and are goal-oriented. Often active and dynamic, they are not afraid of hard work and can easily adjust to new surroundings or requirements. Although they try to avoid failure, if it happens they can turn it into a learning opportunity, determined not to fail again. Type 3s are persistent in pursuing their goals and well-organised.

14.1.3.3 In the workplace

Type 3 leaders are in their natural element. They would prefer to be leaders than followers, and can adapt their style of leadership to suit the group they are with. Their focus on goals and end-results can encourage them to use any means necessary and they may sacrifice quality. They thrive on practical results and will set clear targets and responsibilities, with frequent progress checks, in order to ensure success. Type 3 leaders want their subordinates to take work seriously and believe that the task at hand over-rides any personal concerns.

In making decisions, Type 3s will just get going and not look back. They prefer to keep things simple and to decide on a clear "better" option, with an emphasis on practicality. They are good at searching for a win-win approach but have little patience with detailed analysis.

Type 3s are multitaskers and enjoy fast-moving, stimulating activity at work. They value the output of work, the product, more than the process of getting there. They want challenging but achievable goals, with clear rewards for their effort. For Type 3s, being respected for their ability or competence is more important than being liked. They appreciate frequent and concrete feedback on their performance. With their drive for efficiency, Type 3s can cut corners and take shortcuts where they think it will not be noticed. A job for the Type 3 is best when it is aligned with their longer term career goals.

14.1.4 Type 4

14.1.4.1 Worldview, Vice and Virtue

Type 4s experience a world in which they are missing something that everyone else seems to have, as if they have been abandoned. They believe they can recapture that wished-for connection (love or acceptance) by cultivating a unique or special image.

Type 4s direct their attention towards what is missing rather than what is present. It seems to them that everyone else has what it is they are looking for and envy (the lower emotional state) of what others have becomes the norm for them. Tied to this envy is a lower mental state of melancholy, a sad conviction that they are not "special" enough to deserve what everyone else has.

Development for Type 4s is about learning equanimity (the higher emotional state): a balance of emotions and outside reality, an evenness of temper rather than being overwhelmed by their feelings. The higher mental state is called "origin", a belief that everyone has a deep and complete connection to the world and others. It is being in touch with their real self and feeling whole as they are.

14.1.4.2 General description

Type 4s are aesthetic, attracted to beauty and deep meanings, so that their whole life becomes an art form. They have elite standards and can be impatient with mediocrity and anything they perceive as superficial. They are emotionally intense, feeling and expressing every emotion more intensely than other people, and may appear temperamental. However, they can also be withdrawn, possibly seeming self-absorbed to others. Type 4s have a poor self image, which they try to bolster by appearing unique or special.

It can be difficult for other people to deal the Type 4's constant up and down of emotion, seeing them as moody or overly dramatic. It may look as if they are demanding attention. Their elitist aspirations can make them seem aloof or snobbish. Others can feel that the Type 4 is impossible to please and possibly arrogant. With a generally depressive outlook on life, it is no wonder that 4s can appear pessimistic or even cynical and bitter.

Tyep 4s are empathic, their depth of feeling and sensitivity meaning that they identify well with people who are suffering. They get deeply involved with those close to them and are skilled at getting to the "heart" of the matter. At their best, 4s live in an authentic way, unafraid to go deeply into issues that other might shy away from. Their passion and appreciation of beauty make them very creative artists with romantic ideals.

14.1.4.3 In the workplace

As leaders, Type 4s may look and act very similar to 3s, able to adapt their approach to suit the people around them. The difference is, however, that 4s remain aware that they are putting on an act, whereas 3s believe they are whatever image they are currently portraying. Type 4s are bold, effective leaders in high-risk situations, enjoying the thrill of being on the edge. They make original contributions and like to leave their distinctive mark on projects. They are also very good at bringing compatible people together and lead with the force of their personality, although they can seem unapproachable. They may also have problems if the situation seems to need a compromise with their vision.

Type 4s make decisions by intuition, based on their comparative feelings about the different options. They are likely to trust their own judgement rather than rely on what other people say or what the research seems to indicate. They are especially attracted to creative solutions and may overlook simple answers.

At work, Type 4s like to be recognised as special and can get defensive if they think they have been overlooked or that their efforts are not appreciated. It is more important to them that their point of view is understood than that they necessarily get their own way. They work best if they feel involved in a task and can be very committed to something they see as a worthwhile cause. In teams, they like to have an area in which they are recognised experts, and need to have clear boundaries. It is especially important to 4s to have an outlet for their creativity.

14.1.5   Type 5

14.1.5.1 Worldview, Vice and Virtue

For Type 5s, the world seems invasive. They experience a world which is too demanding and gives too little in return; and come to believe they can gain protection from intrusion by learning self-sufficiency, limiting their own needs, and gaining knowledge.

Type 5s devote their attention to detaching themselves from the world in order to observe it. They hoard their time, energy and knowledge because they fear there is not enough to go round (the lower emotional state of avarice). Along with this, the 5s try to reduce their own needs and maintain the boundaries between themselves and the rest of the world (the lower mental state of stinginess[12]). They observe the world without involving themselves in it, in an effort to be prepared for or avoid its demands.

---

[12] Wagner (1996) uses the keyword "intellectualisation / anonymity" instead of stinginess. This is not a deep difference between authors but more of a surface difference in choice of words. It is about gaining

The path of development for 5s is to replace their detachment from the world with "non-attachment" (higher emotional state). Detachment is a separation of oneself from the world, trying to hoard what 5s believe are limited resources. Non-attachment is an acceptance that there is abundance in the world and it allows feelings and experiences to come and go without trying to cling to them. The higher mental state is called omniscience[13] and is an understanding that is not mediated by the intellect. Knowledge and wisdom come from participation in the world rather than detached observation.

14.1.5.2 General description

Type 5s are very private people. They need to withdraw from contact with others in order to review their feelings and can find it draining to be with others for too long. This habitual withdrawal from the world can make them feel lonely. They are minimalist and conserve their energy and knowledge, which may make others think they are being secretive or aloof. Type 5s like to have precise agreements so that they know clearly what is expected of them. They may find it difficult to change topic quickly and do not like surprises.

Because of their continual detachment from the world, 5s can be seen as unfeeling or uncaring, perhaps coming across as cold and unreachable. They strongly believe the idea of "Knowledge is power" and can be uncommunicative about what they know. When they do communicate, it can seem to others that they are being patronising or pedantic. They may avoid commitments because of the implication that they will have to give resources at some point in the future.

Type 5s are perceptive, their ability to observe the world objectively can give them insights that others don't have. They are usually intellectual and very knowledgeable about their chosen area of expertise. Imaginative and with excellent powers of concentration, they are good at analysing and synthesising information. In a crisis, 5s can be relied upon to remain calm and thoughtfully consider the best way forward. Although well-hidden behind their detachment, 5s are very sensitive and can be privately very passionate about their ideas. It comes naturally to them to keep confidences and their unintrusive kindness is often much appreciated by those close to them.

14.1.5.3 In the workplace

Type 5 leaders are very focused on the job, which can mean they do not pay as much attention as they should to the people. They prefer to lead from behind closed doors and can

---

knowledge of the world by observing it objectively, maintaining the boundaries between self and others, not engaging with things out of fear that they will take too much.

[13] Understanding / transparency by Wagner (1996), but with the same meaning.

seem inaccessible. They are good at delegating to other people and expect subordinates to be independent and not need support. Their control over information is very strong and they only give out what they think is necessary. They hold to the general project outline but are able to adapt to new information to the core idea and be flexible in their approach.

When making decisions, Type 5s remain unemotional and use detached analysis. They rely on logic and a scientific approach and see the use of feelings in decision-making as a loss of control. They need to be given the facts and then enough time to make a considered decision, and dislike being pressured for a response. When they do decide, they are likely to announce the decision without telling anyone how they arrived at it.

At work, Type 5s need predictability in order to be prepared for the demands that will be made on them. They work best when free from interruptions and enjoy difficult projects that require intellectual work. When a project captures their commitment, they are incredibly dedicated. 5s prefer to work intensely on one thing at a time, which can make it difficult for them to shift their attention to something else. Although they find discussions with knowledgeable others useful, they find heated arguments difficult to deal with and avoid conflict. They can see through flattery and like to be rewarded for good work by being given more autonomy or independence.

14.1.6 Type 6

14.1.6.1 Worldview, Vice and Virtue

Type 6s perceive the world as a hazardous and unpredictable place. To gain security and certainty, they try to lessen their fear by being vigilant and always questioning. Appearances are deceptive and Type 6s try to get to the hidden truth.

The lower emotional state of fear runs their lives and their attention is naturally directed towards worst case scenarios in order to prepare themselves for it. Hand-in-hand with this fear is the lower mental state of doubt, a searching for certainty that is never satisfied. Type 6s are always testing everything, convinced that it will turn out worse than it seems or that something will go wrong.

Doubt can be replaced by faith as type 6s develop themselves. They come to have faith that the world can be trustworthy and have faith in themselves and their ability to deal with the world. Their constant questioning of others' motives can develop into faith or trust in others as well. Along with faith goes the courage (higher emotional state) to act on this trust rather than to allow themselves to be held back by fear.

14.1.6.2 General description

Type 6s are on constant alert and their worst-case scenario thinking may make them see problems where they do not exist. However, it gives them a clear head for details and they can point out problems that others might not notice until too late. Naturally wary of change, they are traditional and prefer to stick to the status quo. Ambivalent about authority, they are always looking for trustworthy superiors but unable to stop questioning them.

6s can come across as suspicious of others and constant worriers, perhaps even paranoid. There seem to be two main reactions to the constant anxiety that 6s experience, similar to the fight/flight response. Counterphobic 6s confront what they fear and may appear defiant to authority, while phobic 6s attempt to ingratiate themselves with authority figures in order to avoid possible negative consequences. They will either deliberately break the rules or follow them precisely. They prefer to think than to act and can procrastinate or hesitate out of fear of doing the wrong thing.

At their best, 6s are trustworthy and incredibly loyal to those they trust. They are warm and dutiful team members, self-sacrificing and supportive. They are natural coalition builders, bringing people together to fight the good fight. Champions of the underdog, they are protective of those in their circle. They have many good ideas and are often witty and funny. Type 6s' questioning minds make them excellent devil's advocates and they can bring a useful sense of caution to new ventures. Clear-headed and logical, they can make constructive assessments. Once committed to something, they show perseverance in seeing it through to completion.

14.1.6.3 In the workplace

Type 6 leaders work best when fighting the odds, for example when a business needs to be turned around. If they do not face any opposition, they may begin to procrastinate. A particular difficulty for Type 6 leaders is their ambivalent feelings about being successful: they dislike the exposure it brings them. They are reluctant authorities and may become authoritarian to mask their own doubt. But they are protective of their subordinates and react instantly to any provocation. They prefer to manage by building coalitions and getting people on board than by inspiring their followers. Type 6 leaders are very thoughtful and determined.

When making decisions, 6s use systematic analysis. They make their decisions quickly but then continually question it so others may see them as indecisive. They always look for hidden motives and may focus on small details to the exclusion of the big picture. Like 5s, they need time to think and will resist pressure to make the decision early.

In the workplace, Type 6s work best when they have clear roles and responsibilities. They like to have time to prepare for things and always test what they are told. If there is bad news, they prefer to hear it outright rather than have it withheld. They are excellent team workers, valuing loyalty and teamwork highly, but dislike competition. Although they may

procrastinate when there is no pressure, they are able to focus quickly if they are convinced of something's urgency. They work well when against the odds, but find success difficult to deal with. Type 6s tend to overvalue the power of those in authority over them and react by being very loyal or rebelling. They have strong analytic powers and when they need to collect data will make indirect inquiries, watching people for small clues that could hint at hidden meanings. They value a workplace which is cautious and questioning.

14.1.7   Type 7

14.1.7.1 Worldview, Vice and Virtue

Type 7s experience the world as frustrating, limiting or painful. They believe that frustration and pain should be escaped and that a good life can be assured by looking towards future opportunities and adventures.

Their attention is directed towards identifying options and positive possibilities in order to avoid the frustration of boredom or the pain of the current situation. They develop gluttony (the lower emotional state) for new experiences or fascinating ideas, anything that will "spice" up their lives. The corresponding lower mental state is "planning", devoting their mental energies to imagining and planning for pleasurable opportunities, rather than focusing on the deeper satisfactions of the present.

Type 7s develop through learning to focus on the here-and-now, bringing their attention to single-pointedness (the higher mental state[14]) rather than scattering it over many different options. Connected with this is the higher emotional state of sobriety, moderating the desire for new experiences and learning to live in the present. It is about taking and expending only as much energy as is needed for the situation.

14.1.7.2 General description

Type 7s try to avoid limitation because they experience it as frustration and pain. They are insatiable in their search for the "new" and spontaneous and optimistic in their outlook on life. There is always something better coming and something good to be found in every situation. This means, of course, that they can ignore real problems and try to avoid real difficulties. Type 7s have many different interests and seem very busy and versatile, finding a real joy in new ideas. They have a rich fantasy life and may confuse ideas with actuality, believing that something is already done when they have only thought about it.

---

[14] Commonly referred to as "holy work", it is the idea of being able to concentrate completely on something and see it through to completion without getting distracted. It is in this focus that 7s can find the stimulation they usually try to find in many different options.

Their constant quest for stimulation can make Type 7s seem hedonistic and self-indulgent. Others may perceive them as superficial because they avoid deep feelings or gloss over painful situations. They are difficult to pin down and may appear distracted. They can be irresponsible or inconsistent because of their dislike of commitments. Rebellious and anti-conventional, they rarely respect authority as such but are diplomatic enough to avoid conflict with authority figures as well as other people. They are charming and persuasive but this can be a way of manipulating others to get what they want or to avoid difficult situations arising. They may over-evaluate their abilities or knowledge but can get angry when their ability is questioned.

Type 7s like a challenge, especially experimenting with new ideas, and have high energy levels, especially at the beginning of projects. They are enthusiastic and inventive, imaginative and creative. Big-picture planners, Type 7s are good at conceptual innovation. They can make the best of a bad situation and want to make those around them happy. Friendly and amiable, they like being around people and are often entertaining and lively fun-makers. Their persuasiveness works through inspiring and motivating others to embark on new plans.

14.1.7.3 In the workplace

Type 7 leaders are good at planning a positive future vision which they can communicate to other people enthusiastically. They work best in a fast-paced, quickly changing environment. They can think and act quickly under pressure and gather together different kinds of information into coherent patterns. 7s are better at planning than implementing and are likely to become bored when things are stable. They avoid being accountable and may try to make failure someone else's problem. They are not comfortable with being in authority and prefer to equalise it by empowering their subordinates and flattening hierarchies.

7s may have difficult with decisions because of their wish to avoid responsibility. They also like to keep their options open, avoiding finality. What might seem like a final decision to others may only be the most interesting idea of the moment. They are excellent at brainstorming and coming up with new ideas, but not so good at making the final decision.

Type 7s work best in creative and flexible work environments where there is little formal structure and plenty of opportunity for interaction. They find routine boring and restrictive, preferring to work in intensive sprints. They enjoy work which involves inter-relating and synthesising information and are especially effective in the beginning or planning stages of a project. They are not afraid of reasonable risks and like open-ended agreements. Despite having a positive self-image, they are sensitive to criticism. They are very independent and react badly to hierarchies, although they will work around limitations rather than confront them head on. Acceptance by peers is more important to them than acceptance by authority.

14.1.8 Type 8

14.1.8.1 Worldview, Vice and Virtue

Type 8s see the world as a hard and unjust place where the powerful take advantage of the weak. They try to protect themselves and gain the respect of others by becoming strong and powerful and hiding their own vulnerability.

The attention of Type 8s is naturally directed towards noticing injustices and to situations that need control or assertiveness. When they see these injustices, 8s become fixated on the idea of vengeance (the lower mental state). They see getting even as a way of balancing things out, righting the wrong and maintaining justice. 8s are "larger than life" and do everything to excess. This is the lower emotional state of lust, a thirst for intensity and an excessive appetite for sensory experience[15].

The path of development for 8s centres around relaxing their defences and allowing their innocence (higher emotional state) to emerge. Innocence is about being open to the world without pre-judgements and being satisfied with life as it is. They begin to be able to let go of the rigid, black-and-white thinking that fuels their search for vengeance and accept that the truth can be varied. This appreciation of the complex nature of truth is their higher mental state.

14.1.8.2 General description

Type 8s focus on power and control, especially what they perceive to be abuses of power. They will immediately challenge any injustices they see and are incredibly supportive of the weak or downtrodden. Others are often intimidated by the 8s' all-or-nothing approach to life which allows for no middle ground. Type 8s are often unaware of their impact on other people, not realising that they can seem intimidating and overwhelming. They express their anger with no hesitation and they see conflict as a way of clearing the air and finding out where everyone stands. But once expressed, the anger is gone. 8s believe that the real truth can only come out in a confrontation and it is their way of testing people.

8s find it hard to see any point of view but their own and can become domineering and aggressive. They have a need for high levels of stimulation and may provoke people into conflict just for the sake of it. Naturally confrontational, they see rules as attempts to control them and continually test the limits. They often act first and think later, sometimes focusing on what needs doing now to the exclusion of thinking about the consequences clearly. When faced

---

[15] Not to be confused with the 7's gluttony. 8s want intensity of experience, and the focus is on physical experiences. For 7s it is often enough to imagine things, a mental experience can be just as fulfilling and perhaps more so as it can be manipulated more easily. Also, 7s search for variety of experience rather than intensity.

with untruthfulness or injustice, 8s react very strongly, even to the extent of becoming vindictive and vengeful. Their focus on maintaining a tough image can make them insensitive to others.

Self-confident and decisive, 8s are natural leaders. They swiftly take charge of situations that need it and are fiercely protective of those in their circle. They are hard-working and persistent when they set their minds to something, nothing is deemed a big enough obstacle to stop them. They have a strong sense of justice and are courageous in acting on it, delighting in taking on oppressors. Type 8s are fair and straighforward in their dealings with others, having no hidden agendas. They are exciting people to be around, are magnanimous and friendly and their tough exterior hides a soft heart that they are willing to share with those they trust. They feel they have to find the truth and expose any deceit they encounter.

