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PERSONALITY AND PRACTICE: THE DEVELOPMENT OF PROFESSIONAL IDENTITY AMONG CLINICAL PSYCHOLOGISTS

A PORTFOLIO OF RESEARCH, PRACTICE AND STUDY

Submitted in fulfilment of the requirements for the degree of Doctor of Clinical Psychology

(DClinPsych)

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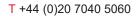
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SECTION A: PREFACE

PREFACE

My interest in studying the personality traits and cognitive-epistemological styles of psychoanalytic and cognitive-behavioural psychotherapists came as a result of observations from my professional life as a clinical psychologist and psychoanalytic psychotherapist. I noticed that the majority of psychologists and psychotherapists I encountered believed firmly in one of these two particular approaches to understanding themselves, their patients and the nature of humankind, and I wondered why. I also noted that neither group seemed interested in the treatment and research activities of the other. Indeed there was often hostility or, more dangerously, ignorance. This Doctorate presented an opportunity to research these observations and find out if there is a psychological explanation. I was not interested in evaluating which orientation or practitioner characteristics were the 'best' but whether particular psychological traits were associated and responsible for choice, membership, and identification with either psychotherapeutic orientation.

Practitioners from these two orientations appear to have two different types of personalities, ways of thinking and theories of knowledge. I suspect this is not unique to clinical psychologists and psychotherapists, and that it

probably also exists between, and within other professional groups. Indeed a review of the literature found evidence suggesting the presence of what some authors call a grand epistemological dichotomy with two distinct patterns of personality traits (Royce and Moss, 1980; Johnson et al, 1988). Notably the writer and scientist C.P. Snow (1964), in his 1959 Rede lecture at Cambridge University, described the existence of two competing value and philosophical systems, which he called the 'two cultures'. As a result of spending time with scientists and literary colleagues he found that he was constantly "...moving among two groups - comparable in intelligence, identical in race, not grossly different in social origin, earning about the same incomes who had almost ceased to communicate at all, who in psychological climate had little in intellectual. moral and common..."(p2). Snow's account parallels my own experience of working with cognitive-behavioural and psychoanalytic psychotherapists.

Very early in my career I became aware of significant differences in the way the two orientations assessed and treated patients. When working with behaviourists treatment primarily involved the measurement, definition and description of the patient's observable symptomatic behaviours, and with psychoanalytic psychotherapists involved an assessment of the state of the

patient's internal world, unconscious conflicts and the analysis of the patient's re-creation of these in the transference. What struck me even more than these differences however, was that the two groups have completely different and oppositional views concerning the nature of what constitutes evidence to support their psychological models. I also noted that although cognitive-behaviourists now work with the thought processes that they believe cause behaviour and feeling, primarily their treatment goal remains the same - symptom modification.

I found it remarkable that both orientations were so dimly aware of the other's model and that they were not particularly interested to find out about each other. It is as if both groups have come from completely different planets, peopled by completely different species. I wanted to understand why their assumptions, attitudes, beliefs and theories of knowledge seem distinct and separate, and the opportunity to do research allowed me to indulge this interest.

The first difficulty was to clarify how these variables could be operationalised, and what instruments could be employed to measure them.

A review of the literature found that studies investigating the differences

between psychotherapists from these two orientations had employed personality and epistemological inventories. I used findings from these studies to derive two summary descriptions of the characteristic personality and cognitive-epistemological traits identified with psychodynamic and cognitive-behavioural psychotherapists. The resulting two descriptions (Table 1.3) are quite distinct and different, suggesting that there are characteristic traits associated with each orientation. However, many problems with the quality of the research were found, and I proposed to conduct a better study.

This research project therefore investigates the link between psychotherapeutic orientation and personality and cognitive-epistemology, through a more robust and rigorous study. Psychotherapists from the two standardised personality orientations completed and cognitiveepistemological inventories (by post) in sufficient numbers to generate reliable and valid data. The results of this investigation strongly support the suggestion of a link or association between who we are (personality), how we think (cognition), what we believe (epistemology), psychotherapeutic orientation. They support my hypothesis that orientation choice is probably not just a matter of chance, or a result of objective evaluation and deliberation, but is related to the approach which most closely reflects personality and cognitive-epistemological style. Psychotherapists often believe that their particular orientation is the true way to understand people. The results of this study suggest this may be because the chosen model reflects their personality and cognitive-epistemology and, as a consequence, they believe in it. One interesting study related to this hypothesis found that when a therapist's orientation does <u>not</u> fit with their epistemological beliefs, they experience dissonance, doubt and difficulty (Vasco, Garcia-Marques and Dryden, 1993).

Clinical psychologists and psychotherapists who have not chosen an orientation may also have distinctive personality and cognitive-epistemological styles. This group appear to wander like travellers from model to model, at times making temporary identifications with particular approaches, but often becoming disillusioned until yet another new perspective is discovered. Such persons describe themselves as eclectic, integrative or simply unsure. Although the research did not evaluate this group, it is possible they may also have their own particular constellation of personality and cognitive-epistemological styles.

I hope the results of this research will cause clinical psychologists and psychotherapists to pause and consider how much their orientation commitment is really based upon an objective evaluation of their model, or whether their choice and belief are influenced by their own personality and cognitive-epistemological styles. I think there is a further implication from this research, the results could suggest that these psychotherapeutic models were created by people who were characterised by the two different personality and cognitive-epistemological styles. If this is true it does not make these models any less valuable and helpful to understanding human behaviour, but we might more accurately acknowledge their nature and limitations.

The case-work and literature review are related to two other professional interests; learning disability and psychoanalytic psychotherapy. When I became involved in learning disability I found it difficult to understand why it was a speciality in the first place, and why psychologists involved with it seemed separate and distinct from mainstream adult clinical psychology. I was also struck by the relative lack of interest and research into the emotional lives of people with learning disability. This is of concern since so many learning disabled people seem to have considerable emotional and

mental health problems, and it is difficult to develop methods of assessing and treating the emotional aspects of their learning disability. The case-work (Section C; Part 1) presents a consultation model I have found useful when working with those responsible for, and intimately involved with, the care and support of this client group. I show how this type of consultation can respond to the emotional developmental needs and difficulties that people with learning disability endure.

The literature review (Section D) gave me an opportunity to investigate how other professionals approach the subject of emotion in learning disability. A review of the literature from 1936 to the present discovered two major findings; 1) there is a relative paucity of research, and 2) researchers unanimously complain that not enough attention is being paid to this area. I dealt with the paucity of direct research by reviewing studies of learning disabled people in the areas of child development, families, psychotherapy and mental health. This provided a much broader and more informed literature of almost 100 articles, still a relatively small number when compared to the available research on emotion in non-learning disabled adults and children. The review suggests there is tremendous potential for research and treatment related to the emotional difficulties and development

of people with learning disability, the results of which could enable them to live richer emotional lives.

Findings from my research into orientation choice suggest a possible explanation for the neglect of emotion by clinical psychologists in learning disability. My investigation found, among other differences, that behavioural clinical psychologists are less concerned with emotion and prefer quantitative data about measurable behaviour. The majority of clinical psychologists working in learning disability are of a behavioural orientation, my research suggests that behaviourists may be less likely than their psychodynamic colleagues, who are in the minority, to be concerned with the research and treatment of emotional disorders. This leads to the speculation that because behaviourally-orientated psychologists are less interested in emotion, they may find learning disability, with its emphasis on pragmatic issues like living skills development, modifying behaviour and service planning, a better fit with their personality and cognitiveepistemology. If this is true, it illustrates how the process of orientation choice and commitment is not merely of academic interest, but can determine how particular client groups actually end up being treated and understood.

In the second case-work discussion (Section C; Part 2) I explore the difficulty of practising psychoanalytic psychotherapy in the NHS within the current climate of evidence-based practice and cost-effectiveness. It is much easier for cognitive-behaviourists to demonstrate and evaluate effectiveness because their techniques are orientated towards symptom relief. Nevertheless, psychoanalytic psychotherapists can and must address these issues, otherwise this form of treatment may be denied to the less well-off members of society. The case I present attempts to address cost-effectiveness and evidence-based practice with a borderline personality disordered patient, and shows that a meaningful psychotherapeutic response to these issues can be made.

Johnson, J.A., Germer, C.K., Efran, J.S., and Overton, W.F. (1988). Personality as the basis for theoretical predictions. <u>Journal of Personality and Social Psychology</u>, 55 (5), 824-835.

Royce, J.R., and Mos, L.P. (1980). <u>Manual</u>, <u>Psycho-Epistemological Profile</u>. (Center for Advanced Study in Theoretical Psychology). University of Alberta, Canada.

Snow, C.P. (1964). The two cultures and a second look. London: Cambridge University Press.

Vasco, A.B., Garcia-Marques, L., and Dryden, W. (1993). "Psychotherapist know thyself!": Dissonance between metatheoretical and personal values in psychotherapists of different theoretical orientations. <u>Psychology research</u>, 3, (3), 181-196.

SECTION B : RESEARCH

AN INVESTIGATION INTO THE PERSONALITY TRAITS AND COGNITIVE-EPISTEMOLOGICAL STYLES OF COGNITIVE-BEHAVIOURAL AND PSYCHOANALYTIC PSYCHOTHERAPISTS

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ABSTRACT

This is an investigation into the personality traits and cognitiveepistemological styles of psychotherapists from the two major orientations. The purpose is to try to understand the role these styles and traits may play in the psychotherapeutic orientation choice. Two hundred and forty seven from the psychoanalytic and cognitive-behavioural psychotherapists orientations completed standardised personality and epistemological style inventories. The results reveal significant differences on these measures between the two orientation groups. This suggests that specific personality and cognitive-epistemological style traits are important variables associated with a psychotherapist's choice of model or orientation. An examination of the trait profiles suggests there are fundamental differences in several areas of personality and cognitive-epistemological style. This has implications for training, practitioner satisfaction, and understanding why there is little communication between these two major orientations.

CHAPTER 1

AN INVESTIGATION INTO THE PERSONALITY TRAITS AND COGNITIVE-EPISTEMOLOGICAL STYLES OF COGNITIVEBEHAVIOURAL AND PSYCHOANALYTIC PSYCHOTHERAPISTS

1.0 INTRODUCTION

In June 1991 the Canadian psychologist John B. Conway delivered his Presidential Address to the annual convention of the Canadian Psychological Association. His address, titled "A World of Differences Among Psychologists", posed these questions:

"How is it that we psychologists come to hold such contrasting metatheoretical positions about the discipline? What leads some of us to believe that mind is brain, that human behaviour is completely determined, or

that humans can be explained by the laws of a natural science of behaviour, while others of us reject such beliefs in favour of contrasting positions? How do we stand on such large issues? I shall attempt to persuade you that our stances on such metaphysical puzzles of psychology are, in part, related to our personalities" (Conway, 1992, p1).

Psychotherapists also adopt contrasting metatheoretical positions. Some believe that there is only conscious observable behaviour, that thoughts create feelings, and treatment must be symptom orientated. Others reject such beliefs in favour of unconscious motivation, internal psychic structure, and the interpretation of symptoms. Conway (1992) said he believed psychologists' metatheoretical positions were related to personality. This study investigates a similar possibility, that psychotherapeutic orientation reflects psychotherapists' personalities and cognitive-epistemological styles.

1.1 The search for an epistemological dichotomy

Conway described a grand philosophical dichotomy, science versus humanism, along which he fit the metatheoretical values of psychologists. He obtained support for his dichotomy from a review of early psychologists' speculations, e.g. William James, Henry Murray, Carl Rogers and later

empirical research. His review of the research was extensive and comprehensive and some of these studies will be described later. However, what will be seen is support for a metatheoretical, metapsychological and metaphysical dichotomy. There are many labels or guises under which it is represented e.g. subjectivism versus objectivism, elementarism versus holism, organicism versus mechanism, and metaphorism versus empiricism.

A comprehensive review of the many different theories of knowledge psychologists hold is contained in Conway's (1989) unpublished manuscript, *Epistemic Values and Psychologists: A World of Individual Differences*, which probably formed the basis for his presidential address. A 'summary sketch' was prepared by Johnson and Miller (1990) from Conway's 1989 review as part of their empirical investigation into the existence of an epistemic division - this sketch is presented below as Table 1.1. It reviews psychological epistemology from the last 90 years, and is arranged by Johnson and Miller to illustrate the presence of the dichotomy. The summary sketch presents evidence from 23 publications to support the existence of two distinctly different theories of knowledge: a linear, analytic style versus an holistic, intuitive style. In order to empirically investigate the existence of this division Johnson and Miller factor analysed seven major

psychometric measures of epistemological style (noted in Table 1.1 by a*). They found that two different factors emerged which resembled and gave support to Conway's grand epistemic dichotomy.

TABLE 1.1 Summary of the proposed epistemic dichotomy. Reproduced from Johnson and Miller (1990).

Linear, Analytic Style	Holistic, Intuitive Style	Source
Lockean	Leibnitzean	Allport (1955)
Noncreative	Creative	Barron & Harrington (1981)
Analytical	Intuitive	Bruner (1960)
Objective	Subjective	Brunswick (1952)
Restrictive	Fluid	Coan (1979)
Objectivist	Subjectivist	Coan (1987)*
Mechanism	Systems Philosophy	Holt et al (1984)*
Modern, scientific	Primitive, Magical	Horton (1975)
Tough-minded	Tender-Minded	James (1907)
Mechanistic	Organicismic	Johnson et al (1988)*
Thinking, sensing	Feeling, Intuiting	Jung (1923)
Science	Humanism	Kimble (1984)*
Apollonian, Pythagorean	Dionysian	Knapp (1964)
Formism, Mechanism	Relativism, Dialectism	Kramer et al (1987)*
Generic	Particular	Maslow (1957)
Peripheralists	Centralists	Murray (1938)
Left Brain	Right Brain	Ornstein (1972)
Rational, Empirical	Metaphorical	Royce (1964)*
Scientists	Humanists	Snow (1964)
Rightist Ideoaffect	Leftist Ideoaffect	Tomkins (1965)
Geometrical-Technical	Physiognomic	Werner (1955)
Field Dependent	Field Independent	Witkin & Goodenough (1977)
Dispositional, Causal	Precausal	Young (1975)*

^{*}Indicates that a psychometric measure was used in the original study and in Johnson and Miller's (1990) factor-analytic study.

Conway's (1992) review shows that a psychologist's position on the epistemic dichotomy can be associated with belief in particular

psychological models. This investigation hypothesises that, in a similar fashion, a psychotherapist's epistemological position on this dichotomy will be associated with particular orientation choices. Evidence will be presented from the literature to show that personality and cognitive-epistemological factors are involved in the process of orientation choice. The literature suggests it is necessary to measure both types of factors to adequately describe the relationship between an individual and their psychotherapeutic orientation choice.

1.2 Other factors involved in orientation choice

It is important to consider the views of those who have questioned the assumption and evidence for a relationship between personality and orientation choice. In 1978 the journal *Psychotherapy: Theory, Research and Practice* published a special edition titled, "The Relationship Between the Personality of the Psychotherapist and his/her Selection of a Theoretical Orientation to Psychotherapy" (Barron, 1978a). In it the behavioural psychologist Arnold Lazarus challenged the concept of a personality type being attracted to a particular orientation as 'stereotyping'. He humorously noted:

"Stereotypes, like toadstools, proliferate all too easily. The 'hard nosed' behaviourist and the 'soft headed' mentalist are supposed to represent opposite ends of a continuum. The sad-faced and bearded psychoanalyst, with stooped shoulders, pensive gaze and Talmudic depth is the presumed antithesis of the action-orientated behaviour modifier whose mindless technocratic methods reflect his or her manipulative tricks" (Lazarus, 1978, p359).

Lazarus does not believe personality factors orientate a therapist to an approach. Rather he thinks therapists "....will shape his or her general school affiliation and its specific techniques to fit his or her own personality" (p360).

On a more serious note Cummings and Lucchese (1978), in the same special issue, emphasised the role of the 'inadvertent' in orientation selection. Inadvertent factors, such as primary clinical experiences in training, interface with clinical models and particular supervisors. Cummings and Lucchese believe ".... accidental factors play an important, if not primary role, at times leading to selection which may be inconsistent or in conflict with one's personality" (p327). Other variables that may affect one's initial choice of orientation include political, economic, socio-cultural, supervisor's ideology, and initial patient population (Schwartz, 1978).

Schwartz became concerned with the question of personality when he wondered what personality traits and characteristics would attract a person to become a psychotherapist and eventually influence his or her choice of orientation. He appears to strike a compromise by allowing that inadvertent factors and personality play an initial role in determining orientation but then concludes personality characteristics would determine whether the therapist would continue to maintain that orientation.

There seems to be a range of views concerning the importance of the relationship between personality, cognitive-epistemological style, and the psychotherapist's orientation. One view is that the choice is entirely accidental and comes from inadvertent factors. Another view allows for an interaction between the accidental and inadvertent, and personality and cognitive-epistemological style. A final position is that personality and cognitive-epistemological traits are wholly responsible for orientation choice.

It is interesting to note that Conway, after his extensive consideration of the role of personality and cognitive traits in psychologists' choice of orientation, developed doubts about the value of such researches. He said,

"After I had written a very long piece reviewing the empirical relationships between metaphysical values and cognitive and personality characteristics, the highlights of which I have just outlined, I began to have sobering second thoughts about the value of this research" (Conway, 1992, p9).

His second thoughts concerned the real limitations of traditional empirical research of the kind he had just extensively reviewed. He wondered how sense could be made of the connections seen in the literature between psychologists' metatheoretical positions and their personalities. He also pointed out that the research was correlational. It could not determine definitively that because certain personality and cognitive-epistemological traits existed for different orientations, they had caused people to adopt them. Finally he was concerned that individuals with certain extreme trait patterns might make it appear that all persons belonging to that particular orientation shared the same trait patterns. He thought that there may be a large middle group of therapists, similar in traits between orientations, that are disguised by the extreme scores of a significant few. He gave in to these second thoughts and sought to answer the question in another way, with a close examination of the life of William James. Conway's (1992) conclusion is that we do indeed have individual metaphysical values that are part of our cognitive and personality characteristics, but empirical research does not do them justice. This is a valid criticism, however, the analysis of William James's life may not have provided a better method.

It is important to mention Donald Sundland's (1977) review chapter, "Theoretical Orientations of Psychotherapists", as he touched upon issues raised later by Conway in his presidential address. Sundland discussed only three pieces of research related to the <u>personality</u> traits of psychotherapists and concluded by saying, "There are very few studies which have addressed this question" (p203). He then criticised two of them, the first on the basis of the inadequacy of the instrument used, the California Personality Inventory, and the second because it used 27 measures with only 13 subjects.

Sundland evaluated a study performed by Weiss (1973). This was an investigation of analytically versus behaviourally orientated clinical students. Sundland noted that Weiss observed that analytic students were interpersonally sensitive and modest; while behavioural students by contrast focused on behaviour, external details and seemed sure of themselves. These differences reminded Weiss of William James's concepts of tough minded versus tenderminded. The other two studies Sundland reported were

performed in 1969 and 1975, and concerned the values and belief systems of psychoanalytic and humanistic versus learning theory therapists. He said these studies found, "... beliefs scaled along an intuitive-objective dimension related to 'school' choices of clinical psychologists; psychoanalytic and humanistic therapists tended toward the intuitive end, while learning theory therapists tended toward the objective pole" (Sundland, 1977, p215). He concluded his review with a series of questions similar to those Conway was to pose in 1991,

"The dynamic interaction between the therapist's *Weltanschuung* and his therapeutic orientation has been researched only slightly. Clearly the philosophical ideas are present first. Do they remain unchanged by the training and practical experiences of therapists? Do they guide the novice therapist in his choice of therapeutic orientation? These and many other questions in this area remain unanswered" (Sundland, 1977, p215).

1.3 Literature review

The relationship between personality and cognitive-epistemological style, and choice of therapeutic orientation has been examined through speculative and theoretical studies, and actual quantitative and qualitative research

employing personality and cognitive-epistemological measures. Examples of both types of studies are reviewed.

1.3.1 A special journal review on personality and psychotherapy orientation

The epitome of armchair speculation and philosophising about the relationship between personality and cognitive style and orientation can be seen in the majority of articles in the special edition of *Psychotherapy: Theory, Research and Practice* (Barron. 1978a). The journal was published under the auspices of the American Psychological Association by the Division of Psychotherapy. The editor Jules Barron stated the relationship assumption clearly, "Without an understanding of theory we cannot practice knowledgeably. And without an understanding of personality we cannot understand the source and development of theory" (Barron, 1978b, p307). Nineteen articles appeared in the special edition. With the exception of the two articles mentioned earlier, Lazarus (1978) and Cummings and Lucchese (1978), overwhelmingly the articles appeared to accept the assumption that personality is the primary factor in choice of theoretical orientation.

Three of the nineteen articles reported an actual piece of empirical quantitative research, but only one was satisfactorily related to the topic in question (Walton, 1978). Walton used a 98 semantic differential on 134 participants from five differently orientated groups of therapists. He found evidence that three out of eight personality variables were related to the theoretical orientation of the therapist. The second research article was solely concerned with measuring psychotherapists' values concerning sexual behaviours and lifestyles (Roman, Charles, and Karasu, 1978). In the third article, Herron (1978) worked with a small group of 21 participants for a preliminary study of the relationship between personality and orientation. He used the Personal Orientation Inventory and suggested that there was a probable link between personality and orientation. He concluded "... it appears fruitful to move on to the issue of the personality variables that may be involved in the choice of a theory of psychotherapy. Included will be the possible motivations already discussed, as well as others that may be detected in order to profile, if possible, the psychoanalyst or the behaviourist" (p401). He noted that a doctoral student, Janine Tremblay, had a proposal to perform a rigorous investigation into this area. This research was carried out and will be discussed later (Tremblay, Herron, and Schultz, 1986). This was the first large scale and thorough examination of the personality-orientation relationship, using standardised measures. It is interesting to note that a similar research proposal was also suggested by Franks (1978). After examining the stereotypes held about famous psychotherapists and their theoretical orientations he recommended using the Cattell 16 Personality Factor Questionnaire (Cattell, Eber, and Tatsuoko, 1970) to measure the personalities of therapists. He thought comparisons could then be made between therapists of different orientations to see how they actually scored on the different scales.

Two studies in the special edition used qualitative research methods. An indepth interview survey of five psychotherapists was performed by Chwast (1978) and from accounts of their personal development he concluded that personality was more important than opportunity for orientation choice. Steiner (1978) surveyed 50 psychotherapists by postal questionnaire, and concluded that the primary factor in orientation choice was their own therapist, followed by course work and orientation of trainers and colleagues. No formal assessment of personality was made.

The fourteen remaining articles in the special edition, although theoretical and speculative, deserve attention. It is from ideas that hypotheses are

derived and subsequently can be examined and tested. Two authors believed that the personality of the psychotherapists had a more powerful effect on practice than actual therapeutic orientation. Strupp (1978) suggested that orientation choice was not an accident but "...overdetermined and deeply rooted in one's biography" (p314). He concluded that in the end the orientation faded and only the personality of the psychotherapist remained. Jasnow (1978) shared a similar belief concerning the eventual emergence of the personality and fading of theoretical orientation. He stated there were two major attitudes in psychotherapy, the artist and/or the scientist.

The idea that personality may eventually come to predominate in psychotherapeutic practice concerned Albert Ellis (1978). He thought if that happened it may overwhelm the structure and discipline of the theoretical model. Ellis wrote that the consequences of this may be that psychotherapists "...then practise this system in highly idiosyncratic ways, or even in a manner that is really opposed to some of its basic tenets, largely because of the influence of their own personality characteristics or disturbances" (p329). He concluded personality was an important deciding factor for orientation and the manner in which practice develops within the theoretical framework.

The psychoanalytic view that personality must determine choice of orientation, as it does so much of human behaviour, was discussed by Marks (1978). He wondered "What...would cause someone to enter such a profession - what is the personality of the depth therapist, that would cause him to train intensively for years, to undergo his own depth analysis, in order to relive with his patients such deep depression, such turbulence, such primitive states of mental life" (p356). A similar psychoanalytic view was expressed by Lindner (1978) who believed the idea of a relationship between orientation and personality was hardly an earthshaking concept. He was more intrigued in the possibility of "... a direct relationship between that psychotherapist's personality and character structure and his/her decision in choosing a therapeutic orientation and that that decision might be influenced by unconscious dysfunctional needs and drives..." (p406).

Finally, the questions posed by authors in the special edition were summed up by Chwast (1978),

"What are the differences in personality among psychoanalysts, behaviour therapists, gestaltists, psychodramatists, bioenergeticists, humanists, Freudians, Jungians, Adlerians, Sullivanians, and transactional analysts? To what extent

have these practitioners been driven to their choices of orientation by personality factors? Which ones? To what extent has opportunity been the primary determinant? These are intriguing questions indeed" (p381).

1.3.2 Conclusions from the 1978 special journal review

The 1978 special edition provided a timely and much needed forum for these 21 writers and researchers to consider the effect that personality variables may have on orientation choice. The conclusion for over 85% of them was that personality does effect, cause or decide orientation choice. There was criticism about the lack of strong evidence for this proposition. Several authors suggested research designs using personality measures. There was, however, little consideration the role cognitive-epistemological styles may play. It appeared research concerning these epistemological variables already existed within general psychological research, but there were no suggestions that such variables should be measured in this context.

1.3.3 Two recent reviews of the literature

It is interesting to note the conclusions of two recent literature reviews on

the subject of psychotherapeutic orientation and personality. Both reviews concluded that there was evidence for a relationship but that many studies reviewed were inadequate (Keinan, Almagan, and Ben Porath, 1989; Tremblay et al., 1986). Keinan et al. (1989), in their review, noted the existence of some evidence against the relationship. In their review of evidence concerning the relationship between orientation and personality they mentioned three studies who they claim found no evidence of a relationship (Sloane, Staples, Cristol, Workston, and Whipple, 1975; Gibeau, 1975; Tremblay et al., 1986). However, although it is true one study found the existence of similar core therapist personality traits between orientations on their measure (The Personal Orientation Inventory (POI)) they also reported "...evidence of a relation between personality and theoretical orientation that supports previous research in this area. These results are limited by the scope and nature of the POI" (Tremblay et al., 1986, p109). It appears that Keinan *et al.* were incorrect in using Tremblay et al's. study as an example of there being no relationship. Tremblay et al., believing in the existence of a relationship, encouraged further research. They particularly recommended that, "It would be useful to use other personality measures and more specific measures of theoretical orientation" (p109).

Keinan *et al.* also reported that another investigation, Sloane *et al.* (1975), had found extreme differences in temperament and style *within* orientations and more similarities across orientation. However, this does not appear to be strong evidence because the study, reported below, only used six subjects and important differences were observed as well. In their conclusion regarding their literature review which extended from 1967 to 1989, Keinan *et al.* concluded that there was sufficient evidence of an association between therapist orientation and personality, but some findings were equivocal, some studies were impressionistic, samples could be small and trainees or students were used. Like the other review (Tremblay *et al.*, 1986), they pointed to the need for further systematic investigation of the relationship.

1.3.4 Three major studies published in the 1970s

Three important studies of psychologists' and psychotherapists' theoretical, epistemological, personality and value systems were published in the 1970s. An extensive study into the description and effectiveness of *Psychotherapy Versus Behavior Therapy* was published by Sloane *et al.* (1975). As part of their study they analysed the behaviours of three analytic and three

behaviour therapists. They found that behaviourists were more active, gave advice, were industrious, made value judgements, controlled the conversation, and dominated but achieved a deeper level of interpersonal contact than analysts.

An investigation of psychologists was undertaken by Richard Coan (1979) in his book, *Psychologists - Personal and Theoretical Pathways*. Employing psychometric instruments and factor analytic techniques, he sought to explore the process of orientation choice. He used a large number of randomly-selected psychologists and established that objectivism-subjectivism was the main factor that accounted for most of the variance between orientations. This dichotomy is described below.

OBJECTIVISM	SUBJECTIVISM	
factual orientation	theoretical orientation	
impersonal causality	personal will	
behavioural content emphasis	experiential content emphasis	
elementarism	holism	
physicalism	a rejection of physicalism	
quantitative orientation	qualitative orientation	

Coan found personality traits that correlated with the factor. He concluded

that it was reasonable to assume individual temperament and life history will make an individual receptive to different theories.

The third piece of work was an exhaustive study of psychotherapists, *The Fifth Profession*, by Henry, Sims and Spray (1971). This was a study of 4,000 psychotherapists and attempted to describe psychotherapy as a profession, how people were attracted to it, and their beliefs and attitudes. It also investigated why mental health professionals particularly were attracted to psychotherapy practice. The authors concluded that supervision, training, colleagues, experiences, broad social and personal goals and intellectual stimulation all influenced psychotherapy practice. The study dissected these influences by examining their effects within the different core mental health professions e.g. medicine, clinical psychology, social work, rather than by psychotherapeutic orientation. However, no formal attention was paid to personality or epistemological factors.

1.3.5 Review of the quantitative research on the relationship between orientation and personality and cognitive-epistemological style

This investigator reviewed 43 journal articles related to the topic of

personality and cognitive style and psychotherapeutic orientation. Articles were selected from the Psych-Lit database for the period 1974 - 1997. Further studies were then located from references appearing in those articles and the studies previously mentioned. The review found evidence from the literature to support the hypothesis that personality and cognitive-epistemological style is an important factor in orientation choice.

It was noted that the trait data found in these investigations had never been collated into a descriptive summary of each orientation's characteristics. Therefore this review investigates if the significant personality and cognitive-epistemological traits found from the research can be collated to characterise psychotherapists from the psychoanalytic and cognitivebehavioural orientations. This could provide useful reference and baseline data for the forthcoming investigation. To perform this evaluation it was decided to select only those studies that were empirical and used methods. Articles of a speculative, theoretical. quantitative impressionistic nature were not included. The evaluation was a difficult task since different measures of varying reliability and validity were used. The participants did not always fit into the dichotomy chosen (analyst or behaviourist), sizes of groups varied greatly, as did participant selection methods, and the degree of methodological rigour was inconsistent.

Twelve research articles were selected on the above criteria. These were then evaluated and all significant personality and cognitive-epistemological traits noted. Then the participant groups used for each study were examined. An attempt was made to fit them into one of three major psychotherapeutic categories (psychoanalytic, eclectic-humanist, and cognitive-behavioural). This was not particularly difficult since the studies had been seeking to measure these differently orientated groups. Consequently, they had used contrasting groups of therapists that mainly represented the two major approaches to psychotherapy.

Each piece of research was then evaluated by recording the number of participants, a description of them, the measurements used and the descriptive trait findings (see appendix 1.1). Next, a summary was prepared that contained just the significant trait descriptions from each study. This list grouped the traits according to whether the participants were psychoanalytic, behaviourist or humanist-eclectic (see appendix 1.2). Finally, from this list the important and relevant trait descriptions for each orientation were condensed and summarised. This summary is presented

later in Table 1.3 (p62). The summary is a distillation of 11 of the 12 studies and involved 1,583 participants. The twelfth study (Kolevzon, Sowers-Hoag, and Hoffman, 1989) involved family therapists and could not be fitted into the analyst or behaviourist dichotomy.

From data presented in the research articles a profile of the typical personality and epistemological characteristics of analysts and behaviourists was derived. The profile, although based upon quantitative empirical research, should be treated with caution because of the difficulties mentioned earlier. However, it offers a feel for the descriptions of the two orientations.

Before presenting the summary table and profile, the 12 studies will be briefly described and discussed. They are presented chronologically by year of publication, with the earliest first.

1.3.6 The quantitative studies

The early studies used various medical and psychiatric professionals as participants. This reflected the location of the psychological therapy as

mainly in a medical environment. An investigation of 78 psychiatrists who were either primarily organic or psychoanalytic in orientation, conducted by Kreitman in 1962, found significant differences between orientations. He employed the Guilford-Martin Personality Inventory, some Minnesota Multiphasic Personality Inventory scales and a Jungian Analyst's rating of participants on the introversion-extroversion dimension. Analysts were found significantly higher than organics for the trait dimensions, thinking introversion, depression, cycloid disposition and anxiety.

An investigation of 82 doctors, divided into three groups according to their degree of 'psychological interest', was performed by Walton (1966). He used the Omnibus Personality Inventory, his own attitude and professional values questionnaire and tests of complexity and thinking-introversion. The two groups with psychological interest differed significantly from the one without such an interest. The latter were more interested in physical aspects of illness, less interested in abstract ideas and reflectiveness and did not evidence thinking introversion.

Further studies of medical participants were conducted by Caine and Smail (1966, 1967, 1968a, 1968b, 1969a, 1969b). They published a series of

articles all related to the effects of training, attitudes, personalities, roles, and treatment methods on professional staff. Caine and Smail were committed to a more psychological approach to mental illness. They were particularly interested in breaking down the conventional institutional medical barriers and developing therapeutic communities. They were concerned to understand the interaction of personality and training and how this reflected in the treatment of patients, particularly, how psychological they were, rather than organic in the tradition of psychiatry at the time. In 1969 they studied the effects of personality on attitudes to psychiatric treatment using lay people, student nurses and occupational nurses (n=101). They used their own Attitude to Treatment Questionnaire, The Cattell Personality Factory Inventory, Hysteroid/Obsessoid Sixteen and Hostility/Direction of Hostility Questionnaire, and the Meyer-Briggs Type Indicator (MBTI). They found that the MBTI trait, 'thinking introversion', played a significant part in determining which attitude to treatment professional workers in psychiatry would adopt (psychological versus organic). Organically-orientated workers tended to be more concrete, practical and down to earth, as measured by the MBTI scale 'sensing/intuiting' (Caine and Smail, 1969a).

Actual psychotherapist participants were investigated by Angelos (1977). He used an 'experimental' assessment and an 'experiential' interview method to compare 10 behavioural and 11 psychoanalytic participants. He found two broad patterns, which he called the objective versus subjective dimension. Participants on the objective side (behaviourist) had extrapsychic personality styles and reported an emphasis on objectively measurable patient behaviours and environmental factors in therapy. Those on the subjective (analyst) side emphasised intrapsychic personality styles and an emphasis on introspection, dreams, memories and free association. He concluded that both experimental and experiential evidence confirmed personality influences psychotherapeutic methods.

The self-concept variables of 134 psychotherapists from four different orientation groups were measured by Walton (1978). He employed a 98 item semantic differential and extracted eight factors that accounted for 45% of the variance. The main observation was that on three of the factors (complexity, seriousness and rationality) he found significant differences between two of the orientations, psychodynamic and Rational Emotive Therapists (RET). Psychodynamic therapists viewed themselves as more serious and complex. RET therapists viewed themselves as more rational.

The first study to employ epistemological measures was published by Schacht and Black (1985). They studied 119 participants from two orientation groups, behaviour therapists and psychoanalysts. They measured the epistemological beliefs of the two groups using the Psycho-Epistemological Profile (Royce and Mos, 1980). The PEP (discussed later in the Methods chapter) describes three epistemological styles; metaphorism, empiricism and rationalism. The three styles are not mutually exclusive but arranged in a profile with the predominant style (highest score) first. Schacht and Black predicted the predominant style for psychoanalysts would be *metaphorism* as the highest scale, followed by *rationalism* and empiricism in descending order. For behaviourists the prediction was empiricism as the highest scale, followed by rationalism and metaphorism. The results were that for 86% of psychoanalysts the predominant style was indeed metaphorism, followed by rationalism and empiricism. For behaviourists there was no predominant style and none of the PEP profile possibilities occurred at a frequency greater than chance. However, when just the mean scores for metaphorism and empiricism were compared in a both differed in the predicted direction. analysis The separate psychoanalysts' mean score for *metaphorism* was significantly higher than behaviourists, and the behaviourists' mean score for *empiricism* was significantly higher than psychoanalysts. They explained this anomaly by pointing out it reflected the psychoanalytic group's homogeneousness and the behaviourists' heterogeneousness. The authors speculated why this might be so, mentioning training, political alignments, peer influence and chance.

Employing a different method to explore the relationship between personality and therapeutic model, Hill and O'Grady (1985) used 42 participants from three different orientations (psychoanalytic, behaviourists, humanistic) to examine the relationship between therapist orientation and actual intentions in therapy. They had participants listen to an excerpt from a therapy session and then try to decide what was in the mind of the therapist and their intention at that time. From a potential 19 different types of therapeutic intentions, six significantly differentiated behaviourists from analysts and one for humanists. Behaviourists evaluated the therapists as intending to: set limits, not concerned with attending to feelings, and looking for change and reinforcing it. Psychoanalytic psychotherapists saw the intentions as: not focusing, concentrating on feelings, looking for insight, and not concerned with change.

The first comprehensive study of personality differences using a standardised instrument was conducted by Tremblay *et al.* (1986). They investigated 180 participants from three orientations (psychodynamic, behaviouristic, humanistic), using a personality inventory (Personal Orientation Inventory (POI)) and comparing the results on its 12 scales. They found five of the scales had significant score overlap and did not differentiate between orientations. This suggested to the authors that the POI was measuring the existence of core 'therapeutic personality' traits. The authors also commented that limits of the scope and nature of the POI may have been responsible for these findings. However, three of the POI scales did differ by orientation. Behaviourists scored significantly lower than analysts for the traits; feeling reactivity, acceptance of aggression, and capacity for human contact.