14.1.8.3 In the workplace

As mentioned above, 8s do not hesitate in taking the lead. They lead by decree in a very autocratic style, centralising power rather than delegating and quickly dealing with any challenges to their authority. While this can turn into a dictatorial approach, it is also excellently suited to unstable environments, when a strong leader is needed who can be direct and assertive and take charge. 8s are able to calculate damage in real terms rather than damage to personal egos. They are good at leading in competitive situations or crises, but can become bored with daily management. If this happens, they are likely to blow a trivial incident out of all proportion to get the energy of a crisis back. Although they are sparing with compliments or praise for subordinates, they are very protective of those they see as under their authority and will not try to shirk responsibility.

Type 8s make decisions by "gut instinct" and have little patience for detailed analysis or consideration of the negative consequences. They may find it difficult to discuss a decision with others or to take on different opinions and may make unilateral decisions without consultation. A strong consideration for 8s making decisions is their awareness of what would be just or fair. They also seek out challenges, so may deliberately avoid the easy option.

At work, Type 8s like high risk situations which demand engagement. They are energised by difficulties and like to have a visible impact. A sure way to motivate 8s is to tell them they cannot do something. They like clarity at work, ambiguity is anathema to them and may be seen as a deliberate attempt to be deceptive. Type 8s have a concern about being manipulated. They may become the spokesperson for a dissatisfied group and be seen as a troublemaker. Because they always want to know what people think or feel about an issue, they can provoke conflict and possibly even polarise opinion. It is very important to 8s to feel they are receiving a fair reward for their time and labour.

14.1.9   Type 9

14.1.9.1 Worldview, Vice and Virtue

Type 9s believe the world considers them unimportant. They try to gain a sense of belonging blending in with everyone else, focusing on other peoples' opinions or wants to the exclusion of their own.

Their attention is directed towards what other people want from them, their claims on the 9s. Constant focus on what other people want from them makes the 9s unable to recognise or act on their own priorities or opinions (the lower mental state of self-forgetting or indolence). Along with this goes the lower emotional state of sloth or laziness[16]. This does not mean that 9s do not do anything, but rather that they do nothing for themselves and try to keep life comfortable by doing the easy things and pleasing others.

The path of development for 9s is to recognise that they belong equally in the world, that their priorities are just as valid as those of other people. This is the higher mental state of love, an unconditional acceptance of themselves and the world. From allowing their own needs to become important, 9s can move into right action (the higher emotional state). It is also called "zeal", caring enough about what needs to be done to do it.

14.1.9.2 General description

Type 9s' main concern is with avoiding conflict and maintaining the comfortable feeling of neutrality. This means they tend to go along with others and replace the things that really matter to them with things that will not cause conflict with others. Easygoing, agreeable and self-effacing, they find it difficult to say no or do anything that would separate themselves from others. They are more comfortable with the predictable and familiar and like to have enough time to reflect and consider things. It may be difficult to get 9s moving, but once they do they can be unstoppable.

Because 9s find it difficult to confront others, they may outwardly agree but exert control by becoming stubborn or obstinate. They can be easily distracted from work and procrastinate the harder tasks by doing easier ones first. This can make them seem lazy or apathetic. Their adaptation to others may cause them to neglect themselves. Disregarding their own desires leads to problems with engaging with people around them or the world in general, appearing unresponsive. They tend to disengage in order to be able to accommodate themselves to others' wishes. Type 9s appear to have low energy, and others may perceive them as boring or tedious.

---

[16] Wagner calls the lower mental "resignation" and the lower emotional "indolence", but his description of indolence is the same as the other authors' sloth or laziness.

However, their attentiveness to others makes them empathic and supportive. They are non-judgemental, accepting and caring, a steadying, calming influence on those in a crisis. Type 9s are excellent peace-makers and diplomats, able to find middle ground between opposing factions and to appreciate both sides of an argument. They have the ability to tolerate what might appear to be paradoxes or contradictions. Friendly, reliable and easy-going, they are easy to be around and respond warmly to others. Type 9s are consistent in their commitments, modest and unostentatious.

14.1.9.3 In the workplace

As leaders, Type 9s are good at routine implementation and can be relied upon over the longer term. They have a participatory style, wanting to include everyone and share the credit for success. It comes easily to them to delegate to others and they come up with systematic solutions which allow everyone to participate. They have unifying visions and global goals, being less interested in the specifics. However, they tend to evade conflict and are reactive rather than proactive.

9s take their time with decisions, wanting to be sure they have considered all the possible options and angles. They will wait until they have a complete decision before expressing it to anyone, so others may be taken by surprise as they have had no notion that the process was taking place. Type 9s may feel they have to justify themselves extensively and include more than just the salient points. They much prefer to mediate a solution between other people than try to make one themselves. When they do decide, they prefer tried and tested solutions to new ones and find it easier to eliminate what they do not want than choose what they do.

Above all, 9s want a harmonious workplace, ideally with consensus and minimal conflict. They work well in stable and predictable environments and do not like surprises or take risks. They work well on "automatic" and are creatures of habit. They are excellent team players, very supportive of others and appreciative of their inputs. Type 9s are motivated by other peoples' enthusiasm and work well within a fair structure.

14.2 Appendix B - Preliminary Research

14.2.1 Method

The original hypothesised relationships between the Enneagram types and the other three models were developed from the author's understanding of the types (from professional training and related reading). It is possible however that important relationships had been missed or that the author's understanding of types differed substantially from that of other Enneagram practitioners. To address this problem, a small-scale piece of research was conducted with Enneagram-knowledgeable respondents.

A questionnaire was constructed which gave respondents a brief introduction to the aims of the study and an overview of the Five Factor, Universal Values and Implicit Motives models. They were asked to indicate what relationships they would expect to see between each Enneagram type and each model, based on their own understanding of the type. This was done blind for the author's hypotheses. Space was provided for comments at the end.

14.2.2 Results

The questionnaire was emailed to 15 qualified Enneagram teachers who had expressed an interest in the research. Eight responses were received. Respondents had experience of working with the Enneagram for between 5 and 22 years.

As the study was very small scale, no statistical analyses were performed. Agreement with the original hypotheses was taken as more than half of the respondents agreeing. A brief overview of the results follows:

Five Factor Model: Altogether, there were 45 items (9 types with 5 traits each) in this section. There was disagreement between respondents and the original hypotheses on only 15 of them. After considering the probable reasons for these differences (for example due to respondents' incomplete understanding of the Five Factor Model) and the extent of agreement among the respondents, the author altered five hypotheses.

Values: In this section, there was agreement on all of the hypotheses (15 in total). Responses highlighted the need to include four further links not addressed in the original hypotheses. The good level of agreement between respondents about what values each type is likely to feel are important is promising for the future research. This model apparently captures an important part of Enneagram theory.

Motives: This section, like the values, showed very good agreement between respondents and the original hypotheses. Respondents did not disagree with any of the hypotheses but there was variation in how strong a relationship they expected to see. In

addition, they suggested four further relationships that have now been included. This good agreement is an early indication that the implicit motives model may describe important parts of the type make-up.

As the main research project developed, these inital hypotheses were adapted somewhat to enable statistical tests of the results. For example, respondents were asked to choose between 0 and 3 values they believed to be important to each Type. This had to be changed so that hypotheses compared the score of the individual Type to the rest of the group.

14.2.3   Discussion

The preliminary research was a valuable exercise in finding some initial confirmation that the research will be able to capture important relationships between explicit and implicit personality models when related to Enneagram Type. The good levels of agreement between the author's predictions and the other qualified teachers' predictions provided a useful check for the author's understanding of the Enneagram types.

14.3 Appendix C - Questionnaire structure Factor Analysis

14.3.1 Five Factor Model Analysis

Five factors were extracted using principal component analysis, explaining a total of 45.6% of the variance. All factors had an eigenvalue greater than 1. The table below shows factor loadings for each item. The highest loading for each item is highlighted in yellow and any loadings higher than 0.3 on unexpected factors are highlighted in green.

Table 39: Factor loadings of 50 Five Factor Model items on each of the Components

Item no.	Component				
	1	2	3	4	5
Extraversion 1	.696	-.002	.077	-.049	.121
Agreeableness 1	.272	.115	.604	-.002	.007
Conscientiousness 1	-.049	.030	.029	.630	-.202
Emotional Stability 1	-.013	.710	-.073	.109	-.024
Openness to Experience 1	.211	.107	.006	.142	.455
Extraversion 2	.698	-.031	-.027	-.092	.111
Agreeableness 2	-.009	-.038	.577	-.006	.044
Conscientiousness 2	.037	.410	-.026	.286	.060
Emotional Stability 2	.068	.753	-.041	.031	.020
Openness to Experience 2	.235	.054	.082	-.061	.575
Extraversion 3	.732	.062	.245	.043	.104
Agreeableness 3	.199	.092	.662	.043	-.033
Conscientiousness 3	-.012	.117	.022	.639	.061
Emotional Stability 3	.080	.665	-.048	.075	-.084
Openness to Experience 3	.138	.063	.106	-.082	.599
Extraversion 4	.747	.080	.036	-.052	.134
Agreeableness 4	-.207	.358	.392	.048	.156
Conscientiousness 4	-.094	.196	-.061	.611	-.033
Emotional Stability 4	-.020	.770	.002	.203	.037
Openness to Experience 4	.087	-.076	.061	.154	.581
Extraversion 5	.565	.354	.404	-.006	.020
Agreeableness 5	.014	-.090	.679	-.002	.038
Conscientiousness 5	-.061	-.146	.081	.643	.113
Emotional Stability 5	.129	.636	.011	.025	-.078
Openness to Experience 5	.092	-.198	-.092	.063	.476
Extraversion 6	.719	.040	.147	.016	.165

Item no.	Component				
	1	2	3	4	5
Agreeableness 6	.066	.033	.660	.049	-.013
Conscientiousness 6	-.024	.083	-.056	.684	-.042
Emotional Stability 6	.017	.557	.148	-.245	-.098
Openness to Experience 6	-.140	.009	-.078	-.120	.623
Extraversion 7	.691	.093	.120	-.048	.005
Agreeableness 7	.018	-.225	.658	-.049	.040
Conscientiousness 7	-.171	-.160	.063	.573	.066
Emotional Stability 7	.113	.729	-.068	-.027	-.008
Openness to Experience 7	-.392	-.135	.183	.039	.388
Extraversion 8	.563	.045	.206	.012	.304
Agreeableness 8	.164	.022	.636	.073	.048
Conscientiousness 8	.061	.222	.137	.427	.118
Emotional Stability 8	.205	.575	-.055	-.105	-.052
Openness to Experience 8	.145	.005	.051	.052	.619
Extraversion 9	.713	.059	-.028	-.083	.134
Agreeableness 9	-.110	-.135	.733	.015	.014
Conscientiousness 9	-.117	-.118	.041	.677	-.061
Emotional Stability 9	-.073	.644	.095	-.091	.030
Openness to Experience 9	.013	.009	-.124	-.095	.658
Extraversion 10	.685	.109	-.009	-.051	.026
Agreeableness 10	.385	.128	.557	.000	-.060
Conscientiousness 10	.145	.070	-.063	.653	-.141
Emotional Stability 10	.169	.727	-.033	.131	.002
Openness to Experience 10	.132	-.095	.105	-.168	.578

14.3.2   Motives Analysis

Principal components analysis (with varimax rotation) was conducted and the two main components explained 50.8% of the variance. Factor loadings are shown below (highest loading of each factor highlighted). Both factors had an eigenvalue greater than 1.

Table 40: Rotated Component Matrix – 2 component solution

	Component 1	Component 2
HS1	-.003	.820
HS2	.077	.729
FF1	.753	.151
FF2	.654	.221
HA1	.001	.689
HA2	.313	.466
FR1	.759	.031
FR2	.832	.015
HP1	.267	.608
HP2	.184	.674
FP1	.578	.342
FP2	.615	.070

The factor analysis was repeated, extracting 6 factors which explained 76% of the variance, loadings below. However, only the first two factors had an eigenvalue greater than 1.

Table 41: Rotated Component Matrix – 6 Factor solution

	Component 1	2	3	4	5	6
HS1	-.018	.755	.319	.084	.148	.197
HS2	.146	.880	.120	.063	.006	.098
FF1	.753	-.026	.139	.208	.094	.182
FF2	.796	.132	.131	.024	-.070	.199
HA1	.077	.386	.064	-.038	.252	.781
HA2	.170	.118	.191	.020	.873	.198
FR1	.707	.133	-.001	.217	.238	-.282
FR2	.651	-.029	.026	.401	.376	-.171
HP1	.272	.222	.810	-.120	.197	-.020
HP2	-.038	.324	.682	.387	.066	.148
FP1	.382	.001	.354	.554	-.045	.366
FP2	.266	.114	-.009	.814	.036	-.095

14.4   Appendix D – Comparison of Enneagram Types on each personality scale

On the following graphs, the 0 on the Y-axis represents the overall group mean and the bars represent the score for each Type.

14.4.1   Five Factor Model

Agreeableness

Extraversion

Conscientiousness

Emotional Stability

Openness to Experience

14.4.2 Values

Universalism

Benevolence

Conformity

Tradition

Stimulation

Self-direction

14.4.3 Implicit Motives

Need for Affiliation

Need for Achievement

Need for Power
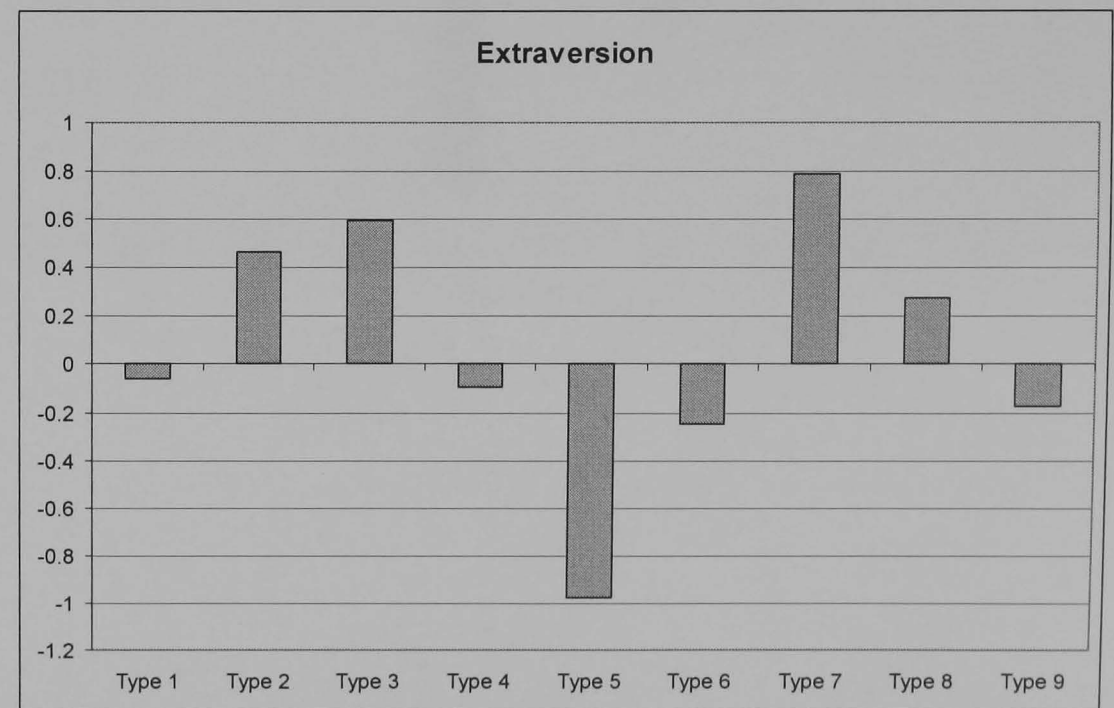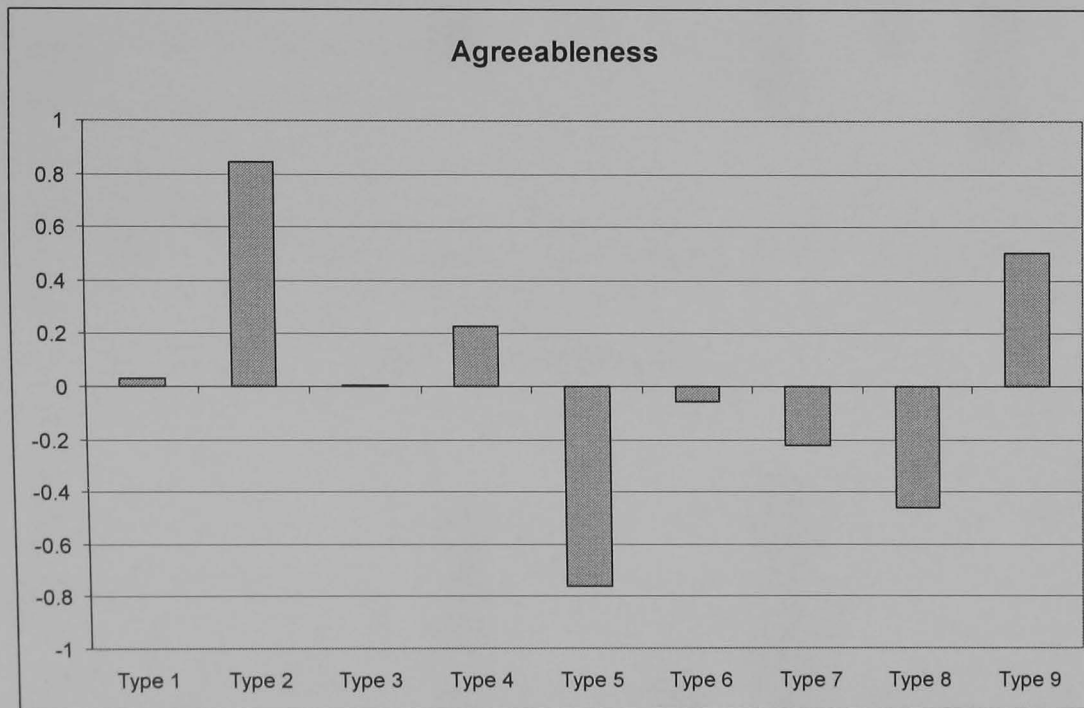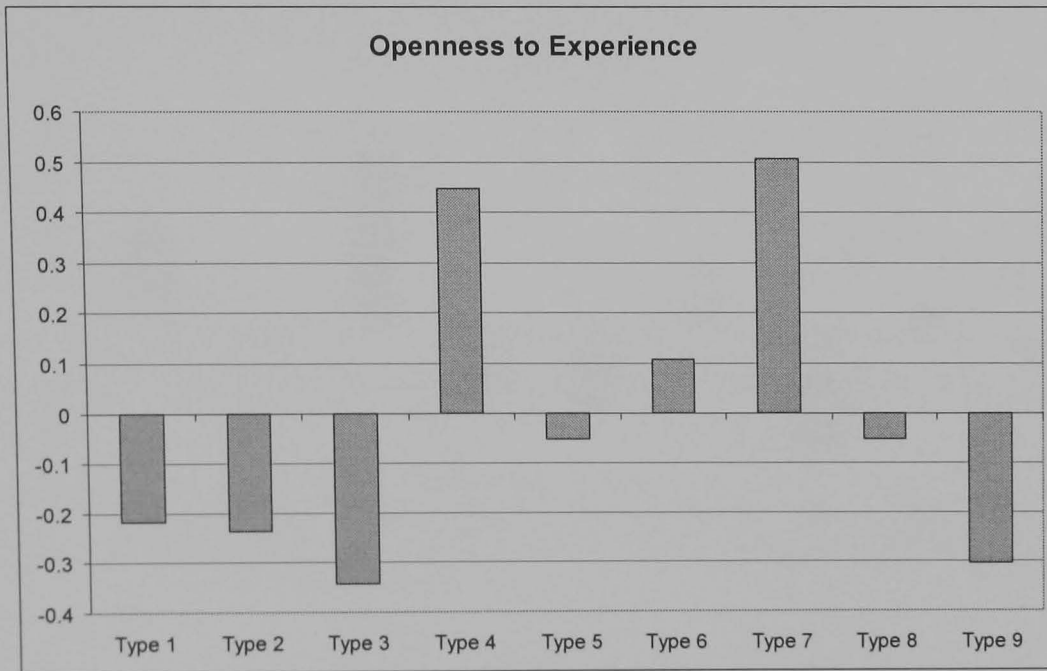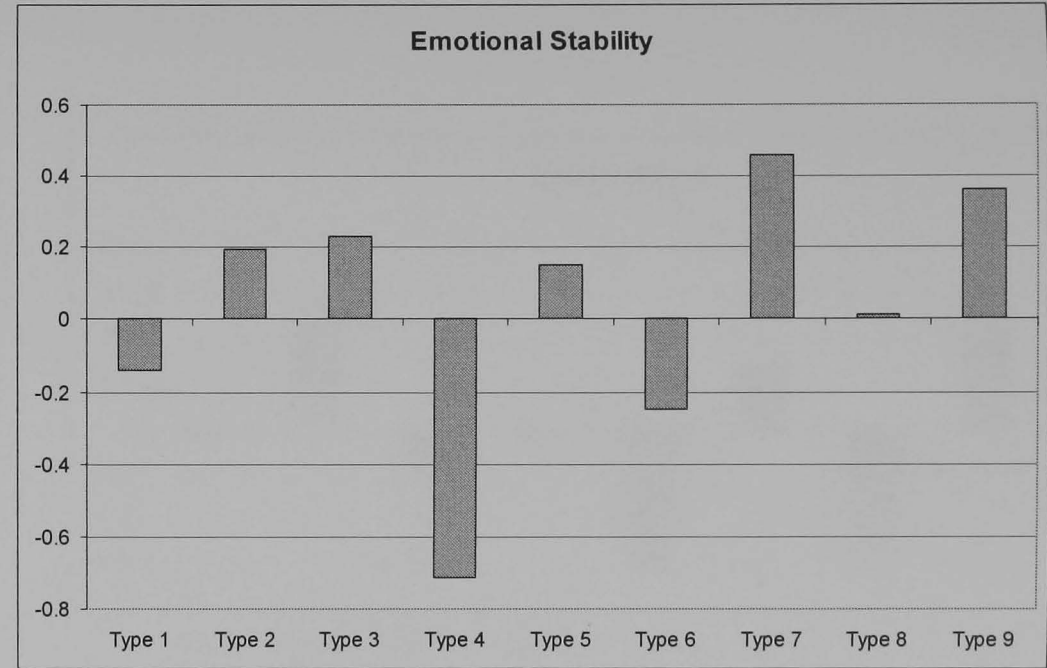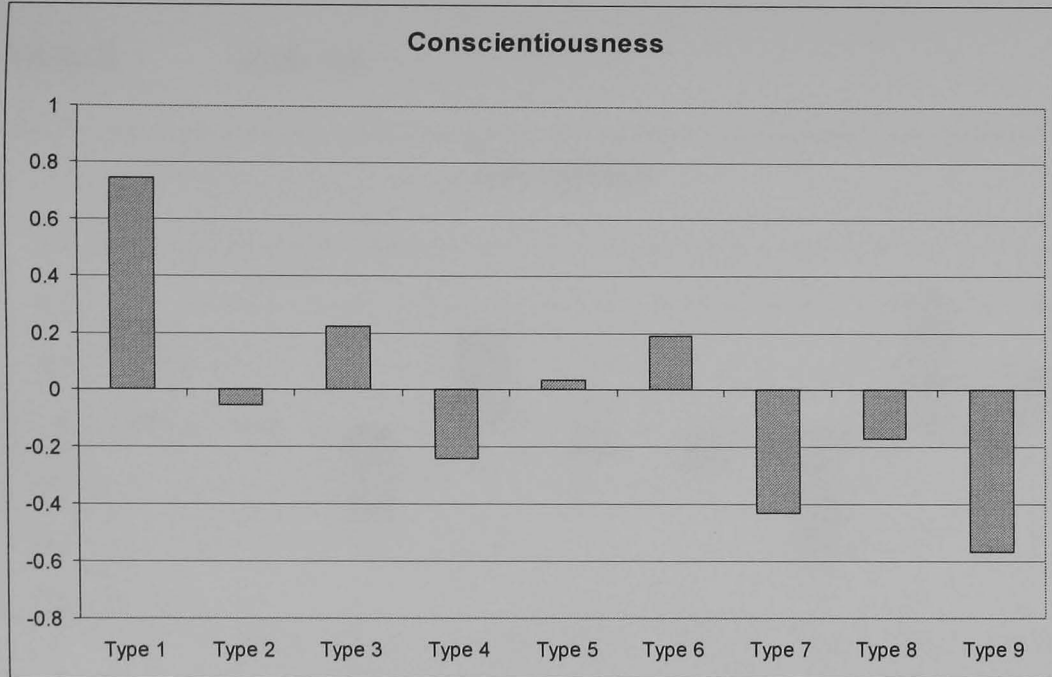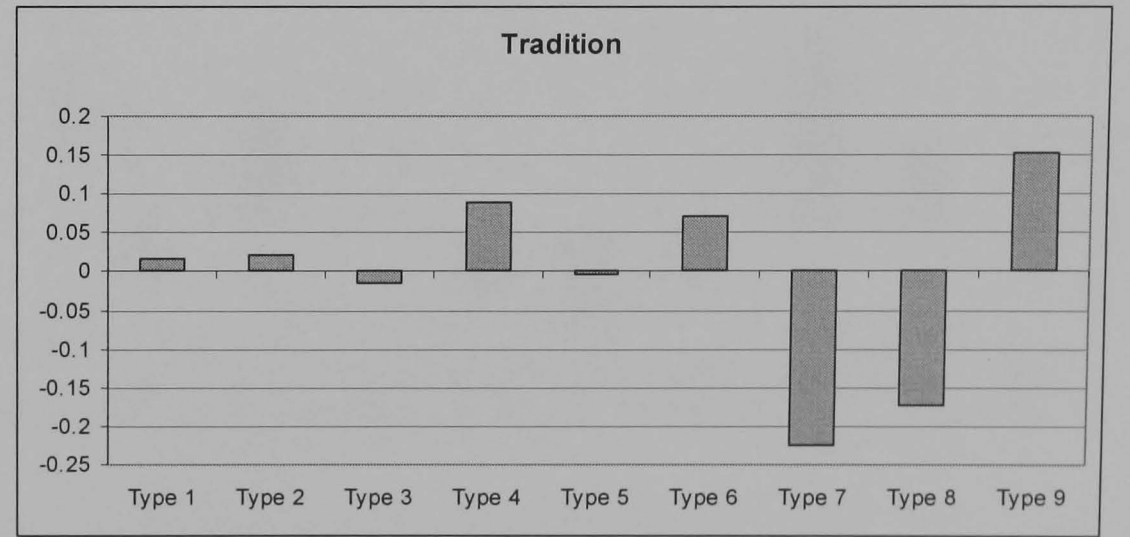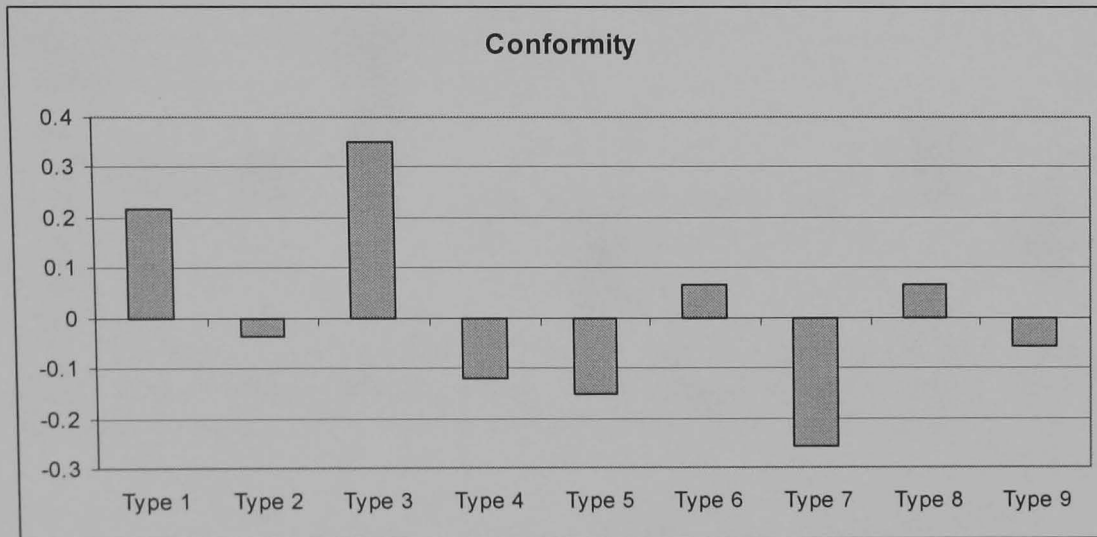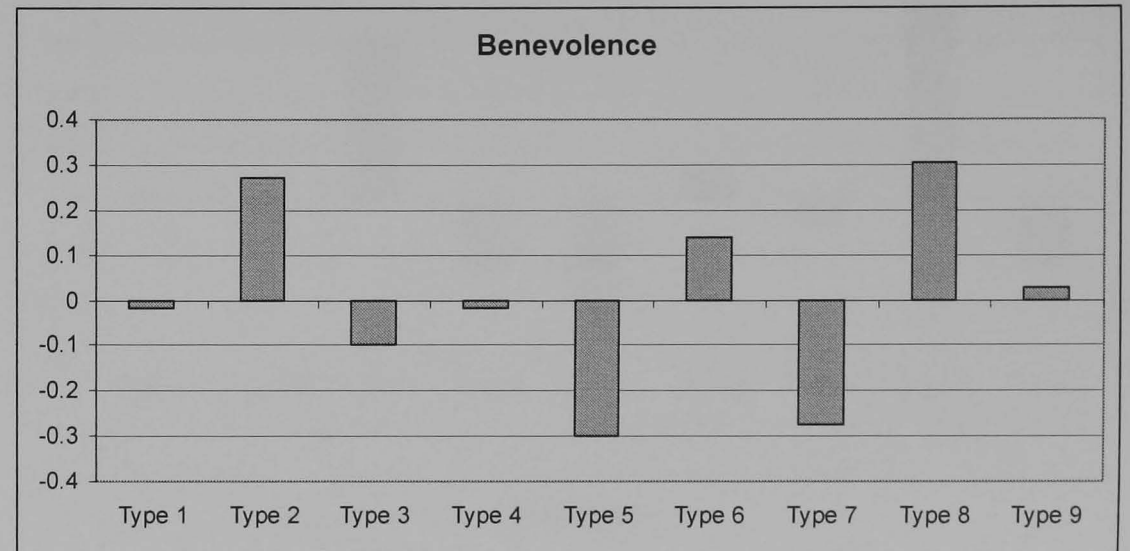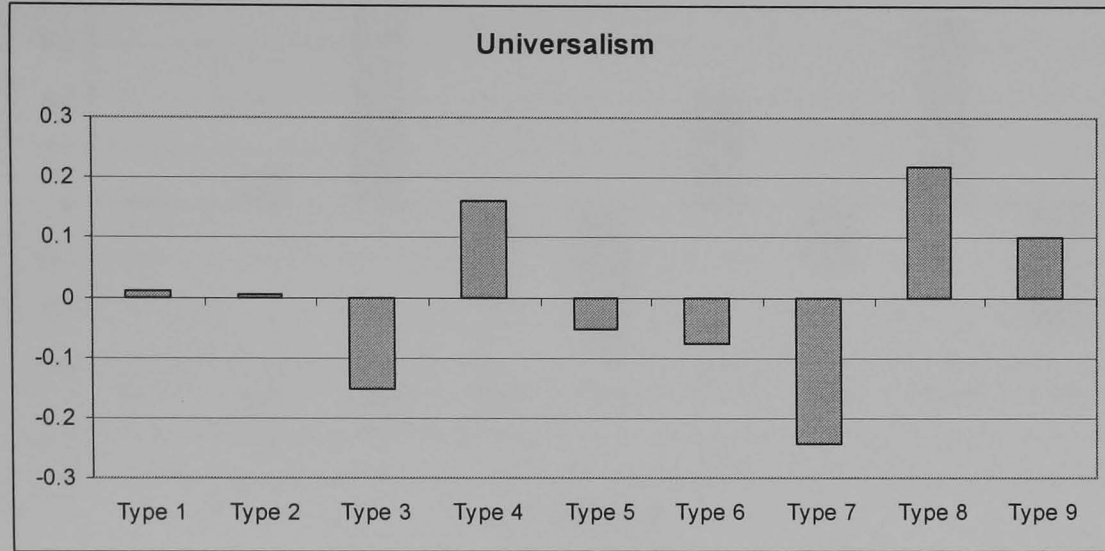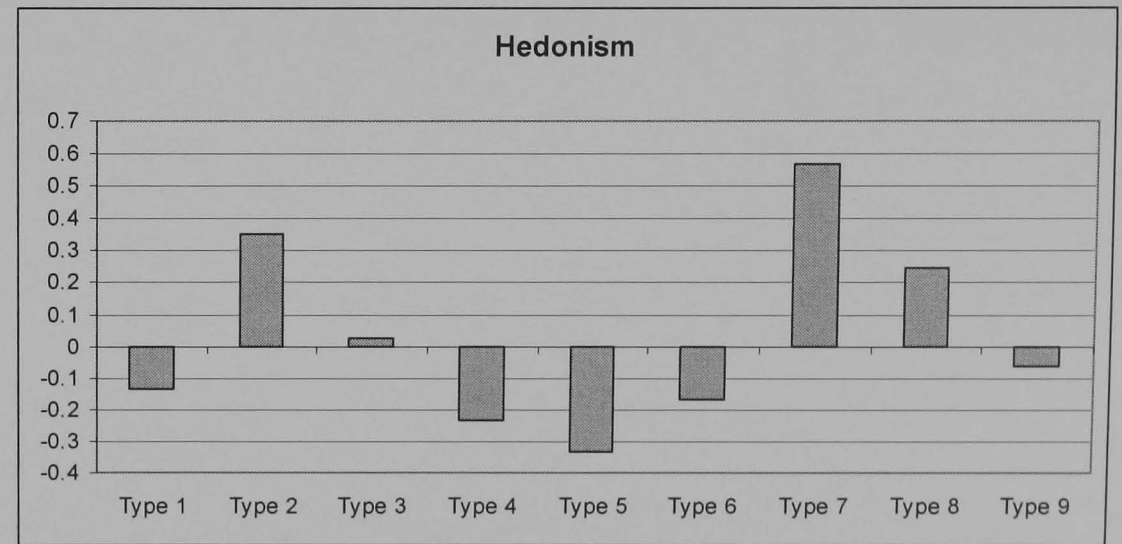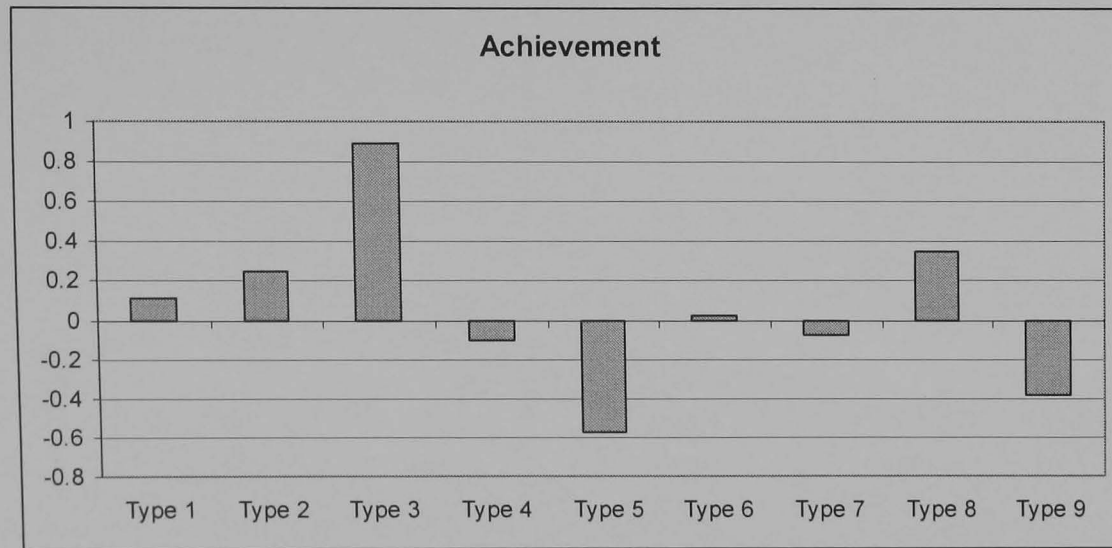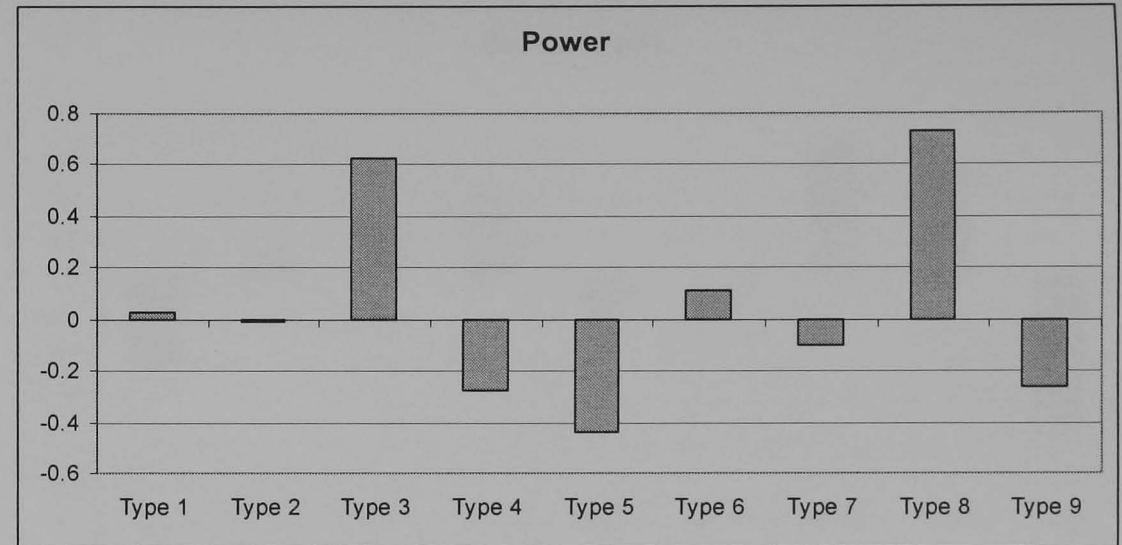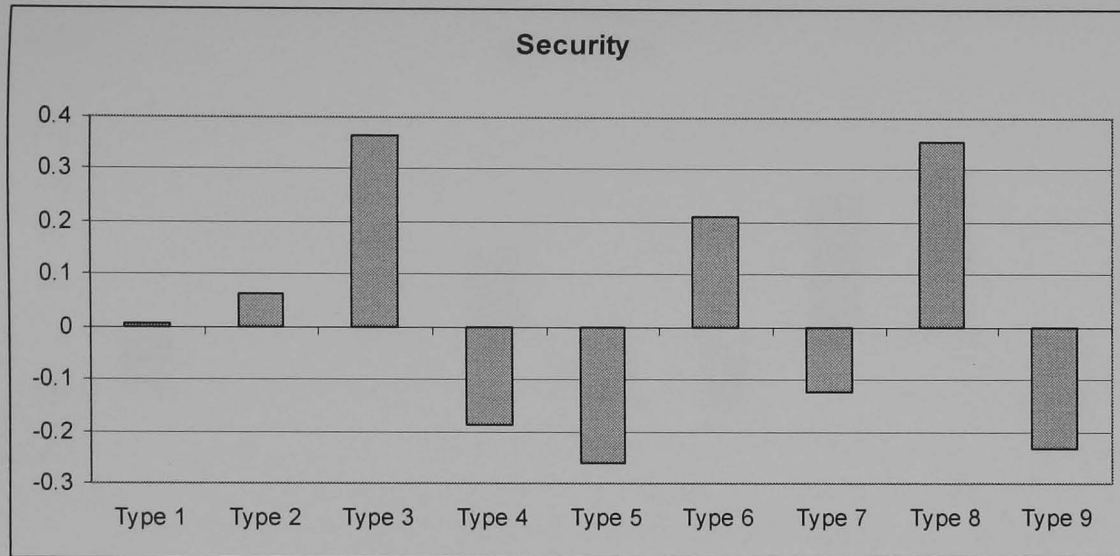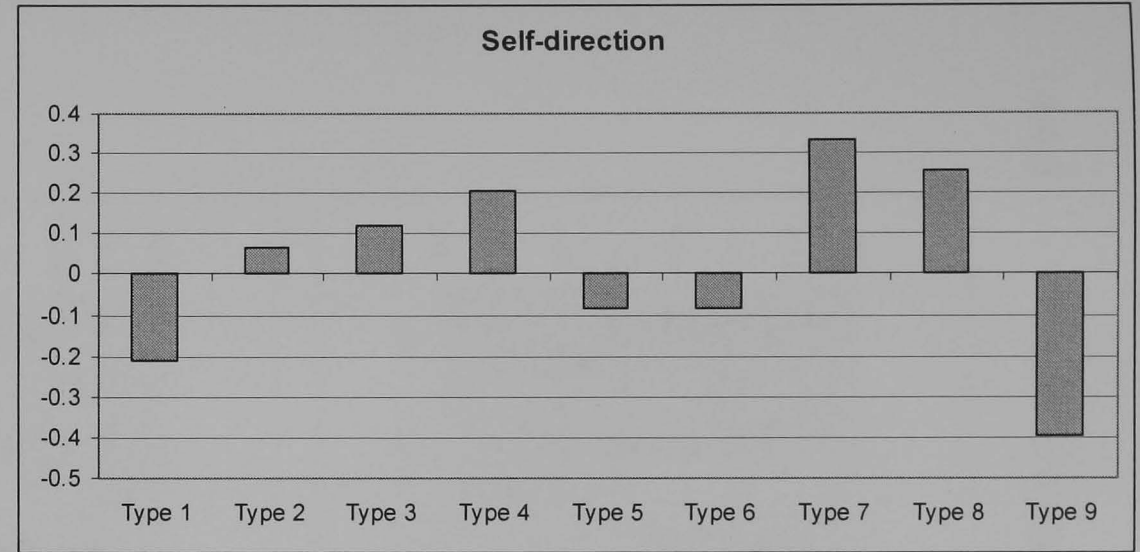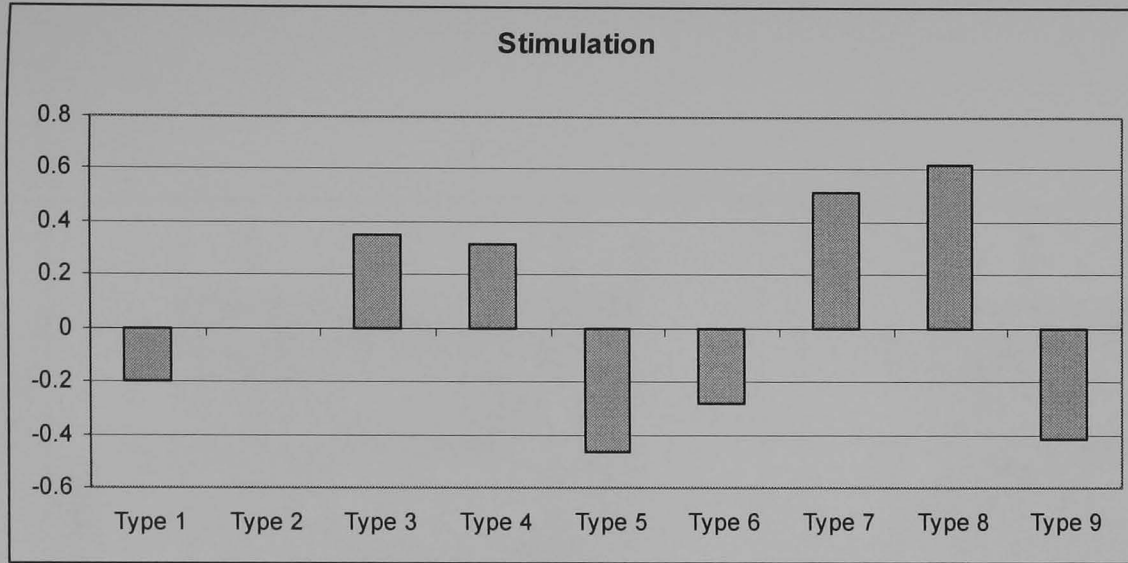
14.5 Appendix E: Complete t-test results