The first large scale investigation into the epistemological beliefs and personalities of scientists, including psychologists of different orientations, was conducted by Johnson, Germer, Efran, and Overton (1988). They surveyed 622 participants divided into 12 different scientific-professional groups and 'normals'. The purpose was to explore how personality would relate to epistemological style. Their instrument, the Organicism-Mechanism

Paradigm Inventory (OMPI) measured participants on a dichotomy of metaphysical belief from mechanism to organicism. This instrument is further discussed in the Methods chapter. Relationships were examined between the OMPI and nine personality inventories including the Myers-Briggs Types Indicator (MBTI), Edwards Personal Preference Indicator, and the California Psychological Inventory (CPI). The OMPI measure of philosophical worldviews correlated pervasively but not consistently with a variety of personality variables. Strongest were the MBTI, CPI and the Bipolar Adjective Rating Scale. The authors concluded, "In short, individuals' personalities mirror their overall philosophical worldviews" (p833). The findings from Johnson et al's. study are used to describe two types of scientist; the *mechanistically* versus *organismically* inclined. These personality and epistemological summary descriptions are presented below.

Mechanistically inclined

"Mechanistically oriented persons (e.g. behaviourists) tend to be orderly, stable, conventional and conforming, objective, and realistic in their cognitive style. Interpersonally they are passive, obedient and reactive. This personality description is consistent with the mechanistic world view, which assumes an ontology of stability and elementarism, an epistemology of objectivism and realism, and a view of persons as reactive, passive, and estranged from yet determined by their environments, who fail to develop progressively.

Organismically inclined

In contrast *organismically* inclined individuals (e.g. developmental psychologists) tend to be fluid, changing, creative, and non-conforming. They tend to be participative and imaginative in their cognitive style. They are active, purposeful, autonomous and individualistic, yet integrated into their interpersonal environment. This personality portrait is consistent with the *organicismic* world view, which assumes an ontology of change and holism, an epistemology that is interactive and constructivistic, and a view of persons as active, purposeful, autonomous, creative, integrated into the social matrix, who progressively develop toward goals" (p833).

A different type of investigative approach was used by Keinan *et al.* (1989). They explored the relationship between orientation and the <u>perceived</u> personality characteristics of practitioners from their own and the other orientations. They studied 64 Israeli psychotherapists from three orientations (psychoanalytic, behaviourist, and eclectic) using their own instrument, the Therapists Characteristic Rating Scales (TCRS). The TCRS is a trait-rating scale used to assess perceived personality characteristics. Participants were requested to assess themselves and then assess typical therapists from the different orientations on the TCRS. Based on a component analysis of the TCRS trait items, three scales were constructed; action-orientated,

insight-orientated, and authoritarian. The only significant finding was that for self ratings behaviourists rated themselves significantly higher on action orientated characteristics than the other orientations. Interestingly, participants did perceive that there was a relationship between particular personality characteristics and orientations but did not view themselves as specifically fitting the patterns. Also when each orientation described the other two they appeared to take a more extreme view than the members of that orientation, perhaps creating stereotypes.

A study of the personality characteristics of family therapists from different orientations was conducted by Kolevzon *et al.* (1989. Unfortunately the therapists could not be assigned to the psychodynamic or behaviouristic dichotomy used in this evaluation. However, the study found that personality attributes, as measured by the Cattell 16PF, did play a role in predicting adherence to the belief and action systems unique to the therapist's particular orientation.

As part of an investigation into the effects of discrepancies between an individual's and a model's metatheoretical beliefs, Vasco, Garcia-Marques, and Dryden (1993) measured the epistemological styles of 140 Portuguese

psychotherapists from five different orientations. The study did not directly give information about any participant score differences on the epistemological measures used (PEP and OMPI), because it was not investigating that phenomenon. However one of the authors supplied that data by private communication (Vasco, 1997). The data showed there was a significant difference between orientations for organicism and mechanicism on the OMPI and for rationalism on the PEP. Unfortunately the analysis did not break down the between group effects to identify between which orientations this was occurring. However, Table 1.2 below shows behaviourists scoring in the mechanistic direction (the lowest organicism score = 17.17). For rationalism the biggest difference in scores is between the humanistic/existentialists (lowest 3.06) score and the system/communication group (highest score = 3.36). However, no significant difference between analysts and behaviourists was found on the PEP for metaphorism and empiricism, as had been found by Schacht and Black (1985). This finding may be explained by Vasco et al's. very unequal group sizes, which range from 12 to 59.

TABLE 1.2 Shows the mean scores for the OMPI and PEP scales for

different therapist orientations.

	Behavioural	Cognitive	Eclectic	Humanist	Psychodynamic	Systems	F
	n=12	n=59	n=21	n=14	n=32	n=16	
Organicism	17.17	21.49	20.9	21.86	21.03	21.25	4.4**
Metaphorism	3.58	3.6	3.77	3.74	3.81	3.71	1.4ns
Rationalism	3.31 3.37	sm 3.31 3.37 3.23 3.06	3.37	3.28	3.36	2.1*	
Empiricism	cism 3.32 3.19 3.19		3.19	3.04	3.25	0.8ns	

**p<.001 *p<.07

Source: Vasco, 1997

1.3.7 Summary of the quantitative studies

After examining the research, information was condensed and summarised as described earlier. Table 1.3 below is the list of those traits and descriptive terms distilled and chosen from the research presented in this review. It is presented as a profile of the personality and cognitive-epistemological characteristics of the 'typical' behavioural and psychodynamic psychotherapist.

TABLE 1.3 SUMMARY OF SUMMARIES

Behavioural Orientation

Psychodynamic Orientation

1)	There is a negative correlation with thinking introversion/extraversion (Kreitman, 1962).	1)	There is a positive association with thinking introversion/ extraversion, depression, cycloid disposition, anxiety, introversion
2)	Not significant for factors; complexity and thinking introversion (Walton, 1966).	2)	(Kreitman, 1962). Significant for factor thinking introversion (Walton, 1966).
3)	Significant for MBTI factor sensing (concrete, practical, down to earth). (Caine et al, 1969a).	3)	Significant for MBTI factor intuiting (ideas, imaginative thinking, theory and experimentation) (Caine et al, 1969a).
4)	Subjects preferred objective orientated therapy, extrapersonally orientated, measurable behaviour, environmental factors (Angelos, 1977).	4)	Subjects preferred subjective orientated therapy, intrapsychic personality styles, dreams, memories, free association (Angelos, 1977).
5)	R.E.T. therapists view themselves as more rational (Walton, 1978).	5)	Psychodynamic therapists view themselves as more serious and complex (Walton, 1978).
6)	Behaviour therapists score higher on empiricism, and rationalism than analysts. (Schacht and Black, 1985).	6)	Psychoanalysts score higher on metaphorism than behaviourists (Schacht and Black, 1985).
7)	set limits, change and reinforce change positively related to behaviourist; feelings, negatively related (Hill and O'Grady, 1985).	7)	Feelings and insight positively are related to psychoanalysts; Focus and change are negatively related. (Hill and O'Grady, 1985).
8)	Lower than psychodynamic/humanist on existentiality, feeling reactivity, acceptance of aggression, capacity for intimate contact. (Tremblay et al, 1986).	8)	Higher than behaviourists on scales existentiality, feeling reactivity, acceptance of aggression, and capacity for contact (Tremblay et al, 1986).
9)	Epistemological style: ontology of stability and elementarism, objectivism and realism. Persons are reactive, passive, estranged yet determined by environment. Personality: perceiving, judging, down to earth, inartistic, ordinary, simple, unlettered, easygoing, follower, cold, conservative, traditional, predictable, conventional, quitting. (Johnson et al, 1988).	9)	Personality style: Fluid, changing, creative, non conforming, participative, imaginative, active, purposes, autonomous, individualist yet integrated into interpersonal environment. Epistemological style: ontology of change, holism, interactive, constructive. Persons are: active, purposive, autonomous, creative, integrated into social matrix who develop progressively towards goals. (Johnson, et al, 1988).
10)	Rated themselves: (Active, initiative, practical, assertive, dominant, extravert) (Keinan et al, 1989).	10)	Analysts/eclectics rated themselves lower on; active, initiative, practical, assertive and dominant) (Keinan et al, 1989).

From the literature review and the summary analysis it is possible to construct a personality and epistemological description of the two orientations - a thumbnail sketch of a 'typical' cognitive-behaviourist and psychoanalytic psychotherapist. This is presented below.

The Cognitive-Behaviourist

The cognitive-behaviourist is not predominantly a thinker about the internal/inner world or its complexity. To investigate their hypothesis they require physical-sensory data that is concrete, objective, observable and measurable. They consider environmental factors as very important causes of behaviour. Cognitive-behaviourists see themselves as rational and empirical. As therapists they prefer to set limits, look for change and want to reinforce it. They are more concerned about thoughts than feelings. A lower acceptance of aggressive client feeling, intimate contact and awareness of feeling reactivity is reported, as is a liking for stability, realism and breaking down phenomena into elements. They can be down to earth, conventional, inartistic, traditional, predictable, orderly, stable and realistic. They rate themselves as active, having initiative, and with being practical, assertive, dominant and extrovert.

The Psychoanalytic Psychotherapist

The psychoanalytic psychotherapist's thinking is primarily concerned with the inner world. There is a tendency to depression, moodiness, anxiety and introversion. The main thinking approach is intuitive, having ideas, imagination, theorising and experimenting. In therapy psychoanalytic psychotherapists are concerned with the intrapsychic, dreams, memories and free association. They see themselves as serious, complex, and having metaphysical thoughts. As therapists they are concerned with feelings and insight not with focus and change, they have a feeling reactivity, acceptance of aggression and capacity for contact. A fluid changing, creative, nonconforming, imaginative, individualistic, active personality style is seen. Change is encouraged and there is a tendency to seeing the whole picture rather than its parts. They see themselves as passive, impractical, non-assertive, reactive rather than pro-active.

1.4 Comments and criticisms of the reviewed literature

Comments and criticisms of the reviewed literature are made in two main areas: the selection and orientation commitment of participants, and the types of personality and epistemological measures employed.

1.4.1 Participant and orientation selection

There were two methods for selecting participants for these investigations. Either a group of mental health practitioners, psychotherapists, or psychologists were asked to participate in a study and allowed to label their own orientation, or the investigators selected names from the professional registers of the appropriate orientation. Sometimes an orientation questionnaire was also given to confirm membership.

There are two problems that arise with these methods. With self-selection a person merely expresses an interest or puts themselves in a category that may not truly express their actual practice. When choosing from professional registers participants will also vary according to other factors. For example, one professional organisation may require a conservative and traditional approach but another, with the same orientation, may represent a more eclectic and experimental approach. Some studies allowed participants to self-assess their own orientation (Kreitman, 1962; Walton, 1966; Caine *et al.*, 1969a; Walton 1978; Hill and O'Grady, 1985; Keinan *et al.*, 1989). Other authors chose participants from professional registers and employed

an internal validity check questionnaire to verify their belief or commitment to their professional orientation (Schacht and Black, 1985; Tremblay *et al.*, 1986; Vasco and Garcia-Marques, 1993). Finally, belonging to a particular group of persons involved in similar activities implied a particular orientation for some investigators (Kolevzon *et al.*, 1989; Johnson *et al.*, 1988; Angelos, 1977). Those studies appear to have taken membership of a particular group to suggest an orientation.

There need to be two elements to participant selection; membership of a professional body that represents a high standard of training, commitment and membership requirement, plus a measure of the participants' commitment, interests and satisfaction with that orientation. Only three of the studies reviewed satisfied that criteria (Schacht and Black, 1989; Tremblay *et al.*, 1986; Vasco *et al.*, 1993).

Another comment about the participants used in these studies is that it is difficult for British researchers to evaluate the quality of the overseas professional bodies they belong to. The only British studies were conducted by Caine *et al.* and they were not concerned with comparing different orientations, but treatment attitudes. Consequently membership of a

particular theoretical orientation was not considered.

Finally, participant numbers also varied considerably between the studies. In some cases the orientation sub-groupings (e.g. analysts, behaviourists, eclectics) fell below 21 and as low as 13, (Walton, 1978; Angelos, 1977; Vasco *et al.*, 1993; Keinan *et al.*, 1989; Caine *et al.*, 1969a).

1.4.2 The measures

There were mainly two types of measures used in these studies; either the author's own measures or standardised ones. Occasionally some used both, for example Kolevzon *et al.*, (1989) and Caine *et al.*, (1969a). However, not all the studies were directly concerned with measuring personality and cognitive style differences. Therefore it may not have been appropriate for them to use standardised personality inventories.

Many of the personality and epistemological inventories employed no longer appear to be in mainstream clinical or research use. This could suggest there were problems with them. Some have been used in research up to the present (Cattell 16PF, Meyer Briggs Type Indicator, California Personality)

Inventory, Psycho-Epistemological Profile, and Organicism-Mechanism Paradigm Inventory).

1.5 Criteria for a satisfactory study

From this review of the literature it is suggested that to conduct a satisfactory study on personality and cognitive-epistemological style differences between psychotherapists of different orientations the following criteria should be satisfied:

- 1) A sufficient sub-group size of at least 50 participants in each group.
- 2) Participants chosen from recognised, high quality and orientation-committed professional bodies.
- 3) The use of an internal check on psychotherapeutic orientation and commitment.
- 4) The use of standardised, valid and reliable measures of personality and epistemology.
- 5) Consideration of the effects of gender and experience as independent variables, and in interaction with orientation.

Only one study came close to meeting all the above requirements, Tremblay

et al. (1986). It investigated only personality variables, not cognitiveepistemological style. However, the personality inventory employed (The Personal Orientation Inventory (POI)) had two problems. First, it appeared from Tremblay et al's. description the POI was not really a global measure of personality but was theoretically closely identified with self-actualisation theory. The authors themselves noted the results were "...limited by the scope and nature of the POI" (p109). Secondly, the POI, according to Tremblay et al., has a number of overlapping items in most sections and "... this tends to increase the probability of a personality cluster within any theoretical orientation" (p109). Indeed they did find a core group of personality traits that correlated to form what they called the 'therapist personality'. Although, because of the psychometric problem, they were unclear if it was truly core therapist traits they were measuring or the POI's overlapping items on scales.

Finally, none of the studies considered the effect gender and experience may have on orientation, personality and epistemological style differences. This appears to be a major omission. As one author noted concerning the measurement of therapists' theoretical orientation, "It is inappropriate to present psychotherapy research omitting the sex and experience level of

therapists" (Sundland, 1977, p216). Orientation, gender and experience are major independent variables and their interaction effects need to be considered.

1.6 Conclusions of this literature review

It appears from this review that there is not a study to satisfy the requirements listed above. No single study has brought together all the five essentials that would be required to research this topic correctly. Many studies had some of the elements but, to be fair, they were not always attempting to investigate personality and epistemological difference between orientations.

However, the research strongly suggests the presence of signs of personality and cognitive-epistemological differences between psychoanalytic psychotherapists and cognitive-behaviourists. What has become clear is that a study is required employing good measures of personality and cognitive-epistemological styles on participants with good training, registered by reputable bodies, who were committed to their professed orientation and would complete measures in sufficient number so that something useful

might be observed. That is what this investigation proposed to do.

1.7 Aim of the study

This study investigates personality and cognitive-epistemological style differences between psychoanalytic and cognitive-behavioural psychotherapists using well-researched and established measures with proven reliability and validity. The participants in this study are from firmly established professional bodies, with well-developed training in their professional orientation, confirm their orientation and answer verifying commitment questions. There is a large enough sample to be able to treat sub-groups statistically and explore the interactions of orientation with gender and experience.

CHAPTER 2

2.0 METHODS

The methods chapter consists of the following sections;

- 2.1 Participants
- 2.2 Procedure
- 2.3 Design
- 2.4 Validity and Reliability of The Instruments

2.1 Participants

A sample of 544 psychoanalytic and cognitive-behavioural psychotherapists were sent invitations to participate in this study. Half consented (267 of 544; 49%), and were then mailed personality and epistemological style questionnaire measures to complete. Almost all (247 of 267; 93%) returned completed and useable forms within the time frame of the study.

The participants were almost equally divided between psychoanalytic psychotherapists (134 of 247; 54%) and cognitive-behavioural psychotherapists (113 of 247; 46%). The majority were female (146 of 247; 59%) and the remainder male (101 of 247; 41%). The average age was 49.7 years and the mean number of years in clinical practice was 15.7 years

2.1.1 Strategy to encourage participation

This research investigation was conducted by postal questionnaire. Research conducted in this manner often produces low levels of response. Yet it was necessary for the validity of the study that each group (analysts and behaviourists) consisted of a minimum 100, for a total of 200 participants. This was because examination for interaction effects among the independent variables required a sufficiently large sample to analyse sub-groups. To achieve a sample size of 200, between 610 to 800 individuals would need to have been contacted, based on a participation rate between 25% to 33%. There was also concern whether the busy professional would find the time to compete questionnaires and return them. With these issues in mind the following steps were taken to increase participation and return of questionnaires:

- 1. A combination of random and opportunist/convenience samples was employed. The latter had an element of professional contact with the investigator that increased participation.
- 2. Potential participants were introduced to the research project through an invitation letter containing information and an informed consent to return (see Appendices 2.1, 2.2, 2.3 and 2.4). This would make the first step of commitment easier.
- 3. Participants were offered the option of receiving a summary report of the research findings.
- 4. Participants were offered the option of receiving a personal feedback summary on their individual questionnaire responses.
- 5. A reminder letter was sent after four weeks if the initial invitation or mailed questionnaire had not been received (see Appendices 2.5 and 2.11).
- 6. To reduce the time commitment from the proposed 60 minutes to 30 minutes and encourage participation, a decision was taken to postpone sending one of the questionnaires. This questionnaire (the PEP) was sent later to all those participants who had returned the initial questionnaires, accompanied by an explanatory letter (see Appendix 2.12).

If this strategy was effective, a return rate of 37% could be achieved producing the required 200 participants. In the event, a sample size of 544 was used, producing 267 returned consents. From these consents, a total of 247 of 267 (93%) participants completed the first questionnaire pack, and 165 of 247 (67%) the postponed questionnaire (the PEP). Tables 2.1 and 2.2 below present information concerning participation rates by the whole sample and then split by orientation.

TABLE 2.1 Shows the total participation and completion of questionnaires for the

whole sample.

	N	%
Requested participants	544	100%
Refused consent	44	8%
Consented	267	49%
Completed questionnaires (from total requested participants)	247	45%
Completed questionnaires (from total consented participants)	247	93%
Questionnaires not returned	20	7%
Participants sent PEP	247	100%
PEP completed (from total requested participants)	165	30%
PEP completed (from total consented participants)	165	67%

TABLE 2.2 Shows the total participation and completion of questionnaires when

the group is divided by orientation.

	ANALYST		BEHAVIOURIS	
	N	%	N	%
Requested participants	273	100%	271	100%
Refused consent	23	8%	21	8%
Consented	148	54%	119	48%
Completed questionnaires (from total requested participants)	134	49%	113	42%
Completed questionnaires (from total consented participants)	134	91%	113	95%
Participants sent PEP	134	100%	113	100%
PEP completed	90	67%	75	66%
PEP completed (from total consented participants)	90	33%	75	27%

Participation in the study was analysed by orientation. Participants were almost equally divided between analysts (134 of 247; 54%) and behaviourists (113 of 247; 46%). Of two thirds who subsequently completed the PEP (165 of 247); the proportions were 55% analysts (90 of 165) and 45% behaviourists (75 of 165). In conclusion, there was a good rate of actual participation (45%) which was similar for both analysts and behaviourists.

2.1.2 Participants' professional group memberships

It was important for the purposes of the study to ensure all participants were trained and professionally registered within their orientation.

2.1.2.1 Cognitive-behaviourists

All behaviourist participants were British Psychological Society (BPS) Registered Chartered Clinical Psychologists who were either members, or accredited United Kingdom Council of Psychotherapists (UKCP) practitioners within the British Association for Cognitive Behavioural Psychotherapists (BABCP). BABCP <u>accredited</u> members have to meet the training requirements of the BABCP in order to be UKCP registered. BABCP <u>members</u> register their interest in and practice of cognitive-behaviour therapy (CBT).

All <u>accredited</u> BABCP members (93) were invited to participate. One hundred and forty four clinical psychologists who were BABCP <u>members</u> were randomly selected from the register of 1,004. This was performed by selecting every seventh name unless an address could not be confirmed in

the BPS register when either the sixth or eighth name was chosen. Also an opportunist sample of 34 potential participants was provided by two senior chartered clinical psychologists who were well known for their commitment to CBT. A different invitation to participate (see Appendix 2.4) was sent to this group with the name of the recommending clinician. It was hoped this would encourage their participation. For the sake of brevity these participants will be referred to as behaviourists in this investigation.

2.1.2.2 Psychoanalysts and psychoanalytic psychotherapists

All psychoanalytic participants were registered with the United Kingdom Council for Psychotherapists (UKCP) and/or registered with the British Confederation of Psychotherapists (BCP). Analysts have various core professions (e.g. medicine, clinical psychology, social work, nursing, etc.) and training within UKCP/BCP. However, they all belong to either one or both of these registering organisations. The author attempted various methods to calculate what might be a representative sample and reflect membership distribution within the registering organisations. Part of the difficulty was that some individuals and organisations were registered with both the UKCP and BCP. To evaluate if the sample would be

representative, several attempts were made to determine what might be the membership proportion of organisations within the UKCP and BCP. However, this proved unsuccessful and it was decided to attempt the best mix of professional bodies possible, with reference to the approximate distribution. A breakdown by professional membership will be presented later.

The analytic sample consisted of a mix between three opportunist samples and a random sample as described below.

Three Opportunist Samples (N=104)

- 1. All analytic psychotherapists who worked in a psychotherapy clinic building the author was responsible for managing (49), and met the professional criteria for inclusion in the analyst group.
- 2. Analytic therapists known to the author professionally or to whom the author would be known (44).
- 3. A year's intake with a major BCP training organisation, the majority of whom had recently completed their training (11).

Random Sample (n=169)

Using the BCP directory every sixth name was chosen.

For the sake of brevity these participants will be referred to as analysts in this investigation.

2.1.3 Participants who gave their consent and completed questionnaires

2.1.3.1 Participants' orientation confirmation

It was important to confirm that participants really did see themselves as belonging to their publicly professed orientation, as defined by their professional membership. Therefore participants were asked to describe their orientation from one of the following four options on their Participants' Information Sheet (see Appendix 2.8); (1) psychoanalytic, (2) cognitive-behavioural, (3) analytical psychologist, and (4) other. The results were:

Analysts - Of the participants selected for this group, 80% (107 of 134) described themselves as psychoanalytic, 19% (26 of 134) as analytical psychologists, and one as cognitive-behavioural.

Behaviourists - Of the participants selected for this group, 96% (109 of 113) described themselves as cognitive-behavioural, one as psychoanalytic and three as other.

These results strongly suggested participants saw themselves as belonging to their publicly professed professional orientation. Over 96% selected the same orientation as their professional membership indicated.

2.1.3.2 Participants' professional memberships

Participants who consented and completed questionnaires had the following professional memberships as shown below.

Analysts

Table 2.3 below shows that the majority of analysts (97%, 130 of 134) belonged to the UKCP, BCP or had joint BCP/UKCP membership.

TABLE 2.3 Shows the UKCP/BCP distribution of participants in the study (n=134).

	N	%
UKCP alone	22	16 4%
BCP alone	58	43.3%
UKCP+BCP joint	42	31.3%
Student	8	6%
Missing data	4	3%
Total	134	100%

Table 2.4 below shows the membership breakdown of the analyst group. The British Association of Psychotherapists (BAP) had the most participants (43 of 134; 32%) followed by the British Psychoanalytical Society (26 of 134; 19%). The distribution probably reflects the effect of the steps mentioned previously that the author took to encourage participation.

TABLE 2.4 Shows the analysts professional organisation membership.

Many individuals belong to one or more organisations and this has not been noted.

	N	%
British Association of Psychotherapists (Freudian)	35	26.1%
British Association of Psychotherapists (Jungian)	8	6.0%
British Psychoanalytic Society	26	19 4%
Society of Analytical Psychologists	15	11.2%
Tavistock Training	12	9.0%
Lincoln Centre Psychotherapy	9	6.7%
Scottish Association of Psychoanalytic Psychotherapist	3	2.2%
Guild	1	.7%
Other*	25	18.7%
Total	134	100%
	1	1

^{*}NOTE: Other includes members of UKCP/BCP professional bodies including: NIASP, WMIP, ACP, YAPP and etc.

Behaviourists

Table 2.5 below shows the BABCP membership breakdown of the behaviourist group. The majority of behaviourists in the sample were members of the BABCP (75 of 113; 66%). There are 1,004 clinical psychologist members versus 93 accredited.

TABLE 2.5 Shows the professional membership groupings of the behaviourists.

	N	0/0
BPS/BABCP/Accredited	38	33.6%
BPS/BABCP/Members	75	66.4%
Total	113	100%

2.1.4 Participants described by age, gender, experience and location

A t-test was performed to see if there were significant orientation differences for age and experience. The t-test results for age revealed analysts were significantly different (older) than behaviourists at the p<.001 level of significance. There was no significant difference for years of experience or gender distribution. Table 2.6 below presents the mean ages

TABLE 2.6 Presents data concerning participants age and experience for both orientations.

	ANALYST		BEHAVIOURIST	
	(n=134)		(n=113)	
	М	SD	М	SD
Age	51.89	10.71	44.88	8.06
Years practice	15.30	9.86	16.25	8.58

TABLE 2. 7 Presents data concerning gender distribution between orientations.

	ANA	ANALYST		BEHAVIOURIST		
	(n=	(n=134)		=113)		
	N	%	N	0/0		
MALE	50	37.3%	51	45.1%		
FEMALE	84	62.7%	62	54.9%		

A chi square analysis found no significant difference in the relative distribution of males and females between analysts and behaviourists.

The geographical distribution of participants was also examined in terms of residence either inside or outside the Greater London area. Table 2.8 below shows the majority of analysts live within the Greater London area and the majority of behaviourists live outside. This was not an unexpected result but does show at least there was a significant representation from analysts from outside the Greater London area, where the minority are located.

TABLE 2.8 Presents data concerning the geographical location of participants.

TABLE 2.0 I resents data concerning the geographica						
	ANALYST		BEHAVIOURIST			
	(n=134)		(n=134)		(n=113)	
	N	%	N	%		
Within Grt London	101	75.4%	12	10.6%		
Outside Grt London	33	24.6%	101	89.4%		

2.1.5 Participation rates

The research attempted to ensure a good rate of participation, which was achieved. Table 2.9 below explores the proportional break down of participants' affiliations. It shows that participants from groups with some connection to the author or, in the case of behaviourists, to two known cognitive behavioural clinical psychologists, had a higher percentage rate of participation than the others. 68% of behaviourist participants were connected versus 38% with no connection, while 64% of analyst participants were connected versus 40% with no connection.

TABLE 2.9 Shows rates of participation by invited group.

	INVITED PARTIC		CIPATED	RATIO	
	N	%	N	%	%
BEHAVIOURISTS					
All BPS/BABCP Accredited Members	93	34.3%	33	29.2%	35.5%
Random BPS/BABCP Members	144	53.1%	57	50.4%	39.6%
Recommended by 2 senior clinicians	34	12.5%	23	20.4%	67.6%
TOTALS	271	100%	113	100%	
ANALYSTS					
All invited from author's clinic	48	17.6%	32	23.9%	66.7%
All analytic students/graduates	11	4.0%	7	5.2%	63.6%
Invited by author	44	16.1%	27	20.1%	61.4%
Random selection	170	62.3%	68	50.7%	40.0%
TOTALS	273	100%	134	100%	

2.1.6 Summary of participants

Analysts were significantly older than behaviourists but both groups have similar years of practice experience. This probably reflects the later age at which people begin an analytic training. There were more females than males in both groups and in similar proportions. This probably reflects the situation that both professional groups have a majority of females. Most

analysts were within the Greater London area where most training takes place. Behaviourists, probably reflecting the distribution of UK clinical psychologists, were found predominantly outside the Greater London area.

More people consented to participate when there was a professional connection with the author or the name of a professional colleague was given. At least 96% of the participants confirmed that their theoretical orientation was the same as their professional membership.

2.2 Procedure

Participants were selected for inclusion in the study as described in the previous section. Potential participants (544) were sent an invitation to participate, an information sheet, an informed consent form, and a stamped return envelope (see Appendices 2.1, 2.2, and 2.3). With the invitation was an option to receive a summary report of the findings. From this first mailing 104 consents were received from analysts and 87 from behaviourists.

A possible concern was that if participants received correspondence from an investigator of an apparently different theoretical orientation to their own this might affect their willingness to participate or how they responded on the questionnaires. They might believe, for example, that the investigator was biased in a particular way. Therefore when communicating with analysts the author truthfully identified himself as a psychoanalytic psychotherapist and with behaviourists he identified himself as a Chartered Clinical Psychologist. Participants were not specifically informed the study was comparing psychotherapists from different orientations.

At that time the initial design of the investigation called for the administration of four questionnaires;

- 1. The Millon Index of Personality Styles (MIPS)
- 2. The NEO Five Factor Personality Inventory (NEO)
- 3. The Organicism-Mechanism Paradigm Inventory (OMPI)
- 4. The Psycho-Epistemological Profile (PEP)

However, concern grew about the time commitment required to complete the four questionnaires (minimum one hour) and a decision was made to reduce this to two by selecting the best personality and epistemological style inventory. For personality style the Millon Index of Personality Styles (Millon, 1994) was chosen because it appeared to offer a greater breadth and depth of personality description than the NEO Five Factor Personality Inventory (Costa and McCrae, 1992). The MIPS does this by using a model that measures personality by three components; motivational aims, cognitive mode and interpersonal behaviour. The MIPS also generated 12 bipolar trait scales (24 total) as well as internal validity/reliability scales and an index of adjustment. For epistemological style, the Organicism Mechanism Inventory (Johnson, Germer, Efran, and Overton, 1988) was chosen because the research literature suggested its two factor design for describing epistemological style had better validity than the Psycho-Epistemological Profile (Royce and Mos, 1980). A further detailed discussion concerning the above measures is presented in the section, Validity and Reliability of Measurements.

This reduced the time required to approximately thirty minutes. This fact was noted in the reminder letters as well as the letter accompanying the questionnaire. It was also decided that those participants who did complete both the OMPI and MIPS could be subsequently offered the PEP to complete.

A reminder letter was then sent to those who had not returned consents (see Appendix 2.5) containing the revised strategy. In order to increase the uptake and encourage completion of questionnaires it was also decided to offer participants the opportunity to have individual feedback summaries on their questionnaire responses. One hundred and forty reminder letters noting this were sent to analysts and 160 to behaviourists. This resulted in an increase of 44 analyst consents and 32 behaviourist consents.

Consented participants were then sent a questionnaire pack containing;

- 1. Cover letter (see Appendix 2.6)
- 2. Questionnaire information sheet and request for individual feedback (see Appendix 2.7)
- 3. Participant information sheet to complete (see Appendix 2.8)
- 4. MIPS questionnaire and answer sheet (see Appendix 2.9)
- 5. OMPI questionnaire and answer sheet (see Appendix 2.10)

The participant information sheet was used to verify data gathered from the professional directories. Also, data about age, years of practice and gender were requested. Three questions were asked to determine the strength of a participant's commitment to their orientation (see Appendix 2.8). The response was on a five point scale. This data would be analysed to evaluate

participants' personal commitment to their orientation as distinct from publicly professed orientation membership. Also it would be another useful dimension to contrast the orientations and to confirm the sample was committed to its orientation.

The initial return of questionnaires was 99 for the analysts and 77 for the behaviourists. A reminder was sent to each participant (see Appendix 2.11) after four weeks. This resulted in a final return of 134 useable questionnaires for the analysts and 113 for the behaviourists.

PEPs were sent to the above participants who had returned questionnaires with a letter (see Appendices 2.12 and 2.13) explaining the wish to further explore epistemological style. No reminders were sent if participants did not complete and return the PEP. Ninety analysts and 75 behaviourists completed and returned useable questionnaires.

2.3 Design

This investigation compared two independent groups of participants (analysts and behaviourists) on a personality inventory and two measures of

epistemological style. Participants were also compared on a three question, five point scale measure of orientation commitment. The main factor (the independent variable) was the therapeutic orientation of the participant. However, it was also considered important to compare the data on two other factors; gender and years of experience. Interaction effects between the three factors were also to be explored.

All data from the dependent variables (personality, cognitiveepistemological style, commitment questions) were analysed initially by Multivariate Analysis Of Variance (MANOVA) for the three factors (orientation, gender, experience) and the three factor interactions (orientation+gender+experience). Orientation and experience were factors with two levels each. Experience, however, needed to be categorised into meaningful levels to analyse the effect it had on the dependent variables. Various methods of categorisation were considered. It was found that when all the participants were ranked by number of years in practice and then divided into thirds, three equally-sized groups resulted with three different levels of experience. The first group had between 1 to 10 years experience, the second 11 to 18 and the third 19 to 59 years. The descriptive labels novice, intermediate and senior were given to these three groups respectively, as shown in Table 2.10 below. This division appeared to fit empirically with how psychotherapist's experience is generally evaluated but it is recognised other categorisations could be considered.

TABLE 2.10 Shows how the factor experience was distributed into three levels.

	PERCENTILE RANGE	RANGE IN YEARS	N
Novice	1st to 33rd %ile	1 to 10	82
Intermediate	34th to 67th %ile	11 to 18	81
Senior	68th to 100th %ile	19 to 59	78

Where the MANOVA indicated a between subjects effect, a follow up Analysis Of Variance (ANOVA) was performed for single factor significant differences with two levels. Where the effect involved the three level factor experience, a Tukey HSD post hoc multiple comparison was performed to identify at which experience level the significant difference occurred.

Where the MANOVA indicated an effect for multiple factor interactions, for example orientation+experience, the following procedure was adopted. The group was first split by each of the two factors in turn and analysed by a one way ANOVA to determine where the significant difference was occurring. If it was occurring within a two level factor then it was sufficient to compare the mean scores. If it was between the three levels of the factor

experience, then a post hoc multiple comparison Tukey HSD test was performed to determine the levels concerned.

2.4 Validity and reliability of the instruments

This section examines the rationale, development, reliability, and validity of the three instruments used in this investigation.

2.4.1 Epistemological measure: The Organicism-Mechanism Paradigm Inventory

A review of the seven major measures of epistemological style or, as they are sometimes called, philosophical worldview measures, was conducted by Johnson and Miller (1990). This review was part of an attempt to explore whether there were basically two fundamental epistemologies which they proposed were,

"...associated with a distinctive cognitive and personality style. Mechanists, who endorse an objectivist worldview, appear to be conscientious, but somewhat rigid, restricted, and anti-intellectual. Organicists, who endorse a subjectivist worldview, are more humanitarian, interpersonally competent, and intellectually open" (Johnson and Miller, 1990, p1).

They subjected each measure to a factor analysis to see if it could be reduced to the *mechanism* versus *organicism* dichotomy. The measures and their relevant sources are listed below:

- Theoretical Orientation Survey (TOS) (Coan, 1979).
 The TOS is a 63 item, Likert format, self report inventory that assesses attitudes on theoretical and methodological issues in psychology.
- 2. World View Inventory (WVI) (Holt, Barrengos, Vitalino, and Webb, 1984).
 - The WVI is a 60 item, Likert format, self report inventory that assesses four world views.
- 3. Organicism-Mechanism Paradigm Inventory (OMPI) (Germer, Efran, and Overton, 1982).
 - The OMPI is a 26 item, forced choice inventory designed to measure an individual's preference for one of two worldviews.
- 4. Social Paradigm Belief Inventory (SPBI) (Kramer, Goldston, and Kahlbaugh, 1987).
 - The SPBI is a 56 item, Likert format inventory designed to assess agreement with four hypotheses concerning the nature of the world.
- 5. Psycho-Epistemological Profile (PEP) (Royce, Mos, and Kearsley, 1975).

 The PEP is a 90 item, Likert format inventory, designed to assess a person's position on three major epistemologies; Metaphorism, Rationalism, and Empiricism.
- 6. Epistemic Differential (ED) (Kimble, 1984).
 - The ED consists of 12 Likert format rating scales, designed to assess a person's position on 12 philosophical polarities in psychology.

The ED consists of 12 Likert format rating scales, designed to assess a person's position on 12 philosophical polarities in psychology.

7. Young Explanatory Satisfactory Schedule (YESS) (Young, 1975).

The YESS contains 55 short statements, responses to them indicate how satisfied participants are with three philosophies of science.

The authors found support for their two factor (*organicism-mechanism*) model of worldview. Their conclusions were:

"Factor 1 is clearly marked by Systems Theory from the WVI, Organicism from the OMPI, Relativism and Dialeticism from the SPBI, and Insight from the PEP. To employ our own terminology, we call this factor Organicism. Factor 2 is clearly defined by Mechanism from the WVI and OMPI, Formism from the SPBI, and Science from the PEP. Again, to use our own terminology, we call this factor Mechanism" (Johnson and Miller, 1990, p8).

In their discussion they concluded, "While certainly not all of the variance in available worldview measures can be captured by two factors, a significant amount can, and the meaning of the additional factors is not clear" (p9). It appears, from the above analysis, that the OMPI is able to determine the predominant worldview or epistemological style of a person within the *organicism-mechanism* dichotomy.