14.5.1 Type 1 t-tests

		Group mean	EType1 mean	T	df	p[17]
FFM	Agreeableness	4.14	4.15	-.276	104.2	.783
	Conscientiousness	3.59	4.14	-6.508	414	.000
	Extraversion	3.26	3.20	.551	414	.582
	Emotional Stability	3.15	3.01	1.244	413	.214
	Openness to Experience	3.98	3.85	1.799	414	.073
Values	Benevolence	1.14	1.12	.219	412	.827
	Conformity	-0.10	0.25	-2.666	413	.008
	Tradition	-1.11	-1.05	-.381	410	.703
	Security	-0.53	-0.49	-.354	412	.724
	Power	-2.13	-2.09	-.269	413	.788
	Achievement	-0.16	0.02	-1.276	413	.203
	Hedonism	-0.39	-0.63	1.188	414	.235
	Stimulation	-0.43	-0.78	1.851	413	.065
	Self-direction	0.91	0.61	2.343	413	.020
	Universalism	0.92	0.92	.033	414	.974
Motives	Hope Success	3.68	3.40	.627	407	.531
	Hope Affiliation	3.55	3.19	1.083	407	.279
	Hope Power	2.95	2.67	.820	407	.412
	Fear Failure	2.47	2.68	-.844	407	.399
	Fear Rejection	2.38	2.67	-1.032	407	.303
	Fear Power	1.76	2.00	-1.047	407	.296
	Achievement	1.21	0.71	1.100	407	.272
	Affiliation	1.17	0.52	1.622	407	.105
	Power	1.18	0.67	1.533	407	.126
	Approach	10.17	9.25	-.060	407	.952
	Avoid	6.61	7.35	-.022	407	.982
Job Attitudes	Work Motivation	6.42	6.66	1.957	306	.051
	Job Involvement	4.11	4.48	-1.753	306	.081
	Job Satisfaction	5.73	5.73	-.074	306	.941
	Org Commit	4.97	5.11	-.651	305	.515
	Turnover Intent	2.78	2.84	-.133	306	.895
	Job Self-Efficacy	3.96	3.92	.540	306	.589
	Job Stress	2.30	2.54	-1.833	45.5	.073

---

[17] The p values are 2-tailed significance levels.

14.5.2   Type 2 t-tests

		Group mean	EType2 mean	T	Df	p
FFM	Agreeableness	4.09	4.64	-9.249	68.4	.000
	Conscientiousness	3.68	3.63	.408	414	.683
	Extraversion	3.21	3.62	-2.979	414	.003
	Emotional Stability	3.11	3.27	-1.174	413	.241
	Openness to Experience	3.98	3.82	1.629	414	.104
Values	Benevolence	1.12	1.30	-1.417	412	.157
	Conformity	-0.03	-0.19	.949	413	.343
	Tradition	-1.10	-1.16	.327	410	.744
	Security	-0.52	-0.55	.208	412	.836
	Power	-2.11	-2.23	.567	413	.571
	Achievement	-0.16	0.13	-1.640	413	.102
	Hedonism	-0.48	0.08	-2.268	414	.024
	Stimulation	-0.47	-0.60	.544	413	.587
	Self-direction	0.87	0.83	.221	413	.825
	Universalism	0.94	0.80	.988	414	.324
Motives	Hope Success	3.62	3.79	-.503	407	.615
	Hope Affiliation	3.52	3.23	.932	56.0	.356
	Hope Power	2.93	2.72	.439	407	.661
	Fear Failure	2.58	1.77	2.197	407	.029
	Fear Rejection	2.52	1.51	3.700	59.7	.000
	Fear Power	1.84	1.46	1.243	407	.215
	Achievement	1.04	2.03	-1.934	407	.054
	Affiliation	1.00	1.72	-1.489	407	.137
	Power	1.09	1.26	-.442	407	.659
	Approach	10.06	9.74	.215	407	.830
	Avoid	6.93	4.74	3.973	65.8	.000
Job Attitudes	Work Motivation	6.46	6.40	.434	306	.665
	Job Involvement	4.16	4.11	.478	306	.633
	Job Satisfaction	5.72	5.78	-.112	306	.911
	Org Commit	4.97	5.21	-.739	305	.461
	Turnover Intent	2.80	2.68	.600	306	.549
	Job Self-Efficacy	3.95	3.94	.164	306	.870
	Job Stress	2.34	2.23	.615	306	.539

14.5.3 Type 3 T-tests

		Group mean	Etype3 mean	T	Df	p
FFM	Agreeableness	4.14	4.13	.090	414	.928
	Conscientiousness	3.66	3.89	-1.864	414	.063
	Extraversion	3.22	3.71	-3.039	414	.003
	Emotional Stability	3.11	3.33	-1.324	413	.186
	Openness to Experience	3.97	3.78	1.816	414	.070
Values	Benevolence	1.16	0.82	2.331	412	.020
	Conformity	-0.06	0.11	-.923	413	.356
	Tradition	-1.08	-1.42	1.466	410	.144
	Security	-0.54	-0.31	-1.332	412	.184
	Power	-2.16	-1.59	-2.411	413	.016
	Achievement	-0.20	0.80	-5.014	413	.000
	Hedonism	-0.40	-0.80	1.373	414	.171
	Stimulation	-0.50	-0.32	-.665	413	.506
	Self-direction	0.87	0.77	.547	413	.584
	Universalism	0.95	0.56	2.492	414	.013
Motives	Hope Success	3.56	4.71	-2.203	407	.028
	Hope Affiliation	3.46	3.93	-.965	407	.335
	Hope Power	2.83	3.93	-2.303	407	.022
	Fear Failure	2.56	1.68	2.214	407	.027
	Fear Rejection	2.47	1.71	1.736	407	.083
	Fear Power	1.83	1.36	1.518	407	.130
	Achievement	1.00	3.04	-3.368	407	.001
	Affiliation	0.99	2.21	-2.098	407	.037
	Power	1.00	2.57	-3.328	407	.001
	Approach	9.85	12.57	-2.326	407	.021
	Avoid	6.87	4.75	2.226	407	.027
Job Attitudes	Work Motivation	6.44	6.60	-.922	306	.357
	Job Involvement	4.16	4.12	.084	306	.933
	Job Satisfaction	5.72	5.80	-.098	306	.922
	Org Commit	5.00	4.92	.233	305	.816
	Turnover Intent	2.77	2.95	-.560	306	.576
	Job Self-Efficacy	3.91	4.45	-3.890	306	.000
	Job Stress	2.34	2.15	1.230	306	.220