The OMPI is a 26 item forced choice questionnaire designed to measure an individual's preference for one of these two worldviews (see Appendix 2.10). It is based on the philosopher Stephen Pepper's (1942) book *World Hypotheses*. Pepper described a comprehensive taxonomy of four philosophical worldviews that, for the basis of empirical testing, could be reduced to these two. The designers of the OMPI believe each worldview has implications for personality (Johnson *et al.*, 1988). Their descriptions for *organicism-mechanism* with their respective personality implications are in Appendix 2.14. The relationship between epistemology and personality was explored empirically by Johnson *et al.* and will be discussed later.

2.4.2 Reliability of the OMPI

Johnson *et al.* (1988) reported the OMPI as having good internal consistency "...with a Guttman split half co-efficient of .86 and a Cronbach alpha coefficient of .76. A 3 week retest showed a stability coefficient of .77" (p825). However, from Johnson *et al's.* (1990) factor analysis it was noted that "Reliabilities for separate Organicism and Mechanism scales scored from the OMPI were good (.85 and .78), but the factor analysis

indicated 16 strong markers of Organicism (revised reliability = .83), but only 6 strong markers for Mechanism (revised reliability = .52)" (p6).

2.4.3 Validity of the OMPI

Johnson et al. (1988) published the results of two studies that supported the validity of the OMPI. In the first they used it on four groups of scientists with known theoretical predilections. They found scores on the OMPI "...showed predicted relations with the actual behaviour of scientists (written statements of theoretical preference, publishing and editing in specific journals, participation in symposia, etc.)" (p826). In the second study, data on sixteen different professional groups (716 subjects) was presented and showed the OMPI could discriminate between the expected underlying worldview direction. For example, as predicted, the mean scores for behaviourists, police applicants, engineering, medical and dental students were the lowest, pointing to their mechanistic orientation, whilst the highest mean scores were for human developmentalists, sociobiologists and personality psychologists pointing to the *organismic* direction. They also explored the expected correlation of organicism-mechanism with various personality and vocational measures. Pervasive support was found

for correlation between philosophical worldview and personality and somewhat less consistent support for their link with vocational inventories.

A summary description of the worldview and personality of the *organismic* and *mechanistic* individual, based upon OMPI and personality measures, was presented by Johnson *et al.* (1988):

"In summary, the evidence demonstrates clearly disparate personality portraits for persons holding a mechanistic worldview and persons endorsing an organismic worldview. Mechanistically oriented persons (e.g. behaviourists) tend to be orderly, stable, conventional, and conforming, objective and realistic in their cognitive style, and interpersonally passive, dependent, and reactive. This personality description is consistent with the mechanistic worldview, which assumes an ontology of stability and elementarism, an epistemology of objectivism and realism, and a view of persons as reactive, passive, estranged from-yet determined by their environments, who fail to develop progressively. In contrast, organismically inclined individuals (e.g. human developmentalists) tend to be fluid, changing, creative, and non conforming. They tend to be participative and imaginative in their cognitive style. They are active, purposive, autonomous, and individualistic, yet integrated into their interpersonal environment. This personality portrait is consistent with the organismic worldview, which assumes an ontology of change and holism, an epistemology that is interactive and constructivistic, and a view of persons as active, purposive, autonomous, creative, integrated into the social matrix, who progressively develop toward goals. In short, individuals' personalities mirror their overall philosophical worldviews" (p833).

Further research was conducted to extend the construct validity of the OMPI (Johnson, Howey, Reedy, Gribble, and Ortiz, 1989). These investigators used the OMPI to study groups consisting of administrators, educators, academic psychologists and psychotherapists. They found "...predicted relationships between the OMPI and theoretical orientation, educational philosophy, vocational interests and counselling philosophy were empirically confirmed" (p2).

2.4.4 Conclusions - OMPI

In conclusion the OMPI appears to have established validity for measuring philosophical worldview or cognitive style based upon a well founded dichotomy of *organicism-mechanism*. However, its test-retest reliability was mentioned in the above papers only in reference to a three week retest. Internal reliability seem to have been satisfactory.

2.5 Epistemological Measure: The Psycho-Epistemological Profile

From the review of philosophical worldview measures by Johnson and Miller (1990) and this study's review of different epistemological

instruments, it appears that the Psycho-Epistemological Profile, (PEP, Royce and Mos, 1980) is a well researched instrument that has good evidence for reliability and validity. The PEP (see Appendix 2.13) is a 90 item Likert-scaled questionnaire based on the philosophical system of J.R. Royce. Royce's epistemological system consists of three theories of knowledge described in his book *The Encapsulated Man* (Royce, 1964). The following is a brief description of these three theories of knowledge from the *Manual of the Psycho-Epistemological Inventory* (Royce and Mos, 1980):

- 1. "METAPHORISM. The person whose view of reality is largely determined by his commitment to metaphoric experience would test the validity of his view in terms of the universality of his insight or awareness. The cognitive processes underlying this commitment are of a symbolising nature, including both conscious and unconscious aspects.
- 2. RATIONALISM. The person whose view of reality is largely determined by his commitment to rationality would test the validity of his view of reality by its logical consistency. The major underlying cognitive processes involve clear thinking, and the rational analysis and synthesis of ideas.
- 3. EMPRICISM. The person whose view of reality is largely determined by his commitment to external experience would test his view of reality in terms of the reliability and validity of observations. The major underlying cognitive processes involve active perception and the seeking out of sensory experience" (p3).

The PEP inventory is the result of Royce and Mos's attempts to operationalise and measure *metaphorism*, *rationalism*, and *empiricism*.

2.5.1 Validity of the PEP

The PEP went through six revisions by its creators (Royce and Mos, 1980). These revisions involved the measure being validated by participants belonging to groups that the authors believed would predict certain epistemological styles; for example biologists and chemists should have a predominantly empirical worldview. In its final form it was standardised on 1,342 participants. The standardisation sample consisted of 925 male and 417 female students between the ages of 19-24 from a heterogeneous population.

Concurrent validity of the PEP was explored by giving the PEP to groups whose epistemological characteristics would be expected on the basis of Royce's theory. Royce and Mos (1980) wrote "Thus general experience would lead us to expect that a biologist will probably be committed to an empirical epistemology. Likewise the novelist or poet would most likely be committed to a metaphoric epistemology" (p46). They presented data from

different four studies involving over 947 participants from professional/orientation groups. The pattern of PEP scores did proceed in the predicted directions and gave support to their theory that predominate epistemological styles are associated with particular professional groupings. The results indicated: "...that empiricism is the dominant cognitive characteristic among professional persons engaged in chemistry and biology; that intuitionism (metaphorism) is more dominant among professional persons engaged in the performing arts (music and drama); and that rationalism is more dominant among those engaged in mathematics and theoretical physics" (p46).

The PEP was also examined for construct validity by comparing participants' PEP scores with results from a wide range of standardised measures, including vocational and occupational interest scales, values and social desirability, cognitive styles, academic achievement, masculinity-femininity scale, and a measure of therapeutic orientation. The measures were Meyers-Briggs Type Indicator, Edwards Social Desirability Scale, Strong Vocational Interest Blank, Theoretical Orientation Survey, Academic Achievement scale, and the Masculinity-Femininity Scale. This process involved many studies and significant numbers of subjects and led Royce

and Mos (1980) to conclude, "Taken as a whole, these studies provide considerable support for the theoretical ideas underlying the validity of epistemic styles as measured by the Psycho-Epistemological Profile" (p68).

A factor analysis of the PEP was reported by Royce and Mos (1980) to have identified three factors which corresponded to the three epistemological styles. However, it showed salient item loading (+/- .25 or greater) for only 40% of the items, suggesting the remaining items needed revision for test inclusion, or the test could be shortened to 41 items. Personal telephonic communication with Mos (May, 1997) confirmed this possibility.

In their reported factor analysis of seven worldview inventories (discussed earlier) Johnson and Miller (1990) found that a fairly radical revision of the scoring was necessary for the PEP. They found three factors that did not correspond with those found by Royce and Mos. Their examination of the items and where they occurred on the original PEP scales suggested the new factors should be named *insight*, *culture*, and *science*. The reported reliabilities of these new scales were .83, .85, and .73 respectively (Johnson and Miller, 1990).

2.5.2 Reliability of the PEP

Royce and Mos (1980) reported that each revision (there were six) of the PEP revealed every item to be positively correlated with the total score of its dimension. Split half reliability coefficients were reported as follows for the scales: *Rationalism* = .77, *Metaphorism* = .88, and *Empiricism* = .77. Test-retest reliabilities were reported at three and nine months on small samples (19 and 43 participants). This revealed a range across scales and conditions of .61 to .87. They believe that the correlation coefficients would be in the order of .80 to .90 if the number of participants were increased. Intercorrelation across the scales, "...indicate considerable dependence (i.e., they are all epistemic styles) among the three epistemological dimensions. Yet their relative degree of independence supports the interpretation that these are three meaningful and isolateable dimensions" (Royce and Mos, 1980, p71).

2.5.3 Conclusions - PEP

In conclusion, it appears that satisfactory reliability and validity has been demonstrated for the PEP. However, like the OMPI not enough has been

done to establish firmer test-retest reliability. For some reason, perhaps the nature of the measures, validity and internal reliability were considered more important. Perhaps Royce and Mos presumed that because they were attempting to measure a trait-like quality, it was unlikely to vary very much across a person's life. It was decided to analyse the PEP results from this investigation with Johnson's three new factors (*insight*, *culture*, *science*) as well as the original three defined by Royce and Mos (*rationalism*, *metaphorism* and *empiricism*). It was interesting that when this investigator spoke to Leo Mos he was not aware that Johnson's factor analytic treatment of the PEP revealed three new factors (Telephonic communication, June 1997).

2.6 Personality Measure: The Millon Index Of Personality Styles

2.6.1 Introduction

The literature review found that a number of personality measures had been used to measure differences between psychotherapists of different orientations. These included: Cattell 16PF, Meyers Briggs Type Indicator,

California Psychological Inventory, Personal Orientation Inventory, Semantic Differential, Hysteroid Obsessoid Questionnaire, Hostility and Direction of Hostility Questionnaire, Omnibus Personality Inventory, and Guilford-Martin Personality Inventory. After reviewing the above, some were discarded as out of date and unrevised, and some seemed to measure too specific traits to provide a global description of personality. The 16PF has stood the test of time and provides a comprehensive description of personality based upon extensive factor analytic procedures. Consideration was given to its modern counterpart the Neo Five Factor Personality Inventory (Costa and McCrae, 1992). A combined use of the 16PF and NEO Five Factor Inventory was the initial preference. However, investigation of a relatively new personality inventory, the Millon Index of Personality Styles (MIPS) (Millon, 1994), showed that it was a more suitable instrument for this investigation. It is a personality measure that is global, provides a comprehensive and in-depth description of human personality functioning, is capable of detecting subtle differences in personality and meets this study's criteria for good validity and reliability.

Its author Theodore Millon is a clinical psychologist who has a substantial reputation in the USA as a personality theorist, researcher, writer, and is the

author of other personality inventories in the area of psychopathology. His recent publication, *Disorders of Personality: DSM-IV And Beyond* (Millon and Davis, 1996) contains an in-depth review of the many personality theorists, theories and measures that have influenced his theory. From this research he developed a model of personality that is a synthesis of various major psychological personality theories with reference to evolutionary mechanisms. This model has been applied clinically for the assessment of personality disorder through his Millon Clinical Multiaxial Inventory (Millon, 1987).

Millon (1994) explains that he turned his attention to developing a personality measure of normality using the same method he used for the deduction of pathological personality traits. This method he calls the latent theoretical approach. This approach initially depends upon observations of human behaviour, explanatory logic, deductive reasoning, and reference to the history and development of personality theory. Assertions are then made about the existence of certain traits which are then tested empirically by conventional research methods. He points out that the attributes of personality (the traits) can either be discovered through the latent theoretical approach or by discovering traits through factor analytic methods of

research e.g. Cattel's Sixteen Factor Personality Inventory (Cattell, Eber, and Tatsuoka, 1970) or the NEO Five Factor Personality Inventory (Costa and McCrae, 1992).

2.6.2 Description of the MIPS

The Millon Index of Personality Styles is a 180 item true/false questionnaire (see Appendix 2.9) designed to measure personality styles in normally functioning adults. It consists of 24 scales grouped into juxtaposed pairs. It takes approximately thirty minutes to complete.

Millon conceptualises personality as being divided into three main components or domains;

- 1. Motivating aims
- 2. Cognitive modes
- 3. Interpersonal behaviour

Personality is reflected in the unique way each individual scores on the traits that constitute the three components. Each of the 24 trait scales belong to one of the three components. Table 2.11 below shows the distribution of traits to their components.

TABLE 2.11 Shows the trait structure of the MIPS scales.

MOTIVATING AIMS	COGNITIVE MODES	INTERPERSONAL BEHAVIOURS
Enhancing	Extraversing	Retiring
Preserving	Introversing	Outgoing
Modifying	Sensing	Hesitating
Accommodating	Intuiting	Asserting
Individuating	Thinking	Dissenting
Nurturing	Feeling	Conforming
	Systematizing	Yielding
	Innovating	Controlling
		Complaining
		Agreeing

2.6.3 Description of the three components of personality

2.6.3.1 Component one - The MIPS motivating aims scales

These scales are concerned with what motivates a person. Millon relates them historically to the work of Sigmund Freud who described a psychological theory of needs and drives (motivation). Millon's (1994) view

is that motivating aims "...pertain to the strivings of goals that spur and guide human beings - the purposes and ends that lead them into one or another course of behaviour" (p6). According to Weiss (1997), Millon linked his three motivating aims trait pairs to psychoanalytic drive theories as follows:

DRIVE
pleasure - pain
active - passive
self - other

The relationship of these drives to psychological theory is described by Weiss as; pleasure-pain to Freudian drive theory, active-passive to ego psychology, and self-other to self psychology and object relations theory.

2.6.3.2 Component two - The MIPS cognitive modes scales

These scales are concerned with how a person makes sense of themselves and the world. Millon relates these scales to the work of Carl Jung and the Myers-Briggs Type Indicator (MBTI) (Myers and McCaulley, 1985). Millon (1994) was influenced by Jung, stating that Jung described "...the sources employed to gather knowledge about life and the manner in which

knowledge is transformed" (p6). Millon continued, "Here we are looking at contrasting 'styles of cognizing'-differences among people, first, in what they attend to in order to experience and learn about life, and, second, in what they habitually do to make such knowledge meaningful and useful to themselves..." (p6). The four cognitive mode trait pairs are related to information gathering and processing as described by Jung and seen in the MBTI. The first two pairs (extroversing-introversing, sensing-intuiting) assess information gathering strategies. The second two pairs (thinking-feeling, systematizing-innovating) relate to what a person does with the information once it has been gathered.

2.6.3.3 Component three - The MIPS interpersonal behaviour scales

These scales are concerned with the person's interpersonal styles of behaviour. Millon refers to the work of Harry Stack Sullivan (1953), Karen Horney (1950), and Timothy Leary (1957), and the manner in which normal interpersonal behaviour styles shade progressively into psychopathological personality disorders. With these scales Millon (1994) is concerned with "…interpersonal ways of relating-how individuals prefer to conduct their

transactions with others. A style of social behaviour derives in part from the interplay of a person's distinctive pattern of motivating aims and cognitive modes" (p7). The five pairs of scales assess a person's style of relating to others. They are at the normal end of the range that shades into the personality disorders as described by DSM IV (APA, 1994).

2.6.4 Millon's approach to a normative model of personality

Millon's approach to constructing a normative model of personality has been to research personality theories and the personality disorders for his three main personality components (motivating aims, cognitive modes and interpersonal behaviours). From the literature surveyed he then identified bipolar trait dimensions for each of his main components.

One other aspect of Millon's thinking that needs to be considered is that his normative model of personality is informed by evolutionary theory. Millon points out that personality traits that are adaptive and beneficial may come to predominate in the species in its interaction with the environment. Also, if an environment alters this may benefit some individuals with certain trait based behaviours. These may then become beneficial and the gene

frequencies change during a generation to generation adaptive process. Millon states that, "At any point in time, a species will possess a limited set of genes that serve as trait potentials. Over succeeding generations the frequency distribution of these genes will likely change in their relative proportions depending on how well the traits they undergird contribute to the species' 'fittedness' within its varying ecological habitats' (Millon, 1990, p22). Millon explains that the interaction of this biological endowment with social experience comprise the elements of personality style, whether normal or abnormal. He further believes that the formative process of the individual's personality parallels the gene redistribution of the species' evolutionary history.

2.6.5 The development of the MIPS

According to Millon the development of the MIPS began with the creation of items that would appear to measure the 24 bipolar traits he considered should constitute the three main components (motivating aims, cognitive modes, and interpersonal behaviour). These items were piloted and revised on several occasions. Further scales were introduced to create a measure of how much a person may be trying to create or have an overly positive or

negative impression. A consistency measure was also introduced to evaluate an individual's consistency of response within the inventory. After the items had reached a satisfactory stage of internal consistency and validation for the 24 trait measures the process then moved into the external validation phase.

Correlations were obtained for each MIPS item with major personality inventories including; the Cattell 16PF, Meyers-Briggs Type Indicator, the NEO Five Factor Personality Inventory, the Gordon Personal Profile Inventory, and the California Psychological Inventory. Millon (1994) described the final phase of MIPS development. "At the end of this three-part process of scale development and validation, each of the 24 MIPS scales consisted of a core group of prototypical items that were weighted three points when endorsed as true, and a set of supporting items, scored in either the true or false direction, weighted either one or two points when endorsed" (p48). Normative data was gathered on a US adult sample of 1,000 adults between the ages of 18 to 65, stratified according to US Census reports.

2.6.5.1 MIPS Adjustment Index

Millon also derived an index of psychological adjustment from the MIPS. He did this by selecting six MIPS scales that in his view would need to show significance to reflect positive or negative psychological adjustment. The pattern he believed would identify this was:

Positive Adjustment = enhancing, outgoing, asserting, conforming, controlling, agreeing.

Negative Adjustment = preserving, retiring, hesitating, dissenting, yielding, complaining

The adjustment index was validated against an experimental group of military recruits from three separate conditions:

- Those recruits who gave no evidence of being required to attend for psychiatric evaluation.
- 2. Recruits who gave evidence of needing psychiatric evaluation but cleared as fit for duty.
- 3. Those found unfit for duty from psychiatric evaluation.

The adjustment index was found to discriminate between the three groups and therefore was considered by Millon as verification of his scale selection for the index, and a potential predictor of adaptability to military service.

2.6.6 Reliability of the MIPS

As part of the inventory's development Millon (1994) found the internal consistency reliability co-efficient alpha median was .78, and split half reliability median was .82. Retest reliability was assessed on a sample of 50 adults, the median interval was two months and the range was 20 to 82 days. The median retest reliability was found to be r=.85.

2.6.7 Validity of the MIPS

Internal validity had been established through test development as described earlier. Items not significantly contributing to a trait had either been changed or abandoned. Intercorrelation for MIPS scales performed for scale-item overlap and scale intercorrelation showed that "...a pattern of converging and diverging relationships emerges among the scales that is largely consistent with expectations..." (Millon, 1994, p71). "Approximately two thirds of the possible combinations of MIPS scales had overlap percentages of ten per cent or less. Zero overlap was observed for 37 theoretically unrelated constructs..." (p66). Evidence is given by Millon of a higher percentage overlap where scales had a stronger theoretical relationship and moderately high percentages between consonant constructs. Interrcorelations between scales revealed high negative correlation between polar opposite

scales (r = -.79), high positive correlation between theoretically related constructs (r = .80) and very low correlation between theoretically unrelated constructs (r = .05).

The factor structure of the MIPS was analysed at the item level by another investigator who reported the presence of "...five factors that were consistent with the five-factor model of personality and which accounted for 24.8% of the total variance" (Weiss, 1997). He concludes, "These findings were consonant with the five-factor model of personality" (p513).

External validity was established between the MIPS scales and the seven other personality inventories. Detailed intercorelation data was presented between the MIPS scales and the scales for each individual personality inventory. From examination of this data Millon (1994) concludes,

"The patterns of convergent and divergent correlation between the MIPS and other tests of personality reported in the section, obtained to demonstrate external validity, are largely consonant with expectation, based upon the author's theory of normal personology and on the item content of the respective scales. These relationships have been demonstrated using a wide variety of personality tests administered to several independent samples of adults and

college students, with many of the samples selected to be representative of their populations" (p87).

Data was also presented concerning the negative and positive impression scales. Two studies were performed which illustrated the scales' ability to differentiate between those participants asked to complete the MIPS honestly from those encouraged to paint a false negative or positive impression. The positive impression scale correlated moderately with the Fake-Good scale of the Cattell 16PF (r = .36, p<.01) and the Good-Impression scale of the California Psychological Inventory (r = .40, p<.01). The negative impression scale correlated with the Fake-Bad scale of the 16PF (r = .58, p<.01) and negatively with the Good Impression scale of the CPI (r = .47, p<.01).

2.6.8 Conclusions - MIPS

Although the MIPS is a recent personality inventory it appears to have undergone a comprehensive programme of theoretical, item and scale development. This was followed by a normative standardisation on 1,000

adults. Internal reliability appears good. There is only one study of retest reliability and, with only a two month median gap, it appears further work needs to be done in this area. However, external validity using seven major personality inventories with various samples seems to support the MIPS structure. The advantage of the MIPS structure is that its division of personality into three main components allows apparently contradictory personality traits to be measured. For example, it is possible for a person (or group) to show evidence of an *intraversing* cognitive mode yet also to be *outgoing* in <u>interpersonal behaviour</u>. This allows greater discrimination than just, for example, saying a person (or group) were wholly introverted. The implication would then be that the introversion is present in all modalities; cognitive, motivational and interpersonal. As Millon (1994) states,

To capture personality more or less fully, we must find ways to characterise all three components of the sequence: the deeper motives that orient individuals, the characteristic modes they utilise to construct and transform their cognitions, and the particular behaviours they have learned in order to relate to others. By characterising and quantifying these three dimensions, we should be able to represent individual differences in accord with the major features that define personality" (P6).

CHAPTER 3

3.0 RESULTS

Results are presented below for the dependent variables (questionnaires);

- 3.1 The Millon Index of Personality Styles (MIPS).
- 3.2 The Psycho-Epistemological Profile (PEP).
- 3.3 The three five point scale commitment to orientation questions.
- 3.4 The Organicism-Mechanism Paradigm Inventory (OMPI).

Questionnaires were analysed for the main effect factor (orientation) to determine differences between psychoanalytic and cognitive-behavioural psychotherapists. The data were also analysed for two other factors (gender and experience) and their interactions.

All four questionnaires are presented with descriptive statistics (means, number of participants, standard deviations) first. Next the **significant** MANOVA interactions are given followed by any post hoc statistical

analysis of significant effects. MANOVAS were performed on all four instruments for the following factors (independent variables) and factor combinations: orientation, gender, experience, orientation + gender, orientation + experience, gender + experience, and orientation + gender + experience.

NOTE: All scale score and questionnaire variable names are indicated by *italics* in text, e.g. *thinking*, *science*, *mechanism*, etc. For brevity psychoanalysts and psychoanalytic psychotherapists are called analysts, and behavioural and cognitive-behavioural psychotherapists are called behaviourists.

3.1 The Millon Index Of Personality Styles results

Table 3.1 below shows the means and standard deviations for the raw scores for each MIPS trait, the internal validity scales (*positive/negative impression*), the internal reliability scale (*consistency*) and a second order experimental scale called *adjustment*. The table presents scores by the main effect factors of orientation, gender and experience. MIPS traits are described in Appendix 2.15.

TABLE 3.1 Shows the mean MIPS scale scores and their standard deviations, associated with the three main effect factors.

TABLE 3.	1 Snows	Shows the mean MIPS scale scores and their standard deviations, as ORIENTATION GENDER						associated	a with t		nain effe	ct tactors	•	
	Ar	nalyst		viourist		Male		emale	No	ovice		mediate	T	Senior
		130		111		101		141		82	L	81	n=	78
	M	SD	M	SD	M	SD	M	SD	М	SD	М	SD	M	SD
TRAIT									L.,					l
Enhancing	23 68	7	25.80	7.28	23.68	7.9	25.3	6.61	24 29	7.57	25.35	6.61	24.33	7.42
Preserving	14.59	7.92	11.74	8.34	14.05	9.39	12.74	7.24	13.85	8.69	12.9	7.36	13.06	8.65
Modifying	24.17	8.57	26.05	9.32	23.93	9.66	25.82	8.32	24.48	9.31	25.27	8.96	25.38	8.64
Accommodating	17.08	8.87	16.52	9.39	18.21	9.19	15.83	8.9	17.02	9.22	16.14	9.46	17.33	8.64
Individuating	13.71	6.53	15.42	6.28	15.3	6.44	13.86	6.46	14.35	5.61	14.4	6.77	14.76	7.02
Nurturing	28	7.03	27.13	7.90	26.56	7.55	28.3	7.28	27 02	7.54	27.43	7.73	28.37	7.05
Extraversing	25.68	7.73	24.59	8.81	23.18	8.32	26.57	7.9	25.79	7.92	24.74	8.96	24.97	7.87
Introversing	9.58	6.37	9.57	6.80	10.6	6.97	8 83	6.14	9.17	6.77	9.53	6.24	10.05	6.71
Sensing	11.08	5.63	14.06	6.36	12.33	6.18	12.56	6.13	12.1	6.04	12.35	5.92	12.95	6.53
Intuiting	24.03	7.49	19.95	8.94	21.83	8.1	22.35	8.65	23.01	7.94	22.19	8.02	21.21	9.3
Thinking	10.26	5.72	15.68	6.71	14.63	6.98	11.42	6.24	11.35	6.36	12.26	6.66	14.76	6.84
Feeling	28.56	6.87	24.38	8.34	25.34	8.47	27.52	7.26	27.89	7.47	26.75	7.84	25.19	8.1
Systematising	30.51	9.45	32 32	9.83	30.35	10.13	32.09	9.23	30.57	9.78	32.33	9.2	31.13	10
Innovating	27.05	8.12	24.05	8.72	25.19	8.56	26.04	8.47	25.98	8.91	26.4	7.65	24.6	8.94
Retiring	13.73	7.34	16.41	10.02	17.65	9.59	13.04	7.55	14.1	8.51	14.54	8.39	16.32	9.34
Outgoing	29.33	9.89	29.82	11.74	29.36	11.72	29.63	10.06	29.6	10.31	30.56	11.34	28.47	10.65
Hesitating	16.5	9.03	14.34	9.02	15.8	9.82	15.3	8.49	17.17	9.51	14.23	9.63	15.08	7.75
Asserting	26.17	8.13	28.48	9.82	28	9.3	26.61	8.78	25.65	8.66	28.98	9.27	27.09	8 85
Dissenting	17.57	6.28	17.13	7.11	18.27	6.88	16.72	6.43	17.84	6.47	17.21	6.21	17.03	7.35
Conforming	25.75	8.23	29.89	8.49	27.91	9.17	27.45	8.15	26.73	8.64	27.7	8.38	28.59	8.75
Yielding	17.04	6.58	15.91	6.40	17.06	7.18	16.13	5.95	17.66	6.8	15.68	6.63	16.19	5.96
Controlling	15,42	5.61	16 00	6.70	16.04	6.39	15.4	5.94	14.91	5.42	15.96	6.4	16.22	6.53
Complaining	16.82	7.2	15.90	7.90	18.19	8.12	15.11	6.79	16.99	7.65	15.52	7.23	16 68	7.72
Agreeing	34.35	8.07	33.72	8.69	33.63	8.99	34.37	7.85	34.32	7.81	33.27	8,38	34.62	8.9
Pos Impression	1.15	1.38	1.50	1.41	1.42	1.58	1.23	1.27	1.13	1.09	1.16	1.42	1.67	1.63
Neg Impression	1.65	1.45	1.48	1.52	1.67	1.67	1.5	1.33	1.65	1.57	1.47	1.48	1.59	1.39
Consistency	3.75	0.99	3.96	1.09	3.83	1.04	3.86	1.04	3.78	1.1	3.9	1.03	3.86	0.99
Adjustment	46.57	7.86	48.95	8.32	46.41	9.03	48.52	7.35	47.11	8.61	48 23	7,63	47.66	8.23

In order to explore whether there were significant differences between participants on MIPS scores for any of the three main factors alone or when interacting, a MANOVA was performed. The MANOVA results showed significant differences (p<.05) between levels for each factor alone and one interaction (orientation+experience). There were no significant interaction effects for orientation+gender, gender+experience, or orientation+gender+experience. The results for each factor treated separately showed that there were eleven significant MIPS scale score differences between analysts and behaviourists, nine between males and females, and two between participants with different levels of experience. For the one significant factor interaction of orientation+experience, there were five significant score differences. Table 3.2 below presents the MANOVA F and significance level scores for the significant between participant differences for MIPS raw scale scores on the three factors and one interaction.

TABLE 3.2 MANOVA results showing between participant differences for MIPS raw scale scores on three single factors and one interaction.

		ree single					ORIE	NOITATION
	ORIEN	TATION	GE	NDER	EXPE	RIENCE	+ EXPE	ERIENCE
N=241					1		1	
[F	SIG	F	SIG	F	SIG	F	SIG
TRAIT					1			
Enhancing	6.619	.011*	2.983	0.086	0.552	0.577	1.223	0.296
Preserving	7.83	0.006*	1.849	0.175	0.222	0.801	0.719	0.488
Modifying	1.821	0.179	4.222	0.041*	0.543	0.582	1.121	0.328
Accommodating	0.128	0.721	4.963	0.027*	0.554	0.575	0.388	0.679
Individuating	4.262	0.04*	3.107	0.079	0.021	0.979	0.517	0.597
Nurturing	0.735	0.392	3.452	0.064	0.98	0.377	0.737	0.48
Extraversing	0.863	0.354	10.245	0.002*	0.055	0.947	1.018	0.363
Introversing	0	0.983	4.594	0.033*	0.313	0.732	1.927	0.148
Sensing	14.411	.000*	0.27	0.604	0.137	0.872	3.382	0.036*
Intuiting	12.729	.000*	0.015	0.902	0.222	0.801	2.515	0.083
Thinking	45.127	.000*	12.848	.000*	3.788	0.024*	2.661	0.072
Feeling	16.509	.000*	3.312	0.07	0.998	0.37	0.627	0.535
Systematising	1.703	0.193	2.862	0.092	0.763	0.468	3.192	0.043*
Innovating	6.767	0.01*	0.427	0.514	0.943	0.391	2.644	0.073
Retiring	6.695	0.01*	18.057	.000*	0.729	0.484	0.229	0.796
Outgoing	0.009	0.925	0.102	0.75	0.844	0.431	0.31	0.734
Hesitating	2.499	0.115	0.603	0.438	1.547	0.215	1.667	0.191
Asserting	2.994	0.085	0.915	0.34	2.064	0.129	2.967	0.053
Dissenting	0.161	0.689	3.956	0.048*	0.215	0.807	1.566	0.211
Conforming	13.038	.000*	0.004	0.952	0.455	0.635	5.98	0.003*
Yielding	1.687	0.195	1.806	0.18	1.616	0.201	3.771	0.024*
Controlling	0.287	0.593	0.411	0.522	0.866	0.422	0.272	0.762
Complaining	1.127	0.29	11.323	0.001*	0.959	0.385	0.192	0.825
Agreeing	0.23	0.632	0.333	0.564	0.677	0.509	0.784	0.458
Positive Impress	3.68	0.056	0.67	0.414	3.218	0.042*	3.742	0.025*
Negative Impress	0.673	0.413	0.932	0.335	0.21	0.811	1.295	0.276
Consistency	2.295	0.131	0.203	0.652	0.325	0.723	0.621	0.538
Adjustment	5.784	0.017*	4.53	0.034*	0.384	0.682	1.583	0.208

NOTE: There were no significant between participant effects found on MIPS scale scores for: orientation + gender, gender + experience, and orientation + gender + experience.

The significant MIPS score differences found on the MANOVA (Table 3.2) for the single factors orientation and gender were directly interpretable from

^{*}Indicates p<.05

consisted of two levels each (analyst vs behaviourist and males vs females). However, the factor experience consisted of three levels (novice, intermediate and senior). In order to determine between which levels of experience the significant mean differences were occurring a Tukey HSD post hoc multiple comparison was performed for the two significant MIPS scale differences (thinking, and positive impression). This showed that for these MIPS scales the significant difference was between seniors and novices of both orientations. Seniors scored significantly higher for thinking and positive impression than novices. For thinking, seniors also scored significantly higher than intermediates. This meant the seniors scored significantly higher for thinking than both intermediates and novices. The results of this analysis are shown below in Tables 3.3 and 3.4. below.

TABLE 3.3 Shows the post hoc between group significant differences on the factor

experience for thinking.

Dependen	ıt	(I) YEARS OF	(J) YEARS OF	MEAN	SIG
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	
	n = 241			1 – J	
Thinking	Tukey	Novice	Intermediate	- 91	. 593
	HSD		Senior	-3.40*	100
		Intermediate	Novice	. 91	. 593
			Senior	-2.50*	. 022
		Senior	Novice	3.40*	. 001
			Intermediate	2.50*	. 022

*Indicates p<.05

TABLE 3.4 Shows the post hoc between group significant differences on the factor

experience for positive impression.

Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	
	n = 241			[- J	
Positive	Tukey	Novice	Intermediate	-2.63E-02	992
Impression	HSD		Senior	53*	.038
		Intermediate	Novice	-2.63E-02	992
			Senior	51	. 053
		Senior	Novice	.53*	038
			Intermediate	.51	. 053

^{*}Indicates p<.05

The one significant factor interaction was between experience and orientation for five MIPS scales. In order to discover where the significant difference lay the sample was first split by experience level into three groups (novices, intermediates and seniors) and compared on the two levels of orientation (analyst and behaviourist) for the five MIPS scales (sensing, systematizing, conforming, yielding, and positive impression). A one way ANOVA was performed to show where the significant differences were occurring for each level of experience. The ANOVA revealed all five MIPS scales differed significantly between analysts and behaviourists at the novice level. Additionally, two scales (conforming and positive impression) differed at the intermediate level. None of the five scales differed by orientation at the senior level. Table 3.5 below shows the results of the

TABLE 3.5 Shows the ANOVA results for the different levels of experience on

significant MIPS traits when groups were compared by orientation.

EXPERIENCE	TRAIT	ORIENTATION	N	MEAN	STD DEV.	F	SIG
Novice	Sensing	Analyst	49	9.84	5 43	21.305*	.000
		Behaviourist	33	15.45	5.37		
	Systematising	Analyst	49	28.22	8.66	7.595*	007
		Behaviourist	33	34.06	10 42		
	Conforming	Analyst	49	23.47	6.62	21.842*	.000
		Behaviourist	33	31.58	9.09		
	Yielding	Analyst	49	18.88	6.66	4.066*	.047
		Behaviourist	33	15.85	6.68		•
	Positive Impression	Analyst	49	.94	1.03	4.091*	.046
		Behaviourist	33	1.42	1.12		
Intermediate	Conforming	Analyst	43	25.33	8 05	8.032*	.006
		Behaviourist	38	30.39	8.02		
	Positive Impression	Analyst	43	79	1.26	6.673*	.012
		Behaviourist	38	1.58	1.48		

*Indicates p<.05

Next the sample was split by orientation into two groups (analysts and behaviourists) and the different experience levels (novice, intermediate, senior) were compared for the five significant MIPS scales (*sensing, systematizing, conforming, yielding, positive impression*). A one way ANOVA was performed to show where the significant differences were occurring. The ANOVA revealed significant between levels of experience differences for analysts on the scales *conforming, yielding* and *positive impression*. Table 3.6 below shows the results of the ANOVA.

TABLE 3.6 Shows the ANOVA results for significant between level of experience differences within the analytic orientation

38

1.84

1.67

ORIENTATION	TRAIT	EXPERIENCE	N	MEAN	STD DEV.	F	SIG
Analyst	Conforming	Novice	49	23.47	6.62	5.627*	.005
		Intermediate	43	25.33	8.05		
		Senior	38	29.18	9.29		
	Yielding	Novice	49	18.88	6.66	3.913*	.022
		Intermediate	43	16.72	6.50		
		Senior	38	15.03	6.04		
	Positive Impression	Novice	49	.94	1.03	7.453*	.001
		Intermediate	43	.79	1.26		

Senior

*Indicates p<.05

In order to determine between which levels of experience the significant mean differences were occurring a Tukey HSD post hoc multiple comparison was performed for the three significant MIPS scores differences (conforming, yielding, positive impression). This showed that, for the trait conforming, novice analysts scored significantly lower (less conforming) than their seniors. For yielding, seniors scored significantly lower than the novices (less yielding). And for positive impression, seniors scored higher than novices and intermediates. The results of this analysis are shown below in Table 3.7.

TABLE 3.7 Shows the post hoc between group significant differences on the factor experience for *conforming*, *yielding*, and *positive impression* within the analytic orientation.

Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	
	n = 130			I - J	
		ANALYSTS			
Conforming	Tukey	Novice	Intermediate	-1.86	.503
	HSD		Senior	-5.71*	.003
		Intermediate	Novice	1.86	.503
			Senior	-3.86	.074
		Senior	Novice	5.71*	.003
			Intermediate	3.86	.074
Yielding		Novice	Intermediate	2.16	.244
			Senior	3.85*	.016
		Intermediate	Novice	-2.16	244
			Senior	1.69	463
		Senior	Novice	-3.85*	016
			Intermediate	-1.69	.463
Positive Impre	ession	Novice	Intermediate	.15	853
·			Senior	- 90*	.004
		Intermediate	Novice	15	.853
			Senior	-1.05*	.001
		Senior	Novice	.90*	.004
			Intermediate	1.05*	.001

*Indicates p<.05

3.1.1 Description of MIPS Results

3.1.1.1 Orientation

When MIPS scores were compared by orientation there were eleven significant differences. The scales were: *enhancing*, *preserving*, *individuating*, *sensing*, *intuiting*, *thinking*, *feeling*, *innovating*, *retiring*, *conforming*, and *adjustment*.

Analysts scored significantly higher than behaviourists on: *preserving*, *intuiting*, *feeling*, and *innovating*. Behaviourists scored significantly higher than analysts on: *enhancing*, *individuating*, *sensing*, *thinking*, *retiring*, *conforming*, and *adjustment*.

3.1.1.2 **Gender**

When MIPS scores were compared by gender there were nine significant differences. The scales were: *modifying, accommodating, extraversing, introversing, thinking, retiring, dissenting, complaining,* and *adjustment.*

Men scored significantly higher than women on: *accommodating*, *introversing*, *thinking*, *retiring*, *dissenting*, and *complaining*. Women scored significantly higher than men on: *modifying*, *extraversing*, and *adjustment*.

3.1.1.3 Experience

When MIPS scores were compared by experience there were two significant differences, *thinking* and *positive impression*. Post hoc statistical analysis (Tables 3.3 and 3.4) for this factor showed that for the trait *thinking*, seniors

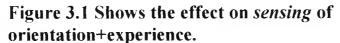
scored significantly higher than novices and intermediates. For the scale *positive impression*, seniors scored significantly higher than novices.

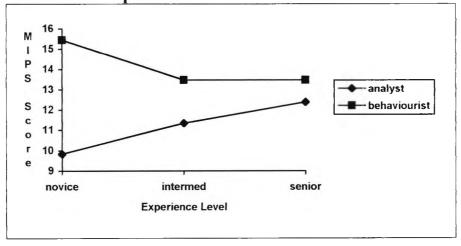
3.1.1.4 Orientation and Experience

Significant effects were found on five MIPS scale scores for the interaction of the factors orientation and experience. The other factor interactions were nonsignificant. The five scales affected were: *sensing, systematising, conforming, yielding,* and *positive impression.*

Sensing

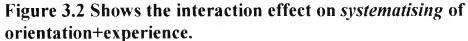
Novice behaviourists scored significantly higher than Novice analysts (Table 3.5). At the intermediate and senior levels of experience there was no longer a significant difference. This was because the behaviourists' score had decreased and the analysts' increased. This is illustrated below in Figure 3.1.

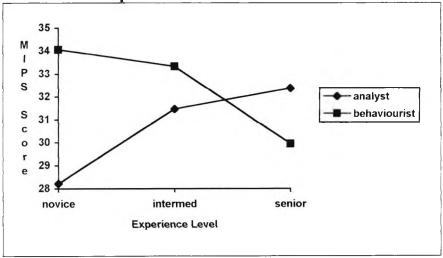




Systematising

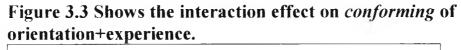
Novice behaviourists scored significantly higher than novice analysts (Table 3.5). At the intermediate and senior levels of experience there was no longer a significant difference. This was because the analysts' score had increased whilst the behaviourists' decreased. This interaction effect is illustrated below in Figure 3.2.

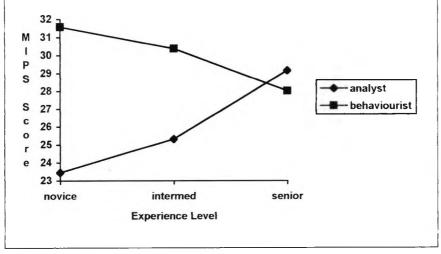




Conforming

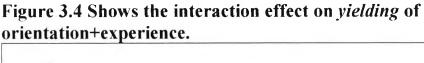
Novice and intermediate behaviourists scored significantly higher than novice and intermediate analysts (Table 3.5). At each level of experience the analysts' score increased and the behaviourists' decreased until at senior level there was no longer a significant difference. This interaction effect is illustrated in Figure 3.3 below. Within the analytic orientation novices scored significantly lower than seniors who were significantly more *conforming* (Tables 3.6 and 3.7).

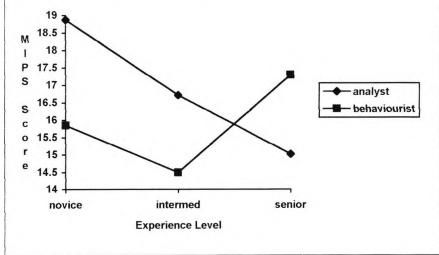




Yielding

Novice analysts scored significantly higher than novice behaviourists (Table 3.5). This difference was no longer significant at the senior levels because the behaviourists' score had risen and the analysts' dropped. This interaction effect is illustrated in Figure 3.4 below. Within the analytic orientation novices scored significantly higher than seniors who were significantly less *vielding* (Tables 3.6 and 3.7).





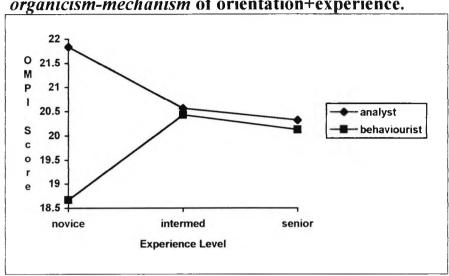


Figure 3.6 Shows the effect on *organicism-mechanism* of orientation+experience.

3.4.2 Comment on OMPI results

Results for the OMPI again confirm that orientation has a significant effect. Analysts scored significantly towards the *organicism* direction and behaviourists towards the *mechanism* direction, as predicted. When the effect of experience was explored it appeared novice analysts were more inclined to *organicism* than their seniors, whereas novice behaviourists were more inclined towards a *mechanistic* worldview. This difference disappeared with experience.

3.1.1.5 Positive - Negative Impression and Consistency Scales

These scales provide internal validity (positive-negative impression) and reliability (consistency) checks for the MIPS. The positive and negative impression scales contain 10 items each that are designed to detect individuals who are attempting to create an overly positive or negative impression of themselves. Both orientations scored well below the cut off point for both scales and the scores did not suggest participants were trying to create either a favourable or unfavourable impression.

The *consistency* scale consists of five items and their reverse, to make ten. For example one item, "I enjoy everyday realities more than daydreams." is the reverse of, "I enjoy daydreams more than everyday realities." The scale is an attempt to measure to what extent a participant is being consistent in his/her answers to all the items in the inventory. The participants' scores on the scale suggested items were being responded to in a consistent manner.

3.1.2 Comment on the MIPS results

Orientation, and orientation combined with experience account for the majority of significance between participant MIPS score differences (total of 14 scales) found in this study. Gender and experience by themselves produced significant differences for nine and two scales respectively. Gender differences were expected because all personality inventories find significant between raw score mean differences for trait scores between men and women. They are then weighted according to data from their normative standardisation sample and adjusted to produce some form of standard scores. By sight comparison with the United States MIPS standardisation data suggests that seven of the nine significant gender differences were in the expected direction. Participant's experience level when combined with their orientation significantly affected five MIPS scales; level of experience by itself only accounted for two of the scale differences.

The MIPS results appear to support the hypothesis that committed and trained psychotherapists from psychoanalytic and cognitive-behavioural orientations would show evidence of differences on measures of personality

traits. These results suggest personality factors are significantly involved in their choice of therapeutic orientation.

When the MIPS trait scores were examined by personality domain separately, the following orientation (including experience) difference pattern was found:

- 1. 75% (6 of 8) cognitive modes traits differed significantly by orientation.
- 2. 50% (3 of 6) motivating aims traits differed significantly by orientation.
- 3. 30% (3 of 10) <u>interpersonal behaviour</u> traits differed significantly by orientation.

These findings suggest that cognitive modes and motivating aims are more important than interpersonal behaviour in discriminating therapeutic orientation membership. There is significant evidence from the Millon Index of Personality Styles that what a psychotherapist seeks to derive and gain from their environment (motivation), how they gather and process knowledge (cognition), and to a lesser extent, the way they relate to others (interpersonal behaviour) will significantly differentiate psychoanalytic from cognitive-behaviour psychotherapists.

3.2 The Psycho-Epistemological Profile results

Table 3.8 below shows the means and standard deviations for the raw scores on the Psycho-Epistemological Profile (PEP). The table presents scores by the main effect factors of orientation, gender and experience.

TABLE 3.8 Shows mean raw PEP trait scores and their standard deviations that are associated with the three main effect factors.

		ORIEN	TATION		GENDER				
	Ana	lyst	Beha	viourist	M	ale	Female		
N=	9	0	75		5	59		6	
	M	SD	M	SD	M	SD	M	SD	
TRAIT									
Culture	60.21	7.58	55.83	8.85	56.80	8.20	59.01	8.51	
Empiricism	93.01	10.89	95.67	9.31	95.00	11.31	93.78	9.66	
Insight	66.82	6.65	67.99	5.91	66.83	6.44	67.75	6.27	
Metaphorism	108.52	11 01	102.2	11.95	103.63	10.93	106.77	12.23	
Rationalism	95.9	11.13	98.31	10.21	96.93	10,80	97.03	10.78	
Science	24.83	5.36	26.33	5.49	26.42	5.49	25.01	5.39	

			EXPERI	ENCE			
	Nov	rice	Interm	ediate	Senior		
N=	5	57		53		5	
	M	SD	M	SD	M	SD	
TRAIT							
Culture	58.53	9.35	57.96	8.50	58.15	7.48	
Empiricism	91.91	8.86	93.17	9.56	97.62	11.48	
Insight	66.56	6.81	67.23	6.31	68.29	5.81	
Metaphorism	105.47	12.05	105.77	12.41	105.71	11.27	
Rationalism	94.67 9.12		96.49	10.70	99.89	11.85	
Science	24.51	4.40	24.72	4.66	27.33	6.66	

In order to explore whether there were significant between participant differences for PEP scores for any of the three main factors alone or when

interacting, a MANOVA was performed. Table 3.9 below presents the MANOVA F and significance level scores for the PEP.

TABLE 3.9 Shows MANOVA results for PEP scales on the significant factors.

							+ EXPERIENCE + GENDER			
					ORIEN	NTATION				
	ORIEN	TATION	EXPE	RIENCE	+ EXPE	RIENCE				
N=165										
TRAIT	F	SIG	F	SIG	F	SIG	F	SIG		
Culture	9.547	0.002*	0.108	0.898	0.776	0.462	4.525	0.012*		
Empiricism	1.972	0.162	3.296	0.04*	1.907	0.152	1.821	0.165		
Insight	0.872	0.352	0.952	0.388	4.603	0.011*	0.749	0.475		
Metaphorism	10.629	0.001*	0.706	0.495	0.24	0.787	0.918	0.402		
Rationalism	2.06	0.153	2.658	0.073	2.739	0.068	1.712	0.184		
Science	2.012	0.158	3.077	0.049*	0.45	0.639	2.306	0.103		

NOTE There were no significant between participant effects found on PEP scores for; gender, orientation+gender, experience+gender.

The MANOVA results showed significant differences (P<.05) between factor levels for orientation and experience alone. There were no significant interaction effects between the males and females for PEP scores. The MANOVA also showed significant interaction effects for orientation+experience, and orientation+experience+gender. However, only the two factor interaction (orientation+experience) was analysed further because the three factor interaction resulted in group sizes too small to be statistically reliable.

^{*} Indicates p<.05

The results for each significant factor treated separately showed that:

- 1. For orientation, scores on *culture* and *metaphorism* differed significantly. Analysts scored significantly higher on both measures.
- 2. For experience, scores on *empiricism* and *science* differed significantly.
- 3. For the significant factor interaction of orientation+experience there was one significant score difference for *insight*.

Because orientation consisted of two levels the significant PEP score difference was directly interpretable; analysts scored significantly higher on *culture* and *metaphorism*. However, the experience factor consisted of three levels. In order to determine between which levels of experience the significant mean differences were occurring a Tukey HSD post hoc multiple comparison was performed for the two significant PEP scale differences (*science* and *empiricism*). This showed that for both PEP scales the difference was between seniors and novices from both orientations. Seniors scored higher for *empiricism* and *science* than novices. For *science* seniors also differed from intermediates. This meant the seniors scored significantly higher for *science* than both intermediates and novices. The results of these analysis are presented in Tables 3.10 and 3.11 below.

TABLE 3.10 Shows the post hoc between group significant differences on the

factor experience for empiricism.

Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	
	n = 165			I - J	
Empiricism	Tukey	Novice	Intermediate	-1.26	.789
•	HSD		Senior	-5.71*	.007
		Intermediate	Novice	1.26	.789
			Senior	-4.45	.056
		Senior	Novice	5.71*	.007
			Intermediate	4.45	.056

^{*} Indicates p<.05

TABLE 3.11 Shows the post hoc between group significant differences on the

factor experience for science.

Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG	
Variable			EXPERIENCE	DIFFERENCE		
	n = 165			I - J		
Science	Tukey	Novice	Intermediate	21	.997	
	HSD		Senior	-2.82*	.014	
		Intermediate	Novice	.21	.977	
			Senior	-2.61*	.029	
		Senior	Novice	2,82*	.014	
			Intermediate	2.61*	.029	

^{*}Indicates p<.05

There was a significant factor interaction between experience and orientation for the scale *insight*. In order to discover where the significant difference lay, the sample was first split by orientation level into two groups (analysts and behaviourists) and compared on the three levels of experience (novices, intermediates, and seniors) for *insight*. A one way ANOVA was performed to show within which orientation significant differences were occurring. The ANOVA revealed the significant interaction effect for the

scale *insight* was <u>within</u> the analytic group. Table 3.12 below shows the results of this analysis.

TABLE 3.12 Shows the ANOVA results for the different levels of experience for

the PEP trait insight when groups are compared by orientation.

ORIENTATION	TRAIT	EXPERIENCE	N	MEAN	STD DEV.	F	SIG
Analyst	Insight	Novice	36	65.31	5.8	4.226	.018*
		Intermediate	28	65.39	7.14		
		Senior	26	69.88	6.45		
Behaviourist		Novice	21	68.71	7.97	.854	.430
		Intermediate	25	68.68	4.97		
		Semor	29	66,86	4.85		

^{*}Indicates p<.05

To explore where the significant differences occurred between the three levels of experience within the analyst group a post hoc multiple comparison Tukey HSD was performed. This showed the significant difference was between the senior and novice analysts for the scale *insight*. Senior analysts scored significantly higher on this measure than their novice counterparts. Table 3.13 below shows the results of this analysis.

TABLE 3.13 Shows the post hoc between group significant differences for the analysts on the factor experience for *insight*.

		ANAL			
Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	
	n = 90			I - J	
Insight	Tukey	Novice	Intermediate	62	.922
	HSD		Senior	-4.58*	.019
		Intermediate	Novice	.62	.922
			Senior	-3.96	.067
		Senior	Novice	4.58*	.019
			Intermediate	3.96	.067

^{*}Indicates p<.05

Next the sample was split by experience into three groups (novices, intermediates, seniors) and compared on the two levels of orientation (analyst and behaviourist) for insight. A one way ANOVA revealed that a difference between senior analysts and behaviourists just failed to reach significance (P=.053). Senior analysts scored higher for insight than senior behaviourists, Table 3.14 below shows the results of this analysis.

TABLE 3.14 Shows the ANOVA results for sensing when seniors were compared

by orientation.

EXPERIENCE	TRAIT	ORIENTATION	N	MEAN	STD DEV.	F	SIG
Senior	Sensing	Analyst	26	69.88	6.45	3.909	.053
		Behaviourist	29	66.86	4.85		

^{*}Indicates p<.05

Description of the Pyscho-Epistemological Profile results 3.2.1

Orientation 3.2.1.1

When PEP scores were compared by orientation there were two significant differences on *culture* and *metaphorism*. Analysts scored significantly higher than behaviourists on both these measures.

3.2.1.2 Experience

When PEP scores were compared by experience there were two significant differences on *empiricism* and *science*. Post hoc statistical analysis (Tables 3.10 and 3.11) for this factor showed that on both these scales seniors scored significantly higher than novices. Furthermore, seniors scored higher than intermediates for *science*.

3.2.1.3 Orientation and Experience

When PEP scores were compared by orientation and experience there was a significant interaction for *insight*. Post hoc statistical analysis (Tables 3.12 and 3.13) showed senior analysts scored significantly higher on *insight* than novice analysts. When between orientation differences were examined (Table 3.14) it was found that senior analysts were almost significantly different from novice behaviourists. It is therefore possible that senior analysts may be more insightful than senior behaviourists. The small number of participants (n=26 and 29) may have reduced the significance of this effect.

3.2.1.4 Orientation, gender and experience

There was a significant interaction for *culture* but statistical treatment would have resulted in too small participant groups for a meaningful analysis.

3.2.2 Comment on PEP results

Orientation appeared to have an effect on the scale *metaphorism*, as predicted from previous research. This score is significantly higher for analysts. However, an expected higher score for *empiricism* for behaviourists was not found. Interestingly, no significant differences were found for *science* between orientations. It appears that, with experience, scores increase for *empiricism* and *science* for both orientations. The interaction of orientation and experience reveals *insight* increasing from novice to senior analyst. Gender did not appear to be a major factor in PEP scores.

3.3 Commitment to orientation questions results

Table 3.15 below shows the means and standard deviations for the raw scores on the three commitment to orientation questions. The Table presents scores by the main effect factors of orientation, gender and experience.

TABLE 3.15: Shows mean therapeutic attitude scores and their standard deviations that are associated with the three main effect factors.

		ORIEN	ΓΑΤΙΟΝ		GENDER				
	Ana	lyst	Behav	riourist	Ma	le	Female		
N=	133		112		100		145		
	M	SD	M	SD	M	SD	M	SD	
ATTITUDE									
Commitment	3.91	0.94	3.49	1.09	3.63	1.13	3.78	0.95	
Practice	3.47	1.11	2.71	1.12	2.99	1.30	3.21	1.08	
Satisfaction	3.68	0.97	3.38	0.99	3.46	1.05	3.60	0.95	
TOTAL SCORE	11.07	2.72	9.57	2.76	10.08	3.10	10.59	2.62	

		EXPERIENCE								
	Nov	vice	Intern	nediate	Senior					
N=	82		8	3	80					
	M	SD	M	SD	M	SD				
ATTITUDE		_								
Commitment	3.76	0.99	3.76	0.98	3.64	1.13				
Practice	3.30	1.12	2.98	1.18	3.09	1.22				
Satisfaction	3.62	1.00	3.63	0.98	3.38	0.97				
TOTAL SCORE	10.68	2.72	10.36	2.84	10.10	2.94				

In order to explore whether there were significant between participant differences on the commitment to orientation questions for any of the three main factors alone or when interacting, a MANOVA was performed. This showed the only significant effect was for the factor orientation. Table 3.16

below shows the results of this analysis and presents the MANOVA F and significance level scores for the commitment to orientation questions.

TABLE 3.16 Shows the MANOVA results for the commitment questions on the orientation factor.

N=245	ORIENTATION				
ATTITUDE	F	SIG			
Commitment	10.9	0.002*			
Practice	27.462	.000*			
Satisfaction	5.741	0.017*			
TOTAL SCORE	17.387	.000*			

^{*}p<.05

3.3.1 Description of the commitment to orientation results

Analysts responded with a higher score (in more agreement) than behaviourists to the three questions concerning their commitment, practice and satisfaction to their orientation. The total attitude score, the sum of all three questions, shows the same pattern. This is an interesting result which seems to suggest that only the orientation of the therapist affected their responses to the three questions purporting to measure commitment and satisfaction with orientation. It does appear analysts remain more within their orientation, are more committed to it and satisfied than behaviourists.

The three questions were also to be employed as a validity check on whether participant were committed, satisfied and practised within their professed

orientation. The range of scores possible on the total of all three questions was 3 to 15. The mean total score was 10.37 (SD 2.84) for both orientations, suggesting the majority of participants were probably practising within their theoretical model.

3.4 The Organicism-Mechanism Paradigm Inventory results

Table 3.17 below shows the means and standard deviations for the raw scores on the Organicism-Mechanism Paradigm Inventory (OMPI). The table presents scores by the main effect factors of orientation, gender and experience.

TABLE 3.17 Shows mean OMPI scores and their standard deviations that are associated with the three main effects factors (orientation, gender, experience).

	ORIENTATION				GENDER			
	Ana	lyst	Behaviourist		Male		Female	
N=	13	0	110		99		141	
	M	SD	M	SD	M	SD	M	SD
OMPI Score	20.98	2.84	19.84	3.64	19.67	3.61	21.01	2.91

		EXPERIENCE						
	Nov	rice	Intern	nediate	Senior			
N=	83		80		76			
	M	SD	M	SD	M	SD		
				2.06		2.66		
OMPI Score	20.58	3.29	20.50	2.86	20.22	3.66		

In order to explore whether there were significant between participant differences on the OMPI score for any of the three main factors alone or when interacting, a MANOVA was performed. The MANOVA results showed significant differences (p<.05) between factor levels for orientation and gender alone and the interaction of orientation+experience. There were no between subject differences for experience alone or the other possible factor combinations. Because orientation and gender both have two levels it can be seen that the between participant significant differences mean analysts score significantly higher on the OMPI than behaviourists. Females also scored significantly higher than males. Table 3.18 below presents the MANOVA F and significance level scores for the significant between participant differences for the OMPI.

TABLE 3.18 Shows MANOVA results for the OMPI on the significant factors.

			ORIENTATION			
	ORIEN	TATION	+ EXPERIENCE			
N=240						
	F	Sig	F	Sig	F	Sig
OMPI Score =	7.409	0.007*	10.583	0.001*	6.205	0.002*

NOTE:

There were no between subjects differences for experience or other factor combinations.

There was one significant factor interaction for the OMPI, between experience and orientation. In order to discover where the significant

^{*} Indicates p<.05

difference lay, the sample was first split by orientation into two groups (behaviourists and analysts) and compared on the three levels of experience (novice, intermediate, and senior) for the OMPI score. A one way ANOVA was performed to show within which orientation significant differences were occurring. The ANOVA revealed the significant interaction effect for the OMPI score was within the analyst group. Table 3.19 below shows the results of this analysis.

TABLE 3.19 Shows the ANOVA results for the different levels of experience for

the OMPI score when groups were compared by orientation.

ORIENTATION	OMPI	EXPERIENCE	N	MEAN	STD DEV.	F	SIG
Analyst	Score	Novice	50	21.84	2.42	3.917	.022*
		Intermediate	43	20.56	2.51		
		Senior	37	20.32	3.46		
Behaviourist		Novice	33	18.67	3.55	2.394	.096
		Intermediate	37	20.43	3 25		
		Senior	39	20.13	3.89		

*Indicates p<.05

In order to explore where the significant differences occurred between the three levels of experience within the analyst group a post hoc multiple comparison Tukey HSD was performed. This showed the significant difference was between the senior and novice analysts. Senior analysts scored significantly lower on the OMPI than novices. This suggests experienced analysts are significantly more *mechanistic* when compared to

their less experienced counterparts. Table 3.20 below shows the results of this analysis.

TABLE 3.20 Shows the post hoc between group significant differences for the analysts on the factor experience for the OMPI score.

		ANAL	1313		
Dependent		(I) YEARS OF	(J) YEARS OF	MEAN	SIG.
Variable		EXPERIENCE	EXPERIENCE	DIFFERENCE	}
	n = 130			I - J	
OMPI Score	Tukey	Novice	Intermediate	1.28	.068
	HSD		Senior	1.52*	.032
		Intermediate	Novice	-1.28	.068
			Senior	.23	.925
		Senior	Novice	-1.52*	.032
			Intermediate	23	.925

*Indicates p<.05

Next the sample was split by experience into three groups (novices, intermediates, seniors) and compared on the two levels of orientation (analyst and behaviourist) for the OMPI score. A one way ANOVA revealed the significant interaction effect for the OMPI score was between novices from both orientations. Novice analysts scored significantly higher on the OMPI than the novice behaviourists. This suggests novice analysts are significantly more *organismic* than their behaviourist counterparts. Analysts and behaviourists did not differ significantly on the OMPI at the other levels of experience. Table 3.21 below shows the results of this analysis.

TABLE 3.21 Shows the ANOVA result for the significant experience level when

the groups were compared by orientation.

EXPERIENCE	OMPI	ORIENTATION	N	MEAN	STD DEV.	F	SIG
Novice	Score	Analyst	50	21.84	2.42	23.498	.000*
		Behaviourist	33	18.67	3.55		

Indicates p<.05

3.4.1 Description of the OMPI results

3.4.1.1 Orientation

When the OMPI score was compared by orientation there was a significant difference between analysts and behaviourists. Analysts scored higher and therefore towards the *organicism* direction. Behaviourists scored lower and therefore towards the *mechanism* direction.

3.4.1.2 **Gender**

When the OMPI score was compared by gender there was a significant difference between males and females. Females scored higher and therefore more towards the *organicism* direction. Males scored lower and therefore towards the *mechanism* direction.

3.4.1.3 Orientation and Experience

When OMPI scores were compared by orientation and experience there was a significant difference. Post hoc statistical analysis (Table 3.20) showed novice analysts were significantly higher than senior analysts on the OMPI score. This would mean novice analysts scored more towards the *organicism* direction than their seniors. When between orientation differences were examined (Table 3.21) it was also found that novice analysts differed significantly from novice behaviourists in scoring significantly more towards the *organicism* direction. This difference was no longer significant at the intermediate and senior levels because the behaviourists' score increased and the analysts' decreased. This suggests they may then share similar worldviews. This effect is illustrated in Figure 3.6 below.

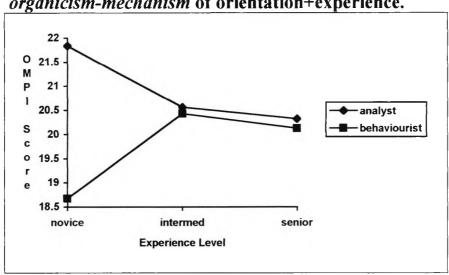


Figure 3.6 Shows the effect on *organicism-mechanism* of orientation+experience.

3.4.2 Comment on OMPI results

Results for the OMPI again confirm that orientation has a significant effect. Analysts scored significantly towards the *organicism* direction and behaviourists towards the *mechanism* direction, as predicted. When the effect of experience was explored it appeared novice analysts were more inclined to *organicism* than their seniors, whereas novice behaviourists were more inclined towards a *mechanistic* worldview. This difference disappeared with experience.

3.5 Summary of all the results

The orientation of the participants was responsible for significant differences on personality and cognitive-epistemological measures.

Of twenty four bi-polar MIPS personality <u>trait</u> scales, twelve differed significantly between analysts and behaviourists. Four of these twleve trait score differences were affected by the experience level of the participants, three of the four occurred between novice analysts and novice behaviourists; and one further trait difference was observed between novice and senior analysts.

The hypothesis that the two major psychotherapeutic orientations would differ on measures of personality is supported by the finding that orientation accounted for 12 significant trait scale differences.

An examination of the epistemological style measures showed an effect for orientation. The OMPI showed a significant difference between analysts and behaviourists in the predicted direction. Analysts scored significantly

towards *organicism* and behaviourists towards *mechanism*. However, a detailed breakdown of OMPI scores by experience showed the difference occurred at the novice level both within and between orientations. With more experience the two orientations then seem to share similar philosophical worldviews.

The PEP results, using Royce et. al's. (1980) original three factors (rationalism, empiricism, metaphorism) showed behaviourists and analysts to differ significantly on metaphorism in the expected direction. However, on the other two scales differences between the groups were not observed. Using Johnson and Miller's (1990) three new factors (culture, science, insight) the results showed that culture, and nearly insight, differed significantly by orientation.

In conclusion, there is some evidence from this investigation to support the hypothesis that the two orientations have different epistemological styles.

The three five point scale questions purporting to measure commitment and satisfaction to orientation showed significant differences between orientations. Analysts scored higher on each question suggesting they are

more committed and satisfied with their orientation. However, the three questions also validated the participants orientation commitment; both orientations appear to belong to their publicly professed orientation.

3.6 Conclusions of all results

On measures of personality and cognitive-epistemological style, orientation was found to be responsible for significant scale score differences. When orientation and experience were combined, significant differences were also observed between participants at different levels of experience. Gender differences were also noted. Further analyses of these results will take place in the Discussion.

CHAPTER 4

4.0 DISCUSSION

The aim of this study is to explore the extent to which personality traits and cognitive-epistemological styles differ between psychoanalytic and cognitive-behavioural psychotherapists and affect their choice of theoretical orientation. Participants were given standardised personality and cognitive-epistemological inventories to complete, results indicate that the orientation of the psychotherapist consistently and pervasively affected scores on all the measures. This strongly suggests that the theoretical orientation of psychotherapists reflects certain characteristic personality traits and cognitive-epistemological styles. The findings suggest that these traits and styles are more important in determining orientation choice than other factors.

Personality and cognitive factors were found to clearly distinguish psychoanalytic from cognitive-behavioural psychotherapists. They have

distinctly different motivational aims, cognitive styles, interpersonal behaviour, epistemological beliefs and commitments to their chosen orientation. It is likely that these personality and cognitive factors play a highly significant role in the psychotherapist's choice of therapeutic orientation. They are probably more significant than so called accidental or inadvertent factors such as initial training, supervision, colleagues, or clinical experience.

The discussion examines this evidence in more descriptive depth. The findings are interpreted within the three domains where the orientation differences were found; motivational aims, cognitive-epistemological styles, and interpersonal behaviour. This arrangement broadly derives from Millon's tripartite model of personality. Finally, the diverse findings will be drawn together into a summary description for each orientation and the implications considered.

4.1 The motivations of behaviourists and analysts

The results suggest practitioners from the two orientations differ significantly on what drives and motivates them. In order to analyse these

differences it is first important to consider Millon's theory of motivation. Millon says it is based upon Freud's tripartite schema of instinctual drive polarities, as described in *Instincts and Their Vicissitudes* (Freud, 1957). According to Millon, this theory posits that motivation is governed by three polarities.

"Subject (ego) - Object (external world)

Pleasure - Unpleasure

and Active - Passive".

(Freud, 1957, p133)

Millon conceptualised three bipolar trait dimensions to measure each of Freud's drives. These are shown below with a description of the modality within which they appear.

Motivating Aims

There are three bipolar pairs of traits that constitute the motivating aims,

and their operations:

MIPS MOTIVATING AIMS DESCRIPTION

Enhancing - Preserving primary drives

Modifying - Accommodating modes of adaptation

Individuating - Nurturing self or other orientation

Millon believes the primary and basic motivational drive is the pleasure-unpleasure principle. Freud meant this principle to describe the psychological economy of the individual, the direction of their psychic energy. He observed two directions within individuals; the tendency to orientate themselves either towards seeking pleasurable experience and sensation, or seeking to avoid painful experience and stimuli. The next motivational level concerns the individual's mode of adaptation, whether, for the purpose of enacting their primary drive state, they are active or passive in their involvement with the environment. The final motivational level concerns the self or other orientation, that is whether the person characteristically seeks stimulation from within themselves or turns towards others.

4.1.1 Differences of primary motivation

The primary motivating aim, in Millon's development of Freud's theory, is either the tendency to preserve things the way they are or enhance them. Millon measures this through his *enhancing-preserving* dimension. *Enhancing* is characterised by individuals who do not wish to just avoid pain or preserve life, but actively seek out opportunities to develop, enhance

and enrich it. *Preserving*, on the other hand, is characterised by individuals who are concerned with and sensitive to threats to emotional and physical security. They are concerned with avoiding unnecessary risks, dangers and difficulties.

Analysts scored significantly higher than behaviourists on *preserving*, and behaviourists scored significantly higher on *enhancing* than analysts. It appears that at the most basic primary drive, linked by Millon to Freud's *pleasure* versus *unpleasure* drive, there is a fundamental difference in the motivating aims of the two orientations.

It is interesting to note the highly significant correlation reported by Millon (1994) between this trait dimension pair and the NEO Neuroticism scale, where *enhancing* negatively correlates with Neuroticism (r = -70) and *preserving* positively correlates (r = .80). Neuroticism, as defined by the NEO's authors, is not a measure of psychopathology, as "It is possible to obtain a high score on the N scale without having any diagnosable psychiatric disorder. Conversely, not all psychiatric categories imply high levels of N" (Costa and McCrae, 1992, p14). It does appear that Neuroticism within the NEO personality inventory measures poor

adjustment and emotional instability. A high Neuroticism score suggests a tendency to experience negative affect, have less impulse control and to cope poorly with stress. Further evidence of a relationship between *preserving* and instability can be derived from Millon's (1994) data concerning military recruits referred for psychological screening. They showed a significant correlation between *preserving* and NEO neuroticism and all MMPI- 2 psychiatric subscales (Butcher *et al.*, 1989).

The Millon Index of Personality Styles (MIPS) *preserving* trait consistently shows a significant correlation with other measures of psychological instability and poor adjustment. The NEO and MMPI have already been mentioned but there are also significant correlations (in the direction of instability) with: Cattell 16PF second order factors anxiety and adjustment (Catell *et al.*, 1970), the Gordon Personal Profile-Inventory factor emotional stability (Gordon, 1978;), the Beck Depression Inventory (Beck and Steer, 1987), and the College Adjustment Scales factors anxiety, depression, suicidal ideation and problems with: self-esteem, interpersonal, family, academic and career (Anton and Reid, 1991). The tendency for a psychoanalytic orientation or interest to be associated with instability was actually found in a study of psychiatrists (Kreitman, 1962). The study found

that psychiatrists with an interest in psychoanalysis had significantly higher scores than psychiatrists with an organic interest for the scales anxiety on the Minnesota Multiphasic Personality Inventory (MMPI) (Butcher, Dahlstrom, Graham, Tellegen, and Kaemmer, 1989) and depression/cycloid-depression on the Guilford Martin Personality Inventory.

The results from the MIPS Adjustment Index are also relevant to this discussion. The Adjustment Index was developed by Millon from certain selected traits on the MIPS scales. He extrapolated, from his model of personality, those traits that he thought would be associated with positive or negative psychological adjustment. The scale was then validated against 297 military recruits who did or did not require psychiatric evaluation and those subsequently found unfit for duty. A co-author of the MIPS concluded," ... the MIPS Adjustment Index holds considerable promise in a wide variety of organisational settings in which screening for overall adjustment is considered job relevant..." (Weiss, 1997, p511). Based upon this evidence, Millon (1994) set a cut off T score of below T-35 as suggestive of poor overall adjustment, based upon the military sample.

Although the results of this investigation found that both orientations scored above the cut-off point (suggesting good over all psychological adjustment), when orientations were compared the behaviourists scored significantly higher than analysts. To understand this result it is helpful to look at the trait dimensions Millon (1994) selected to constitute positive versus negative adjustment. These are presented below in Table 4.1.

TABLE 4.1 Constituent scales of the MIPS Adjustment Index

	Motivating Aims	Interpersonal Behaviours						
Positive Adjustment	Enhancing	Outgoing	Asserting	Conforming	Controlling	Agreeing		
Negative Adjustment	Preserving	Retiring	Hesitating	Dissenting	Yielding	Complaining		

Table 4.1 shows that ten of the twelve scales that constitute the index are interpersonal behaviours and the remaining two are the motivating aims now being considered, *enhancing-preserving*. Only three out of ten interpersonal behaviour traits differed by orientation alone in this investigation. This pattern of scores suggests that the analysts' higher *preserving* score is probably significantly responsible for their lower adjustment score. However, this is difficult to satisfactorily determine because Millon does not give the weightings for each trait on the positive and negative scales.

In this discussion theoretical and empirical links have been demonstrated between *preserving* and 'neuroticism'. The correlational evidence between *preserving* and other scales measuring psychological problems suggests the possibility that analysts are more likely than behaviourists to have those who experience difficulties amongst their number. Because the MIPS measures traits within the normal range of personality traits, it is likely that that is where those difficulties lie. They are probably within the ordinary experience of neurotic problems. Millon describes the likely problems to be; worry, pessimism, inhibition and a narrowing of the range of positive emotions. The analysts' wish to avoid perceived threats may result in a narrowing of the potential for positive emotions and joyful experiences and lead them to be "...inhibited and restrained, worrisome and pessimistic, overly concerned with the difficulties of life" (Millon, 1994, p16).

The existence of such difficulties may have formed part of their initial attraction to an analytic orientation with its emphasis on a personal therapeutic experience. Indeed, the desire to undertake a personal analysis must have its foundation in some need or discomfort that is of concern to the individual. The evidence suggests behaviourists may have less

experience of neurotic symptomatology, and consequently may not have felt the need for a personal, in-depth analysis. However, still wishing to work psychotherapeutically as a psychologist, they may have been attracted to the cognitive-behaviourist orientation without its need for a personal analysis.

An interesting piece of anecdotal evidence concerning the cognitive-behaviourists' higher *enhancing* score came from a BBC radio interview conducted by the psychiatrist Professor Anthony Clare (St Louis, October 5, 1997). He interviewed one of the founders of cognitive behaviour therapy (CBT), Professor Aaron Beck. In the course of their discussion both observed and agreed that CBT was practised by individuals who were generally 'enhancing' in their character. They also agreed that they thought CBT sought to 'enhance' a person's life.