14.5.4   Type 4 t-tests

<table>
<thead>
<tr><th></th><th></th><th>Group
mean</th><th>EType4 mean</th><th>T</th><th>Df</th><th>p</th></tr>
</thead>
<tbody>
<tr><td rowspan="5">FFM</td><td>Agreeableness</td><td>4.12</td><td>4.28</td><td>-1.819</td><td>414</td><td>.070</td></tr>
<tr><td>Conscientiousness</td><td>3.69</td><td>3.54</td><td>1.548</td><td>414</td><td>.122</td></tr>
<tr><td>Extraversion</td><td>3.26</td><td>3.19</td><td>.577</td><td>414</td><td>.564</td></tr>
<tr><td>Emotional Stability</td><td>3.20</td><td>2.56</td><td>5.474</td><td>413</td><td>.000</td></tr>
<tr><td>Openness to Experience</td><td>3.93</td><td>4.21</td><td>-3.440</td><td>414</td><td>.001</td></tr>
<tr><td rowspan="11">Values</td><td>Benevolence</td><td>1.14</td><td>1.14</td><td>-.009</td><td>412</td><td>.993</td></tr>
<tr><td>Conformity</td><td>-0.03</td><td>-0.17</td><td>.811</td><td>56.0</td><td>.421</td></tr>
<tr><td>Tradition</td><td>-1.11</td><td>-1.02</td><td>-.520</td><td>410</td><td>.603</td></tr>
<tr><td>Security</td><td>-0.49</td><td>-0.78</td><td>2.167</td><td>412</td><td>.031</td></tr>
<tr><td>Power</td><td>-2.07</td><td>-2.54</td><td>2.533</td><td>413</td><td>.012</td></tr>
<tr><td>Achievement</td><td>-0.11</td><td>-0.27</td><td>.991</td><td>413</td><td>.322</td></tr>
<tr><td>Hedonism</td><td>-0.37</td><td>-0.84</td><td>1.844</td><td>57.5</td><td>.070</td></tr>
<tr><td>Stimulation</td><td>-0.55</td><td>0.02</td><td>-2.813</td><td>413</td><td>.005</td></tr>
<tr><td>Self-direction</td><td>0.83</td><td>1.11</td><td>-1.917</td><td>413</td><td>.056</td></tr>
<tr><td>Universalism</td><td>0.90</td><td>1.08</td><td>-1.397</td><td>414</td><td>.163</td></tr>
<tr><td rowspan="11">Motives</td><td>Hope Success</td><td>3.71</td><td>3.10</td><td>1.327</td><td>407</td><td>.185</td></tr>
<tr><td>Hope Affiliation</td><td>3.49</td><td>3.55</td><td>-.529</td><td>407</td><td>.597</td></tr>
<tr><td>Hope Power</td><td>2.99</td><td>2.29</td><td>1.829</td><td>407</td><td>.068</td></tr>
<tr><td>Fear Failure</td><td>2.44</td><td>2.94</td><td>-1.784</td><td>407</td><td>.075</td></tr>
<tr><td>Fear Rejection</td><td>2.34</td><td>3.06</td><td>-2.241</td><td>407</td><td>.026</td></tr>
<tr><td>Fear Power</td><td>1.75</td><td>2.18</td><td>-1.867</td><td>407</td><td>.063</td></tr>
<tr><td>Achievement</td><td>1.26</td><td>0.16</td><td>2.333</td><td>407</td><td>.020</td></tr>
<tr><td>Affiliation</td><td>1.15</td><td>0.49</td><td>1.389</td><td>407</td><td>.166</td></tr>
<tr><td>Power</td><td>1.24</td><td>0.10</td><td>3.108</td><td>407</td><td>.002</td></tr>
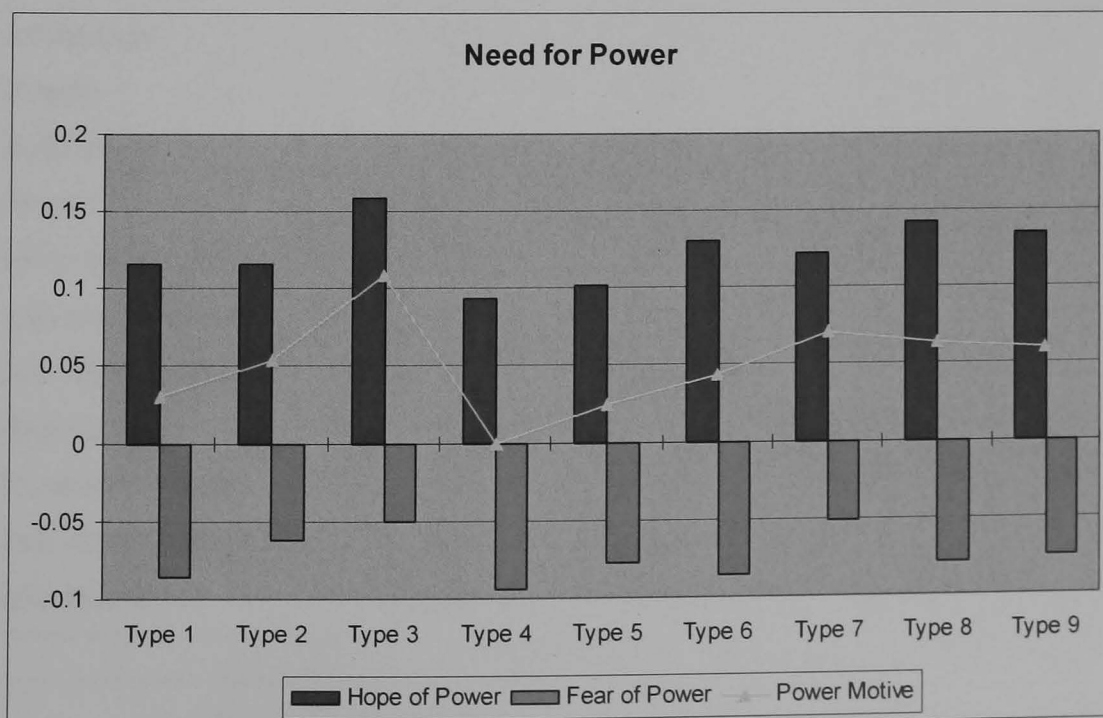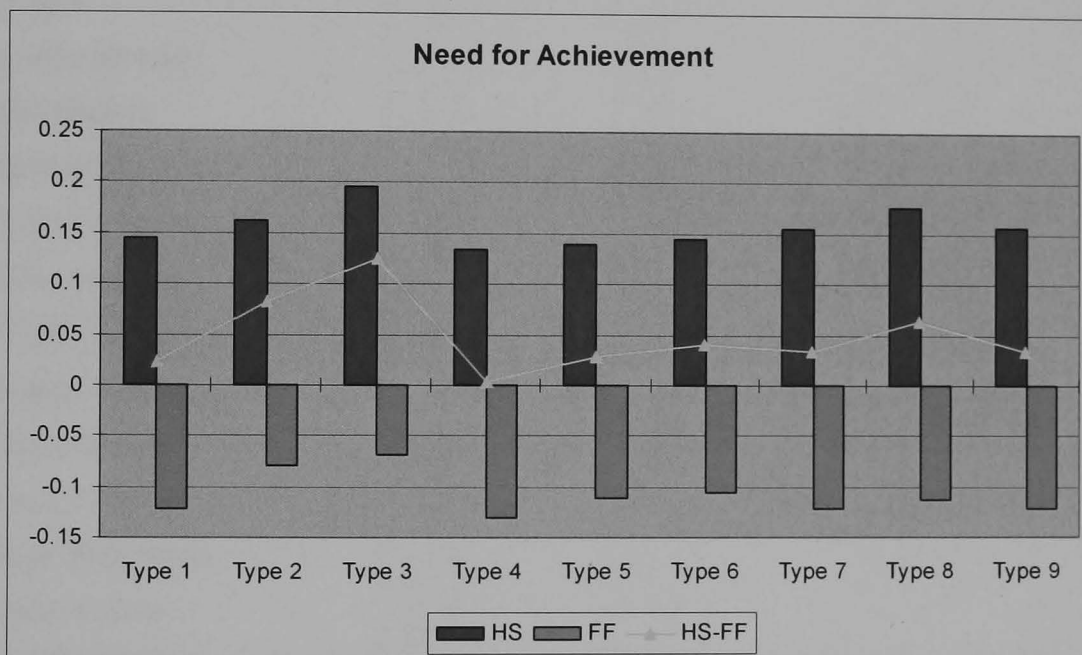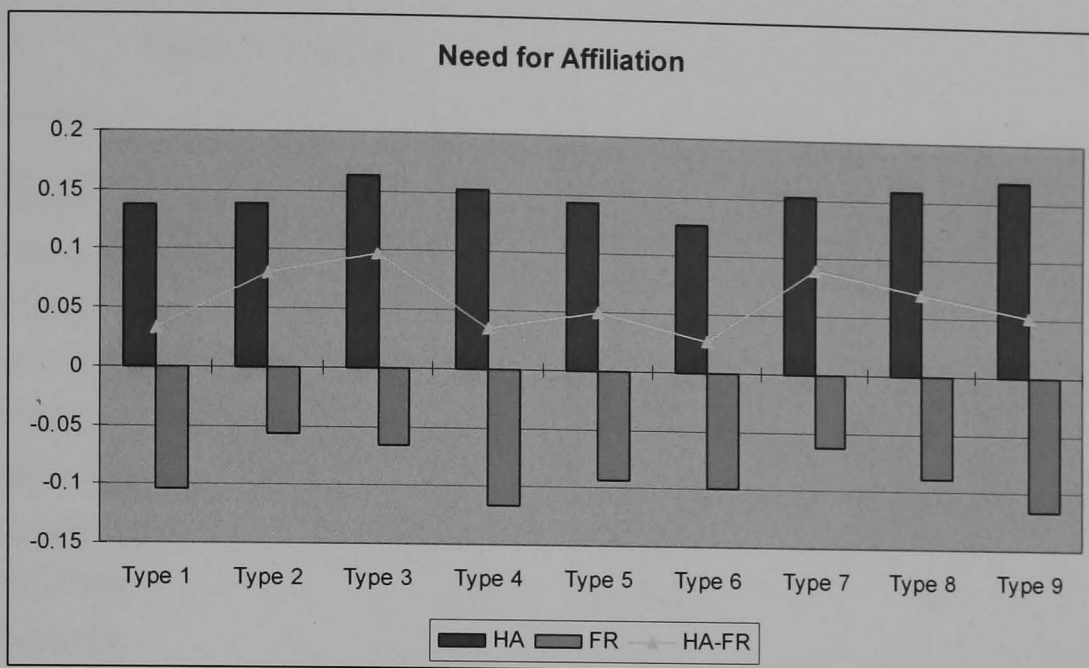<tr><td>Approach</td><td>10.18</td><td>8.94</td><td>1.325</td><td>64.6</td><td>.190</td></tr>
<tr><td>Avoid</td><td>6.53</td><td>8.18</td><td>-2.396</td><td>407</td><td>.017</td></tr>
<tr><td rowspan="7">Job Attitudes</td><td>Work Motivation</td><td>6.47</td><td>6.31</td><td>1.289</td><td>306</td><td>.198</td></tr>
<tr><td>Job Involvement</td><td>4.18</td><td>3.99</td><td>.812</td><td>306</td><td>.417</td></tr>
<tr><td>Job Satisfaction</td><td>5.75</td><td>5.60</td><td>.665</td><td>306</td><td>.507</td></tr>
<tr><td>Org Commit</td><td>4.99</td><td>5.03</td><td>-.215</td><td>305</td><td>.830</td></tr>
<tr><td>Turnover Intent</td><td>2.77</td><td>2.92</td><td>-.659</td><td>306</td><td>.510</td></tr>
<tr><td>Job Self-Efficacy</td><td>3.97</td><td>3.83</td><td>1.395</td><td>306</td><td>.164</td></tr>
<tr><td>Job Stress</td><td>2.30</td><td>2.51</td><td>-1.613</td><td>306</td><td>.108</td></tr>
</tbody>
</table>

14.5.5 Type 5 T-tests

		Group mean	EType5 mean	T	Df	p
FFM	Agreeableness	4.20	3.69	5.113	58.0	.000
	Conscientiousness	3.67	3.70	-.295	414	.768
	Extraversion	3.36	2.44	7.896	414	.000
	Emotional Stability	3.12	3.22	-.863	413	.389
	Openness to Experience	3.97	3.92	.610	414	.542
Values	Benevolence	1.14	1.14	.001	412	.999
	Conformity	-0.06	0.07	-.909	413	.364
	Tradition	-1.15	-0.77	-2.087	410	.038
	Security	-0.52	-0.55	.238	412	.812
	Power	-2.08	-2.43	1.878	413	.061
	Achievement	-0.06	-0.63	3.659	413	.000
	Hedonism	-0.39	-0.72	1.482	414	.139
	Stimulation	-0.42	-0.96	2.677	413	.008
	Self-direction	0.84	1.06	-1.567	413	.118
	Universalism	0.89	1.18	-2.361	414	.019
Motives	Hope Success	3.69	3.22	1.206	407	.228
	Hope Affiliation	3.51	3.38	.319	407	.750
	Hope Power	2.97	2.44	1.462	407	.145
	Fear Failure	2.50	2.52	-.108	407	.914
	Fear Rejection	2.41	2.52	-.335	407	.738
	Fear Power	1.79	1.88	-.417	407	.677
	Achievement	1.19	0.70	1.065	407	.287
	Affiliation	1.10	0.86	.502	407	.616
	Power	1.18	0.56	1.715	407	.087
	Approach	10.17	9.04	1.274	407	.203
	Avoid	6.70	6.92	-.337	407	.737
Job Attitudes	Work Motivation	6.47	6.33	1.069	306	.286
	Job Involvement	4.20	3.89	2.042	51.4	.046
	Job Satisfaction	5.72	5.79	-.196	306	.844
	Org Commit	5.01	4.81	.836	305	.404
	Turnover Intent	2.82	2.55	.697	306	.486
	Job Self-Efficacy	3.98	3.75	1.815	306	.071
	Job Stress	2.32	2.37	-.011	306	.992

14.5.6 Type 6 T-tests

		Group mean	EType6 mean	T	Df	p
FFM	Agreeableness	4.14	4.11	.424	414	.672
	Conscientiousness	3.66	3.77	-1.243	414	.214
	Extraversion	3.28	3.05	1.998	414	.046
	Emotional Stability	3.16	2.92	2.148	413	.032
	Openness to Experience	3.95	4.03	-1.030	414	.304
Values	Benevolence	1.12	1.25	-1.176	412	.240
	Conformity	-0.05	-0.01	-.279	413	.781
	Tradition	-1.11	-1.03	-.525	410	.600
	Security	-0.56	-0.29	-2.211	412	.028
	Power	-2.16	-1.92	-1.372	413	.171
	Achievement	-0.14	-0.09	-.335	413	.738
	Hedonism	-0.39	-0.67	1.352	414	.177
	Stimulation	-0.42	-0.90	2.506	413	.013
	Self-direction	0.88	0.75	.943	413	.346
	Universalism	0.94	0.84	.892	414	.373
Motives	Hope Success	3.65	3.57	.413	407	.680
	Hope Affiliation	3.56	3.09	1.716	407	.087
	Hope Power	2.86	3.17	-.784	407	.433
	Fear Failure	2.52	2.38	.617	407	.538
	Fear Rejection	2.39	2.64	-.600	407	.549
	Fear Power	1.76	2.03	-1.025	407	.306
	Achievement	1.13	1.19	-.088	407	.930
	Affiliation	1.17	0.45	1.742	407	.082
	Power	1.10	1.14	-.045	407	.964
	Approach	10.07	9.83	.524	407	.600
	Avoid	6.67	7.05	-.356	407	.722
Job Attitudes	Work Motivation	6.45	6.49	-.344	306	.731
	Job Involvement	4.13	4.35	-1.185	306	.237
	Job Satisfaction	5.73	5.70	.086	306	.932
	Org Commit	4.99	4.99	-.006	305	.995
	Turnover Intent	2.79	2.78	.121	306	.904
	Job Self-Efficacy	3.95	3.95	-.017	306	.987
	Job Stress	2.33	2.35	-.255	306	.799

14.5.7 Type 7 T-tests

		Group mean	EType7 mean	T	Df	p
FFM	Agreeableness	4.15	4.02	1.402	414	.162
	Conscientiousness	3.71	3.40	3.095	414	.002
	Extraversion	3.17	3.88	-6.875	64.0	.000
	Emotional Stability	3.08	3.54	-3.655	413	.000
	Openness to Experience	3.93	4.24	-4.673	66.9	.000
Values	Benevolence	1.16	0.93	1.974	412	.049
	Conformity	-0.02	-0.31	1.901	413	.058
	Tradition	-1.08	-1.31	1.199	410	.231
	Security	-0.51	-0.61	.676	412	.499
	Power	-2.10	-2.29	.985	413	.325
	Achievement	-0.12	-0.24	.751	413	.453
	Hedonism	-0.54	0.49	-4.495	414	.000
	Stimulation	-0.58	0.30	-4.142	413	.000
	Self-direction	0.81	1.31	-3.321	413	.001
	Universalism	0.95	0.72	1.798	414	.073
Motives	Hope Success	3.61	3.80	-.288	407	.773
	Hope Affiliation	3.46	3.78	-.762	407	.447
	Hope Power	2.90	2.93	.046	407	.963
	Fear Failure	2.47	2.71	-.566	407	.572
	Fear Rejection	2.52	1.64	2.471	407	.014
	Fear Power	1.87	1.22	2.551	407	.011
	Achievement	1.14	1.09	.155	407	.877
	Affiliation	0.94	2.13	-2.533	407	.012
	Power	1.03	1.71	-1.733	407	.084
	Approach	9.98	10.51	-.406	407	.685
	Avoid	6.86	5.58	1.733	407	.084
Job Attitudes	Work Motivation	6.47	6.37	.721	306	.471
	Job Involvement	4.19	3.93	1.170	306	.243
	Job Satisfaction	5.71	5.91	-.918	306	.359
	Org Commit	5.01	4.84	.686	305	.493
	Turnover Intent	2.80	2.68	.292	306	.771
	Job Self-Efficacy	3.93	4.12	-1.567	306	.118
	Job Stress	2.35	2.16	1.459	306	.145

14.5.8 Type 8 T-tests

		Group mean	EType8 mean	T	Df	p
FFM	**Agreeableness**	4.17	3.86	3.105	414	.002
	Conscientiousness	3.69	3.56	1.188	414	.235
	Extraversion	3.22	3.52	-2.136	414	.033
	Emotional Stability	3.13	3.13	-.006	413	.995
	Openness to Experience	3.96	3.95	.079	414	.937
Values	**Benevolence**	1.15	1.09	.478	412	.633
	Conformity	-0.01	-0.37	2.226	413	.027
	Tradition	-1.04	-1.73	3.493	410	.001
	Security	-0.53	-0.45	-.542	412	.588
	Power	-2.20	-1.44	-3.758	413	.000
	Achievement	-0.15	0.02	-.949	413	.343
	Hedonism	-0.44	-0.27	-.678	414	.498
	Stimulation	-0.56	0.19	-3.314	413	.001
	Self-direction	0.86	0.87	-.033	413	.974
	Universalism	0.93	0.85	.573	414	.567
Motives	**Hope Success**	3.59	4.05	-1.174	407	.241
	Hope Affiliation	3.47	3.69	-.572	407	.567
	Hope Power	2.87	3.28	-1.159	407	.247
	Fear Failure	2.50	2.49	-.037	407	.970
	Fear Rejection	2.44	2.31	.262	407	.794
	Fear Power	1.80	1.85	-.271	407	.787
	Achievement	1.09	1.56	-1.247	53.8	.218
	Affiliation	1.04	1.38	-.630	407	.529
	Power	1.07	1.44	-.936	407	.350
	Approach	9.93	11.03	-1.233	407	.218
	Avoid	6.73	6.64	.016	407	.987
Job Attitudes	**Work Motivation**	6.46	6.44	.154	306	.877
	Job Involvement	4.10	4.68	-2.474	306	.014
	Job Satisfaction	5.75	5.57	.672	306	.502
	Org Commit	4.96	5.24	-1.171	305	.242
	Turnover Intent	2.79	2.77	.110	306	.912
	Job Self-Efficacy	3.92	4.21	-2.347	306	.020
	Job Stress	2.34	2.23	.761	306	.447

14.5.9 Type 9 T-tests

		Group mean	EType9 mean	T	Df	p
FFM	Agreeableness	4.10	4.43	-3.595	414	.000
	Conscientiousness	3.72	3.29	4.278	414	.000
	Extraversion	3.27	3.09	1.396	414	.164
	Emotional Stability	3.09	3.43	-2.670	413	.008
	Openness to Experience	3.98	3.77	2.473	414	.014
Values	Benevolence	1.12	1.34	-1.879	412	.061
	Conformity	-0.06	0.06	-.903	59.5	.370
	Tradition	-1.15	-0.73	-2.801	63.7	.007
	Security	-0.51	-0.66	1.348	64.2	.182
	Power	-2.10	-2.32	1.154	413	.249
	Achievement	-0.08	-0.52	2.676	413	.008
	Hedonism	-0.44	-0.31	-.554	414	.580
	Stimulation	-0.43	-0.93	2.340	413	.020
	Self-direction	0.90	0.53	2.526	413	.012
	Universalism	0.89	1.20	-2.396	414	.017
Motives	Hope Success	3.62	3.76	-.164	407	.870
	Hope Affiliation	3.43	4.00	-1.485	407	.138
	Hope Power	2.86	3.27	-.964	407	.336
	Fear Failure	2.46	2.84	-1.009	407	.314
	Fear Rejection	2.34	3.11	-1.942	407	.053
	Fear Power	1.80	1.82	.007	407	.994
	Achievement	1.16	0.91	.563	407	.574
	Affiliation	1.09	0.89	.451	407	.652
	Power	1.06	1.44	-.942	407	.347
	Approach	9.91	11.02	-1.050	407	.294
	Avoid	6.60	7.78	-1.313	407	.190
Job Attitudes	Work Motivation	6.45	6.52	-.508	306	.612
	Job Involvement	4.19	3.87	1.303	306	.194
	Job Satisfaction	5.73	5.71	-.038	306	.970
	Org Commit	5.02	4.77	1.018	305	.310
	Turnover Intent	2.77	2.96	-.550	306	.583
	Job Self-Efficacy	3.99	3.65	2.936	306	.004
	Job Stress	2.34	2.26	.648	306	.517

14.6 Appendix F – Beta values from regression analyses

Table 42: Standardised Co-efficients (Beta values) for Block regressions (Controls, personality models, Enneagram)[18]

Model		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-Efficacy	Perceived Stress
1 Controls	sex	-.163**	.045	-.105	-.047	.025	.018	.036
	age	.047	-.022	.124*	.043	-.125*	-.050	-.201**
	employment	.210**	.226**	.327**	.464**	-.263**	.150**	-.233**
	British	.169*	.055	.048	.118	-.116	.041	.111
	American	.117	-.039	-.019	.146	-.045	.318**	-.017
2 Controls, FFM, Values, Motives	sex	-.114*	.072	-.079	-.036	.023	.026	.049
	age	.067	-.026	.085	.046	-.097	-.033	-.141**
	employment	.200**	.202**	.306**	.463**	-.249**	.102*	-.214**
	British	.184*	.029	.075	.122	-.140	.048	-.023
	American	.052	-.087	-.054	.120	-.027	.246**	-.048
	AchFail	.051	-.009	-.141*	-.008	.164*	.017	-.059
	AffRej	.121	-.018	.108	.034	-.018	.034	-.077
	PowFP	.031	.002	.068	.023	-.098	.104	.039
	CBenevolence	-.107	-.756*	-.389	.032	-.001	.754*	-.586*
	CConformity	-.053	-.816*	-.408	-.067	.032	.939**	-.605*
	CTradition	-.300	-1.237*	-.664	-.120	.057	1.251**	-1.027*
	CSecurity	-.255	-.891*	-.528	-.135	-.003	.923**	-.763*
	CPower	-.086	-.651	-.372	.008	-.013	.845**	-.697*
	CAchievement	-.132	-.730	-.470	-.054	.034	1.034**	-.689*
	CHedonism	-.138	-.812**	-.351	-.127	-.007	.516*	-.445
	CStimulation	-.186	-.616	-.513	-.060	.104	1.079**	-.601*
	CSelfdirection	-.159	-1.026*	-.600	-.138	.113	1.137**	-.803*
	CUniversalism	-.191	-1.261*	-.673	-.045	.024	1.495**	-1.118*
	Agreeableness	.210**	.054	.061	.028	.034	-.067	.009
	Conscientiousness	.188**	.094	.059	.058	-.086	.228	-.095

[18] * p· 0.05, ** p < 0.01

Model		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-Efficacy	Perceived Stress
	Extraversion	-.033	.030	.112	.067	-.042	.116	-.101
	EmotionalStability	-.026	-.031	.190**	.016	-.200**	.146**	-.426**
	OpennesstoExperience	.004	-.071	.038	.024	-.075	.074	-.059
3 Controls, FFM, Values, Motives and Enneagram	sex	-.122*	.094	-.088	-.040	.022	.048	.043
	age	.085	-.029	.083	.038	-.086	-.022	-.139*
	employment	.200*	.195**	.306**	.466**	-.249**	.087	-.213**
	British	.070	.035	.085	.120	-.144	.023	-.025
	American	.205**	-.074	-.033	.132	-.041	.226**	-.048
	AchFail	.058	-.017	-.123	-.008	.153*	.000	-.061
	AffRej	.120	-.012	.096	.032	-.011	.033	-.078
	PowFP	.016	.011	.064	.031	-.104	.109*	.038
	CBenevolence	.014	-.683*	-.378	.069	.026	.698*	-.548
	CConformity	.038	-.712*	-.415	-.031	.054	.878**	-.571
	CTradition	-.115	-1.059	-.670	-.044	.102	1.202*	-.974*
	CSecurity	-.122	-.772	-.518	-.074	.017	.853*	-.722*
	CPower	.018	-.569	-.358	.049	.000	.775**	-.662*
	CAchievement	.006	-.604	-.466	-.008	.061	.994**	-.658*
	CHedonism	-.047	-.739*	-.350	-.092	.017	.490*	-.419
	CStimulation	-.063	-.516	-.503	-.024	.130	.991**	-.553
	CSelfdirection	-.015	-.888*	-.607	-.078	.149	1.062**	-.758*
	CUniversalism	-.011	-1.080	-.676	.025	.063	1.414**	-1.062*
	Agreeableness	.261**	.095	.096	.039	.022	-.022	.004
	Conscientiousness	.155*	.077	.034	.028	-.080	.241**	-.111*
	Extraversion	-.052	.023	.132	.073	-.059	.062	-.092
	EmotionalStability	-.037	-.032	.201**	.039	-.215**	.140*	-.426**
	OpennesstoExperience	.000	-.081	.009	.019	-.052	.086	-.055
	EType1	.075	.064	-.045	.042	.040	-.005	.009
	EType2	-.113	.012	-.110	-.018	.026	.045	-.006
	EType3	.006	-.065	-.074	-.063	.076	.122	-.013
	EType4	-.087	-.047	-.043	-.009	-.012	.030	-.039
	EType6	-.001	.056	-.073	-.062	.049	.049	-.013

Model		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-Efficacy	Perceived Stress
	EType7	.034	.033	-.044	-.052	.028	.114	-.040
	EType8	.007	.113	-.102	.002	.047	.166*	-.044
	EType9	-.008	-.024	-.116	-.072	.080	-.015	-.021

Table 43: Standardised Co-efficients (Beta values) for Block regressions (Controls, Enneagram, personality models)

Model		Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-Efficacy	Perceived Stress
1: Controls	sex	-.163**	.045	-.105	-.047	.025	.018	.036
	age	.047	-.022	.124*	.043	-.125*	-.050	-.201**
	employment	.210**	.226**	.327**	.464**	-.263**	.150**	-.233**
	British	.169*	.055	.048	.118	-.116	.041	.111
	American	.117	-.039	-.019	.146	-.045	.318**	-.017
2: Controls, Enneagram	sex	-.173**	.061	-.116*	-.047	.031	.033	.030
	age	.063	-.014	.128*	.040	-.121*	-.021	-.219**
	employment	.218**	.215**	.338**	.469**	-.268**	.115*	-.220**
	British	.176*	.052	.055	.111	-.116	-.002	.116
	American	.114	-.050	-.009	.147	-.055	.280**	-.011
	EType1	.130	.048	.066	.116	-.030	-.009	.011
	EType2	-.041	-.047	.023	.058	-.022	.010	-.060
	EType3	.034	-.066	.032	-.005	.007	.196**	-.101
	EType4	-.079	-.095	-.004	.051	.004	-.028	.066
	EType5	-.012	-.121	.063	.025	-.069	-.033	-.031
	EType7	-.009	-.086	.079	-.003	-.046	.118	-.112
	EType8	-.029	.073	-.031	.065	.002	.161*	-.067
	EType9	.024	-.105	.038	.004	.008	-.121	-.055
3: Controls, Enneagram and FFM, Values, Motives	sex	-.122*	.094	-.088	-.040	.022	.048	.043
	age	.085	-.029	.083	.038	-.086	-.022	-.139*
	employment	.205**	.195**	.306**	.466**	-.249**	.087	-.213**
	British	.200*	.035	.085	.120	-.144	.023	-.025
	American	.070	-.074	-.033	.132	-.041	.226**	-.048
	EType1	.076	.013	.021	.099	-.005	-.051	.022
	EType2	-.113	-.036	-.048	.035	-.016	.004	.005
	EType3	.006	-.104	-.022	-.020	.041	.087	-.003
	EType4	-.087	-.098	.024	.057	-.057	-.015	-.027
	EType5	.000	-.051	.067	.047	-.045	-.045	.012

Model	Internal Work Motivation	Job Involvement	Job Satisfaction	Organisational Commitment	Turnover Intention	Job Self-Efficacy	Perceived Stress
EType7	.035	-.015	.018	.001	-.015	.072	-.029
EType8	.007	.066	-.040	.055	.005	.125*	-.033
EType9	-.008	-.072	-.052	-.019	.037	-.057	-.009
AchFail	.058	-.017	-.123	-.008	.153*	.000	-.061
AffRej	.120	-.012	.096	.032	-.011	.033	-.078
PowFP	.016	.011	.064	.031	-.104	.109*	.038
CBenevolence	.014	-.683*	-.378	.069	.026	.698*	-.548
CConformity	.038	-.712*	-.415	-.031	.054	.878**	-.571
CTradition	-.115	-1.059	-.670	-.044	.102	1.202*	-.974*
CSecurity	-.122	-.772	-.518	-.074	.017	.853*	-.722*
CPower	.018	-.569	-.358	.049	.000	.775**	-.662*
CAchievement	.006	-.604	-.466	-.008	.061	.994**	-.658*
CHedonism	-.047	-.739*	-.350	-.092	.017	.490*	-.419
CStimulation	-.063	-.516	-.503	-.024	.130	.991**	-.553
CSelfdirection	-.015	-.888*	-.607	-.078	.149	1.062**	-.758*
CUniversalism	-.011	-1.080	-.676	.025	.063	1.414**	-1.062*
Agreeableness	.261**	.095	.096	.039	.022	-.022	.004
Conscientiousness	.155*	.077	.034	.028	-.080	.241**	-.111*
Extraversion	-.052	.023	.132	.073	-.059	.062	-.092
EmotionalStability	-.037	-.032	.201**	.039	-.215**	.140*	-.426**
OpennesstoExperience	.000	-.081	.009	.019	-.052	.086	-.055

Table 44: Standardised Co-efficients (Beta values) for Block regressions (Controls, FFM, Enneagram)

Model		Internal Work Motivation	Job Self-Efficacy	Perceived Stress
1: Controls	sex	-.159**	.021	.022
	age	.046	-.050	-.208**
	British	.176*	.045	.111
	American	.114	.319**	-.013
	employment	.204**	.145*	-.206**
2: Controls, FFM	sex	-.114*	.009	.033
	age	.039	-.073	-.163**
	British	.198*	.084	.012
	American	.095	.273**	-.013
	employment	.198**	.119*	-.174**
	Agreeableness	.208**	-.132*	.025
	Conscientiousness	.185**	.220**	-.108*
	Extraversion	-.016	.211**	-.137**
	EmotionalStability	.012	.190**	-.424**
	OpennesstoExperience	.008	.118*	-.041
3: Controls, FFM and Enneagram	sex	-.124*	.029	.026
	age	.056	-.060	-.158**
	British	.198*	.054	.015
	American	.101	.249**	-.010
	employment	.197**	.096	-.170**
	Agreeableness	.260**	-.068	.025
	Conscientiousness	.153*	.230**	-.141**
	Extraversion	-.015	.124*	-.135*
	EmotionalStability	-.011	.193**	-.416**
	OpennesstoExperience	.014	.124*	-.041
	EType1	.056	-.004	.077
	EType2	-.124	.042	.003
	EType3	.005	.183**	-.017
	EType4	-.122	.072	-.021
	EType6	-.033	.054	-.009
	EType7	-.004	.109	-.003
	EType8	.001	.195**	-.031
	EType9	-.016	-.034	-.028

Table 45: Standardised Co-efficients (Beta values) for Block regressions (Controls, Values, Enneagram)

Model		Internal Work Motivation	Job Involvement	Job Self-Efficacy
1: Control	sex	-.115*	.042	.015
	age	.021	-.016	-.044
	British	.132	.055	.041

Model		Internal Work Motivation	Job Involvement	Job Self-Efficacy
	American	.068	-.033	.323**
	employment	.154**	.218**	.142*
2: Controls, Values	sex	-.110	.043	.016
	age	.040	-.020	.004
	British	.105	.021	.014
	American	.047	-.084	.277**
	employment	.187**	.199**	.121*
	CBenevolence	-.018	-.723*	.888**
	CConformity	.079	-.791*	1.099**
	CTradition	-.174	-1.196*	1.433**
	CSecurity	-.153	-.852*	1.134**
	CPower	-.073	-.642	1.005**
	CAchievement	-.056	-.688	1.264**
	CHedonism	-.111	-.791**	.624*
	CStimulation	-.184	-.611	1.233**
	CSelfdirection	-.042	-1.018*	1.342**
	CUniversalism	-.136	-1.243*	1.705**
3: Controls, Values and Enneagram	sex	-.123*	.057	.032
	age	.059	-.019	.016
	British	.121	.025	-.013
	American	.044	-.078	.262**
	employment	.198**	.197**	.111*
	CBenevolence	.142	-.630	.869**
	CConformity	.201	-.680	1.058**
	CTradition	.061	-.999	1.430**
	CSecurity	.010	-.725	1.089**
	CPower	.066	-.552	.946**
	CAchievement	.080	-.567	1.230**
	CHedonism	.022	-.703*	.608*
	CStimulation	-.032	-.497	1.175**
	CSelfdirection	.172	-.864*	1.296**
	CUniversalism	.103	-1.043	1.674**
	EType1	.219**	.111	.011
	EType2	-.004	.052	.023
	EType3	.091	-.015	.141*
	EType4	.038	-.020	-.053
	EType6	.060	.077	.005
	EType7	-.004	.029	.118
	EType8	.029	.117	.125
	EType9	.073	.005	-.060

Table 46: Standardised Co-efficients (Beta values) for Block regression (Controls, Motives, Enneagram)

Model		Job Self-Efficacy
1: Controls	sex	.018
	age	-.044
	British	.045
	American	.324**
	employment	.138*
2: Controls, Motives	sex	.035
	age	-.035
	British	.043
	American	.301**
	employment	.106
	AchFail	.039
	AffRej	.106
	PowFP	.113
3: Controls, Motives and Enneagram	sex	.052
	age	-.017
	British	.001
	American	.263**
	employment	.080
	AchFail	.003
	AffRej	.094
	PowFP	.100
	EType1	-.013
	EType2	-.011
	EType3	.173**
	EType4	-.020
	EType5	-.055
	EType7	.079
	EType8	.139*
	EType9	-.140*

14.7 Appendix G – Self-awareness workshop

Start time	Activity	Duration
9.30	Introduction • Introduce self • Go round group, name and what hope to get out of workshop • Overview of workshop, emphasise confidentiality / safe space. Note that people can be deeply affected by this and to take responsibility for themselves. • What is self-awareness? (on flipchart) • Johari window	35 min *5* *15* *5* *5*

10.00	Medicine Cards
	• Choose a couple of cards that appeal to you in some way
	• With a partner, talk about which animal were attracted to and why
	   ○ How are you like / unlike that animal? What does this animal say about you? Any new or confirmed insight?
	• Whole group activity
	   ○ Did anyone choose the same animals? Was it for similar reasons? Did anyone choose different animals but for same reasons?
		35 min
		5
		15
		
		15

10.40	Life Map • Describe how to do it, using theme of "significant times of change". • Draw Maps individually	65 min *5* *15*
11.00	***Coffee Break***	***15 min***
11.15	• Discuss Life Map with partner • Regroup – was this exercise interesting/ helpful? What sort of things came out of it?	*15* *15*
11:45	Creative • What does work mean to you?	*10 min*
11.55	Journaling • Describe what journaling is • Ask them to write response/reaction to it, what they learnt • Talk about it with partner • Regroup – what was difficult / easy about that task? Did you find out anything new / revisit something old? • Talk about difference between reflection and rumination, describe the different outcomes associated with each.	45 min *15* *10* *15* *5*
12:40	Networks • Introduce idea of using stones/buttons to represent where you are in relation to colleagues • In pairs, but first of all be silent and construct network on your own.	35 min *5*

		• In pairs, take it in turns to talk about your network. One not talking should listen without making interpretation or judgement. Why is it like this? What parts of it are you happy with? Are there things you would like to change? Do you think the other people in your network would construct a similar one? Why (not)? • Regroup – what sort of things emerged during this exercise? How do you think being aware of what your network looks like can help you?	*2x10* *10*
1.15		Self-awareness discussion In groups of 3 or 4: • Look back at "What is self-awareness?" – has your understanding of it changed? • Is self-awareness useful in normal life? Regroup to consider same questions	*15* *10* *5*
1.30		End	

14.8   Appendix H – Introductory Enneagram Workshop

Start time	Activity	Time
9.30	Introduction • Introduce self • Go round group, name and what hope to get out of workshop • Overview of workshop, emphasise confidentiality / safe space	15 min
9.45	Brief Overview of Enneagram • 3 centres • 9 types – motivations and common traits • Meaning of arrows – stress/security • Go round group – What type do you think you might be? (with ref to Daniels' paragraphs)	15 min *10* *5*
10.00	Each Type in more detail *For each Type* • *Basic worldview* • *DVD clip* • *Discuss in group – anyone relate to this type?* Heart Types - Type 3, 2 and 4 Head Types – Type 6, 5 and 7 Gut Types – Type 9, 8 and 1	*~7 or 8 min each*
11.15	***Coffee Break – help with deciding type***	***15 min***
11.35	Collage Exercise • Introduce exercise • Create collage about your type, in type groups or alone	20 min
11.55	Discuss collages	60 min *~ 7 per type*

1.00	Summary
	 • Go through types again briefly
	 • How type affects your relationships with others
	     o Awareness of own worldview and habitual responses
	     o Understanding that others' worldview differs from own
	 • With partner – what one thing are you taking away from this workshop?
	 • As group
		15 min

1.15	Q&A Give out handouts	10 min
1.30	***End***	

14.9 Appendix I – Correspondence of the two workshops

14.9.1 Workshop Preparation

A pre-workshop exercise given to both groups to keep the workshops as similar as possible. It is important for the people coming on the Enneagram course to have some idea of what types they relate most to so that it does not seem to overwhelming at the start. The Enneagram exercise consists of reading paragraphs about each type and deciding which the participant is most like or unlike. The preparation exercise for the self-awareness workshop was chosen to have a similar focus. Participants are asked to choose 2 or 3 cards with animal pictures on them, that capture something of what they are like. This means that they will be thinking about themselves and what they are like or unlike.

14.9.2 Workshop Activities

Introductions

- These follow the same format for both workshops

First exercise

- The Enneagram workshop then introduces the system and asks participants <u>what type they think they might be and why, based on the preparation exercise</u>.

- Using a similar approach, the self-awareness workshop asks participants to discuss with each other <u>which animals they chose in the preparation exercise and why</u>.

Second exercise

- The Enneagram workshop then goes on to <u>discuss the types in greater detail</u>. This discussion focuses around life-strategies, motives and unconscious habits. Participants identify with a type by looking back over their lives and reflecting on repeating patterns.

- Although the self-awareness workshop cannot do exactly the same as this, it can also use the approach of getting participants to look back and reflect on their lives by doing the <u>Life Map exercise</u>. By focusing on significant times of change, participants will be encouraged to think about how the patterns in their lives may have stayed the same or changed. In addition, getting participants to do a physical, visual task shows similarities with the collage exercise in the Enneagram workshop.