Having established the presence of a major difference in the primary motivating drive for behaviourists and analysts the investigation now considers the findings regarding the other two motivating aims.

4.1.2 Other motivating dimensions

The second motivational level refers to the ego-psychological concept of the active versus passive character, and is measured by the trait pair modifyingaccommodating. The first trait dimension pair measures the basic primary drive concerned with the 'becoming' of the individual. This level measures their existential 'being-in-the-world', how the person endures and enacts their primary motivating drive. There was no significant difference found between orientations on this trait pair. It might have been expected that the behaviourists' significant *enhancing* score would be reflected on *modifying*, and the analysts' significant preserving score on accommodating. For example, that the *preserving* individual would be passive and reflective and the enhancing individual would be active and seek to modify their lives. Moderately high correlations are indeed found between the scales(r = .50, r = .57) but the design of the MIPS is such that it can measure the amount of the primary drive trait and also separately measure its relative enactment. Although the primary drive trait for analysts is *preserving* and behaviourists is *enhancing*, neither group appears to have developed a predominantly active or passive style to sustain their existence in either of those styles.

The final aspect of motivation considers the motivational drive towards self versus others. Individuals who are self-focused, self-actualising, have a strong sense of identity, independent minded and not so concerned about the needs of others exhibit the *individuating* trait. Where, however, there is a strong need to turn to others, become concerned about them, seek to nurture a warm relationship, or put others first, this is described as the *nurturing* trait. Millon believes scores on this dimension measure the balance between the two dispositions of the self. Both orientations have similar scores for *nurturing*, but behaviourists scored significantly higher for *individuating*. This suggests that although both groups are similar for *nurturing*, some behaviourists may also have a tendency to focus on themselves, put their own priorities before others and regulate their own experiences.

These findings have implications for clinical practice. The function of the psychoanalytic psychotherapist is to become involved in a living transferential relationship, to tune in to the unconscious communication of the patient, receive projections and experience emotional reactions. This suggests it would be helpful to have a predominant concern for the other person rather than the self. The behaviourists' significantly higher

with themselves, while analysts are comparatively more concerned with others. This situation may therefore be more in keeping with the very different therapeutic relationships both employ. But the implication, because this is a personality trait, is that this difference is not just manifest in the consulting room but is a generally observed tendency.

However, both orientations appear to experience a similar need to turn to others, become concerned, and experience empathy. This *nurturing* trait probably exists as one of a number of core traits in psychotherapists and others in the caring professions. Evidence for the existence of therapist core traits was claimed to have been found by Tremblay *et al.* (1986), "There appears to be a 'therapists personality' that spans theoretical orientations and comprises a focus on the present, strong self acceptance and self regard, synergy, and a constructive view of the nature of humanity" (p109). The findings from this investigation suggest that whereas both orientations show a similar need to nurture, analysts may differ from behaviourists in that they direct this more towards others than themselves.

4.1.3 Summary of the motivational aims findings

It appears the primary motivating aim of the two orientations is significantly different; analysts wish to avoid pain and preserve, and behaviourists enhance and develop. Neither differ significantly for the secondary motivating aim of modifying their world by active or passive methods. In relation to the motivating aim of *nurturing* relationships they are similar, but behaviourists are more likely to turn towards themselves than analysts.

4.2 Cognitive and epistemological measures

Millon's tripartite model of human personality functioning emphasises the importance of cognitive differences between individuals. He comments that if one desires to measure the whole person then cognitive style must be considered of equal significance to the other two aspects, motivation and interpersonal behaviour. Cognitive style has been ignored in most models of personality and measurement. Where it has been acknowledged, this was often in the form of crude measures of intelligence. The Cattell 16PF, for example, has a 13 item measure of intelligence that relates only to scholastic mental abilities. Other instruments have ignored cognitive style as a separate

dimension (e.g. NEO and Eysenck Personality Inventory) or confused it with the interpersonal manifestation (MBTI). Therefore in this investigation the measurement of cognition was considered from two perspectives: (1) the structure and functional style of the cognitive apparatus itself (cognition) and (2) the beliefs, theories and philosophies that originate from that apparatus (epistemology).

The MIPS cognitive modes measure the sources and styles of information gathering, processing and organisation and the cognitive perceptual apparatus itself. The second cognitive perspective was measured by two epistemological measures and concerns the person's theory of knowledge, their beliefs, philosophy and worldview. This discussion begins with an evaluation of the cognitive style differences between the orientations and is then followed by the epistemological findings.

4.3 Cognitive Style

There are four MIPS bipolar pairs of traits that constitute the cognitive modes and their operation:-

MIPS COGNITIVE MODES	DESCRIPTION
Extraversing - Introversing	source of information gathering
Sensing - Intuiting	style of information gathering
Thinking - Feeling	style of information processing
Systematising - Innovating	how information is organised

4.3.1 Sources and styles of knowledge

The first cognitive dimension, *extraversing-introversing*, relates to the sources used to gather knowledge. It is concerned with whether individuals characteristically seek knowledge outside themselves (*extraversing*), having regard to the environment and others, or whether they seek it within themselves (*introversing*) having regard to internal thoughts and feelings. Analysts and behaviourists did not differ on this *extraversing-introversing*

dimension.

This is a surprising finding, because empirical observation and theory suggest the behaviourist is primarily concerned with the external interpsychic world of consciousness and the analyst is primarily concerned with the intra-psychic world of unconsciousness. There is evidence from the literature reviewed to support these empirical observations. For example, indepth qualitative research interviews conducted on 21 psychoanalytic and behavioural psychotherapists demonstrated that behaviourists reported extrapersonality orientated personality styles and concern with objective, behaviours. whereas, psychoanalysts measurable patient reported intrapsychic personality styles and concern with introspection, dreams, memories and free association (Angelos, 1977). Other researchers found thinking introversion, as measured by the MBTI, associated with the more psychological and psychoanalytic orientated practitioners (Kreitman, 1962; Walton, 1966; Caine et al., 1969).

Participants in this study did not show orientation differences for this trait pair. One possible explanation is that Millon's *extraversing-introversing* dimension is primarily, as he states, a cognitive trait. He emphasised this

from his re-reading of Jung, writing,

"What did Jung mean by 'Extraversion' and 'Introversion'? The view commonly held by Jung's interpreters is that these terms refer to behavioural aspects of sociability...It is the author's view that Jung intended something appreciably different. His was essentially a cognitive orientation, so that Extroversion and Introversion signified not a person's social style but the question of his or her attentions and interests" (Millon, 1994, p22.).

The findings from this investigation suggested that when this dimension was measured as a <u>cognitive</u> trait by the MIPS, no orientation difference was found, and this suggests analysts and behaviourists attend to internal and external sources for knowledge in similar proportions. But when introversion-extroversion was measured primarily as an interpersonal trait by the MBTI in the other studies reviewed, differences between orientations were found in the expected direction. This may be because, as Caine *et al.* (1969a) believe, the MBTI measures this dimension as a social trait. They observed, "...the actual items of the introversion-extroversion scale appear to focus on sociability and related characteristics" (p.277).

The evidence from this investigation suggests therefore that analysts and behaviourists do not differ in their primary source of information. They refer to a similar pattern of internal and external sources. It is interesting to observe what then happens to that knowledge. Examination of the other cognitive modes will show there are differences in how it is gathered, processed and organised.

There was a difference found between orientations on their characteristic styles of gathering knowledge. There are, according to Millon's interpretation of Jung, two traits measuring this characteristic, *sensing* and *intuiting*. *Sensing* is seen by Millon, with reference to Jung, as describing the type of person who relies on their physical senses for tangible, structured and well-defined information gathering. Wanting the facts, quantitative precision, pragmatic and realistic styles are characteristic of this person. The *intuiting* person is seen as preferring thoughts of an abstract, complex, connotative, symbolic and metaphysical nature.

Novice behaviourists scored significantly higher on *sensing* than analysts. This difference disappeared after eleven years of practice and orientations are then similar on this trait. An examination of the pattern of scores for *sensing* shows that behaviourists decreased on this trait with experience. Then, at the intermediate experience level the analysts' score increases until

there is no longer any significant difference. This trend continues into the senior level. These results could not be analysed to determine whether the trend reflected the presence of static differences between groups, or cognitive development. Cognitive development suggests the possibility that analysts and behaviourists begin their careers significantly different on their styles of information gathering but, with experience, come to an equal valuing of sensory and intuitive cognitive styles. The research literature is not much help in exploring how experience affects cognitive style development. It has never examined personality and epistemological differences for orientation and experience. So although there are plenty of examples of differences between orientations it is not known whether they are consistent at every experience level. If experience had not been considered in this study it would have just been observed that behaviourists and analysts differed on sensing.

The research reviewed in this study also supports the finding that behaviourists use *sensing* and analysts *intuiting* as their preferred style of information gathering. For example, participants with a traditional organic and medical attitude to the treatment of mental illness were found to have significantly raised scores on the MBTI dimension sensing (Caine *et al.*,

1969a). The study also found that participants who were more psychotherapeutically orientated scored significantly higher for MBTI intuiting. In another example, a behaviourist-scientist sample scored significantly for MBTI sensing and a social sciences-psychologist sample for intuiting (Johnson *et al.*, 1988). The MIPS and MBTI scales sensing-intuiting were reported by Millon (1994) to have significant correlation, (r=.78, r=.60).

4.3.2 Processing and organising knowledge

Once information and knowledge have been gathered it needs to be processed and organised. Processing can be performed through *thinking* or *feeling* and then organised in a *systematic* or *innovative* manner according to Millon's model of cognition. The *thinking* trait emphasises the use of reason, logic, reduction of emotional input and objectivity. However, in its extreme form this can be seen as behaviour that is rigid, overcontrolled and unyielding. *Feeling* emphasises the primacy of affect to transform information, use of introspective analysis and empathic response. These traits are also reported by Millon (1994) to have a significant correlation with MBTI thinking - feeling, (r - .62 and r = .64).

The MIPS results showed analysts scored significantly higher for *feeling* than behaviourists, and behaviourists scored significantly higher for *thinking* than analysts. This result suggests behaviourists probably rely more on reason and logic to transform information concerning the patient (e.g. observation, measures of observable behaviours, environmental cues) and analysts rely more on their feelings to understand and assess the patient's responses. The latter is seen clinically in analysts' use of the concepts transference and countertransference.

Confirmation for this difference in psychotherapeutic approach was found in another study. Psychoanalytic and behaviourist therapists were asked to rate themselves on therapeutic intentions from a recorded session. Significant differences between orientations were found. Psychoanalytic, more than behaviourist participants, saw the therapist as attempting to "...identify, intensify, and/or enable acceptance of feelings, encourage or provoke the client to become aware or deepen underlying or hidden feelings or affect or experience feelings at a deeper level" (Hill and O'Grady, 1985, behaviourists p9). another study. scored lower In than psychodynamic/humanist therapists for the trait scale feeling reactivity on the Personal Orientation Inventory (Tremblay, 1986). This scale purports to measure sensitivity to personal feelings and needs.

It is interesting to note that for **both** orientations the score for *thinking* increased with the level of experience until seniors had significantly more of the trait than others. It is difficult to know whether this increase is reflecting the effect of clinical experience, age or just static differences between these groups. If this is an effect of change through experience then it would suggest psychotherapists with more than 18 years experience have grown to depend more on the use of reason and logic. On the other hand, the more pathological features of *thinking* could also suggest some practitioners may have become more rigid, overcontrolled and unvielding.

The final step in cognitive transformation concerns how information and knowledge are organised by the person, whether the person fits new information into their pre-existing cognitive systems (*systematising*) or whether they allow imagination and creativity to suggest a unique understanding (*innovating*). Analysts scored significantly higher for *innovating* than behaviourists. For *systematising* there was a difference at the novice level, with behaviourists scoring significantly higher. The

analysts' score then increased and the behaviourists' decreased in the other experience levels, until they were similar for this trait.

In interpreting these cognitive style findings it is useful to note the different history, training, and metatheoretical basis of the two orientations. Cognitive-behaviour therapy is based upon psychological-learning theory and the direct application of it. Learning theory is studied by potential clinical psychologists at an early undergraduate level and leads naturally into application in clinical postgraduate training. It is a more systematic psychological theory, taught to be applied in a fairly consistent manner. Psychoanalytic psychotherapists, by comparison, usually have a core profession, with a diverse theoretical basis and then much later go on to study a multitheoretical analytical model that does not consistently and systematically translate into direct clinical application. It has also been the author's observation that students in a psychoanalytic training can go through an initial period of considerable theoretical disorientation. With experience however, there usually develops an understanding and grasp of the diverse and apparently contradictory models.

It is possible to speculate that the analysts' *innovative* cognitive style fits more closely to the less systematically structured analytic model and the novice behaviourists' *systematising* style fits their primarily cognitive-behavioural clinical psychology training. It is important, in this connection, to recall that the psychoanalytic movement was and is characterised by revolution, splitting, fragmentation, diversity and strong personalities. Indeed the founder of the movement. Freud, reflected these tendencies.

Peter Gay (1988) in his book, *Freud. A Life for our Time*, described how Freud's psychoanalytic theory was an innovation and how Freud was an innovative thinker. He also showed how Freud experimented and changed his own theories. There were the early interests in cocaine, hypnotism, and Fliess's ideas concerning numerology and the nose. This was followed by the initial belief in then rejection of the seduction theory and change from a topographical to a structural model of the mind. The development of the analytic model has been typified by innovative thinkers, resulting in numerous splits and schisms. In the USA there has been the development of ego psychology, interpersonal analysis (Horney, 1950), self-psychology (Kohut, 1983). In the UK the major schism between Anna Freud and Melanie Klein resulted in three theoretical orientations: Contemporary

Freudians (Sandler, Dare, and Holder, 1990), Kleinians (Klein, 1975), and the Independent Group (Kohon, 1988).

By contrast the history and development of cognitive-behaviour therapy appears orderly, sequential, and systematic. Pavlov's discovery of classical conditioning resulted in Watson (1983), Skinner (1965), Wolpe (1990) and Lazarus (1968) development of behaviour therapy. This developed into cognitive-behavioural therapy, as exemplified by Aaron Beck's (1983) cognitive-behavioural treatment of depression.

These differences in historical development and training may help to explain the finding that *systematising* is the predominant cognitive-organisational style for behaviourists, and *innovating* for analysts. It is possible that orientation was initially selected by participants to reflect their predominant cognitive-organisational style: cognitive-behavioural for the *systemic* and psychoanalytic for the *innovative* thinker. There may have been a resonance or fit between the participants' **perception** of the orientations' apparent cognitive style and their own. This resonance is described by Vasco Garcia-Marques and Dryden (1993) as 'tempting' the potential therapist towards their appropriate orientation. "Psychotherapists' attitudes toward the

theoretical and metatheoretical assumptions of different orientations are the result of personal perspectives, philosophical stances, worldviews, and values. All these variables combine to make a particular orientation more tantalising than others, contributing to an eventual goodness of fit between a therapist's personality and a particular orientation" (p183).

The therapist's perception is that an orientation is somehow congruent with their cognitive style. Sometimes that perception is incorrect. For example, a person who is highly systematising might misperceive an analytical training as structural, systematic and consistent. An investigation into the consequence of dissonance between the therapist's personal philosophy and values and the metatheoretical assumptions of their selected orientation was conducted by Vasco and Garcia-Marques (1993). They found that when dissonance was present there was dissatisfaction. This may cause therapists to abandon their work, select eclecticism, 'retreat to commitment', feel dissatisfied and become less effective. Vasco and Garcia-Marques emphasise the importance of the potential therapists knowing their personality and philosophical values and fitting to the appropriate orientation. However, it is not always possible for a novice to know their traits and values and also the image of particular orientations, and

practitioners may be stereotypic as Lazarus (1978) noted.

4.3.3 Summary of the cognitive style findings

Significant differences in cognitive modes were found between the orientations. Generally the differences were as predicted from the research, with the exception of *extraversing-introversing*. Detailed analysis suggests this was because this study measured the cognitive rather than interpersonal aspects of the introversion-extroversion dimension. A discussion concerning the implications of cognitive style differences and choice of orientation suggests how the cognitive style of a person might lead them to be attracted to a theoretical orientation that they believe will fit that style.

4.4 The epistemological measures

As discussed previously, significant differences were found between analysts and behaviourists on the MIPS cognitive scales. This suggests participants have different ways of gathering, processing, and organising knowledge, and findings from the MIPS cognitive scales should correlate with findings from the epistemological scales (The Organicism-Mechanism

Paradigm Inventory, OMPI, and The Psycho-Epistemological Profile, PEP). In order to test this hypothesis predictions were made concerning the expected correlations between all the cognitive and epistemological scales. An analysis of the trait descriptions suggested that the MIPS sensing, thinking and systematising scales should fit with OMPI mechanism and PEP empiricism-rationalism, and could be called the 'objective' dimension. Behaviourists were found to score significantly higher than analysts on all those scales except PEP empiricism-rationalism. Likewise the MIPS intuiting, feeling and innovating scales should fit with OMPI organicism and PEP metaphorism and could be called the 'subjective' dimension. Analysts were found to score significantly higher than behaviourists on all those traits. However, some of these differences disappear with experience and were really only observed consistently and clearly with less experienced practitioners.

On the two measures of epistemological styles (OMPI and PEP) both orientations differed significantly. This suggests that analysts and behaviourists have different epistemological styles, which further confirms the differences found on the cognitive modes component of the MIPS. The findings from the two inventories will now be explored in depth.

4.4.1 The Organicism Mechanism Paradigm Inventory

Analysts scored significantly higher on the OMPI than behaviourists. A higher score is in the *organicism* direction and a lower one is in the *mechanicism* direction. This result suggests that comparatively the philosophical worldview of analysts tends to the *organicism* direction, and of behaviourists to the *mechanicism* direction.

When the factor experience was analysed, the significant score difference was observed to be located between the novices of both orientations. Novice analysts scored significantly toward the *organicism* direction and novice behaviourists toward the *mechanicism* direction. At the intermediate and senior levels the OMPI scores had moved closer and were no longer significantly different.

The pattern observed was that the analysts' OMPI score decreased while the behaviourists' increased. This could suggest that analysts and behaviourists may have begun their practices with significantly dissimilar epistemological beliefs but through experience came to share similar views. However, as has been previously mentioned, this may also suggest a static effect is being

observed at each experience level. Therefore an alternative explanation could be that over the years analysts with more *organismic* and behaviourists with more *mechanistic* epistemologies are being attracted to their orientations.

The scores for the OMPI went entirely in the predicted direction with the behaviourists predominantly *mechanistic* and the analysts *organismic*. What is surprising is the possibility that either analysts become more *mechanistic* with experience or younger analysts are now more *organismic* than their analytic seniors were. Conversely either behaviourists may become more *organismic* with experience or younger behaviourists are now more *mechanistic* than their seniors were.

The actual mean scores are also of interest. The mean scores for both orientations (analysts m = 20.98, behaviourists m = 19.84) are broadly in line with Vasco's findings (psychodynamic m = 21.03, behaviourists m = 17.17) (Vasco 1997). Johnson *et al's*. (1988) range of normative data on 16 different groups of 716 participants showed the U.S. standardisation sample to have a much lower mean of 16.07 (S.D. = 4). An examination of his data showed 25 'Skinnerian' behaviourists from editorial staff and guest editors

of *The Journal of Applied Behaviour Analysis - 1984* to have an even lower mean OMPI score of 14.79 (S.D. = 4.05). This is considerably lower than this study's or Vasco's behaviourists. However, at the upper (*organicism*) end of OMPI, the mean scores are very similar. It is of note that Johnson's behaviourists, police applicants, engineering students, medical students, and dental students scored even lower, between mean = 11.69 to mean = 14.79, a much lower OMPI *mechanism* score than found in this study or Vasco's.

Looking for an explanation, the gender distribution of Johnson *et al's*. behavioural sub sample (N = 156) was examined. This analysis revealed 84% (n = 131) were male and only 16% (n = 25) were female. This suggests that the predominance of men in the behavioural sub sample may have lowered the score more towards the *mechanism* direction. In this investigation males were found to score significantly lower on the OMPI (towards *mechanicism*) than females. It is interesting that Johnson *et al.* (1988), Johnson and Miller (1990) and Vasco and Garcia-Marques (1993) did not compare OMPI scores by gender. Another factor to consider is that this is first time a British population has taken the OMPI. There may therefore be socio-cultural reasons why this particular sample had a different distribution of scores. Johnson *et al's*, standardisation sample

contained Yugoslavs, Nigerians, North Americans and Indians, while Vasco's study used Portuguese participants.

4.4.2 Psycho-Epistemological Profile

A second measure of epistemological beliefs, the Psycho-Epistemological Profile (PEP) was offered to those participants (n=247) who had completed the original questionnaire packs containing the OMPI and MIPS. Two thirds (165 of 247) of participants returned useable PEP's in similar orientation proportions: 55% (90 of 165) were analysts, and 45% (75 of 165) were behaviourists.

The PEP evaluated participants to determine their predominant epistemological style from three scales; *metaphorism, empiricism* or *rationalism*. However, a factor analysis of the PEP by different investigators had identified three different factors, named, *insight, culture* and *science*, (Johnson and Miller, 1990). In this investigation an analysis was performed using both the original factors (Royce and Mos, 1980) and Johnson and Miller's new factors. The item numbers for the PEP that constituted Johnson and Miller's three new factors were supplied by private correspondence

(Private Communication, Johnson, May 1997).

The concurrent and construct validity of the PEP, its theoretical basis, as well as previous research suggest that the analysts' predominant epistemology should be *metaphorism* and behaviourists' *empiricism* (Schacht and Black, 1985; Royce and Mos, 1980; Johnson and Miller, 1990). In this investigation analysts scored significantly higher than behaviourists on *metaphorism* but there was no difference for *empiricism*.

It is appropriate, in view of these findings, to review the evidence that suggested the epistemological predictions for *metaphorism* and *empiricism*. Research reported in the *Manual of the PEP* found *metaphorism*, as predicted, was consistently the predominant epistemological style of those persons engaged in the performing arts, speech-drama, and the humanities (Royce and Mos, 1980). *Metaphorism* was also found to correlate moderately significantly with the following standardised inventory scales: aesthetic/religious on (Allport, Vernon, and Lindzey Study of Values), feeling/intuitionism on (MBTI), and the male Strong Vocational Interest Blank Scales (SVIB) of music, art, nature, social services, psychiatrist, psychologist, and minister. However, the pattern of female scores on the

SVIB did not follow the males. There was a suggestion that female SVIB psychologists' interest scores moderately correlated with *empiricism*.

Empiricism was found to be the predominant epistemological style of those persons engaged in chemistry, biology, experimental psychology, and life sciences (Royce and Mos, 1980). They also found *empiricism* correlated with these scales: 'theoretical' and negatively with 'religious' (Study of Values) 'perceiving' and negatively with 'intuitionism' on (MBTI), and the SVIB scales of law/politics and physical sciences.

The PEP was used to measure the predominant epistemological style of psychoanalytic and behavioural psychotherapists by Schacht and Black (1985) and Vasco (1997). Vasco found no significant difference for any of the three PEP epistemological styles between orientations, but some of his groups were extremely small (n = 12). Schacht and Black, however, found their psychoanalytic psychotherapists scored significantly higher for *metaphorism* and behaviour therapists for *empiricism*. This research, and Johnson and Miller's (1990) epistemic dichotomy, suggested the prediction that analysts would score significantly higher on *metaphorism* and behaviourists on *empiricism*. It was also predicted that the hierarchical

pattern of epistemological traits would differ by orientation. Schacht and Black had found that for 86% (57 of 66) of their psychoanalytic psychotherapists the predominant scale was *metaphorism*, followed by either *rationalism* or *empiricism*. Their behaviourists, however, had no distinctive hierarchical pattern of epistemological beliefs. They had predicted the hierarchy would be *empiricism*, followed by *rationalism* and *metaphorism*. Their explanation was that the behaviourists may have been a more heterogeneous group than their psychoanalytic psychotherapists.

In this investigation analysts scored significantly higher on *metaphorism* than behaviourists, but there was no orientation difference found for *empiricism*. The hierarchical pattern for analysts was *metaphorism* followed by *rationalism* and *empiricism*, which was also the pattern for the behaviourists. So the expected epistemological prediction was found for analysts but not for behaviourists. This was surprising, especially since the behaviourists were clinical psychologists who typically have an undergraduate degree based upon a scientific understanding of psychology. Their postgraduate training is usually within the scientist-practitioner model and their membership of the BABCP indicates an interest in the application of cognitive-behavioural psychology.

One possible explanation for this finding is that the behaviourists in this investigation may have a greater range of epistemological beliefs but be less consistently committed to them. They may be a more heterogeneous group, like Schacht and Black's (1985) behaviourists. This could reflect a greater epistemological flexibility or perhaps uncertainty concerning the nature of evidence they require. Further support for this hypothesis can be found in the behaviourists' response to the commitment to orientation questions asked as part of this study and discussed later. These results suggest they may be more likely to step outside their cognitive-behavioural orientation than analysts.

Seniors from both orientations showed significantly higher *empiricism* scores than novices. This could suggest, like the previously discussed cognitive scales that were affected by experience, there is a tendency to develop a more objective attitude with experience. However, it is also possible the older practitioners were always higher for this characteristic.

The three different factors found by Johnson and Miller (1990) were also used to evaluate PEP scores. However, they did not reveal much additional

information. This was probably because two of their scales, science and culture, consisted mainly of items from the empiricism and metaphorism scales respectively. However, insight was an equal balance of items from each of Royce's original three factors and consequently a more original scale. The items on this scale appeared to measure the importance of thought, consideration and self-reflection, for example, "My intellect has been developed most by gaining insightful self knowledge". Senior analysts scored significantly higher than novice analysts for insight and this may well reflect the effect experience has on developing this psychoanalytically valued skill. These very experienced analysts may also be more insightful than their senior behaviourist counterparts. The score difference between them for *insight* just barely failed to reach significance (p=.053). This might be explained by the small numbers of participants involved, a larger group may have emphasised this difference.

4.4.3 Summary of the epistemological findings

Epistemological measures showed evidence of differences due to the therapeutic orientation of the participants. The differences probably reflect adherence to different philosophical worldviews and epistemologies.

However, there was some evidence that behaviourists may have some epistemological similarities to analysts. This may be because behaviourists are a more heterogeneous group. Experience is an independent variable that consistently affected cognitive-epistemological scores, the main effect emphasising differences at the novice levels and their reduction with experience. It is not clear whether this represents a developmental process or that newer psychotherapists are more clearly differentiated on these measures than older ones.

4.5 Interpersonal behaviour

The third personality dimension measures how people actually behave in interpersonal situations. However, in this study, of the ten traits measuring this component only three were found to differ significantly by orientation. Proportionately, this was the smallest number of differences found within a component. This finding suggests that while analysts and behaviourists show evidence of different motivation, thinking and epistemology, when it comes to their interpersonal behaviour there is not such a large difference.

It is important to evaluate the reason relatively fewer interpersonal scale

differences were found. First, it is necessary to examine Millon's theory of interpersonal behaviour and their measurement. Millon believes that these and useful information concerning provide important behaviours personality. However he distinctly separates them from other components of personality, unlike other personality researchers who have used social behaviour items to measure the core traits they are investigating. Millon also observes that other researchers give interpersonal variables primacy, and implies that their personality inventories mainly measure the socialinterpersonal manifestations of core internal traits. The MIPS puts the social component on an equal but separate footing from other aspects of personality functioning.

Millon saw the developing emphasis on the important role of interpersonal variables in personality theory as coming from the work of Adolph Meyer (Winters, 1951), Harry Stack Sullivan (1953), Gregory Bateson (1956) and Eric Berne's Transactional Analysis (1961). Millon saw this development culminating with Timothy Leary's (1957) interpersonal typology and developed by others into instruments to operationalise its theoretical interpersonal dimensions. In trying to determine what traits constituted the interpersonal dimension, Millon noted that there was a high degree of

complex and the first four factors of the NEO five factor model. Millon reports that his MIPS interpersonal behaviour scales correspond both to Leary's interpersonal types and to the first four NEO factors. The MIPS approach is to measure these interpersonal trait concepts purely in terms of what people do, rather than what motivates them or how they think.

In his research for descriptions of the normal interpersonal trait dimensions, he drew upon his Millon Clinical Multiaxial Inventory (MCMI) (Millon, 1987), an inventory for assessing personality disorders. This was because he believes that interpersonal behaviour extends from normality to an extreme or clinical version. For example, the normal MIPS version of *outgoing* describes talkative, lively popular individuals, but the extreme clinical version is similar to DSM's histrionic personality disorder (APA, 1994). Millon wrote "Pathology results from the same forces that are involved in the development of normal functioning. Important differences in the character, timing, and integrity of these influences will lead some individuals to acquire pathological structures and functions, whereas others develop adaptive ones" (Millon, 1993, p283).

The five MIPS interpersonal scales are therefore the outcome of the influences of Leary's typology and its correspondence with the NEO, and Millon's view that normal interpersonal behaviour is related to pathological variants as measured on his MCMI. The five MIPS bipolar trait dimensions are shown below.

MIPS Interpersonal Behaviour Trait Dimensions

Retiring - Outgoing

Hesitating - Asserting

Dissenting - Conforming

Yielding - Controlling

Complaining - Agreeing

Having determined these five bipolar trait dimensions, they are measured firmly within the interpersonal domain. They are distinguished clearly from the other two components, motivation and thinking. As measures of interpersonal behaviour they correlate with associated traits within different MIPS personality components but are not considered measures of them. For example the MIPS *introversing - extraversing* dimension is considered a cognitive mode, but it does correlate significantly with other introversion-

extroversion scales (MBTI, 16PF, and NEO) that measure this dimension as both social behaviour and cognitive style. This probably reflects the likelihood that persons with significantly *introversing* or *extroversing* cognitive styles are likely, but not necessarily, to show evidence of introverted or extroverted social behaviours.

Millon makes the point that traits must be measured within their appropriate domain. This has implications for the evaluation of past personality evidence concerning orientation differences. It suggests these instruments may have been measuring traits as if they existed within a mixture of three domains (cognitive, motivational and interpersonal). Although that research claimed to have found evidence of social differences, because none of those traits were measured purely within the interpersonal domain, then there really may not have been strong evidence to conclude there existed differences between the orientations. Therefore, the expectation in this study that a significant number of interpersonal behaviour differences might be found was based upon the results from previous measures that did not locate traits purely within interpersonal domains.

Referring to the literature, there was only one study that used a specific

measure of interpersonal behaviour (Tremblay *et al.*, 1986). They used the Personal Orientation Inventory (POI) which has some scales that appear to measure interpersonal behaviour. They found behaviourists had a lower score than humanistic and psychodynamic therapists for three POI scales, two of which were interpersonal in nature (capacity for intimate control and feeling reactivity). They reported that these scales were related to the development of intimate relationships and the acceptance or sensitivity to the person's own feelings. Their results suggested, "Behavioural therapists had the most unique negative personality traits, with 'negative' construed as the absence of what the POI considers positive...The unique behavioural constellation was; relatively limited flexibility, acceptance of their own feelings, and development of relationships" (Tremblay *et al.*, 1986, p109). However, in mitigation, only one of these traits was below the test norm.

The possibility that significant interpersonal differences may not actually exist between analysts and behaviourists has to be considered. The results from previous personality research are unclear and there is no other evidence to consider. It is also unlikely that analysts or behaviourists would differ on other interpersonal measures, such as divorce rates, lifestyles, number and quality of social contracts, community involvement, friendship

network and family relationships. Therefore there was probably little, if any, strong evidence to support the expectation of finding major interpersonal differences in this study.

However, there were some significant differences and these will be analysed. The behaviourists' higher *retiring* score suggests they may have less need than analysts to give and receive affection, express feeling, have ties, to be with others or have relationships. Millon describes how such persons may show non-clinical evidence of attributes seen in the schizoid personality disorder. It is important to note that although some behaviourists' tendency is toward social indifference, and they may be seen as less friendly, they still share with analysts the similar need to actively seek social stimulation

The behaviourists' significant *retiring* score does not fit with the expected pattern for other MIPS scale intercorrelations. In that sense it is a rather anomalous finding. Analysis of the stem and leaf and box plots for this trait did show there were a significant number of behaviourists scoring high for this trait, it did not appear the group mean was being raised by a few participants with exceptionally high scores. It is nevertheless possible that

although behaviourists seek social relationships and are confident with them, there is a subtle difference. A significant number may be, according to Millon's (1994) description of this trait, more aloof, have minimal need to show feeling, and although seen as easygoing may be indifferent and prefer to be alone.

Behaviourists also differ from analysts on the *conforming* trait. This finding suggests that behaviourists with less than 18 year's experience are more conventional, orderly, responsible, proper and conscientious than their analytic counterparts. However, observation of the mean scores shows that at each level of experience the analysts become more *conforming* until both orientations are equal at the senior level. A similar pattern was observed within the analytic group itself, where seniors were more significantly *conforming* than less experienced practitioners.

An interesting pattern of scores were found that shows cognitive and interpersonal differences between novice analysts and behaviourists disappear with experience. The two highest MIPS intercorrelations for *conforming* are the cognitive scales *sensing* and *systematising*, (r=.62, r=.68). Interestingly the experience pattern is found to be similar for all

three traits. Whilst the novice behaviourist who is initially more conforming, relies primarily on sense data, and a systematic cognitive style becomes less so with experience, the analysts' scores increase for those traits until both orientations become alike. This experience pattern is further validated with reference to the results from the epistemological measure, the OMPI. Novice analysts and behaviourists scored in the predicted different directions for *organicism-mechanism* but came to resemble each other with experience.

There are implications if these experience patterns are the effect of development rather than measurement of static groups. It could suggest behaviourists, with experience, may become less 'rigid' and objective in their cognitive style and also that their conformity needs decrease. Analysts may 'tighten up' in their cognitive style and become less subjective and also their conformity needs increase. This would further confirm the previous discussion concerning the very different personal requirements of an analytic versus a cognitive-behavioural training.

When the trait dimension *yielding-controlling* is examined there is further confirmation of the effect experience has on rigidity. Millon believes

submissive to the will of others and those who are dominant, and command obedience and seek to manipulate. Whilst there were no significant differences for *controlling*, novice analysts scored significantly higher for *yielding* than either novice behaviourists or senior analysts. Analysts therefore have become less *yielding* (more rigid) but behaviourists more *yielding*, (less rigid) with experience until both are alike.

This finding suggests that novice analysts may have more of a tendency to act in a "...subservient and self-abasing manner" (Millon, 1994, p33). Millon points out *yielding* conveys more than just a general agreeableness. It has the notion of servility and adherence to the expectation of those they follow. Again, the requirements of the two different training methods may have an effect here. A psychoanalytic psychotherapist must have a minimum five years' personal analysis, adhere to a well defined structure, undergo intensive personal supervision and refer to fairly authoritarian training committees. It is possible people who enter or are beginning a psychoanalytic career need to have more of the *yielding* trait than their behaviourist counterparts. It is also possible that with time this trait becomes less necessary to the psychoanalytic psychotherapist. Relevant here are the

comments of Keinan *et al.* (1989) who reported on Weiss's (1973) interviews of 20 analytically orientated psychotherapy students. Keinan summarises that Weiss found them, "...more aware of their own anxieties, more insecure with regard to themselves and to the efficacy of psychotherapy, and more humble (at times verging on self effacement)" (p218). It is also significant that the behaviourists did not appear more *controlling* than analysts. This did not support the popular stereotype of them as primarily concerned with controlling behaviour. However, in qualitative interviews with 20 student behaviour therapists, Weiss (1973) did find them more self-confident and secure, sometimes to the point of arrogance.

4.5.1 Summary of the interpersonal findings

An evaluation of the ten interpersonal behaviour scales shows this personality component only differentiated between orientations for three traits. On two of these traits more experience caused the difference to disappear. This, and other trait patterns, could provide evidence to support the proposition that analysts tighten up and become more objective, while behaviourists become less rigid and more subjective. However, the

independent variable experience may also be measuring static groups at different points in time. The suggestion would then be that newer psychotherapists are different from their seniors on these trait measures and may remain so.

4.6 Participants' orientation commitment

Three questions were composed to investigate and measure the strength of therapeutic orientation, commitment to model in clinical practice, and satisfaction with orientation, and to see if there was a difference between analysts and behaviourists. The results were that on all three questions analysts scored significantly higher than behaviourists. This suggests analysts experience significantly more of the qualities in question than behaviourists.

The results may also confirm the possibility, previously mentioned, that the behaviourists in this sample are a more heterogeneous group than the analysts. If they are less committed, less satisfied and more eclectic, there

may be a greater variety of therapeutic views and beliefs held by them. Some support for this can be found when regarding responses to one of the three question items, "In my clinical practice I remain completely within my prime theoretical orientation." This produced the largest mean difference between orientations, and would suggest behaviourists might be more likely to step outside their cognitive-behavioural orientation than analysts.

It is interesting to note here a study of the consequences of dissonance between a therapist's professed orientation and his/her personal satisfaction and philosophical values (Vasco, Garcia-Marques and Dryden, 1993). They observed that when psychodynamic therapists experienced dissonance they allowed theory to even further influence their practice, but the cognitive-behaviourists changed and revised and allowed theory to have a diminishing place. So there is an interesting, albeit unlikely, alternative to consider. It is probable the sample would have contained some therapists who were experiencing dissonance. If so the analysts, according to Vasco and Garcia-Marques, would have raised commitment scores and the behaviourists lowered scores. In theory, therefore, some of the observed differences in scores might be attributable to the effect of the therapists in dissonance.

In the introduction to this study some studies were criticised because of the absence of any check on the participants' commitment to their professed public orientation. These questions provide evidence concerning this. When the three questions are totalled they give a range from 5 (minimum) to 15 (maximum). The mid point would be 9.5. The mean total score was actually 10.37 (S.D = 2.84) and suggests the total participant group was correctly identified as probably working within their professional orientation. Even though there was a tendency for behaviourists to be less committed, they still scored just at the mean (9.55).

4.7 Summary description of the personality and epistemological findings

The results from this investigation have been summarised into descriptions of the major differences between analysts and behaviourists on measures of personality and cognitive-epistemological style. It must be noted that these descriptions are comparative and it would not be accurate to say an orientation group is being compared to 'all' people in the general population or a normative standardisation. The two orientations are being compared with each other. So, for example, if it is observed that analysts are motivated

in a certain way, that means in comparison to behaviourists <u>not</u> as a generalised observation in comparison to the general population.

4.7.1 Psychoanalytic psychotherapists

4.7.1.1 Motivation

Psychoanalytic psychotherapists are primarily driven by the desire to avoid pain, unpleasure or negative affect. They are especially sensitive to threats and avoid unnecessary risk. They may be more aware of feelings of anxiety or depression, they do not appear unduly active or passive, and there seems to be a balance of the drive towards self or others.

4.7.1.2 Cognitive-epistemological style

Psychoanalytic psychotherapists attend equally to the internal and external world for information. They rely predominantly on their intuition rather than the physical senses for gathering this information. They then process their knowledge through the use of feeling by introspective analysis, insight, and empathy. This group often organise their knowledge in an innovative way,

being prepared to step outside cognitive structures and allow their imagination to suggest a unique understanding. They are likely to believe the universe is a constantly changing system and that it is more important to understand the functioning whole than examine its parts. By rationally examining the relationship between a person and the world through conceptualisation and thought, they believe understanding will develop. There is a marked tendency to employ symbolic and metaphorical thought processes, and to test the validity of their perception in terms of the universality of insight and awareness. They are more likely to remain within their theoretical analytic model in both belief and practice. Whilst they may innovate within it, they are unlikely to use other psychological models.

4.7.1.3 Interpersonal behaviour

Psychoanalytic psychotherapists are not unlike the cognitive-behaviourists in actual interpersonal behaviour. There are, however, a few differences that would distinguish them from their behavioural colleagues. At the beginning of their careers they may appear less conventional, orderly, responsible, proper and conscientious, but this changes with time until they are similar in these traits to behaviourists. Novice analysts also have a tendency to

servility, and adherence to the expectations of those they follow. However, like their conformity, this difference disappears with greater experience.

4.7.2 Cognitive-behaviourists

4.7.2.1 Motivation

Cognitive-behaviourists are concerned to enhance life, not just avoid unpleasure and pain. Their primary motivating drive is to seek out opportunities to develop, foster and enrich life. As a consequence behaviourists may have a tendency to experience less anxiety and depression and show more signs of psychological adjustment, emotional stability and cope better with stress. They are neither predominantly active nor passive in enacting this primary drive. There is a tendency to be self-focused, self-actualised, have a strong sense of identity and be more independent of others.

4.7.2.2 Cognitive-epistemological style

Cognitive-behaviourists attend equally to internal versus external

information. However, there is a strong sense of reliance on the physical senses for tangible, structural and well-defined information gathering. This orientation prefers quantitative versus qualitative information, and is pragmatic, and realistic. They prefer thinking over feeling, emphasising the use of reason, logic and a reduction of emotional input, whereas analysts may rely on their feelings to understand a patient, the behaviourist prefers observation and measurement of behaviour. They have a tendency to try to fit new information into their pre-existing cognitive system. This is particularly so for less experienced clinicians. Cognitive-behaviourists are likely to be conventional, conforming, objective and realistic in their cognitive style. Their epistemology is that the universe is composed of distinct parts and knowledge must reduce these to basic units. The universe is static, and can be understood by an external knower and therefore knowledge can be distinguished from the subject. The scientific methodology is empirical and emphasis is placed on sense data over concepts. There are, however, a greater variety of epistemological styles and a tendency to stray from their cognitive-behavioural model.

4.7.2.3 Interpersonal behaviour

Behaviourists have less need to give or receive affection, have relationships or express feelings. Less experienced behaviourists are more conventional, orderly, proper and conscientious. However, they are no more controlling in their interpersonal relationships than analysts. This may not, of course, necessarily reflect their clinical behaviour.

4.8 Conclusions

The next chapter (Conclusions) will examine and consider the implications, applications, and limitations of this study.

CHAPTER 5

5.0 CONCLUSIONS

This investigation explores the proposition that psychotherapeutic orientation reflects personality, cognitive and epistemological style. A review of the research literature provides supportive evidence for this proposition. However, some criticisms of it were made and a more thorough and rigorous investigation was proposed and carried out. Persuasive and consistent support was found for the proposition that personality and cognitive-epistemological style may be a more significant factor in psychotherapeutic orientation than other factors such as primary training, supervision or initial clinical experience. It appears that the major differences between persons from the two orientations lay with their motivating aims, cognitive-epistemological styles, and philosophical worldviews, and not so much with their interpersonal behaviours.

This concluding chapter will examine the limitations of the study, its implications and applications, and provide suggestions for further research.

5.1 Limitations of the study

The conclusions that can be drawn from this investigation are limited by a number of factors, including the sample, the methodology, and the instruments used. These are discussed below.

5.1.1 Sampling limitations

Psychotherapists were not invited to participate in this study by completely random means. Convenience samples were employed to increase participation rates. The latter were employed for 38% (104 of 272) of the analytic sample and 13% (34 of 271) of the behaviourist. It was observed that the convenience-sampled psychotherapists were more likely to participate in the study. Any effect beyond the increased participation rate is difficult to establish. The professional link with the investigator might have influenced the responses of the analytic participants, despite the assurance of anonymity and confidentiality. One possible effect was that the

convenience sampled participants may have altered their responses to either support or contradict the investigator's experimental hypothesis. The difficulty was, they did not know what it was. None of the participants was informed that the study was comparing analysts with behaviourists. Neither was the investigator known as representing a view. However, it is possible there were influences and effects as a result of the professional connection. A professional connection may also have affected the convenience-sampled behaviourists' responses. In their case the names and recommendations of two cognitive-behaviour therapists known to them were used to encourage participation.

The second limitation concerning sampling is that no other orientations were investigated. Therefore, although orientation differences were measured, it would be difficult to extrapolate them to related therapeutic models. For example, although humanistic and integrative psychotherapists may share some features of the psychoanalytic orientation, there might be problems generalising these findings to them.

The last sampling limitation concerns the response rate. At 49% this was a good return rate for posted questionnaires. However, one might wonder how

the other 51% would have responded. It is probably the case that this study investigated 7.5% of the approximately 2,600 psychoanalytic psychotherapists and 10% of the 1,097 BABCP accredited and members who were clinical psychologists.

5.1.2 Limitations of the instruments

The personality inventory shows good evidence for construct validity, however its retest reliability was only reported on one sample of 50 individuals over a period of 20 to 82 days. For an inventory purporting to measure lifelong and enduring personality traits, this is too short. The creators of the NEO, for example, comment, "Good retest reliability is essential to measures of personality traits, which are expected to show little change over short intervals of time" (Costa and McCrae, 1992, p45). Retest reliabilities were established for the NEO and Cattell 16PF between 3 months and 7 year periods. The MIPS is a recent instrument and it's possible that reliability is being investigated.

The epistemological measures also had shortcomings that could affect the conclusions drawn from this investigation. On the OMPI the *organicism*

dimension may be associated with more desirable, positive and humanitarian qualities than *mechanism*, reported Johnson and Miller (1990). They believed there were positive aspects to *mechanism* that were not being captured by the instrument. The OMPI may also measure and reflect some social-political ideologies. From an inspection of items it is conceivable that responses could be affected by left-right political views. Here, for example, are two items that might be vulnerable:

- 1a) Schools should be where a child learns to think for him/herself.
- 1b) Schools should be where a child learns basic information.
- 25a) Persons are made by their environments.
- 25b) Persons and their environments affect each other.

Some of the PEP items may also have been vulnerable to social desirability and political attitudes. It is also important to note that at the time of the OMPI and PEP administration (June, 1997), the UK was undergoing a huge political shift, as seen in the landslide general election. This may have affected responses to certain more political and social items.

The OMPI is also vulnerable in another area. It only has six strong items for measuring *mechanism* versus sixteen for *organicism*, (Johnson Miller,

1990). It is possible, therefore, that the OMPI is vulnerable to a bias toward organicism. Although the investigation analysed OMPI scores comparatively, there could have been a biasing effect for this unequal item distribution. For example, with fewer mechanism strong items available it could have increased the probability of agreeing with an organicism item. Alternatively, the presence of fewer mechanism strong items might have suggested it was an unpopular view to subscribe to.

With regard to the other epistemological measure, the PEP was found by Johnson and Miller (1990) to require radical revision for scoring. They claim to have identified three new factors as a result of their factor analysis. Inspection of the items comprising two of the three new factors showed, however, that they consisted mainly of items from related original factors. Only the third new factor *insight* appeared unique by item comparison. But this independent factor analysis raises some questions concerning the viability of the original factors. A last point concerning the PEP was that in this investigation a smaller, sub-sample of participants took it, and that may have affected generalisability.

The measure of therapeutic orientation commitment, consisting of three

Likert type questions, also has limitations. They were not subject to any assessment of reliability or validity. The questions had evident face and content validity, and there was consistency from the replies by orientation. There is, however, no evidence of concurrent validity to confirm these questions were actually measuring what they purported to measure.

5.1.3 Methodological limitations

The employment of completely quantitative methods limits the conclusions that can be drawn. A more intensive qualitative method to investigate differences in personality and cognitive-epistemological styles might have provided different findings. In-depth interviews could have been conducted to gather data concerning participants' lives, histories, training, personal development, beliefs, values, clinical practice and attitudes. Criteria could have been established to analyse that data into categories in order to compare the orientations. A limitation of this study is that not much has been learnt about the individuals and their development beyond the parameters of the measures themselves. The quantitative method used here has assumptions concerning personality structure and epistemology and attempts to measure participants within those parameters, but there may be

other factors or effects that would not have been discovered through this type of quantitative research. In a sense, its major limitation is that it set out to prove or disprove certain hypotheses and thereby defined the parameters of what it could discover. There was not a mechanism to find other potentially unique possibilities.

This study also considered the effect experience had on personality and cognitive-epistemological measures. It was found to have an important effect when combined with orientation. Very often it was observed that there was an initial orientation difference on a scale, but the difference disappeared with participants of greater experience. The study was not able to differentiate whether these experience-related findings measured an individual's tendency to change with age, or whether they were measuring fixed historical characteristics of the two groups from different points in time.

There is some evidence from epistemological studies but it does not really clarify the situation, for example research reporting results from the OMPI *mechanism* scale can be interpreted to support either possibility; persons with a *mechanistic* epistemology have been found to be younger (Johnson

and Miller, 1990), and older persons less *mechanistic* (Kramer, Goldston and Kahlbaugh, 1987). Other epistemological studies reviewed by Vasco (1994) suggested to him that psychoanalysts as a group have moved away from the *mechanistic* epistemology. His analysis of the literature leads him to conclude that the primary epistemology for analysts was <u>once</u> *mechanism* (Liotti and Reda, 1981; Lyddon, 1989). He then quotes recent psychoanalysts who have suggested the primary orientation has indeed moved away from the *mechanistic* model. Vasco also believes his research offers some support for this trend. The only way to really explore this question would be to follow a cohort over time with these measures to determine whether their epistemology and personality changes over time or remains relatively fixed.

5.2 Suggestions for further research

There seems to be a reasonable body of evidence, including this investigation, that suggests personality and cognitive-epistemological style are probably the most important factors in psychotherapeutic orientation choice. It may not be necessary to continue to confirm this further. It might be interesting to delve into these traits and styles by using different

instruments or qualitative methods. However, it is likely that similar patterns of significant traits would differentiate psychoanalytic from cognitivebehavioural psychotherapists. What may be a potential area for development is to investigate the predictive validity of these personality and cognitiveepistemological patterns. If it is true that these factors are the most important, then one should be able to predict the eventual orientation that potential psychotherapists may adopt. Having now established the associated with constellation of traits cognitive-behavioural and psychoanalytic psychotherapists, it should be possible to take potential therapists who are considering applying for training, assess them and predict within which orientation they might eventually practise. After a period of time the cohort could be contacted to confirm their subsequent orientation. It would be expected that those persons who showed evidence of an objective behavioural type profile would graduate towards the cognitivebehavioural therapies and those with a subjective analytic type profile would gravitate towards the psychodynamic or psychoanalytical therapies. Those who did not fit particular profiles could be followed up to see what happened to them.

This type of investigation would aim to confirm further, albeit from another

direction, the role of personality and cognitive-epistemology in orientation choice. It would moreover address Conway's concern, expressed in his Presidential Address, about the value of such research. His concern was that this type of research is correlational, and could be contaminated by those persons with extreme scores on traits affecting the mean scores. If an investigation successfully predicted the subsequent orientations of participants from their profiles, then this might address his concern. Either the predicted orientation would become true or not, thus confirming or not the proposition that personality and epistemological style will predict eventual psychotherapeutic orientation.

5.3 Applications of this research for psychotherapeutic orientation choice

This research, and the review of previous investigations, suggests that it may be important for a person considering their orientation as a psychotherapist to assess their own personalities and cognitive-epistemological styles. Research has shown that when there is dissonance between a particular orientation's metatheoretical assumptions and a person's own personal values and epistemological style there can be

dissatisfaction (Vasco and Garcia-Marques, 1993). This may result in particular difficulties for different orientations. Vasco and Garcia-Marques found three common reactions:

"(a) re-entrenchment, by allowing their theory to influence even further their practice (psychodynamics); (b) changing and revising by diminishing the influence of selected theory in practice (cognitive and behaviourists), or by selecting eclectic as secondary theoretical orientation (cognitive); or (c) abandoning career (psychodynamics and systemics). A fourth way is also conceivable, though not yet empirically supported - prevalent crisis" (Vasco and Garcia-Marques, 1993, p193).

It is important for all psychotherapeutic training institutions to ensure there is an adequate opportunity to assess and discuss with the applicant the personality trait and cognitive-epistemological style dimensions that this research and others have consistently shown to be relevant to orientation choice. It is also important not just to prescribe an ideal personality and cognitive type that each applicant should come near to meeting. There needs to be room for dissent, controversy and criticism within the psychotherapy professions. When some personal values and beliefs do <u>not</u> match the metatheoretical orientation assumptions, that may be an opportunity for creativity, debate and change for both the individual and the institution. By

taking cognisance of these and other findings, individuals and institutions may be able to make more informed choices.

It is not proposed that applicants, trainees, or qualified psychotherapists take these personality and cognitive measures to see what orientation is the 'correct' one for them. Rather, the significant trait patterns that emerge for the two major orientations and their derivatives should be noted and the implications considered for the individual. This research highlights the importance of acknowledging an applicant's personality and cognitive-epistemic system in relation to the orientation's metatheoretical assumptions. However, it is important to keep in mind the possibility that both individuals and institutions are capable of interaction and development.

It is possible that within each individual's particular pattern of personality traits and cognitive-epistemological styles there lies embedded an orientation fit that may take time and development to realise. That may be why some therapists are observed to go through theoretical and paradigm shifts over their lives until they may reach a view that feels correct for them. What may be happening is that through development and insight they are finding their embedded orientation.

There is another important implication from this research that concerns the absence of dialogue between the two major psychotherapeutic orientations. Their ideas, theories, and practice seem quite opposed at times. In 1977 Paul Wachtel made an attempt to explore this rift and propose an integration. His book, *Psychoanalysis and Behaviour Therapy - Toward An Integration* (Wachtel, 1989), is a discussion of how fruitful a collaboration between these orientations might be. One recent attempt has been through Cognitive Analytic Therapy (Ryle, 1995), but it remains to be seen whether this approach will be able to provide a space for the interaction of cognitive-behavioural and psychoanalytic psychotherapy. It may prove useful for this therapeutic dichotomy to remain, as the resulting tension can be stimulating, creative and productive.

However, this research suggests that the different motivational aims, cognitive-epistemological styles, and therapeutic orientation commitments make dialogue extremely difficult for the majority of psychotherapists. One recent writer to the clinical psychologists' journal *Forum* noted, "Cognitive authors now increasingly sound like psychodynamic ones which would be a good thing if only there was a genuine dialogue between these disciplines to

sort out genuine agreements and differences in thinking" (Seager, 1997). Before this genuine dialogue could occur the major hurdle of personality and cognitive-epistemological differences would have to be overcome, because it is not just a matter of theoretical differences. As Lyddon (1989) concludes after a discussion of the philosophical differences between orientations "...differences across philosophical positions cannot be resolved at the level of competing facts and theories. A more comprehensive understanding needs to include a deeper level of analysis - that is, an exploration of the fundamental philosophical assumptions upon which different counselling theories and approaches are based" (p446). Without this fundamental exploration such attempts are fruitless and lead to confusion and misunderstanding. Two authors (Liotti and Reda, 1981) warn that attempts to integrate psychoanalysis with cognitive therapy without an awareness of their different epistemologies should be treated with extreme caution in order to avoid possible theoretical and methodological confusion. They say that although such an integration should be favourably considered because of the practical value, both approaches are of "...equal scientific legitimacy but of incompatible philosophical natures. As a consequence...we must approach this integration with extreme caution in order to avoid the possible theoretical and methodological confusion" (p235).

Millon (1988) in a paper describing a 'posteclectic' approach to integrative psychotherapy admits that the integration of different therapeutic methods must contend with "...differing 'worldviews' concerning the essential nature of psychological experience; Pepper, 1942" (p210). Millon, however, sees no problem in encouraging active dialectics amongst the different theorists and practitioners. This may be because, as he readily admits, he personally holds an 'organismic' epistemology which by its definition (appendix 2.14) more readily allows theoretical integration.

The situation is akin to gender differences. Psychological research consistently finds that males and females differ significantly on personality and thinking styles. Those differences can be creative and challenging but may also lead to re-entrenchment, isolation, conflict and lack of communication if they are not acknowledged and properly understood.

CHAPTER 6

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SECTION C: CASE WORK

SECTION D : CRITICAL REVIEW OF THE LITERATURE

EMOTIONS, EMOTIONAL DEVELOPMENT, AND EMOTIONAL DISTURBANCE IN PEOPLE WITH A LEARNING DISABILITY: A REVIEW OF RESEARCH AND THERAPY

1.0 Introduction

The emotional lives and emotional difficulties of people with learning disability have been largely neglected by researchers, clinicians and care staff. Incarcerated in large subnormality hospitals until the 1980s, people with learning disability were out of sight and out of mind. Now they are more visible as a result of care in the community, but their emotional development remains studiously ignored. What is the use of a better physical environment if their existence is characterised by loneliness, isolation, fear and apathy (Sullivan, Vitello and Foster, 1988)? It is timely to study the emotional quality of the lives of people with learning disability, otherwise efforts to improve their physical environment may be considered wasted.

Psychologists familiar with the literature and research tradition in learning disability will recognise that most published studies are concerned with

describing and measuring cognitive functioning; assessing and modifying adaptive behaviour; service planning, delivery and evaluation; and issues of normalisation. This review examines the comparatively few published research findings concerning emotion, emotional development, and emotional disturbance in people with learning disability. Professionals in the related fields of child development, psychotherapy, counselling, and adult mental health also manifest a similar lack of interest in learning disability. It may be because they are reluctant, uncertain, or unsure whether or how to apply their knowledge, theories, approaches and research methodologies. Four reasons for the lack of research are suggested by Bailey, Matthews and Leckie (1986):

"We do not know much about the feelings of people who are mentally handicapped and how they are reflected in their behaviour;

We actually believe that feelings do not matter when trying to understand people who are mentally handicapped;

We are apprehensive of the challenge of finding out more about how people who are mentally handicapped feel; and

We are not sure how to go ahead and find ways of beginning to understand the feelings of people who are mentally handicapped" (p65).

Although there is comparatively little direct research, much can be learned by examining studies that are indirectly related to emotion in learning disabled people (e.g. psychotherapy, mental illness, learning disabled children and their parents). This chapter reviews examples of both kinds of research from 1936 to the present. The purpose is to review what has been achieved, provide an assessment of the current situation, and encourage further investigation into the emotional lives of people with learning disability.

1.1 Definition of learning disability

Learning disability is a term currently applied to people who have been historically referred to in the UK as subnormal, mentally retarded or mentally handicapped. There have been many other labels employed to describe this group, as Sinason (1992) has extensively researched. It is her belief that many of these terms are euphemisms (including learning disability), that reflect the reluctance of professionals to confront the existence of actual handicaps in people. The term learning disability does not reflect the global nature of the disability experienced by these individuals. It suggests they merely suffer from a difficulty of learning.

The psychiatric classification system DSM IV (APA, 1994) describes the essential feature of mental retardation (the US term for learning disability) as "...subaverage general intellectual functioning that is accompanied by significant limitations in adaptive functioning in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health and safety" (p39). Onset must occur before age 18 and, no matter what the aetiology, the final common pathway of the pathological processes affects the functioning of the central nervous system. The incidence of learning disability in the population varies according to the definitions used, methods of ascertainment, and population studied. Factors such as social class, the presence of an additional physical handicap, and nutritional status also affect prevalence rates. DSM IV quotes a prevalence rate of 1% of the US population as mentally retarded.

Those authors whose work is reviewed criticise the almost complete lack of direct psychological attention paid to emotional development in people with learning disabilities, (e.g., Hollins and Evered, 1990; Tharinger, Horton-Burrows, and Milea, 1990; Garber, 1991; Wagner, 1991; Wenz-Gross and

Siperstein, 1996; Jones and Bonnar, 1996). According to Strongman (1985) almost all research pertaining to emotional development in learning disability is actually about emotional and psychiatric disturbance, he concludes:

"The most appropriate summary of the state of knowledge about emotion in mentally retarded people is that it is almost non existent. What there is mainly takes the form of speculation based on psychiatric observation and assumes that mentally retarded people are more at risk of emotional disorder than those who are non retarded" (p204).

Strongman says the state of knowledge concerning emotion in those with learning disability is almost non-existent. He also implies that the observed association between learning disability and emotional and psychiatric disorder is based upon speculation and assumption, however there is considerable evidence of a link as this chapter shows. Furthermore, given that people with learning disability are more at risk, it would be hard to conceive of expecting 'normal' emotional development in a psychological disorder of such widespread impairment. The disability of learning pertains to both cognitive and emotional domains. Therefore, to study emotional development in this group inevitably means studying people with some degree of concurrent emotional disability.

This does not mean that emotional development in learning disability can only be studied when it becomes disturbed, but studies of emotionally non-disturbed individuals are unusual. One interesting example investigated the recognition of emotion from facial expression in learning disabled people (Gray, Fraser and Leudar, 1983). The study found that the degree of recognition of facial expressions increases with intelligence, but over all there was confusion and an inability to cope with high intensity emotions which were poorly recognised, badly handled, and rejected. More positive emotions or simple negative ones were found to be more easily recognised.

Some researchers blame behavioural psychology, behaviourism and neuropsychology for the comparative paucity of research into emotional development. Spensley (1984) comments,"...In this country, at any rate, mental handicap has become the domain of behavioural psychology, and psychoanalysis is deemed largely irrelevant" (p44). She believes that psychologists who seek methods of modifying behaviour take no account of why the person is behaving in maladaptive ways in the first place. Bailey *et al.* (1986) in a similarly critical vein pose the question, Whatever happened to feelings? "Feelings are not mentioned a great deal in our work or contact

with the mentally handicapped. Rather, with some justification, this can be said to be the decade of behaviourism: a philosophy of science where everything is reducible to the study of behaviour" (p65). Garber (1988, 1991) believes there has been a noticeable hiatus in the research examining the emotional sequelae of learning disability. This has coincided with the emergence of neuropsychological models that have neglected interpersonal and intrapersonal aspects of learning disability. Garber says that although psychotherapists and psychoanalysts see large numbers of people with learning disability, the literature that addresses therapeutic possibilities is exceptionally meagre. He cannot understand why the exploration of psychotherapeutic approaches is so neglected.

1.2 Emotional disturbance and institutionalisation

Long term hospitalisation and institutionalisation have been held responsible for the high rate of emotional and mental disorders found in residents of hospitals for the learning disabled (Moss, Emerson, Bouras and Holland, 1997; Reiss, Levitan and McNally, 1982). For example, four large studies of hospitalised-institutionalised people with learning disability found evidence of psychiatric disorder significantly greater than would be found in the non-

learning disabled population (King *et al.*, 1994; Einfeld, 1984; Wright, 1982; Reid, Ballinger and Heather, 1978). These psychiatric disorders included a significant proportion of affective disturbances.

Other studies have demonstrated that it would be incorrect to assume institutionalisation is the sole explanation for the high incidence of emotional disturbance. A study of 222 individuals living in the community found 46 per cent had conduct, neurotic and antisocial forms of behaviour disorders (Richardson, Katz, Koller, McLaren and Rubinstein 1979). This figure is close to the one-third usually found disturbed in institutionalised people. A large study (n=454) of the prevalence of psychopathology in children and adolescents with intellectual disability living in the community was conducted by Einfeld and Tonge (1996a). This Australian study involved parents completing a 96 item checklist to assess a broad range of behavioural and emotional disturbances. The study found 40.7 per cent (Einfeld and Tonge, 1996b) could be classified as having severe emotional and behaviour disorders or as being psychiatrically disturbed. The level of learning disability affected scores on the checklist. Disruptive and antisocial behaviours were more prominent in the mild learning disabled group, and

self-absorbed and autistic behaviours more prominent in the severe learning disabled group.

The incidence of personality disorder in people living in the community has also been studied. Khan, Cowan and Roy (1997) assessed 101 adults using the Standardised Assessment of Personality (SAP). The SAP is an instrument designed to detect the presence of personality disorder in people with learning disability (Mann, Jenkins Cutting and Cowan, 1981) and uses structured interviews consisting of probe questions which are related to ICD-10 personality disorder operational criteria. Participants were living in a variety of community settings, in contact with specialised services, and on a special needs register of learning disabled adults. Khan et al. found an extremely high rate of personality disorder. Fifty percent of their sample were found to have 'personality abnormalities', which consisted of 31 percent diagnosed psychiatric personality disorders and 19 percent abnormal personality traits. This led them to conclude that the prevalence of personality disorder in community populations is high, much higher than the general population. They also suggest that the presence of personality disorder is often overshadowed when other psychiatric diagnosis are made in people with learning disability. They stress the importance of distinguishing between long-standing personality abnormalities arising from early adolescence, and psychiatric and behavioural problems arising in later life. However, it is unclear how much the selection of participants who are in touch with specialised services may have affected results.

Proponents of community care hoped that the deinstitutionalisation of people with learning disability would eliminate many of the disturbed behaviours this group experienced in large subnormality hospitals. Movement of patients into the community was expected to bring improved quality of life and relationships. To some extent this has happened and has benefited many in certain areas of functioning. However, there are few examples of attempts to investigate and treat the emotional sequelae of such moves. One recent example concludes that studies of the large hospital closure programmes of the 1980s resulted in people with learning disability generally being better off in terms of physical environment and lifestyle. The gains are modest and variable "...but moving alone does not lead to significant gains for individuals in terms of their own behaviour" (Cullen, Whoriskey, Mackenzie, Mitchell, Ralston, Shreeve and Stanley, 1995, p485). Cullen et al. studied the psychological effect of moving participants from a medium-sized institution to the community. Results were consistent

with the findings of their literature review which found that the process of moving to community-based care results in some initial changes but does not in itself bring about long term changes. They comment that community-based services may fit in with a normalisation ideal but criticise the lack of a sophisticated programme of comprehensive therapeutic services. They argue for the provision of psychological therapies - deinstitutionalisation alone is not enough.

These studies suggest that although institutionalisation has often been blamed for the high rate of emotional difficulties occurring in people with learning disability, they suffer more emotional disturbance whether they live in an institution or not. This is probably symptomatic of an inherent failure in emotional development that is associated with the cognitive impairment. Studies of adults living in the community and non-institutionalised children have consistently shown the presence of the emotional and interpersonal developmental failure. These difficulties are described in a qualitative study that intensively investigated the lifestyles of six moderately learning disabled men moved from an institution into the community (Sullivan, *et al.*, 1988). It was found that their poor level of interpersonal and social development was not affected by the move, it remained extremely limited.

Sullivan *et al.* criticise previous studies which only focus on quantitative changes in adaptive behaviour. In their study they used participant observer and in-depth qualitative methods to assess quality of interpersonal life. They found that the men's emotional lives were at the level of pre-schoolers - isolated and lonely, and that they were unable to verbalise angry or sad feelings.

1.3 Psychological assessment

The assessment of emotions, emotional development, personality, affective disorders and mental illness in learning disability presents considerable problems for investigators. According to Wagner (1991), attempts to assess emotional problems in persons with learning disability are complicated by low intelligence. Other investigators have found that the diagnosis of learning disability tends to 'overshadow' signs of emotional disturbance (Reiss, Levitan, and Szyszko, 1982), and psychological problems are apparently viewed as less important when observed in persons of low intelligence than in the general population (Reiss, and Szyszko, 1983). Sovner and Hurley (1983), in their review of 25 published studies on affective illness in people with learning disability, say that many clinicians:

"...assume that retarded individuals cannot develop the psychological processes that they consider a necessary prerequisite for the development of mental illness. Although this belief has been refuted by clinicians who report rich mental lives and many types of psychopathology for their patients the entire clinical area has received little attention in the psychiatric community" (p61).

The difficult task of identifying affective disturbance in learning disabled people is further compounded by their lack of communication skills necessary to communicate feeling states, their indirect expression of affect and the atypical presentation of psychopathological symptoms (Sovner and Hurley, 1983). This leads Sovner and Hurley to conclude that mental health clinicians "...must take a more active role in the diagnosis and treatment of mental illness in this population. The mentally retarded suffer from a full range of affective disorders and should be considered candidates for the full range of treatments including psychotherapy..." (p66). They believe that the use of the Rorschach Technique and the Thematic Apperception Test may help with the assessment of affective states in people with learning disability.

There are problems and difficulties in assessing the presence of personality and psychiatric disorder in the learning disabled population. A critical

review of the diagnosis of mental health needs in people with mental retardation was conducted by Sturmey (1995). The conceptual problems raised suggest that the diagnostic problems were insurmountable, nevertheless Sturmey believes DSM criteria can be used with the learning disabled population if certain strategies are adopted. Despite the problems of assessing this population, and even with further diagnostic refinement, the evidence reviewed suggests it is likely that a higher incidence of psychiatric and personality disorder diagnosis will continue to be observed.

Psychophysiological measures of psychological stress were employed by Chaney (1996) to assess emotion in people with profound learning disability. Chaney questioned a widely held assumption that people with profound mental retardation respond minimally, if at all, to stress. The difficulty has been measuring the stress through conventional methods; interviews, observations, questionnaires and reports of carers. Chaney measured emotional reactivity using body temperature, heart rate, respiration rate, and blood pressure. In addition, observation reports were made, including facial and bodily expression and vocal responses. Participants (n=35) were observed in the course of their daily routine and in some special experimental situations. Chaney (op. cit.) concludes that

people with learning disability, even profound handicap, show firm psychophysiological evidence to suggest the presence and experience of stressful emotions, even though overt signs may not be entirely evident.

Diagnostic difficulties exist in determining the cause of emotional disturbance in the learning disabled. The most likely tendency is to attribute symptoms to the cognitive deficit itself (Reiss, 1982). There can also be a difficulty, in institutional settings, of misdiagnosing psychiatric disturbance when it is the effects of the institution itself that may be responsible. Another aspect of this diagnostic difficulty, addressed by Wagner (1991), is "... partly due to the unavailability of appropriate instruments or methods" (p88). Wagner proposes a model for assessment that includes a 'developmental factor' which adjusts the criteria based upon the individual's actual observed maturational level of functioning. He believes this approach could mitigate the systematic error that Schroeder (1987) observes occurs when unmodified psychodiagnostic criteria are applied from non-learning disabled to learning disabled patients. Wagner (1991) proposes making adjustments to diagnostic expectation congruent with an individual's general level of psychological maturity. Thus a 21 year old grossly immature person's mood swings would be viewed differently if they were occurring in a more mature person. Diagnosis and treatment would become more developmentally appropriate. Pathology, according to Wagner, then becomes related to the person's developmental level, not to their actual chronological age. He recommends consideration of the developmental personality constructs and theories around normal child development as reference points.

In order to investigate his theory Wagner employed an apperceptive test, Tasks of Emotional Development (TED) (Cohen and Weil, 1971). The apperceptive technique is more widely known from the Thematic Apperception Test (TAT). TED and TAT both involve showing the subject pictures that reflect certain socio-psychological situations and asking people to describe what they see. From these responses an evaluation can be made concerning their personality. Wagner points out that the TED's authors do not adopt a single developmental stage model but a developmental task approach. The tasks chosen for assessment "...were not seen as being independent of one another, or hierarchical or epigenetically related, but as representing different aspects of life to which an individual brings a characteristic way of responding" (p88). Wagner (1991) found that the use of the TED allowed emotional developmental data to be generated that allowed for the reduction of errors of diagnosis due to misattribution of emotional difficulties to cognitive factors. He also thought the technique should reduce the misinterpretation of learning disabled people's emotional responses because it allowed consideration of the emotional developmental level that individual was operating at. The technique also allows various developmental theories to be interfaced with it.

Attention has recently been directed to psychological instruments designed to assess emotional state and mental health disorder in people with learning disability. Havercamp and Reiss (1996) mention a number of new scales that purport to measure personality and psychopathology. The measures and their sources are cited below:

- (1) Psychopathology Inventory for Mentally Retarded Adults (Matson, 1988).
- (2) Aberrant Behaviour Checklist (Aman and Singh, 1986).
- (3) Reiss Screen for Maladaptive Behaviour Test (Reiss, 1988).
- (4) Emotional Problem Scales (Strohmer and Prout, 1991).
- (5) Diagnostic Assessment for the Severely Handicapped (Matson, Gardner, Coe and Sovner, 1991).

One assessment instrument that has been around a long time but appears to have fallen into disuse is the Eysenck-Withers Personality Inventory for Subnormal Subjects (50-80 IQ) (Eysenck, 1965). This was derived from the Eysenck Personality Inventory (Eysenck and Eysenck, 1964) which measures extroversion-introversion and neuroticism-stability. A special form of the Cattell 16PF (Cattell, Eber and Tatsuoko, 1970) was developed for use with persons of limited educational and cultural background and little or no reading ability. This instrument (16PF Form E) (Eber and Cattell, 1985) was constructed to measure the same factors as the main 16 PF. Eber and Cattell thought that since the 16PF(E) was "... designed for a population with limited verbal ability it seems especially promising for use with mentally retarded population" (p27). In my own extensive use of the 16PF (E) with learning disabled people I found it extremely helpful in making diagnostic personality assessments. However, reliability and validity have yet to be firmly established and it does not appear the instrument is in widespread use with this client group. This may also be due to the general reluctance to use personality measurement in learning disability. The striking lack of psychometric instruments to assess this patient group led Meins (1996) to comment "This fact hinders research, since standardised assessment of the psychopathological status is essential especially for treatment studies" (p222). As a result of this concern Meins developed a measure of depression that he claims is able to distinguish between depressive and non-depressive cases, and between sub-groups of depression.

Smith and McCarthy (1996) comment that there are increasing attempts to investigate the emotions of learning disabled people and that they can be reliably and validly assessed using self-report questionnaires. They developed a semi-structured interview to investigate the attachment-related experiences of this group. They wanted to explore the role of attachment experiences played in learning disabled people's lives. Their semi-structured interview method assesses a person's current state of mind in respect to attachment theory, by looking at the coherency and thoughtfulness with which they described their childhood and its effect. The employment of the interview method reflects their belief that learning disabled adults "...can report their own personal experiences and that reliable and valid data can be obtained when suitable methods are used" (p155). In their review of methodology, they note that it is important to use grammatically simplified questions to increase participants' understanding of items and that multiple choice questions help learning disabled individuals respond. It is interesting to note that the 16PF(E) uses both strategies and as a result can be used successfully and easily for assessment. The importance of Smith and McCarthy's study is that it illustrates how learning disabled people's thoughts and emotions can be reliably investigated and how little is known about their personal experience of attachment relationships. They conclude, "Results from this study suggest that it is possible to investigate emotional attachment processes in adults with a severe learning disability, using a measure adapted to their needs" (p158). The investigation did require individuals to have adequate conversational abilities and, as the authors admit, the results cannot be generalised to people with learning disability who lack verbal skills and abilities.

The lack of suitable instruments to measure the subjective emotional experience of people with learning disability clearly hampers research and therapy.

1.4 The childhood roots of emotional development and disturbance in learning disability

The emotional development and emotional difficulties of adults are affected by their childhood experience. Therefore research concerned with the socialemotional development of learning disabled children, parental reactions to the birth of a learning disabled child, and the development of parent-child relationships is examined. The review shows it has an important contribution to understanding emotional development in learning disabled adults.