Third exercise

- The <u>collages</u> the participants make in the Enneagram workshop provide a way for people who are unfamiliar with the system to begin to explore their own type in a way that does not require words. It uses creativity and allows the unconscious personality

patterns to shape their work. Subsequent discussion of each type using the collages allows the rest of the group to get an insight into how other people see the world and compare it with their own. It allows people to tell a bit of the story of their type (essential within the narrative tradition of the Enneagram) without them needing to be very familiar with it, and gives them self-awareness of how personality type influences their life.

- The Life Map exercise echoes some of these points, as described above. In the Journaling exercise, participants are learning a skill for improving their self-awareness and putting it into action straight away. Similarly to discussing Enneagram types, Journaling gives participants the opportunity to reflect on their unconscious reactions and responses to things. Discussion with others then gives them an insight into how the same stimulus can be responded to in many different ways.

Fourth exercise

- The Enneagram workshop also covers how type affects relationships with others. Although this is only explicitly addressed at the end of the workshop, as part of all the exercises participants will be reflecting on how they relate to others.

- The Networks exercise in the self-awareness workshop directs participants attention towards how they relate to their family or colleagues.

Final discussion

- A summary and re-iteration of the Enneagram system at the end is intended to refresh participants about the whole system and how it can be used in everyday life.

- Discussion about how self-awareness can be useful in everyday life, drawing on participants' own views. Research findings about self-awareness are intended to give participants some idea of concrete outcomes from self-awareness practices.

14.10 Appendix J – Differences between Workshop Groups

Participants on the Enneagram workshops were assigned randomly to Group 1 or 2. Group 1 completed the first questionnaire, then attended the workshop and subsequently completed the second and third questionnaires. Group 2 completed the first and second questionnaires before attending the workshop and subsequently completed the third. Group 3 consisted of those participants attending the Self-awareness training, who completed questionnaires in the same order as Group 1.

Table 47: Chi-square comparison of Workshop Groups

	x^2	Df	P
Nationality	1.5	4	.827
Ethnicity	3.87	2	.144
Sex	1.45	2	.485
Occupation	3.59	6	.732
Industry	20.74	4	.001

Table 48: ANOVA comparison of Workshop Groups

	F	Df	p
Job Freedom	.462	2, 78	.632
Job Satisfaction	.291	2, 83	.748
Pay Satisfaction	.016	2, 83	.984
Internal Work Motivation	1.061	2, 83	.351
Anxiety-Contentment	.851	2, 83	.431
Depression-Enthusiasm	1.948	2, 83	.149
Proactive Coping	1.238	2, 84	.295
Instrumental Coping	.664	2, 84	.518
Rumination	3.692	2, 85	.029
Reflection	.249	2, 85	.780

Table 49: Paired T-test for effect of questionnaire completion

	Mean difference	t	df	Sig. (2-tailed)
Q1JobSatScale - Q2JobSatScale	.27083	1.771	31	.086
Q1IWMscale - Q2IWMscale	.25000	1.209	31	.236
Q1PaySatscale - Q2PaySatscale	.03226	.127	30	.900
Q1AnxCont - Q2AnxCont	.12903	1.545	30	.133
Q1DepEnth - Q2DepEnth	-.04839	-.635	30	.530
Q1ProactScale - Q2ProactScale	.02073	.571	32	.572
Q1InstrScale - Q2InstrScale	.03517	.490	32	.628
Q1Rumination - Q2Rumination	.15023	1.739	32	.092
Q1Reflection - Q2Reflection	.07406	1.106	32	.277
Q2JFree1 - Q3JFree1	.033	.108	29	.915

Chapter 15   References

Adler, A. (1924). The Practice and Theory of Individual Psychology. London, Kegan Paul, Trench, Trubner and Co. Ltd.

Allport, G. W. (1955). Becoming - Basic considerations for a psychology of personality. New Haven, Yale University Press.

Anson, K. and J. Ponsford (2006). "Who Benefits? Outcome following a coping skills group intervention for traumatically brain injured individuals." Brain Injury 20(1): 1-13.

Arica Institute. (2005). "Oscar Ichazo Interview."   Retrieved 25 October, 2005, from http://www.arica.org/articles/effross.cfm.

Asendorpf, J. B. (2002). "Editorial: The Puzzle of Personality Types." European Journal of Personality 16: S1-S5.

Asendorpf, J. B., R. Banse, et al. (2002). "Double Dissociation Between Implicit and Explicit Personality Self-Concept: The Case of Shy Behavior." Journal of Personality and Social Psychology 83(2): 380-393.

Asendorpf, J. B., P. Borkenau, et al. (2001). "Carving Personality Description at its Joints: Confirmation of Three Replicable Personality Prototypes for Both Children and Adults." European Journal of Personality 15: 169-198.

Ashton, M. C., K. Lee, et al. (2004). "A Hierarchical Analysis of 1,710 English Personality-Descriptive Adjectives." Journal of Personality and Social Psychology 87(5): 707-721.

Atkinson, J. W. (1992). Motivational Determinants of Thematic Apperception. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Atwater, L., P. Roush, et al. (1995). "The influence of upward feedback on self- and follower ratings of leadership." Personnel Psychology 48(1): 35-59.

Bandura, A. (2001). "Social Cognitive Theory: An Agentic Perspective." Annual Review of Psychology 52: 1-26.

Barrick, M. R., T. R. Mitchell, et al. (2003). Situational and Motivational Influences. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

Barrick, M. R. and M. K. Mount (1991). "The Big Five Personality Dimensions and Job Performance: A Meta-analysis." Personnel Psychology 44(1): 1-26.

Barrick, M. R., G. L. Stewart, et al. (1998). "Relating Member Ability and Personality to Work-Team Processes and Team Effectiveness." Journal of Applied Psychology 83(3): 377-391.

Baumeister, R. F. and D. M. Tice (1996). "Rethinking and Reclaiming the Interdisciplinary Role of Personality Psychology: The Science of Human Nature Should

Be the Center of the Social Sciences and Humanities." Journal of Research in Personality 30(3): 363-373.

Berings, D., F. De Fruyt, et al. (2003). "Work values and personality traits as predictors of enterprising and social vocational interests." Personality and Individual Differences.

Blake, A. G. E. (1996). The Intelligent Enneagram. Boston, Shambhala Publications Inc.

Block, J. (1995). "A Contrarian View of the Five-Factor Approach to Personality Description." Psychological Bulletin 117(2): 187-215.

Block, J. (2001). "Millenial Contrarianism: The Five-Factor Approach to Personality Description 5 Years Later." Journal of Research in Personality 35: 98-107.

Boeree, C. G. (1997-2000). "Personality Theories." Retrieved 6 October, 2004, from http://www.ship.edu/~cgboeree/perscontents.html.

Bono, J. E. and T. A. Judge (2003). "Core Self-Evaluations: A review of the trait and its role in job satisfaction and job performance." European Journal of Personality 17: S5-S18.

Bornstein, R. F. (2002). "A Process Dissociation Approach to Objective-Projective Test Score Interrelationships." Journal of Personality Assessment 78(1): 47-68.

Bowers, C. A., J. A. Pharmer, et al. (2000). "When Member Homogeneity is needed in work teams: A meta-analysis." Small Group Research 31(3): 305-327.

Briggs Myers, I. and P. B. Myers (1995). Gifts Differing. Palo Alto, Davies-Black Publishing.

Brown, A. and D. Bartram (2005). Relationships between OPQ and Enneagram Types. London, SHL Group plc: 1-34.

Brown, K. W. and R. M. Ryan (2003). "The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being." Journal of Personality and Social Psychology 84(4): 822-848.

Brown, S. P. (1996). "A Meta-Analysis and Review of Organizational Research on Job Involvement." Psychological Bulletin 120(2): 235-255.

Brugha, C. M. (1998). "The structure of development decision-making." European Journal of Operational Research 104: 77-92.

Bruner, J. (1990). Acts of Meaning. London, Harvard University Press.

Buchanan, T., J. A. Johnson, et al. (2005). "Implementing a Five-Factor Personality Inventory for Use on the Internet." European Journal of Psychological Assessment 21(2): 115-127.

Cantor, N. (1990). "From Thought to Behavior: "Having" and "Doing" in the Study of Personality and Cognition." American Psychologist 45(6): 735-750.

Caprara, G. V. and D. Cervone (2000). Personality Determinants, Dynamics, and Potentials. Cambridge, Cambridge University Press.

Caspi, A. (2000). "The Child is Father of the Man: Personality continuities from childhood to adulthood." Journal of Personality and Social Psychology 78(1): 158-172.

Cattell, R. B. (1943). "The Description of Personality: Basic traits resolved into clusters." Journal of Abnormal and Social Psychology 38: 476-506.

Cattell, R. B. (1943a). "The Description of Personality. I. Foundations of trait measurement." Psychological Review 50: 559-594.

Cattell, R. B. (1972). "The 16 P.F. and basic personality structure: A reply to Eysenck." Journal of Behavioural Science 1(4): 169-187.

Cattell, R. B. (1974). "A large sample cross-check on 16 PF: Primary structure by parcelled factoring." Multivariate Experimental Clinical Research 1(2): 79-95.

Cattell, R. B. (1986). "The 16 PF personality structure and Dr Eysenck." Journal of Social Behavior and Personality 1(2): 153-160.

Chen, G., S. M. Gulley, et al. (2001). "Validation of a new General Self-Efficacy Scale." Organizational Research Methods 4(1): 62-83.

Cheston, S. L. (1996). Managerial self-awareness: A longitudinal study.

Childs, R. (2004). "So you want to be an ENFJ?" Selection and Development Review 20(5): 3-6.

CNAC. (2004). "Nonlinear Dynamics and Complex Systems Theory: Glossary of Terms." Retrieved 8 September, 2007.

Cohen, S., T. Kamarck, et al. (1983). "A Global Measure of Perceived Stress." Journal of Health and Social Behavior 24(4): 385-396.

Cook, J. D., S. J. Hepworth, et al. (1981). The Experience of Work - A Compendium and Review of 249 Measures and their Use. London, Academic Press.

Costa, P. T., J. H. Herbst, et al. (2002). "The Replicability and Utility of Three Personality Types." European Journal of Personality 16: S73-S87.

Costa, P. T. and R. R. McCrae (1995). "Solid Ground in the Wetlands of Personality: A Reply to Block." Psychological Bulletin 117(2): 216-220.

Cutting, B. and A. Kouzmin (2004). "A synthesis of knowing and governance: making sense of organizational and governance polemics." Corporate Governance 4(1): 76-114.

Dameyer, J. J. (2001). Psychometric evaluation of the Riso-Hudson Enneagram Type Indicator, California Institute of Integral Studies.

Daniels, D. N. and P. O'Hanrahan (2004). Enneagram Professional Training Program - Panel Interviewing. Bristol, Trifold School for Enneagram Studies.

Daniels, D. N. and V. A. Price (2000). The Essential Enneagram. San Francisco, HarperCollins.

Daniels, K., P. Brough, et al. (1997). "A note on a modification to Warr's measures of affective well-being at work." Journal of Occupational and Organizational Psychology **70**: 129-138.

De Fruyt, F., I. Mervielde, et al. (2002). "The Consistency of Personality Type Classification Across Samples and Five-Factor Measures." European Journal of Personality **16**: S57-S72.

Devos, T., D. Spini, et al. (2002). "Conflicts among human values and trust in institutions." British Journal of Social Psychology **41**: 481-494.

Diener, E. (1996). "Traits Can Be Powerful, but Are Not Enough: Lessons from Subjective Well-Being." Journal of Research in Personality **30**(3): 389-399.

Downey, G. and S. I. Feldman (1996). "Implications of Rejection Sensitivity for Intimate Relationships." Journal of Personality and Social Psychology **70**(6): 1327-1343.

Dweck, C. S. (1996). "Capturing the Dynamic Nature of Personality." Journal of Research in Personality **30**(3): 348-362.

Edwards, P., I. Roberts, et al. (2002). "Increasing respose rates to postal questionnaires: systematic review." British Medical Journal **324**: 1-9.

Epstein, S. (1996). "Recommendations for the Future Development of Personality Psychology." Journal of Research in Personality **30**(3): 435-446.

Eysenck, H. J. (1967). The Biological Basis of Personality. Springfield, Charles C. Thomas.

Feldman Barrett, L. (1998). "Discrete Emotions or Dimensions? The Role of Valence Focus and Arousal Focus." Cognition and Emotion **12**(4): 579-599.

Feldman Barrett, L. and J. A. Russel (1998). "Independence and Bipolarity in the Structure of Current Affect." Journal of Personality and Social Psychology **74**(4): 967-984.

Feldman, D. C. (2002). "Managers' propensity to work longer hours: A multilevel analysis." Human Resource Management Review **12**: 339-357.

Fenigstein, A., M. F. Scheier, et al. (1975). "Public and Private Self-Consciousness: Assessment and Theory." Journal of Counselling and Clinical Psychology **43**(4): 522-527.

Field, A. (2000). Discovering Statistics Using SPSS for Windows. London, Sage Publications Inc.

Fleming, J. and M. S. Horner (1992). The motive to avoid success. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Freud, S. (1963). Introductory Lectures in Psychoanalysis. London, Penguin.

Friedman, M. and R. H. Rosenman (1974). Type A Behavior and your heart. New York, Alfred A Knopf.

Funder, D. C. (2001). "Personality." Annual Review of Psychology 52: 197-221.

Furnham, A. (1997). The Psychology of Behaviour at Work: The individual in the organisation. Hove, Psychology Press.

Gamard, W. S. (1986). Interrater reliability and validity of judgments of enneagram personality types, California Institute of Integral Studies.

Ganz, M. (1953). The psychology of Alfred Adler and the Development of the Child. London, Routledge and Kegan Paul Ltd.

Garrety, K., R. Badham, et al. (2003). "The use of personality typing in organizational change: Discourse, emotions and the reflexive subject." Human Relations 56(2): 211-235.

Garson, D. G. (2007). "Statnotes: Topics in Multivariate Analysis." Retrieved 25 June, 2007, from http://www2.chass.ncsu.edu/garson/pa765/assumpt.htm.

Geertz, C. (1975). "On the Nature of Anthropological Understanding." American Scientist 63: 47-53.

George, D. and P. Mallery (2003). SPSS for Windows Step by Step - a simple guide and reference. London, Pearson Education Inc.

George, J. M. (2004). Personality and Work-related distress. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Geyer, P. (1988). "An MBTI History." Retrieved 15 September, 2007, from http://members.ozemail.com.au/~alchymia/library/history.html.

Ghorbani, N., P. J. Watson, et al. (2003). "Two facets of self-knowledge: Cross-cultural development of measures in Iran and the United States." Genetic, Social and General Psychology Monographs 129(3): 238-268.

Giga, S. I., C. L. Cooper, et al. (2003). "The Development of a Framework for a Comprehensive Approach to Stress Management Interventions at Work." International Journal of Stress Management 10(4): 280-296.

Goldberg, M. J. (1999). The 9 Ways of Working: how to use the enneagram to discover your natural strenghts and work more effectively. New York, Marlowe and Company.

Goodstein, L. D. and R. I. Lanyon (1999). "Applications of personality assessment to the workplace: A review." Journal of Business and Psychology 13(3): 291-322.

Greenglass, E. R., R. Schwarzer, et al. (1999). The Proactive Coping Inventory (PCI): A Multidimensional Research Instrument. 20th International Conference of the Stress and Anxiety Research Society.

Greenglass, E. R., R. Schwarzer, et al. (1999). "The Proactive Coping Inventory (PCI): A Multidimensional Research Instrument." Retrieved 10 May 2006, 2006.

Greenwald, A. G. and M. R. Banaji (1995). "Implicit Social Cognition: Attitudes, Self-Esteem, and Stereotypes." Psychological Review 102(1): 4-27.

Gryskiewicz, N. D. and W. L. Tullar (1995). "The relationship between personality type and creativity style among managers." Journal of Psychological Type **32**: 30-35.

Hamilton, M. B. (2003). "Online Survey Response Rates and Times: Background and Guidance for Industry." Retrieved 22 February 2007, from http://www.supersurvey.com.

Harré, R. (1998). The Singular Self. London, Sage Publications.

Heisenberg, W. (1927). "Uncertainty Paper." Retrieved 25 October, 2004, from http://www.aip.org/history/heisenberg/p08.htm.

Hofstee, W. K. B. (2002). "Types and Variables: Towards a Congenial Procedure for Handling Personality Data." European Journal of Personality **16**: S89-S96.

Hogan, R. (2004). Personality psychology for organisational researchers. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Hough, L. M. (2003). Emerging Trends and Needs in Personality Research and Practice. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

IPAT. (2001). "16PF World." Retrieved 23 September, 2005, from http://www.16pfworld.com/.

IPIP. (2001). "International Personality Item Pool." Retrieved 20 December, 2004, from http://ipip.ori.org/.

James, W. (1911). Memories and Studies. New York, Longmans, Green and Co.

Johnson, J. W. (2003). Toward a better understanding of the relationship between personality and individual performance. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

Judge, T. A. (1991). "Does Affective Disposition Moderate the Relationship Between Job Satisfaction and Voluntary Turnover?" Journal of Applied Psychology **78**(3): 395-401.

Judge, T. A. and R. Ilies (2002). "Relationship of Personality to Performance Motivation: A Meta-Analytic Review." Journal of Applied Psychology **87**(4): 797-807.

Judge, T. A., C. J. Thoreson, et al. (2001). "The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review." Psychological Bulletin **127**(3): 376-407.

Kagan, J. (1998). Three Seductive Ideas. London, Harvard University Press.

Kale, S. H. and S. Shrivastava (2003). "The enneagram system for enhancing workplace spirituality." The Journal of Management Development **22**(4): 308-328.

Kamineni, R. (2005). "The Next Stage of Psychographic Segmentation: Usage of the Enneagram." Journal of American Academy of Business, Cambridge **6**(1): 315-320.

Kelly, G. A. (1955). The Psychology of Personal Constructs. New York, W. W. Norton and Company Inc.

Kho, E. C. (2001). An evaluation study of the effectiveness of a United States-based global leadership development program.

Kirkcaldy, B. D., R. J. Shephard, et al. (2002). "The influence of type A behaviour and locus of control upon job satisfaction and occupational health." Personality and Individual Differences 33: 1361-1371.

Koestner, R. and D. C. McClelland (1992). The affiliation motive. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Krahe, B. (1990). Situation Cognition and coherence in personality. Cambridge, Cambridge University Press.