1.4.1 Psychological studies of learning disabled children

The presence of emotional difficulties can be observed in learning disabled children attending regular schools and living in the community (Margalit and Levin-Alyagon, 1994). These children experience loneliness and signs of maladjustment. Clegg and Landsall-Welfare (1995) conclude that children and adults with learning disability experience extreme problems developing relationships and that their social relationships reduce as they age. They note that although researchers no longer describe people with learning disability as clinging, passive and attention seeking in order not to characterise them as childlike, this problem has not gone away. They also note that studies of children, adolescents and adults suggest relationship difficulties are common and the pattern of past residential services prevented emotional development. They explore the relevance of Bowlby's

(1977a, 1977b) attachment theory to understand some of the enmeshed emotional difficulties that clients and staff in residential settings can become involved in. They suggest that the prevalence of attachment-related emotional disorder in learning disability needs to be investigated. This is an interesting line of enquiry because it proposes reaching right back to the mother-handicapped infant relationship to try to explore and understand this early interaction. It is likely that the emotional difficulties seen in learning disabled adults are manifest in the early bonding and attachment process between mother and child.

The roots of adult difficulties in socialisation can be observed in learning disabled children. In a study of the social world of learning disabled children, Wenz-Gross and Siperstein (1996) found they had difficulties with developing friendships, and quoted previous research showing this group had little social impact and merely developed acquaintanceships. In their study of 36 pre-adolescents Gross and Siperstein conclude that the lack of meaningful social and interpersonal interaction with peers places them at greater risk from social problems as they move into adolescence. A study of the quality of friendships between children with and without learning disability was conducted by Siperstein, Leffert and Wenz-Gross (1997).

They found that children with learning disability showed limited collaboration and limited shared decision making, a low level of cooperative play and shared laughter and an asymmetrical, hierarchical division of roles. Their conclusion is that children with learning disability have acquaintanceships, but not friendships.

Studying the emotional development of infants with physical handicap contributes to understanding the effect learning disability may have. Wasserman (1986) studied 14 physically handicapped infants and her findings suggest they exhibit similar symptoms of sadness, inhibition, isolation and withdrawal. Her descriptions bear remarkable resemblance to the findings of observational studies of learning disabled children. She notes that physically handicapped children show a diminished expression of positive emotion, and a delay in their ability to master the distress of short maternal separation. Affective dampening is observed as early as the second year, and seems part of a group of problems related to social and cognitive functioning. Wasserman concludes, "Whatever its cause, the lack of expressivity and the social inhibition reported here very likely have recursive effects on the quality of the mother-child interaction, and may

cause further difficulties for the handicapped child as his or her social sphere expands beyond the mother-child dyad" (p398).

An in-depth qualitative study of 15 learning disabled adolescents (Cohen 1985) found two major affective disturbances; distress and anxiety, and low-level chronic depression. Cohen graphically describes these adolescents coping with feelings of sadness, loss, confusion, helplessness, anxious anticipation of failure and humiliation, incompetence, inadequacy, damage and rigidity. He identifies four major problem areas; (1) work and learning, (2) distress and depression, (3) the experience of self and (4) the expectations of others. Problems in these areas gives rise to major affective symptoms and a disturbance of self-concept. Cohen draws two important conclusions; (1) "there are virtually no learning-disabled children or adolescents who do not evidence significant psychological conflicts and concerns" (p177) and, (2) "...learning-disabled adolescents are at risk even when they seem to have been helpfully and comprehensively diagnosed and treated" (p192).

Support for Cohen's view is found in a study that shows children with learning disability experience higher levels of self-reported fears and generalised anxiety than non-learning disabled children (Ramirez and Kratochwill, 1997). Older children also show evidence of fear. A study of 7-18 year olds with learning disability found that they reported significantly higher levels of fearfulness and a greater range of fears than youths without disability (Gullone, Cummins, and King, 1996). The content of their fears were more likely to resemble those of younger children without disabilities.

There is a small but descriptive psychoanalytic literature that has examined the emotional sequelae to learning disability in children. This literature can be traced back to 1936 when work was done exploring psychoanalytic psychotherapeutic methods in the study and treatment of youngsters with significant learning disabilities (Chidester and Menninger, 1936; Ackerman and Menninger, 1936). It is fascinating to read these pioneering attempts to treat handicapped children with psychological approaches. These early researchers believed that sometimes learning disability was a manifestation of personality disturbance and they demonstrated the improvement of IQ scores through psychotherapeutic methods.

Another example is the *Symposium on Psychotherapy in Mental Retardation* that was held by the Canadian Psychiatric Association in 1963.

The published papers continued to reflect the theory that learning disability can be caused by emotional disturbance and case reports were presented that demonstrated improvements in IQ scores (Scott, 1963; Sarwer-Foner, 1963; Ogle, 1963). Further research demonstrating a link between emotional disturbance and learning disability continued into the 1970's and 1980's (e.g. Selan, 1976; Balbernie, 1985; Bernstein, 1985; Symington, 1981). Recently Valerie Sinason (1992) at the Tavistock Clinic has published a book describing psychoanalytic-psychotherapeutic approaches to treating and understanding the emotional affects of learning disability.

Garber (1991) presents an in-depth account of the psychoanalytic treatment of a learning disabled 11 year old to illustrate three psychodynamic configurations he believes are unique to learning disability. First there is the problem of parental self esteem and the likelihood they may treat the child as an inherently damaged and defective product. Second, the child's own self-concept is damaged and defective, leading him to become more dependant on what others think and, in response to not knowing, becoming anxious and depressed. The child will also resort to a variety of 'testing manoeuvres' to get a sense of reliability from the environment. Third, as a result of the interaction process between the learning disabled child and his

carers he "...may develop a chronically unstable sense of self and narcissistic psychopathology" (p146).

Garber presents not only this single case as evidence for these configurations but refers to 35 other learning disabled children that he has studied. He describes how the child's awareness of their defect and damage can be distorted and confused, and lead to disordered fantasies about themselves. This can lead to a disability that is far in excess of the actual reality-based handicap. Also, an extensive and elaborate pathological emotional superstructure can evolve to compensate for this awareness. O'Hara (1993), in her account of the observation of a handicapped child, describes this process and the denial of the actual real handicap, "It is unbearably painful being handicapped and being different, and the result of denial is reflected in 'normalisation' being taken to extremes' (p34). O'Hara criticises the denial of difference manifest in the attitude of Community Mental Handicap Teams where, she says, there is a we're all the same attitude that handicaps professionals.

Garber (1991) describes and summarises the emotional development of the typical learning disabled child. First he points to the initial disillusion,

disappointment and depression of the parents. Then at school the child is emotionally extremely vulnerable and internalises the negative environmental perceptions and expectations. If the environment mirrors him positively the child may become overly excited and grandiose, but the result of such interactions is likely to be a labile emotional state. Garber believes the learning disabled child is constantly hurt, wounded and diminished by teachers, parents and peers, and needs to expend incredible energy to cover up and defend his/her defects. Garber, like Strongman, is critical of the neglect of the emotional development in learning disability.

The evidence from this research suggests that the social-emotional development of children and adolescents with learning disability differs significantly from their non-learning disabled peers. The research demonstrates that learning disabled children are more likely to have fewer and more superficial relationships, experience greater emotional distress, show more signs of affective disorder, suffer a disturbance of self-concept and have higher levels of fearfulness. It is likely that these differences contribute to the development of adult emotional problems.

1.4.2 The birth of a handicapped child affects bonding with parents

The birth of a handicapped child can affect the parents in various ways, and interfere with the development of the mother-infant bond. This has important consequences for the child's subsequent emotional development. Wasserman and Allen (1985) found that mothers of physically handicapped children were more likely to ignore their children at 24 months of age. She observed a decreased responsivity and the presence of affective disturbance and notes that, although the long term consequences of this are unknown, this may put emotional expression at risk. The study found support for clinical reports of maternal withdrawal and, interestingly, a reduction in the infant's intellectual function.

An in-depth infant observation of a mentally handicapped 3 year old boy was reported by O'Hara (1993). She observed how painful this little boy's emotional world was and how difficult it must have been for the mother to bond with this new baby. After observing the mother and child together, O'Hara noted the mother's emotional detachment, depressiveness and helplessness in understanding and meeting the needs of her son. O'Hara

expressed concern at the inadequacy of the obviously caring relationships around this child to respond to his emotional needs, "I began to realise the pain and complexity of emotions involved in caring for a child with severe mental handicap, and that handicap is located interpersonally (McCormack, 1991)" (p33). Her identification with the child's emotional situation is clearly revealed when she states, "I felt the distorted communications, the disturbance, the neglect and the resentment in Ben's [the child] relationships" (p33).

Parents have been investigated for their reactions to the birth and upbringing of a learning disabled child. A detailed study of a small number of families following the birth of a Downs child showed that although there was no significant impact on parents' mental health, grief was observed (Gath, 1977), and when compared to couples with non-handicapped children, more marital problems were noted. These findings suggest the birth of a handicapped child emphasises pre-existing marital and mental health problems as well as the strengths of the couple. Solnit and Stark (1961) studied and graphically described the process of mourning parents go through following the birth of what they term a 'defective' child. They believe that if the mother's mourning is not helped and understood it

becomes a persistent, depressed, and reproachful state. A longitudinal study of the parents of children with Downs syndrome (from birth to age 21 years) also found evidence of depression, loneliness and marital problems in 25 per cent of participants (Carr, 1988). Otherwise, there was a fairly positive outlook. Nevertheless, the parental difficulties of grief and depression that have been found in these studies appears to extend from the birth of the child into adolescence.

The assumption from early speculation and theory that distress, crisis and pathology are inevitable sequelae to the birth of a handicapped child however, is now being challenged. Some authors refer to a 'new look' to research on distress experienced by parents (Scott, Atkinson, Minton and Bowman, 1997). These authors criticise pre-1980's research saying it was much too anecdotal and speculative. Another criticism of this research is that it has focused on negative reactions such as denial, anger, shame, guilt and depression (Glidden and Floyd, 1997).

Recent research (Dyson, 1997), however, still suggests that parents of children with learning disability experience greater amounts of stress. Dyson points out that the groups studied are heterogeneous with regard to type of

learning disability, and that different disabilities have different impacts on parental stress. Indeed Glidden and Floyd (1997) suggest there is a growing recognition that there may be rewards and benefits involved in rearing children with learning disability and it may bring out strengths in other family members. From their research on parents, Glidden and Floyd suggest the stress experienced may actually be a depressive element that may exist for many years after initial diagnosis. In a study of the distress levels of parents who had infants with Down's Syndrome, Scott et al. (1997) found some evidence of depression but at a low level. They conclude that this supports their view that whilst some families experience difficulties, not all do. They believe there are four possible explanations for this; (1) Down's syndrome is less stressful for parents, (2) young children (0-2yrs) may be less demanding, (3) improvement in services and availability of counselling, and (4) improvement in the social context of support for parents with learning disabled children.

1.5 Psychological therapy and emotional disorder in learning disability

Mental health professionals are reluctant to apply psychotherapeutic techniques to emotionally disturbed persons with learning disability (Reiss, Levitan and McNally, 1982). Nevertheless, the relatively small number of published accounts of individual and group psychotherapeutic treatment are important because they describe the emotional experiences and difficulties of people with a learning disability from this different perspective. Two roles that psychotherapy can play in learning disability are described by Balbernie (1987): first the treatment of individuals can, as Balbernie observes, "...sometimes release energies for normal growth which were previously tied up in 'disturbed' behaviour" (p18), and second it offers an in-depth qualitative method to research emotional development and problems in this group.

A review of the emotional sequelae of sexual abuse in children and adults with learning disability discusses the lack of psychotherapeutic provision for this group and concludes, "Little attention has been paid to the emotional, psychological and personality development of this population. Furthermore, even less is known about the relationship between personality factors and emotional disturbance" (Tharinger, Horton-Burrows, and Milea, 1990, p306). These authors comment that even though people with learning

disability experience the same emotional and behavioural problems as nonlearning disabled individuals, few mental health professionals treat or research their emotional development. Tharinger et al. express concern at the division of services into mental health and mental handicap, and the implication that one cannot at times need the services of both. They comment that few therapists specialise in treating this group and that there is little research. It appears to them that learning disability is an automatic rule out criterion for selecting patients for psychotherapy research studies. In their review of available mental health interventions Tharinger et al. note the most common treatments are psychotropic medication and behaviour modification. They believe that those interventions are not enough to deal with emotional and psychological trauma and that unfortunately individual, group and family psychotherapy have been overlooked because of assumptions concerning learning disabled people's lack of verbal abilities, introspective nature and insight. This is an assumption, they correctly point out, that is not accurate in regard to individuals who are mildly or moderately handicapped. Consequently they believe this group are seldom asked to share their personal experiences, or given credit for the validity of them. Where this has happened they note that, "Clients have been found to share themes of desire for independence, lack of self worth, loneliness, personal loss and other introspective topics..."(p309).

Bicknell (1983) in her seminal paper, The Psychopathology of Handicap, discusses the emotional problems faced by learning disabled people and their need for psychological therapy. Especially noted are problems of loss, grieving, mourning, bonding and attachment, which are only minimally being tackled by psychotherapeutic methods. Several other researchers have attempted to bring therapeutic attention to this area. For example, the treatment of seven learning disabled individuals using Mahler's (Mahler, Pine and Berman, 1975) separation individuation model was presented by Frankish (1989). The significance of a psychoanalytic approach to the understanding and treatment of behavioural disorder in learning disability is comprehensively reviewed by Gaedt (1995). He illustrates how the implications go beyond individual treatment to the very important areas of staff consultation and provide "...an important counterbalance to the growing trend towards an over-simplified, mechanised manner of dealing with this group which organic-biological approaches seem to suggest" (p237). In another example, Spensley (1985) shows how a patient benefited from the psychological treatment and understanding of her slow and

backward behaviour. The case presentation illustrated how an apparent cognitive deficit (the learning disorder) was rooted in very early developmental arrest of an emotional nature.

Psychotherapeutic work led one therapist to suggest that sometimes people with learning disability use their handicap for secondary purposes (Sinason, 1986). She observes from her psychotherapeutic treatment of learning disabled people that three types of 'secondary handicap' can develop. The first is that learning disabled people can become compliant, using their handicap to keep others happy with them. The second occurs when a personality disorder is linked with the original handicap, and third Sinason observes that the handicap can be employed to protect the self from unbearable psychic trauma.

Clark, (1984) in his aptly titled book *Help, Hospitals and The Handicapped*, argues for and describes the benefits of an eclectic approach to the psychotherapeutic understanding and treatment of learning disabled people. Two recent examples of this type of eclectic work can be quoted. Hussain and Raczka (1997) provide a practical example of the application of a person-centred counselling approach. They believe, "...that we need to

look at the client's needs at this time from a psychological, as well as practical viewpoint" (p37). They achieve this through the use of a technique called life story work as a means of easing the transition of people moving from long-stay hospitals. This involved helping staff work with their clients to write a biographical story of the client's life. This allowed people "...the time and opportunity to deal with some of the personal and emotional issues associated with a history of change and loss" (p75). The second example is James's (1995) presentation of guidelines on helping people with learning disability going through the process of bereavement. James believes "There is no evidence to suggest that people with learning disabilities have emotional responses which are any different from those experienced by other people" (p76).

1.5.1 Group psychotherapy and learning disability

Group psychotherapy also provides an opportunity to learn about the emotional aspects of learning disability. Three recent descriptions of the content and process of groups have been published (Hodgetts, 1986; Hollins and Evered, 1990; Jones and Bonnar, 1996). These accounts begin, as most papers on emotional aspects of learning disability do, with comments about

the general lack of attention paid to this area. Hollins and Evered write, "Group-analytic psychotherapy with people with mental handicap has seldom been written about in the English literature" (p55). Jones and Bonnar also note, "The use of psychotherapy with people with learning disabilities has been largely neglected until recently. Although the literature is expanding there is still little sharing of experience and knowledge of how this group use psychotherapy and benefit from it" (p65).

The most frequent emotions expressed in Jones and Bonnar's (1996) group were loss, separation, sadness, abandonment, rejection, anger and ambivalence. Sexuality and handicap were alluded to, but not directly explored. There appeared to be difficulties with boundary and envy which could sometimes be acted out physically. There was almost a total lack of cohesion in the group and this probably reflects the participants social and emotional immaturity. However, because the group met for only 12 sessions, there was probably not enough time to help with that aspect of their difficulties. The participants attempted to evoke strong parenting responses from the therapists and this had to be constantly monitored. The group therapists felt this group resembled the maturational difficulties many adolescents had. They concluded:

"It became clear that this client group can use a dynamic psychotherapeutic approach. Although cohesion of the group failed to occur, the sense of abandonment expressed at its conclusion indicated that the group members had achieved a significant degree of engagement" (Jones and Bonnar, 1996, p68).

Another group for learning disabled adults shared some similarities, but because this group lasted much longer (50 sessions) it provided more opportunity for group cohesion to develop (Hollins and Evered, 1990). Indeed, the early phase was characterised by the similar boundary problems and disjointedness that Jones and Bonnar (1996) had noted. However, a group cohesion developed, probably as a result of the additional time available. Until near the end participants were reluctant, like the other group, to explore issues and fantasies concerning handicap. Issues explored included death, loss and separation, sexuality, and dependency verses independence. Hollins and Evered believe the group helped with some maturational tasks, and provide follow up evidence to support this. A third study of a brief psychotherapy group (Hodgetts, 1986) also found that the group experience offered a useful forum for learning disabled adults to express feelings, but recommended that the number of meetings should be increased. The important findings from these groups are that similar emotional problems and motivational delays were revealed and that group psychotherapy had some impact on them.

1.5.2 Consultation to staff facilitates emotional development

Providing psychological consultation to staff responsible for the care and support of people with learning disability can facilitate emotional development. In a discussion of mental health consultation to residential facilities for the learning disabled Szymanski, Eissner and Rosefsky (1980) point out, "Their (staff) feeling about, and relationships with, the residents may be compared with those of natural parents, and may be partly responsible both for the genesis of the residents' psychopathology and their progress. Thus involving all these caregivers as allies in the mental health diagnostic and treatment process is imperative" (p262). They point out how the consultant can help staff resolve difficult feelings of over or under control and overprotection, inappropriate expectations and omnipotence. They also warn that, "If staff members are very behaviourally orientated, they deny that anxiety and other feelings may be underlying the inappropriate behaviors of the residents that they try unsuccessfully to extinguish. Their own anger, depression, and rejection of the residents may ensue" (p270).

Psychological consultation provided to staff groups responsible for the care and support of people with learning disability has mainly been along behavioural lines. An example of a purely behavioural approach to staff and client behaviour can be seen in a study investigating ongoing consultation as a method of improving performance of staff members in a group home (Harchik, Sherman, Sheldon and Strouse, 1992). They tackle the problems of staff and client behaviour purely at the level of a token reinforcement system. There is no reference to the social-emotional context, quality of residents' lives or that their behaviour may have any meaning whatsoever. Behaviour is seen only as a variable to modify and to teach staff to control. Although they improve the 'performance' of staff in changing behaviour (no doubt a good thing) no attempts were made to use consultation to address the emotional aspects of their residents' behaviour.

A more sensitive investigation into staff behaviour and its implications for the behaviour of people with learning disability was conducted by Hastings and Remington (1994). They recognise the reciprocal nature of interaction between staff and residents, and observe that staff appeared to behave in ways that maintain challenging behaviour and reported on the poor quality and negativity of interactions. They even conclude that researchers and staff should be concerned why staff behave in these ways but there is no reference to the emotional needs, responses, and reactions of residents and how the staff's emotional responses may be a factor in creating them. The authors do suggest however, that there should be "More analysis of this kind, perhaps from different theoretical orientations..." (p433).

Simply applying behavioural analysis and procedures makes the human functioning of people with learning disability appear to lack feeling and emotion, and denies part of their human expression comment Bailey *et al.* (1986). Psychological consultation to staff can provide an important therapeutic tool that goes beyond behaviour modification and provides opportunity for understanding the emotional lives and problems of people with learning disability.

1.6 Conclusions

This review argues that there is a need for further research and therapeutic initiatives regarding the emotional development and disturbance of people with learning disabilities. There is little direct research, but indirect evidence from studies of mother-infant bonding, children and adolescents, and mental illness suggests people with learning disability experience difficulties in emotional development and that their needs are not being met. It is important to identify, describe and assess the problem, to develop a better understanding that could lead to remedial and therapeutic action.

Professionals in learning disability seem reluctant to treat and investigate emotional difficulties, preferring to concentrate on service planning and development, deinstitutionalisation and the modification of behaviour. Perhaps this is because the challenge throws up our own learning disability when confronted with complex behaviour that cannot be easily understood or treated in conventional ways. There is now sufficient evidence to show people with learning disability have emotional lives with emotional difficulties, need help with these problems and benefit from psychological

techniques. There is no excuse for ignoring this area of human experience and difficulty.

It would be helpful to the process of understanding the emotional lives of people with learning disability if there were more research by professionals not connected with learning disability. Professionals with knowledge and experience in the fields of psychotherapy, education, and mental health, could bring expertise to this area. Indeed, examples from this type of research have shown fruitful results. It is possible that the worldview of professionals in learning disability has become constricted by practical and pragmatic concerns and that they may derive fresh challenge from such cross-fertilisation.

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APPENDICES

APPENDIX 1.1 EVALUATION OF QUANTITATIVE RESEARCH

STUDY: Vasco, Garcia-Marques, and Dryden (1993)

SUBJECTS

N = 140 Portuguese (86 female, 54 male)

Chosen by authors from professional registering bodies.

5 x groups. 61 = cognitive 35 = psychodynamic 16 = systemic

15 = humanistic 13 = behavioural

PURPOSE AND FINDING

To investigate the effects of a discrepancy between metatheoretical assumptions of particular orientations and therapist personal values. A negative correlation was found between subjects level of dissonance and degree of satisfaction with orientation.

INSTRUMENT

- A) Organicism-mechanism paradigm inventory (OMPI)
- B) Psycho-epistemological profile (PEP)

RESULTS

Are presented in the form of a "Dissonance Index".

Vasco has provided data for the OMPI and PEP for the different orientations by private communication (Vasco, 1997).

STUDY: Kolevzon, Sowers-Hoag, and Hofman (1989)

SUBJECTS

Family therapists x 3 groups representing;

- A) Communications model (n=49)
- B) structural/strategic model (n=37)
- C) Bowenian model (n=70)

PURPOSE

To explore the role played by personality attributes of the family therapist in facilitating and/or inhibiting adherence to a variety of approaches to family practice. Would any personality attributes be predictive of a family therapist's adherence to one of the particular models of family therapy.

INSTRUMENTS

16PF and Author's own questionnaire to determine belief or action factors for each orientationl.

RESULTS

- 1) Each model is described by the belief and style factors unique to it.
- 2) These are then tested to see if there is a correlation with 16PF factors.

It does appear that each of the 3 models has unique belief or action factors and personality traits.

CONCLUSION

Personality attributes of the family therapist do play a role in predicting adherence to the belief and action systems unique to a particular approach in family therapy.

STUDY: Keinan, Almagor, and Ben Porath (1989)

SUBJECTS

64 Israeli therapists (34 F + 30 M)

29 = eclectic

18 = behaviourists

17 = psychoanalysts

Self assessed for orientation.

INSTRUMENT (Therapist characteristics rating scale (TCRS))

Author's own. Derived from a list of personality characteristics, submitted to 3 groups. 28 items (characteristics) determined. Three factors determined;

- 1) Action orientated characteristics (ADC)
- 2) Insight orientated characteristics (IOC)
- 3) Authoritarian characteristics (AuC)

PROCEDURE

TCRs given as A) Self rating then B) rate a typical therapist of their own orientation as well as C) a typical therapist of each of the other two schools.

RESULTS

- A) SELF RATING 3 orientations differed only on (AOC). Behaviourists rated themselves significantly higher.
- B) Differences between self and own group typical ratings
 - (AOC) Psychoanalysts rated a typical therapist of their group significantly lower than themselves.

Eclectics rated a typical therapist of their group significantly higher than themselves.

Behaviourists no difference.

(IOC) Psychoanalysts rated a typical therapist of their group significantly higher than themselves.

Behaviourists rated a typical therapist of their group significantly lower than themselves.

Eclectics no difference.

(AuC) No difference

- C) Self-rating versus typical ratings by the other two orientations
 - (AOC) Significant difference on self ratings (see A), but no differences between self and other orientations ratings of AOC. I.e. it is higher for behaviourists, next eclectics and lowest for analysts.
 - (IOC) Behaviourists no significant difference on self ratings (SEE A).

Behaviourists rated themselves significantly higher on IOC than other two groups.

Eclectics rated themselves significantly higher on IOC than other 2 groups.

Psychoanalysts no significant difference between their self ratings and others typical ratings.

(AuC) No significant differences on self ratings (see A)

Eclectics rated typical behaviourists higher than behaviourists rated themselves.

Psychoanalysts rated typical behaviourists higher than eclectics. Rated typical eclectics higher than eclectics rated themselves. No significant differences when comparing psychoanalysts self ratings with typical ratings made by other 2 groups.

SUMMARY

A) Self Ratings

With regard to AOC behaviourists perceived themselves as higher.

With regard to IOC all groups rate themselves similarly.

With regard to A all groups rate themselves similarly.

B) Both therapists describe themselves and how they view a typical therapist of own orientation.

Psychoanalysts rated the "typical analyst" as less active and more insightful than they rated themselves, behaviourists rated the typical behaviourist as less insightful then themselves and eclectics rated the typical eclectic as more action orientated than themselves.

C) Self ratings of one orientation were compared with ratings of a typical therapist of that orientation made by practitioners of the other 2 schools.

Psychoanalysts and eclectics viewed "typical behaviourists" as less insightful and more authoritarian than the behaviourists perceived themselves, while behaviourists and psychoanalysts rated "typical eclectics" as less insightful and more authoritarian than eclectics viewed themselves. Where there were discrepancies between self and typical views the latter were chosen to commonly held stereotypes.

CONCLUSION

Supports the general notion of a relation between psychotherapeutic orientation and personality but therapists do not view themselves as fitting this pattern. Those views are probably based upon stereotypes.

STUDY: Johnson, Germer, Efran, and Overton (1988)

PURPOSE

To explore how personality would be expected to relate to preference for a *mechanistic* or *organismic* world view.

SUBJECTS

12 sample groups. N = 622, all from different populations.

INSTRUMENTS

The following instruments were used for different samples (sample identification in parenthesis)

Johnson's inner and other directedness (sample 6)

Organicism-Mechanism paradigm inventory (OMPI) (used for all groups)

Johnson checks aspects of identity scales - AIS (Sample 5, 6)

Meyers Briggs types indicator (Sample 3, 5, 6, 8)

Edwards personal preference indicator (Sample 1)

Zuckerman sensation-seeking scale (Sample 1)

Holland's VPI and SDS and Strong Campbell inventory (UPI 3, 6 SCII 2 SOS 5,8)

California psychological inventory (Sample 5, 6, 7, 8)

Learning style inventory (Sample 3)

Bipolar adjective rating scale (Sample 7, 8)

Wide range vocabulary test (Sample 10,11,12)

PREDICTION

High scores (Organicism) on OMPI to be associated with: inner directedness

Personal identity, intuition, artistic interests, intellectual openness and

flexibility, verbal IQ, abstract learning style.

Low scores (Mechanism) on OMPI to be associated with outer directedness

Social identity, sensing, conventional interests, intellectual rigidity and

concrete learning style.

RESULTS

Epistemology

Normative data established for the OMPI. N = 622 showed "human developmentalists" high score on OMPI = organismically inclined. "Behaviourists" low score on OMPI = mechanistic orientation.

Personality

Correlations with MBTI: Organicism Associated with intuition; perceiving

Mechanism

Associated with sensing; judging

Correlations with CPI: Organicism

Associated with intellectual flexibility

intellectual scales

efficiency/flexibility)

Associated with interpersonal effective (3 scales = dominance, capacity for status

and empathy)

Correlations with BARS: (Subjects described themselves and peers as;)

Organicism - Imaginative, aesthetic, creative, complex, well-read, industrial, leader-like, warm, liberal, unorthodox, changeable, experimental and preserving.

Mechanism - Down to earth, inartistic, ordinary, simple, unlettered, easygoing, follower, cold, conservative, traditional, predictable, conventional and quitting.

DISCUSSION

OMPI measure of philosophical worldviews correlated pervasively but not perfectly consistently with a variety of personality valuables. Strongest were personality inventories (MBTI, CPI, BARS).

SUMMARY

In short individuals' personalities mirror their overall philosophical worldviews.

STUDY: Trembly, Herron, and Schultz (1986)

SUBJECTS

N=180. 3 x groups of (30 men + 30 women, American

60 (psychodynamic) 60 (behaviouristic) 60 (humanistic)

Self designated orientation by professional membership and admit to orientation on central questionnaire.

INSTRUMENT

Personal Orientation Inventory (POI) used as personality measure.

"Personality inventory measures 12 non discreet scales that are believed to characterise normal, well adjusted, self actualised people. The 12 scales are;

- (1) TC = time competence(3) SAV = self actualising value
- (2) I = inner directed(4) Ex = existentiality
- (5) FR = feeling reactivity
- (6) S = spontaneity
- (7) SR = self regard
- (8) SA = self acceptance
- (9) NC = nature of man
- (10) SY = synergy
- (11) A = acceptance of aggression (12) C = capacity for human contact

METHOD

S's took the POI. Scores on 12 scales across 3 therapeutic orientations were compared using co-variance model, 12 analyses of covariance used.

RESULTS (for theoretical orientation)

Over 3 groups, a significant effect for; I, SAV, Ex, Fr, S, A + C

	Humanists		Psychodynam	nic	Behaviourist
I (Inner Directed)	+		(Same)
SAV (Self Actualising Value	+		(Same)
S (Spontaneity)	+		(Same)
Ex (Existentiality)	+		(Same)
Fr (Feeling Reactivity)	(Same)		-
A (Acceptance of Aggression	n) (Same)		-
C (Capacity Intimate Contact	t) (Same)		-

Remaining scales (TC, Sr, Sa, Nc, SY) all the same and suggest a "therapeutic personality"; focus on the present, strong self acceptance + self regard, synergy and a constructive view of the nature of humanity.

STUDY: Hill and O'Grady (1985)

SUBJECTS

N = 42 (28m 14f) Psychotherapists USA Self rated orientation (psychoanalytic, humanistic and behavioural) on a likert scale. Patterns of orientation more evident than single ratings.

MEASURES/INSTRUMENT

Authors 19 item intentions list.

METHOD (Study 2)

Therapists record session and listen to it and note therapist intentions.

PROCESS

To examine the relationship between therapist orientations and intentions. A multivariate multiple regression profile analysis was performed.

FINDINGS

Significant relationships found for 7 of 19 intentions.

(1)	"Set limits"	positively related to behaviourists
(2)	"Focus"	negatively related to psychoanalytic
(3)	"Feelings"	positively related to psychoanalytic
(3)	"Feelings"	negatively related to behaviourist
(4)	"Insight"	positively related to psychoanalytic
(5)	"Change"	negatively related to psychoanalytic
(5)	"Change"	positively related to behaviourist
(6)	"Reinforce change"	positively related to behaviourist
(7)	"Therapist needs"	positively related to humanist

Other 10 intentions used with equal frequency by therapists from varying orientations - This led authors to conclude there were "Commonalties among treatment".

STUDY: Schacht and Black (1985)

SUBJECTS (USA)

N = 119 53 = Behaviour Therapists 66 = Psychoanalysts Selected from professional membership + questionnaire

INSTRUMENT

Psycho-epistemological profile Measures 3 epistemic styles

1) Empiricism (E) 2) Rationalism (R) 3) Metaphorism (M)

Profile consists of scores on all 3 dimensions, highest score possibly indicating dominant epistemology for that person.

METHOD

Questionnaire completed.

6 hypotheses re PEP profiles for different orientations.

RESULTS

Hypothesis 1 (PEP profile for psychoanalysts should show: M highest followed by R + E) Result was 86% of psychoanalysts had PEP profile that had metaphorism as highest score as predicted.

Hypothesis 2 (PEP profile for behaviourists should show E highest followed by R+M) Result was no predominant profile found.

Hypothesis 3 Behaviourist should score higher on E than psychoanalysts. Result was behaviour therapists mean empiricism score was higher than analysts.

Hypothesis 4 Analysts should score higher on M than behaviourists. Result was analysts produced higher M score.

Hypothesis 5 There should be no difference on rationalism. Behaviourists scored higher rationalism than analysts.

Hypothesis 6 Analyst with research training should score high E than non-research. This was not shown.

Hypothesis 7 E scores of both should be correlated with research activities. This was not shown.

CONCLUSION

2 groups have different epistemic styles. Analysts remarkably homogeneous Behaviourists more heterogeneous than the analysts.

STUDY: Walton (1978)

SUBJECTS

N = 134, consisting of 4 groups, (Behavioural, rational-emotive, psychodynamic, humanistic eclectic) American.

Self selected for orientation. Questionnaire mailed to 325 male therapists. 134 responded = 41%.

INSTRUMENT

98 item semantic differential.

PROCESS

7 concepts + 14 word pairs used for each concept.

FINDINGS

8 FACTORS EXTRACTED - Accounted for 44.5% of variance:

- 1) OR = outgoing receptivity
- 2) CO = complexity
- CA = calmness
- 4) IRS initial reaction to strangers
- I = intuition
- BF = best friend
- R = rationality
- S = seriousness

3 significant differences among therapists found on the factors C = complexity, S = seriousness and R = rationality.

On complexity + seriousness critical difference was between RET + psychodynamic therapists. Psychodynamic therapists view themselves as more serious and more complex. On rationality RET therapists significantly higher than eclectic therapists. No other factor approached 5% significance level.

STUDY: Angelos (1977)

PURPOSE

To explore the relationship between the personality and therapy methods of 10 behavioural and 11 psychoanalytic psychotherapists.

SUBJECTS

N = 21 10 behavioural and 11 psychoanalytic

METHOD

2 methods used A) Experimental B) Experiential

A) "Experimental"

2 hypotheses. Used an "objective/subjective" factor.

A projective autokinetic test. A questionnaire.

B) "Experiential"

Each therapist discussed his personal/professional life in open ended interviews.

RESULTS

A) Experimental

"Objective" rated therapists preferred objective orientated therapy on the questionnaire. Self labelled behaviourists.

"Subjective" rated therapists preferred subjective orientated therapy and were analysts. Analysts.

B) Experiential

3 broad patterns found in interviews.

- 1) Objective/Subjective configuration : as found in hypothesis of experimental study
 - A) Subjects reporting extrapersonality-orientated personality styles reported emphasis on objectively measurable patient behaviours and environmental factors in therapy.
 - B) Subjects with characteristic subjective, intrapsychic personality styles therapy emphasises introspection dreams, memories, free association.
- 2) Life stage

Younger from older therapists.

3) Self other relationship

Reports of attempts to resolve self/other relationships.

SUMMARY

Both clinical and statistical evidence confirmed psychotherapists personality influences methods.

STUDY: Caine and Smail (1969a)

SUBJECTS

British

N = 56 untrained "normals"

N = 24 student occupational therapists

N = 21 student nurses

INSTRUMENTS

ATQ (Attitudes to treatment questionnaires - authors)

16 PF, Meyers-Briggs,

HOQ (hysteroid/obsessiod questionnaire)

HDHQ (hostility/direction of hostility questionnaire)

METHOD

A principal components analysis was carried out on normals. 4 components extracted from normalised sample. These explore relations between personality measures.

RESULTS

Components (derived from HOQ, HDHQ, 16PF, Meyers-Briggs)

- 1 = Emotionality/anxiety/neuroticism
- 2 = Hysteroid/obsessoid
- 3 = trusting/suspicious (?)
- 4 = Introversion/extraversion/thinking introversion

Correlation with ATQ yielded one significant ratio = Meyers-Briggs sensing intuiting scale. High scorers on the ATQ (ie. more organically orientated) tend to be more "sensing" (concrete practical, down to earth) than low scorers. Meyers-Briggs factor alone provides personality measure most closely related to the ATQ.

CONCLUSION

Thinking introversion plays most important part when determining orientation or "attitude to treatment" which professional workers in psychiatry will adopt.

STUDY: Walton, (1966)

SUBJECTS

N = 82 doctors

Group 1 = 35 full time psychiatry course lasting 1 week

Group 2 = 30 said were interested in psych factors

Group 3 = 17 negative in psychological orientation.

INSTRUMENT

Omnibus Personality Inventory

Tests: Complexity

Thinking - introversion scales.

Authors 31 item questionnaire: Attitudes and professional values.

METHOD

Personality inventory given and authors own questionnaire.

35 variables (tests and questionnaire). 5 out of 35 variables found to distinguish among 3 groups of doctors.

RESULT

Significant variables distinguishing group 1 and 2 from 3.

- Thinking introversion.

 Group 1 and 2 doctors more reflective and responsive to abstract ideas.
- 2) Self judgement about suitability to be a psychiatrist.
- 3) Quality of psychiatry teaching at medical school.
- 4) Interest in non-organic patients.
- 5) Wish to undertake more psychological work in practice.

CONCLUSION

Group 1 and 2 doctors are distinguished from group 3 by 2 variables.