Latham, G. P. and C. C. Pinder (2005). "Work Motivation Theory and Research at the Dawn of the Twenty-First Century." Annual Review of Psychology 56: 485-516.

Levin, E. S. (1997). The impact of inner work on professional effectiveness.

Luthans, F. and S. J. Peterson (2003). "360-Degree Feedback with Systematic Coaching: Empirical Analysis Suggests a Winning Combination." Human Resource Management 42(3): 243-256.

Maier, N. R. F. (1931). "Reasoning in humans II. The solution of a problem and its appearance in consciousness." Journal of Comparative Psychology 12: 181-194.

Mandara, J. (2003). "The Typological Approach in Child and Family Psychology: A Review of Theory, Methods and Research." Clinical Child and Family Psychology Review 6(2): 129-146.

Maslow, A. H. (1968). Toward a Psychology of Being. London, Van Nostrand Reinhold Company.

Mathieu, J. E. and D. M. Zajac (1990). "A Review and Meta-analysis of the Antecedents, Correlates and Consequences of Organizational Commitment." Psychological Bulletin 108: 171-194.

McAdams, D. P. (1992). The intimacy motive. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

McAdams, D. P. (2001). "The Psychology of Life Stories." Review of General Psychology 5(2): 100-122.

McClelland, D. C. (1992). Motivational configurations. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

McClelland, D. C. (1996). "Does the Field of Personality Have a Future?" Journal of Research in Personality 30(3): 429-434.

McClelland, D. C. and R. Koestner (1992). The achievement motive. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

McClelland, D. C., R. Koestner, et al. (1989). "How do Self-Attributed and Implicit Motives Differ?" Psychological Review 96(4): 690-702.

McCrae, R. R. and P. T. Costa (1990). Personality in adulthood. New York, Guilford Press.

McCrae, R. R. and P. T. Costa (1996). Ch 3 Toward a New Generation of Personality Theories: Theoretical Contexts for the Five-Factor Model. The Five Factor Model of Personality: Theoretical Perspectives. J. S. Wiggins. London, The Guilford Press: 66-75.

McCrae, R. R. and P. T. Costa (1997). "Personality Trait Structure as a Human Universal." American Psychologist 52(5): 509-516.

McCrae, R. R. and P. T. Costa (2003). Personality in Adulthood: A Five Factor Theory Perspective. London, Guildford Press.

McCrae, R. R. and O. P. John (1992). "An Introduction to the Five-Factor Model and Its Applications." Journal of Personality 60(2): 175-215.

McKelvie, S. J. (1992). "Does memory contaminate test-retest reliability?" Journal of General Psychology 119(1): 59-72.

Meglino, B. M. and E. C. Ravlin (1998). "Individual Values in Organizations: Concepts, Controversies, and Research." Journal of Management 24(3): 351-389.

Meyer, J. P., N. J. Allen, et al. (1993). "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization." Journal of Applied Psychology 78(4): 538-551.

Mischel, W. (1968). Personality and Assessment. London, John Wiley and Sons, Inc.

Mischel, W. (1973). "Toward a Cognitive Social Learning Reconceptualization of Personality." Psychological Review 80(4): 252-283.

Mischel, W. and Y. Shoda (1995). "A Cognitive-Affective System Theory of Personality: Reconceptualizing Situations, Dispositions, Dynamics, and Invariance in Personality Structure." Psychological Review 102(2): 246-268.

Mischel, W. and Y. Shoda (1998). "Reconciling Processing Dynamics and Personality Dispositions." Annual Review of Psychology 49: 229-258.

Moshavi, D., F. W. Brown, et al. (2003). "Leader self-awareness and its relationship to subordinate attitudes and performance." Leadership and Organization Development Journal 24(7): 407-418.

Murray, H. A. (1936). "Basic Concepts for a psychology of personality." Journal of General Psychology 15: 241-268.

Naranjo, C. (1994). Character and Neurosis: an integrative view. Nevada City, Gateways / IDHHB, Inc.

Nathans, H. (2004). The Enneagram at Work: Towards personal mastery and social intelligence. London, Cyan/Scriptum.

Newgent, R. A. (2001). An investigation of the reliability and validity of the Riso-Hudson Enneagram Type Indicator, The University of Akron.

Newgent, R. A., P. E. Parr, et al. (2004). "The Riso-Hudson Enneagram Type Indicator: Estimates of Reliability and Validity." Measurement and Evaluation in Counseling and Development 36: 226-237.

Nikolaou, I. and I. T. Robertson (2001). "The Five-Factor model of personality and work behaviour in Greece." European Journal of Work and Organizational Psychology 10(2): 161-186.

Nisbett, R. E. and T. DeCamp Wilson (1977). "Telling more than we can know: verbal reports on mental processes." Psychological Review 84(3): 231-259.

Nunnally, J. C. (1978). Psychometric theory. New York, McGraw Hill.

Office for National Statistics. (1992, 2003). "UK Standard Industrial Classification of Economic Activities." Retrieved 2 February, 2006, from http://www.statistics.gov.uk/methods_quality/sic/default.asp.

Office for National Statistics. (2000). "Standard Occupational Classification." Retrieved 2 February, 2006, from http://www.statistics.gov.uk/methods_quality/soc/structure.asp.

OPP. (2007). "Psychometric Tools - MBTI." Retrieved 1 August, 2007, from http://www.opp.co.uk/prod2.aspx?title=48&t1=49&t2=50&t3=51&t4=52&t5=209&Img=4 14.

Organ, D. W. and J. B. McFall (2004). Personality and Citizenship Behaviour in Organisations. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Ownsworth, T., J. Desbois, et al. (2006). "The Associations Among Self-Awareness, Emotional Well-Being, and Employment Outcome Following Acquired Brain Injury: A 12-Month Longitudinal Study." Rehabilitation Psychology 51(1): 50-59.

Ozer, D. J. and S. P. Reise (1994). "Personality Assessment." Annual Review of Psychology 45: 357-388.

Pacwa, M. (1991). "Tell Me Who I Am, O Enneagram." Christian Research Institute Journal(Fall): 14-25.

Palmer, H. (1988). The Enneagram - Understanding Yourself and the Others in Your Life. San Francisco, HarperCollins.

Palmer, H. (1995). The Enneagram in Love and Work: Understanding your intimate and business relationships. San Francisco, HarperCollins.

Palmer, H. (1995). The Pocket Enneagram: understanding the nine types of people. San Francisco, Harper Collins.

Pennebaker, J. W., T. J. Mayne, et al. (1997). "Linguistic Predictors of Adaptive Bereavement." Journal of Personality and Social Psychology 72(4): 863-871.

Pennebaker, J. W., M. R. Mehl, et al. (2003). "Psychological Aspects of Natural Language Use: Our Words, Our Selves." Annual Review of Psychology 54: 547-577.

Pervin, L. A. and O. P. John (2001). Personality Theory and Research. New York, John Wiley & Sons.

Polkinghorne, D. E. (1988). Narrative Knowing and the Human Sciences. Albany, State University of New York Press.

Porter, L. W., R. M. Steers, et al. (1974). "Organizational Commitment, Job Satisfaction and Turnover among Psychiatric Technicians." Journal of Applied Psychology 59: 603-609.

Puca, R. M., G. Rinkenauer, et al. (2006). "Individual Differences in Approach and Avoidance Movements: How the Avoidance Motive Influences Response Force." Journal of Personality 74(4): 979-1014.

Randall, D. M., D. B. Fedor, et al. (1990). "The Behavioral Expression of Organizational Commitment." Journal of Vocational Behavior 36: 210-224.

Riso, D. R. and R. Hudson (1999). The Wisdom of the Enneagram. New York, Bantam Books.

Robertson, S. (2005). Stress and the workplace. London, Mind (National Association for Mental Health).

Roccas, S., L. Sagiv, et al. (2002). "The Big Five Personality Factors and Personal Values." Personality and Social Psychology Bulletin 28(6): 789-801.

Roe, R. A. and P. Ester (1999). "Values and Work: Empirical Findings and Theoretical Perspective." Applied Psychology: An International Review 48(1): 1-21.

Rogers, C. R. (1951). Client-Centered Therapy - Its current practice, implications, and theory. Boston, Houghton Mifflin Company.

Rohan, M. J. (2000). "A Rose by Any Name? The Values Construct." Personality and Social Psychology Review 4(3): 255-277.

Rokeach, M. (1973). The Nature of Human Values. New York, John Wiley.

Ros, M., S. H. Schwartz, et al. (1999). "Basic Individual Values, Work Values, and the Meaning of Work." Applied Psychology: An International Review 48(1): 49-71.

Rosse, J. G., M. D. Stecher, et al. (1998). "The impact of response distortion on preemployment personality testing and hiring decisions." Journal of Applied Psychology 83(4): 634-644.

Ryan, A. M. and A. Kristof-Brown (2003). Focusing on personality in Person-Organisation Fit Research: Unaddressed issues. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

Sagiv, L. and S. H. Schwartz (2000). "Value priorities and subjective well-being: direct relations and congruity effects." European Journal of Social Psychology 30: 177-198.

Salmon, E. (2003). The ABC of the Enneagram. Penrith, The Institute for Outdoor Learning.

Saucier, G. and L. R. Goldberg (2003). The Structure of Personality Attributes. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

Saudino, K. J. and R. Plomin (1996). "Personality and Behavioral Genetics: Where Have We Been and Where Are We Going?" Journal of Research in Personality 30(3): 335-347.

Schmukle, S. C. and B. Egloff (2005). "A Latent State-Trait Analysis of Implicit and Explicit Personality Measures." European Journal of Psychological Assessment 21(2): 100-107.

Schultheiss, O. C. and J. C. Brunstein (1999). "Bridging the gap between implicit motives and explicit goals." Journal of Personality 67(1): 1-38.

Schwartz, S. H. (1992). "Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries." Advances in Experimental Social Psychology 25(1-65).

Schwartz, S. H. (1999). "A Theory of Cultural Values and Some Implications for Work." Applied Psychology: An International Review 48(1): 23-47.

Schwartz, S. H. (2003). "ESS1 Coding Human Value Scale." Retrieved 31 July 2006, 2006, from ess.nsd.uib.no/files/2003/ESS1CodingHumanValueScale.doc.

Schwartz, S. H. and W. Bilsky (1987). "Toward a universal psychological structure of human values." Journal of Personality and Social Psychology 53(3): 550-562.

Schwartz, S. H. and K. Boehnke (2004). "Evaluating the structure of human values with confirmatory factor analysis." Journal of Research in Personality 38: 230-255.

Schwartz, S. H. and L. Sagiv (1995). "Identifying culture-specifics in content and structure of values." Journal of Cross-Cultural Psychology 26(1): 92-116.

Scott Kelso, J. A. (1993). Dynamic Patterns: The Self-Organisation of Brain and Behaviour. London, MIT Press.

Shafer, A. B. (2000). "Mediation of the Big Five's effect on career decision making by life task dimensions and on money attitudes by materialism." Personality and Individual Differences 28: 93-109.

Sharp, P. M. (1994). A factor analytic study of three Enneagram personality inventories and the Vocational Preference Inventory, Texas Tech University.

Sheehan, K. (2001). "E-mail Survey Response Rates: A Review." Journal of Computer Mediated Communication 6(2): 1-19.

Shoda, Y. and W. Mischel (1996). "Toward a Unified, Intra-individual Dynamic Conception of Personality." Journal of Research in Personality 30(3): 414-428.

Silvia, P. J. (2002). "Self-awareness and the Regulation of Emotional Intensity." Self and Identity **1**: 3-10.

Silvia, P. J. and T. S. Duval (2001). "Objective Self-Awareness Theory: Recent Progress and Enduring Problems." Personality and Social Psychology Review **5**(3): 230-241.

Singh, R. and J. H. Greenhaus (2004). "The relation between career decision-making strategies and person-job fit: A study of job changers." Journal of Vocational Behavior **64**: 198-221.

Skodol, A. E., J. M. Oldham, et al. (2005). "Dimensional Representations of DSM-IV Personality Disorders: Relationships to Functional Impairment." American Journal of Psychiatry **162**: 1919-1925.

Smith, B. and C. Robie (2004). The Implications of Impression Management for personality research in organisations. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Smith, C. P. (1992). Reliability Issues. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Smith, C. P., J. W. Atkinson, et al., Eds. (1992). Motivation and Personality: Handbook of Thematic Content Analysis. Cambridge, Cambridge University Press.

Sokolowski, K., H.-D. Schmalt, et al. (2000). "Assessing Achievement, Affiliation, and Power Motives All at Once: The Multi-Motive Grid (MMG)." Journal of Personality Assessment **74**(1): 126-145.

Spangler, W. D. (1992). "Validity of Questionnaire and TAT Measures of Need for Achievement: Two Meta-Analyses." Psychological Bulletin **112**(1): 140-154.

Spangler, W. D., R. J. House, et al. (2004). Personality and Leadership. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Spokane, A. R., E. I. Meir, et al. (2000). "Person-Environment Congruence and Holland's Theory: A Review and Reconsideration." Journal of Vocational Behavior **57**: 137-187.

Spony, G. (2003). "The development of a work-value model assessing the cumulative impact of individual and cultural differences on managers' work-value systems: empirical evidence from French and British managers." International Journal of Human Resource Management **14**(4): 658-679.

Staw, B. M. (2004). The dispositional approach to job attitudes: An empirical and conceptual review. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Stewart, G. L. (2003). Toward an Understanding of the Multilevel Role of Personality in Teams. Personality and Work: Reconsidering the role of personality in organisations. M. R. Barrick and A. M. Ryan. San Francisco, Jossey-Bass.

Stewart, G. L. and M. R. Barrick (2004). Four lessons learned from the person-situation debate: A review and research agenda. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Stewart, S. M. (2007). "An Integrative Framework of Workplace Stress and Aggression." The Business Review 8(1): 223-234.

Storr, A., Ed. (1989). Freud. Oxford, Oxford University Press.

Storr, A., Ed. (1998). The Essential Jung. London, Fontana Press.

Tabachnick, B. G. and L. S. Fidell (2001). Using Multivariate Statistics. London, Allyn and Bacon.

Tett, R. P. and J. P. Meyer (1993). "Job Satisfaction, Organisational Commitment, Turnover Intention and Turnover: Path Analyses based on Meta-Analytic Findings." Personnel Psychology 43: 259-293.

Thomas, A. and S. Chess (1977). Temperament and Development. Oxford, Brunner/Mazel.

Thrasher, P. (1994). The enneagram: Movement between types, an inventory, and a criterion measure, Loyola University of Chicago.

Tischler, L. (1996). "Comparing person-organization personality fit to work success." Journal of Psychological Type 28: 34-43.

Tokar, D. M., A. R. Fischer, et al. (1998). "Personality and Vocational Behavior: A Selective Review of the Literature, 1993-1997." Journal of Vocational Behavior 53: 115-153.

Trapnell, P. D. and J. D. Campbell (1999). "Private Self-Consciousness and the Five Factor Model of Personality: Distinguishing Rumination from Reflection." Journal of Personality and Social Psychology 76(2): 284-304.

Trochim, W. M. K. (2006). "Research Methods Knowledge Base 2nd Edition." Retrieved 3 June, 2006, from http://www.socialresearchmethods.net/kb/.

Trudeau, K. J. and R. Reich (1995). "Correlates of psychological mindedness." Personality and Individual Differences 19(5): 699-704.

Tupes, E. C. and R. E. Christal (1992). "Recurrent Personality Factors Based on Trait Ratings." Journal of Personality 60(2): 225-251.

van Katwyk, P. T., S. Fox, et al. (2000). "Using the Job-Related Affective Well-Being Scale (JAWS) to Investigate Affective Responses to Work Stressors." Journal of Occupational Health Psychology 5(2): 219-230.

Vansteelandt, K. and I. Van Mechelen (1998). "Individual Differences in Situation-Behavior Profiles: A Triple Typology Model." Journal of Personality and Social Psychology 75(3): 751-765.

Veroff, J. (1992). Power Motivation. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Vogt, D. S. and C. C. Randall (2005). "Assessment of Accurate Self-Knowledge." Journal of Personality Assessment **84**(3): 239-251.

Wagner, J. (1981). A Descriptive, Reliability and Validity Study of the Enneagram Personality Typology. Psychology. Chicago, Loyola University of Chicago.

Wagner, J. (1983). "Reliability and validity study of a Sufi personality typology: The Enneagram." Journal of Clinical Psychology **39**(5): 712-717.

Wagner, J. (1996). The Enneagram Spectrum of Personality Styles. Portland, Metamorphous Press.

Walsh, W. B. (2004). Vocational psychology and personality. Personality and Organisations. B. Schneider and D. B. Smith. London, Lawrence Erlbaum Associates.

Warling, D. L. (1995). An examination fo the external validity of the Riso Hudson Enneagram Type Indicator, University of Guelph.

Warr, P. (1990). "The measurement of well-being and other aspects of mental health." Journal of Occupational Psychology **63**: 193-210.

Watkins, E. and M. Moulds (2005). "Distinct Modes of Ruminative Self-Focus: Impact of Abstract Versus Concrete Rumination on Problem Solving in Depression." Emotion **5**(3): 319-328.

Watson, D., L. A. Clark, et al. (1988). "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales." Journal of Personality and Social Psychology **54**(6): 1063-1070.

Westen, D. (1996). "A Model and a Method for Uncovering the Nomothetic from the Idiographic: An Alternative to the Five-Factor Model?" Journal of Research in Personality **30**(3): 400-413.

Westen, D. (1998). "The Scientific Legacy of Sigmund Freud: Toward a Psychodynamically Informed Psychological Science." Psychological Bulletin **124**(3): 333-371.

Williams, M. L., M. A. McDaniel, et al. (2006). "A Meta-Analysis of the Antecedents and Consequences of Pay Level Satisfaction." Journal of Applied Psychology **91**(2): 392-413.

Wilson, T. D. and E. W. Dunn (2004). "Self-Knowledge: Its Limits, Value and Potential for Improvement." Annual Review of Psychology **55**: 493-518.

Winter, D. G. (1992). Power motivation revisited. Motivation and Personality: Handbook of Thematic Content Analysis. C. P. Smith, J. W. Atkinson, D. C. McClelland and J. Veroff. Cambridge, Cambridge University Press.

Winter, D. G., O. P. John, et al. (1998). "Traits and Motives: Toward an Integration of Two Traditions in Personality Research." Psychological Review **105**(2): 230-250.

Wyman, P. (1998). "Integrating the MBTI and the Enneagram in Psychotherapy: The Core Self and the Defense System." Journal of Psychological Type **46**: 28-40.