- 1) Self description (self assessed suitability as psychiatrist)
- 2) Measurable dimension of personality (thinking introversion)
- 3) Complexity variable does not distinguish
- 4) Doctors more interested in physical aspects of illness. Are less reflective and less interested in abstract ideas.
- 5) Difference demonstrated between psychologically orientated and physical orientated doctors.

STUDY: Kreitman, (1962)

PURPOSE

To investigate 2 attitudes among psychiatrists

- 1) Paramount interest in organic aspects (O orientation)
- 2) Paramount interest in psychoanalysis (A orientation)

SUBJECTS

N = 78 psychiatrists

73 men

5 women

INSTRUMENTS

- 1. 2 attitude scales designed to measure interest in psychological ("A") and organic ("O") approaches.
- 2. Personality: Guilford-Martin personality inventory Scales S, T, D, C and R.
- 3. M.M.P.I. scales "A" and "R"
- 4. Jungian therapist rated 45 subjects on introversion/extraversion.

RESULTS

		Guilford-Martin	MMPI
A scale	significant correlations with	T, D, D + C	Α
O scale	significant correlations with	T	

Correlation with Jungian introversion/extraversion found and "A" attitude with introversion.

No correlation with "O" attitude and extraversion

DISCUSSION

- 1. Analyst Orientation found significant for: T + thinking introversion/extraversion
 D = Depression
 D+C = Depression + Cycloid disposition
 A (MMPI) = Anxiety
- Organic orientation significant for T = -thinking extraversion/introversion.

SUMMARY

Positive association between analytic and Jungian introversion T, D, D+C MMPI A. Negative association between organics and T.

APPENDIX	1.2 SUMN	MARY OF	F EVALUA	TIONS

Appendix 1.2. Summary of evaluations carried out on the twelve studies of personality and epistemological differences between psychotherapists of different orientations (see Appendix 1.1).

INVESTIGATIONS and SIGNIFICANT FINDINGS			
MEASURES	BEHAVIOURAL	PSYCHODYNAMIC	
Kreitman	Psychiatrists interested	Psychiatrists interested	
1962 N = 78	in organic approach had	in psychoanalysis had	
psychiatrists	negative association with	positive association with	
Measures	thinking introversion/extraversion.	thinking introversion/extraversion	
Guildford-Martin		depression, cycloid disposition.	
Personality Inventory		Positive association with anxiety.	
,		Positive association with introversion.	
MMPI (D+R)	None		
Jungian Introversion	None		
Extroversion			
Walton (1966)	Doctors with no interest in	Doctors on 1 week psychiatry course and	
N = 82 doctors	psychological factors	doctors interested in psychological factors	
<u>Measures</u>	found not significant for	found significant for factor:	
Omnibus	factors; complexity and thinking introversion.		
Personality Inventory	thinking introversion.		

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	BEHAVIOURAL	PSYCHODYNAMIC
Caine (1969)	Subjects more organically orientated have	Subjects more therapeutically orientated have
N = 56 "normals"	significant scores on Meyers Briggs	significant scores on Meyers Briggs
N = 24 students	factor "sensing" (concrete, practical,	factor "intuiting" (ideas, imaginative
N = 21 student nurses	down to earth).	thinking, theory and experimentation).
<u>Measures</u>		
16 PF, HOQ,		
HDDQ, MBTI		
Angelos (1977)	Subjects preferred objective orientated	Subjects preferred subjective orientated therapy.
N = 10 behaviourists	therapy. Found extrapersonally orientated	Found intrapyschic personality styles.
N = 11 analysis	measurable behaviour. Environmental factors important.	Dreams, memories, free association important.
Measures	1	•
"Projective autokinetic		
test" + interviews		
Walton (1978)	RET therapists view themselves	Psychodynamic therapists view
N = 134	as more rational.	themselves as more serious
4 groups		and complex.
behavioural, RET,		
psychodynamic, eclectic		
Measure		
98 item semantic differential		

	BEHAVIOURAL HI	IMANISTIC	PSYCHODYNAMIC
Schacht (1985) N = 119 53 behaviourists 66 psychoanalysts Measure Psycho-Epistemological Profile	Behaviour therapists score higher on empiricism, rationalism than psychoanalysts.	er	Metaphorism highest score, higher than behaviourists.
Hill (1985) N = 42 3 groups psychoanalytic humanistic behavioural Hill list of 101 19 therapeutic intentions	"Set limits" (+ related) "Feelings" (- related) "Change" (+ related) "Reinforce (+ related) change"	Humanistic "Therapist needs (+ related)	"Focus" (- related) "Feelings" (+ related) "Insight" (+ related) "Change" (- related)
Tremblay (1986) N = 180 60 psychodynamic 60 behaviourist 60 humanist Measure Personal Orientation Inventory		Humanistic Sig higher than psyconamic and behavio	
		inner directed If actualizing value spontaneity.	

Johnson (1988) N = 622 12 groups
Measures Organicism-Mechanism Paradigm Inventory
10 personality inventories
Correlations of
OMPI with 1) Aspects of identity scales
2) Meyers Briggs3) Holland vocational

ocational types

4) California Psychological Inventory

5) Bi polar adjective scales

REHAVIOURAL

(Mechanism)

(Subjects = Skinnerian behaviourists, police, engineer, medical, dental, students) etc

MBTI

Perceiving - judging CPL

BARS

Down to earth, inartistic, ordinary, simple, unlettered, easygoing, follower, cold, conservative, traditional, predictable, conventional, quitting.

CONCLUSION

"Mechanistically oriented persons (eg. behaviourist) tend to be orderly, stable, conventional, and conforming, objective and realistic in their cognitive style and Interpersonally passive, obedient and reactive. This personality description is consistent with the mechanistic world view, which assumes an ontology of stability and elementarism, an epistemology of objectivism and realism, and a view of persons as reactive, passive, estranged from yet determined by - their environments, who fail to develop progressively.

PSYCHODYNAMIC

(Organicism)

(Subjects = personality psychologists, sociobiologists, human developmentalists) etc

MBTI

Intuition - sensing

CPL

Intellectual flexibility interpersonal effectavenes

BARS

Imaginative, aesthetic, creative, complex, well read, industrious, leaderlike, warm, liberal, unorthodox, changeable, experimental, persevering.

CONCLUSION

"In contrast organismically inclined individuals (eg human developmentalists) tend to be fluid, changing, creative, and non-conforming. They tend to be participative and imaginative in their cognitive style. They are active, purposive, autonomous, and individualistic, vet integrated into their interpersonal environment. This personality portrait is consistent with the organismic worldview, which assumes an ontology of change and holism, an epistemology that is interactive and constructivistic, and a view of persons as active, purposive, autonomous, creative, integrated into the social matrix, who progressively develop toward goals.

	<u>BFHAVIOURAL</u>	<u>PSYCHODYNAMIC</u>
	Se	elf Ratings
Keinan (1989)	Rated themselves higher on action	Eclectic and analysts rated themselves
N=64	orientated characteristics	significantly lower on action orientated
29 = eclectic	(more: active, initiative,	characteristics (less active, intuitive,
18 = behaviourists	practical, assertive, dominant	practical assertive and dominant)
17 = psychoanalysts	extravert)	
<u>Measure</u> Therapist		
Characteristics	Similar levels found on insight orientate	ed and authoritarian characteristics for 3 groups
		f other orientations
Rating scale		y held stereotypes regarding orientation)
Vasco (1993) N = 140	Data wass used to construct a di the study.	issonance ideal for the purpose of
61 = cognitive	Scored towards mechanism	Scored towards organicism
35 = personality	Scored towards metaphorism	Scored towards empiricism
16 = systemic	Section to manual metaphoriem	
15 = humanist		
13 = behaviourist		
Measures		
1) Organicism/ (OMPI)		
mechanism		
paradigm inventory		
2) Psycho-epistemological in	ventory (PFP)	

FAMILY THERAPISTS AND PERSONALITY ATTRIBUTES

(Kolevzon, Sowers-Hoag, and Hofman 1989)

N = 156.	49 = commun	ications model 70 =	Bowenian model	37 = structural/strategic model
Measures:	Cattell 16PF Authors own	scale to determine orientation	on assumption and style fac	ctors
MEASURE		COMMUNICATIONS MODEL	STRUCTURAI STRATEGIC MODEL	
Assumption style factors measured by 59 "statemer questionnair	as author's Analy: nts"	Therapist as risker (+) Family participation (+) zer (+) Attender (-)	Therapist as Director (+)	Family participation (-) Energizer (-) Planner (+)
Correlations these factors with Cattell traits Pattern of sign	16PF gnificant Extrav	OF 144 Possible correlations 11 16PF traits significant (7.6%) verted high risking traits (experimenting, venturesome and imaginary	significant (10. Assertive and non disclosing traits	22 16PF traits 9%) significant (11.5%) Conscientious and trusting traits are towards model but outgoing, tenderminded and

APPENDIX 2.1 FIRST INVITATION LETTER TO POTENTIAL PARTICIPANTS

ANDREW R ARTHUR BA. MSc. AFBPsS. C.Psychol

Chartered Clinical Psychologist Psychotherapist (UKCP Registered) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

Dear

I am conducting a research project exploring the personality and thinking styles of British Cognitive Behavioural Psychotherapists. This research will be for my Doctorate but also will be a significant major study in the area and be published.

I am inviting your participation in this interesting and important research project. I hope it will help us develop our understanding of psychotherapists. It would involve you completing paper and pencil questionnaires that take less than half an hour. All results would be anonymous and confidential. There will be an option to receive a copy of the research findings and an individual feedback.

Please find enclosed an information sheet on the project. I hope you will read it and agree to participate. If so please read and sign the "Declaration of Informed Consent" form. return it to me in the envelope and I will give you the questionnaires to complete. A copy of the consent is on the reverse of the information sheet and is for you to keep.

Please be assured that I will not be scoring or examining any named individual's questionnaire.

If you have any questions or hesitations please let me know. If you would like a copy of the research when it is published please tick the box on the consent form.

I look forward to hearing from you.

Indian R Orthan

With thanks.

Andrew R Arthur

ANDREW R ARTHUR BA, MSc, AFBPsS, C.Psychol

Chartered Clinical Psychologist Psychoanalytic Psychotherapist (BAP) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

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I look forward to hearing from you.

when R. arthur

With thanks.

Andrew R Arthur

APPENDIX 2.2 STUDY INFORMATION SHEET

PLEASE KEEP

INFORMATION SHEET

PURPOSE OF THE INVESTIGATION: To explore the personality and thinking styles of British Psychotherapists by using standardized paper and pencil questionnaires.

METHOD: Approximately 200 psychotherapists will be given the opportunity to anonymously complete two questionnaires each. These questionnaires will be scored by an assistant and the data will be statistically analysed on a group basis. This data will be presented in a doctoral thesis and later published in a reputable professional psychological journal.

PROCEDURE: Each psychotherapist will be given a basic demographic sheet to fill in containing basic questions about sex, age, years of practice, therapeutic orientation, core profession and etc. Following this there is a short questionnaire about philosophical values (approx 10mins) and a further questionnaire about personality styles (approx 20 mins). Altogether it should not take longer than half an hour. The questionnaires are returned and separately scored by the assistant.

CONFIDENTIALITY AND ANONYMITY: All questionnaires are numbered and only identified numerically. When questionnaires are returned the name of the participant will be ticked off and no further connection between the questionnaires and a name will be made. Scoring will not be performed by the investigator. With such a large sample it will not be possible to identify any participant from the group data characteristics (eg age, sex, training etc). It would not be possible for anyone to link up a name with a questionnaire. All questionnaires would eventually be destroyed and meanwhile kept secure.

THE QUESTIONNAIRES: Are all reputable with good reliability and validity and with an extensive research history. They have evolved mainly from the literature to do with values, beliefs, attitudes and philosophical styles.

RESULTS: All participants may request to receive a copy of the published results which they will hopefully find of interest generally and also because of their participation.

INFORMED CONSENT: Participants are requested to read and sign their agreement on the attached "Declaration of Informed Consent Form".

APPENDIX 2.3 INFORMED CONSENT FORM

PLEASE RETURN

DECLARATION OF INFORMED CONSENT

I give my informed consent to participate in this study of psychotherapists' personality and thinking styles. I consent to publication of study results so long as the information is anonymous and disguised so that no identification can be made. I further understand that although a record will be kept of my having participated in the study, all data collected from my participation will be identified by number only.

- I have been informed that my participation in the study will involve me in taking pencil and paper questionnaires.
- 2) I have been informed that the general aim of the study is to explore psychotherapists' attitudes, beliefs, values and philosophies.
- 3) I have been informed that there are no "disguised" procedures in this study.
- 4) I have been informed that the investigator will answer any questions I may have regarding the procedures of this study.
- 5) I have been informed that I am free to withdraw from the study at any time.

Concerns about any aspect of the study may be referred to the investigator's supervisor Professor Robert Bor at the City University, London.

The person conducting the investigation is Andrew Arthur, Chartered Clinical Psychologist and as a member of the British Psychological Society subject to their codes of practice and ethics in conducting psychological research. He is a Doctoral Student at the City University, London. His address is 23 College Crescent. London NW3 5LL and telephone is 0171-388 6990.

NAME OF PARTICIPANT (Please Print)	•••••
SIGNATURE OF PARTICIPANT	
SIGNATURE OF INVESTIGATOR Only	Irthu
I would like to receive a copy of the research report who	en it is published.
() YES () NO	

APPENDIX 2.4

INVITATION LETTER TO SELECTED BEHAVIOURISTS WITH NAMED PROFESSIONAL COLLEAGUE

ANDREW R ARTHUR BA, Msc, AFBPsS, C. Psychol

Chartered Clinical Psychologist Psychotherapist (UKCP Registered) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

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If you have any questions or hesitations please let me know. If you would like a copy of the research when it is published please tick the box on the consent form.

I look forward to hearing from you.

With thanks.

Andrew R. Arthur

July R Dello

APPENDIX 2.5 REMINDER LETTER TO POTENTIAL PARTICIPANTS

ANDREW R ARTHUR BA, MSc, AFBPsS, C.Psychol

Chartered Clinical Psychologist Psychotherapist (UKCP Registered) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

Dear

I recently wrote to you about the research project I am conducting. I do hope you received my letter and information.

You may still be considering whether to take part in the study. I am writing to encourage your participation in what I believe is an important research study into the personality and thinking styles of British Cognitive Behavioural Psychotherapists.

I have reduced the number of questionnaires to two and they should take approximately thirty minutes to complete.

You may recall there is an option to receive a copy of the published results. I would also like to offer participants the further option of receiving an individual confidential "report" based upon their own questionnaire responses. This could be interesting feedback about your own personality and thinking style. It can be done whilst maintaining anonymity. Details of this option will be provided with the questionnaire.

I hope you will decide to participate in the research. I am enclosing another set of forms in case you might require them.

If you have any further questions please let me know.

I look forward to hearing from you.

Indian R. Outher

With thanks.

Andrew R Arthur

ANDREW R ARTHUR BA. MSc., AFBPsS, C.Psychol

Chartered Clinical Psychologist Psychoanalytic Psychotherapist (BAP) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

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If you have any further questions please let me know.

I look forward to hearing from you.

Indian R Outhern

With thanks,

Andrew R Arthur

APPENDIX 2.6 COVER LETTER WITH QUESTIONNAIRES

ANDREW R ARTHUR BA, MSc, AFBPsS, C.Psychol

Chartered Clinical Psychologist Psychotherapist (UKCP Registered) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

Dear

Thank you very much indeed for agreeing to participate in my research project. I greatly appreciate your willingness to take part in what I believe will be an important research study into the personality and thinking styles of British Cognitive Behavioural Psychotherapists.

Please find enclosed two questionnaires to complete. I expect it will take about 30 minutes to complete both of them. I would recommend answering the questions with your first thoughts and not deliberating too much.

In addition to a copy of the research report that you may have requested on the consent form. I would like to offer you the opportunity to receive an individual confidential "report" based upon the results of your questionnaire responses. This could be interesting feedback about your own personality and thinking style. It can be done whilst maintaining anonymity.

If you would like to exercise that option please just complete the attached form and return with your questionnaires.

Again I would like to thank you for your time and participation. If I can answer any questions or be of any help please contact me.

With thanks.

Andrew R Arthur

Andrew R. arthur

ANDREW R ARTHUR BA, MSc, AFBPsS, C.Psychol

Chartered Clinical Psychologist Psychotherapist (UKCP Registered) 23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

Dear

Thank you very much indeed for agreeing to participate in my research project. I greatly appreciate your willingness to take part in what I believe will be an important research study into the personality and thinking styles of British Psychotherapists.

Please find enclosed two questionnaires to complete. I expect it will take about 30 minutes to complete both of them. I would recommend answering the questions with your first thoughts and not deliberating too much.

In addition to a copy of the research report that you may have requested on the consent form. I would like to offer you the opportunity to receive an individual confidential "report" based upon the results of your questionnaire responses. This could be interesting feedback about your own personality and thinking style. It can be done whilst maintaining anonymity.

If you would like to exercise that option please just complete the attached form and return with your questionnaires.

Again I would like to thank you for your time and participation. If I can answer any questions or be of any help please contact me.

With thanks.

Andrew R Arthur

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APPENDIX 2.7 INFORMATION SHEET FOR QUESTIONNAIRE PACK

QUESTIONNAIRE INFORMATION

There are two questionnaires and a participant information sheet in this pack. It would probably be a good idea to try to set aside some time and complete them at once if you can.

All questionnaires are "normative" in the sense that they are exploring personal traits within the "normal" individual. They are NOT measures of pathology.

QUESTIONNAIRE 1

The Paradigm Inventory explores people's theories of knowledge. How they know, and evaluate evidence. What constitutes knowledge/evidence for them and what are their criteria for belief. This questionnaire has been in existence and subject to substantial research (mainly in N. America and Europe) for the last 20 years.

QUESTIONNAIRE 2

The Millon Index of Personality Styles (MIPS) is a recent questionnaire that does what its title suggests. It describes the human personality based on some of the major psychological theorists of the last 100 years.

OPTIONAL REQUEST FOR AN INDIVIDUAL PROFILE REPORT OF MY SCORES
SUBJECT REF NUMBER

I request an individual profile summary derived from my scores on the questionnaires I have completed. I understand this will be done by the investigator (Andrew Arthur) without his knowing who has completed the questionnaire. The summary will then be posted to me by linking the above subject reference number with my name which I give below. The linking and posting will be supervised but not performed by Andrew Arthur.

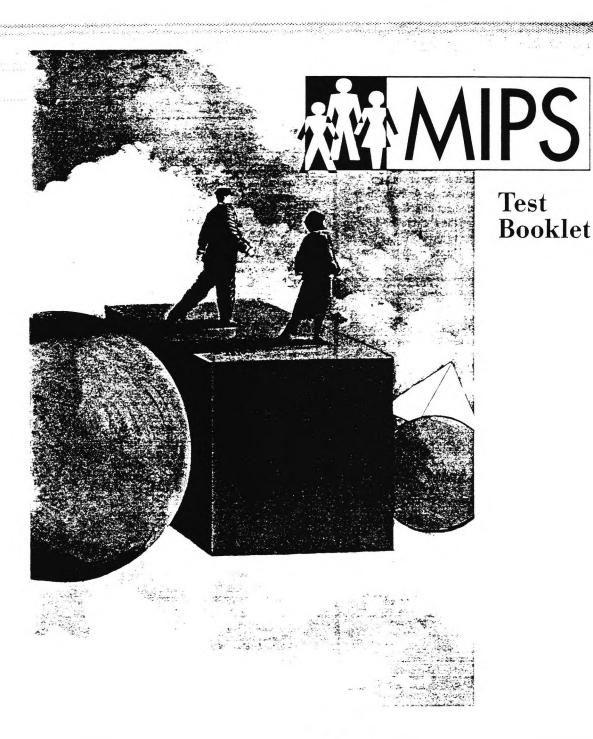
IF YOU WOULD LIKE A REPORT. PLEASE RETURN THIS FORM WITH YOUR QUESTIONNAIRE PACK.

APPENDIX 2.8 PARTICIPANT INFORMATION SHEET TO COMPLETE

PARTICIPANT INFORMATION

Please answer the following: 1. female [] Are you: male [] What is your age 2. 3. Which professional organisations are you registered with? 4. What is your prime theoretical orientation as a psychotherapist? psychoanalytic cognitive behavioural analytical psychologist OTHER 5. How many years have you been practising as a psychotherapist?vrs Please read each statement below and tick the response that best represents your opinion. Fill in only one response for each statement. 6. I am completely committed to my prime theoretical orientation. strongly agree [] agree [] neutral [] disagree [] strongly disagree [] 7. I am completely satisfied with my prime theoretical orientation. strongly agree [] agree [] neutral [] disagree [] strongly disagree [] 8. In my clinical practice I remain completely within my primary theoretical orientation. strongly agree [] agree [] neutral [] disagree [] strongly disagree [] THANK YOU FOR ANSWERING THESE QUESTIONS I would value any comments you may wish to make.

APPENDIX 2.9 MILLON INDEX OF PERSONALITY STYLES



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015-454163X



Directions: The following pages contain a list of statements. Read each statement and decide whether or not it describes you. If you agree with a statement or believe that it is true about you, blacken the *T* circle for *true* on the Answer Sheet. If you disagree with a statement or believe that it is not true about you, blacken the *F* circle for *false* on the Answer Sheet. Be sure to answer either true or false for every statement. There are no *right* or *wrong* answers.

1	lam	а	quiet	and	cooperative	person.
---	-----	---	-------	-----	-------------	---------

- 2 1 have always done things my way and taken the consequences.
- 3 1 like to be the one to take charge.
- 4 I have always had a regular way of doing things so I can avoid mistakes.
- 5 I respond the same day to letters I get.
- 6 Every now and then I ruin the good things that happen to me.
- 7 I don't get excited about much any more.
- 8 I would much rather be a follower than be a leader.
- 9 I go out of my way to make myself popular with others.
- 10 I have always had a talent for being successful.
- 11 I often find that I've been treated unfairly.
- 12 I feel uncomfortable when people are good to me.
- 13 I often feel self-conscious and tense at social gatherings.
- 14 Police take too much advantage of the power they have
- 15 Sometimes I have had to be pretty rough with people.
- 16 Children should always obey the rules of their elders.
- 17 I often feel disgusted with the way things are going.
- 18 I often expect the worst to happen to me.
- 19 I wouldn't mind not having many friends.
- 20 I am a shy and socially inhibited person.
- 21 Even when I disagree, I usually let others have their way.
- 22 No one should be expected to always tell the truth.
- 23 1 make nasty remarks to people if they deserve

- 24 I like to follow instructions and do what others expect of me.
- 25 So little of what I do is appreciated by others
- Almost anything I try is easy for me.
 I've become more drawn into myself in recent years.
- 28 I am a dramatic and showy sort of person.
- 29 I always try to do what is proper
- 30 I don't depend much on other people for friendship.
- 31 I've never averstayed my time at a parking meter.
- 32 Punishment hasn't stopped me from doing whatever I wanted.
- 33 I like to arrange things to the last detail.
- 34 I am often annoyed by others.
- 35 I never broke any rule my parents expected me to follow.
- 36 | get what I want even if I have to bully others.
- 37 Nothing is more important than protecting one's moral reputation.
- 38 Opportunities don't work out for me the way they do for others.
- 39 I don't show much feeling any more.
- 40 What I have to say is not likely to interest others.
- 41 I go out of my way to meet exciting people and to have adventures.
- 42 I don't take many of my responsibilities too seriously.
- 13 I'm a tough, unsentimental sort of person.
- 44 few things in life seem to stir me very much
- 45 I become very tense when I have to talk to people I don't know.
- 46 I'm a cooperative person who gives in to others.
- 47 I like to act on the spur of the moment.
- 18 I think ahead and then actively follow through.
- 49 I have often been restless and wanted to move on to almost anywhere else.
- 50 It is best to tightly control one's emotions
- 51 I wish people would not blame me when things go wrong.
- 52 I'm probably my own worst enemy
- 53 I have very few close ties with others
- 54 I feel anxious with people I don't know very well.
- 55 It's all right to get around the law, if you don't break it.
- 50 I do a lot for others, but little is done for me.
- 57 I've always believed that others don't think well
- 58 1 am very confident

	records.
60	From past experience I know that good things
	don't last.
61	Some people say I enjoy being a martyr.
62	I am most comfortable when I'm alone.
63	I become much more tense than others do in new
	situations.
64	I always try to avoid disagreements, no matter
	how strongly I feel about the subject.
65	I look for apportunities that are exciting and new
	to me.
66	There were times when my parents had trouble
	keeping me in line.
67	I always finish my work before I relax.
68	Others get breaks I don't get.
69	I sometimes feel I deserve to be unhappy.
70	I wait for events to take their course before
	deciding what to do.
71	I try to take care of others before I take care of
	myself.
72	I often feel that my life goes from bad to worse.
73	1 am inspired simply by being around people.
74	I always check the speed limit and never drive
	faster than what's posted.
75	I use my head, not my heart, to make decisions.
76	I usually follow my hunches, not the information
	I may have.
77	I'm never envious of the achievement of others.
78	I preferred school subjects that were factual
	rather than theoretical.
79	I plan ahead and then act decisively to make my
	plans happen.
80	My heart seems to rule my head.
81	I can always see the bright side of life.
82	I often wait for sameone else to solve my
	problems.
83	I do what I want without worrying about the
	allasta as albass

effects on others.

problem to me.

day can be spoiled.

than things I just imagine.

others.

difficult.

84 I react quickly to anything that might become a

85 I feel good about myself only when I'm helpful to

86 When something little goes wrong, my whole

91 Talking with someone whom I've just met is

87 | enjoy daydreams more than everyday realities.
88 | I'm content to sit back and let life take its course.
89 | I try to be logical rather than emotional.
90 | prefer things that I can see and touch rather

59 I very systematically arrange my papers and

records.

92	Being kindhearted is much more important than
-	being cool and logical.
93	Guesses about the future are more interesting to
	me than facts about the past.
94 95	It's very easy for me to enjoy myself.
95	I don't seem able to influence the world around me.
96	I live in terms of my own needs, not the needs of others.
97	I never wait for things to happen; I make them happen my way.
98	I never voice a curse-word even when I'm furious with someone.
99	My life is guided by a need to help others.
100	I often feel on edge, waiting for something to go
	wrong.
101	Even when I was a youngster I would never cheat on a test.
102	I am always cool and objective when dealing with others.
103	I'd rather learn how to run a machine than
	speculate on why it works.
104	I'm not an easy person to get to know.
105	I spend a lot of time thinking about the mysteries of life.
106	I cope very easily with emotional ups and downs.
107	I am somewhat passive and slow about organizing my life.
108	I do what I want without worrying about pleasing
	others.
109	No matter what the temptation may be, I would never do something wrong.
110	Friends and family turn to me first for warmth and
	support.
111	Even when life is going well, I usually expect it will soon get worse.
112	I carefully plan and organize my work before I begin.
113	I am impersonal and objective when I try to solve a problem.
114	I am a realistic person who does not like to speculate about things.
115	Some of my best friends don't know how I really feel.
116	Others consider me cool-headed rather than
117	warmhearted. My sense of reality is better than my sense of
	imagination.
118	I look out for myself first and then think of others
119	I spend a lot of effort to see that life works out
	well for me.
120	l always keep my composure, no matter what's happening.
	3

121	I show a great deal of warmth toward my
100	friends.
122	Very few things have worked out well for me.
123	I like to meet new people and learn about their lives.
124	I can ignore personal and emotional matters in my work.
125	I prefer to deal with realities, not with possibili-
126	ties. I seem to need a lot of time to be alone with my
127	thoughts. Feelings of the heart are of greater value than the
100	logic of the mind.
128	I like dreamers more than I do realists.
129	I'm able to laugh at problems more easily than most people are.
130	There's not much I can do, so I just wait to see what happens.
131	I never get into arguments, no matter how angry I am.
132	1 express my thoughts apenly and freely.
133	I look at the job to be done, and not at the
	feelings of the people involved.
134	Working on creative ideas would be ideal
	for me.
135	I'm the kind of person who takes life easy and
	prefers to watch the passing scene.
136	I dislike depending on anyone in my work.
137	I see to it that things come out the way I want
	them to.
138	I enjoy everyday realities more than daydreams.
139	Lots of small things upset me.
40	I learn best by watching and talking to people
141	I'm not content to sit back and let life take its course.
142	Meeting new people is not something I look forward to.
143	I seldom know how to keep a social conversation going.
144	I always take others' feelings into account.
145	I trust my hunches more than my observations.
146	I tend not to act until I know what others are going to do.
147	1 prefer to make decisions on my own, with little or no advice from others.
148	I often feel miserable for no good reason.
149	I like being popular and doing lots of social activities.
150	I rarely express my inner thoughts to others.
151	I am enthusiastic about almost all of the activities
152	I make it a practice to depend on myself and not

153	Most of the time I'm actively involved in arranging the events in my life.
154	There's nothing like the warm feeling of being
155	with a group of relatives.
133	Sometimes I am tense or depressed, and I don't know why.
156	I really enjoy discussions about myths and
	mystical events.
157	I decide my priorities and then take firm action
	to achieve them.
158	I don't hesitate to direct people to do what I think
	is best for them.
159	I'm proud that I am efficient and organized.
160	I really dislike people who become leaders for
	no good reason.
161	I am ambitious.
162	1 know how to charm people.
163	Others can always rely on me to do my work
164	diligently.
104	Others consider me warmhearted rather than cool-headed.
165	I'd be willing to work for years to become some-
.03	one of importance.
166	I would enjoy selling new ideas or products to
	people.
167	usually persuade others to do exactly what
	I want them to do.
168	l enjoy work that requires careful attention to
	details.
169	I'm very introspective, always trying to under-
	stand my thoughts and emotions.
170	I have great confidence in my social abilities.
171	I quickly size up situations and then act to make
.,,	them turn out the way I want.
172	I can persuade almost anyone to switch to my
	side of an argument.
173	I will get any job done no matter what the
	obstacles may be.
174	Like a good salesperson, I can successfully
	influence people in a socially pleasing manner.
175	Meeting new people is something I look forward
	to.
176	The welfare of those affected should be the
	primary consideration when a decision about
177	them is made.
177	I have the patience to attend to work that must be
178	highly accurate. My sense of imagination is better than my sense
., .	of reality.
179	I'm motivated to become one of the best in my
	field.
180	I have a pleasing social style that makes people
	easily like me.

APPENDIX 2.10 ORGANICISM-MECHANISM PARADIGM INVENTORY

PARADIGM INVENTORY

This is a questionnaire about how people relate to their world. Listed below are pairs of statements concerning thoughts, attitudes. and ways of behaving.

Please read each statement carefully and find the one which pertains to you more closely. No statement is more "correct" than the other.

An answer sheet is provided for your responses. Please answer all items, but circle only one statement ("a" or "b") in each pair.

- 1) a. Schools should be where a child learns to think for him/herself.
 - b. Schools should be where a child learns basic information.
- 2) a. Things really look different if we change how we see them.
 - b. Things really look different only if they are changed.
- 3) a. Organisms change by forces from outside themselves.
 - b. Organisms can change themselves.
- 4) a. A good judge is purely objective.
 - b. A good judge is not objective and knows it.
- 5) a. Great discoveries come from scientific imagination.
 - b. Great discoveries come from scientific experimentation.
- 6) a. All things stay basically the same over time.
 - b. All things change from one moment to the next.
- 7) a. A business executive needs time to analyse the facts.
 - b. A business executive needs time for creative thinking.
- 8) a. Before making a big decision. I like to sleep on it.
 - b. Before making a big decision. I like to get all the information.
- 9) a. Progress in science occurs when there is a new way of looking at events.
 - b. Progress in science occurs when an important observation is made.
- 10) a. A criminal is just a burden to society.
 - b. A criminal has a function in society.
- 11) a. Our knowledge is limited by our observations.
 - b. Our knowledge is limited by our imagination.

(OVER)

- 12) a. Living is a process of using up the available supplies.
 - b. Living is a process of exchanging supplies back and forth.
- 13) a. Events are sometimes just the same as before.
 - b. Events are always new and different in some way.
- 14) a. Divorce is often a phase in each partner's growth.
 - b. Divorce is usually the result of incompatible personalities.
- 15) a. Facts are more useful than a good idea.
 - b. Facts are less useful than a good idea.
- 16) a. Each relationship I have is different.
 - b. Each relationship I have is much like the previous one.
- 17) a. Things are changed only when they are directly affected.
 - b. Things are changed by everything else.
- 18) a. We learn by carefully examining individual facts.
 - b. We learn by finding order in an array of facts.
- 19) a. To live independently of other people is not a realistic goal.
 - b. To live independently of other people is a realistic goal.
- 20) a. War can be understood by examining what purpose it served.
 - b. War can be understood by examining its causes.
- 21) a. The world is like a large, living organism.
 - b. The world is like a large, complex machine.
- 22) a. A child discovers the world by being praised and punished.
 - b. A child discovers the world by testing his/her dreams and fears.
- 23) a. I can change things in my family only by planned action.
 - b. I can change things in my family just by being who I am.
- 24) a. A child's world is different from mine.
 - b. A child's world is like mine, but he/she knows less.
- 25) a. Persons are made by their environments.
 - b. Persons and their environments affect each other.
- 26) a. To resolve a family dispute, it is important how we look at the facts.
 - b. To resolve a family dispute, it is important to discover all the facts.

Authors: C. K. Germer, J. S. Efran, and W. F. Overton Temple University Philadelphia, Pa.

ANSWER SHEET

for Paradigm Inventory

Sex M F

For each pair of statements on the Paradigm Inventory, circle the letter of the statement that is closest to your own opinion.										
1)	a	b	14)	a	Ь					
2)	a	ь	15)	a	b					
3)	a	b	16)	a	b					
4)	a	b	17)	a	b					
5)	a	b	18)	a	b					
6)	a	Ь	19)	a	b					
7)	a	ь	20)	a	b					
8)	a	b	21)	a	b					
9)	a	Ъ	22)	a	b					
10)	a	b	23)	a	b					
11)	a	b	24)	a	b					
12)	a	b	25)	a	b					
13)	a	b	26)	a	b					

APPENDIX 2.11 REMINDER LETTER TO PARTICIPANTS TO RETURN COMPLETED QUESTIONNAIRE PACKS

ANDREW R ARTHUR BA. MSc. AFBPsS. C.Psychol

Chartered Clinical Psychologist

23 College Crescent Hampstead London NW3 5LL Tel: 0171-388 6990

Dear

Thank you for agreeing to participate in my research project.

I hope you received the questionnaire pack I recently sent to you.

If you have not yet completed and posted the questionnaires would you kindly accept this letter as a gentle reminder. It would be helpful to receive them within the next two weeks.

I look forward to hearing from you soon.

when R Orthus

Yours sincerely,

ANDREW R ARTHUR

APPENDIX 2.12 PSYCHO-EPISTEMOLOGICAL PROFILE INVITATION LETTER

ANDREW R ARTHUR BA. MSc, AFBPsS, C.Psychol

Chartered Clinical Psychologist

23 College Crescent Hampstead London NW3 5LL

Tel: 0171-388 6990

Dear

Thank you very much for recently completing and returning my research questionnaires.

I will be analysing the data soon and providing you with a report, if you requested it.

I would like to ask you for a little further help. You may recall that my research project is an exploration into psychotherapists' personality and cognitive styles. I want to further develop and deepen an understanding of the latter through the use of an additional questionnaire. It is called "The Psycho-Epistemological Profile" (PEP) and provides further interesting description about our personal theories of knowledge.

Please could I ask you to consider completing it for me? It should only take about 20 minutes and I will provide you with a personal feedback if you had requested this for the first two questionnaires.

I do hope that you will be interested and have enclosed the questionnaire for your consideration.

I look forward to hearing from you and thank you very much for your time.

Yours sincerely,

ANDREW R ARTHUR

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APPENDIX 2.13 PSYCHO-EPISTEMOLOGICAL PROFILE

University of Alberta

Edmonton

P.E.P.

Experimental Form VI

Directions

For each of the following statements, please indicate your personal agreement or disagreement on the scale provided on the answer sheet. 'D' means complete disagreement with the statement, 'MD' means moderate disagreement, 'N' means neutral, 'MA' means moderate agreement, and 'CA' means complete agreement.

Here is a sample question:

The Roman Empire fell because of moral degeneration of its rulers.

D MD N (MA) CA

In this example, the person agrees with the statement, but not entirely, so they have circled the response 'MA' - moderate agreement.

Your personal preference alone is required. There are no right or wrong responses. <u>It is necessary</u>, however, that you answer all of the questions. Be sure to clearly mark the appropriate space for each question. If you wish to change an answer make an "X" through the incorrect response and then circle the correct response. <u>Trust your first impression</u>. There is no time limit.

- 1. A good teacher is primarily one who has a sparkling entertaining delivery.
- 2. The thing most responsible for a child's fear of the dark is thinking of all sorts of things that could be "out there".
- 3. Most people who read a lot, know a lot because they come to know of the nature and function of the world around them.
- 4. Higher education should place a greater emphasis on fine arts and literature.
- 5. I would like to be a philosopher.
- 6. A subject I would like to study is biology.
- 7. In choosing a job I would look for one which offered opportunity for experimentation and observation.
- 8. The Bible is still a best seller today because it provides meaningful accounts of several important eras in religious history.
- 9. Our understanding of the meaning of life has been furthered most by art and literature.
- 10. More people are in church today than ever before because they want to see and hear for themselves what ministers have to say.
- 11. It is of primary importance for parents to be consistent in their ideas and plans regarding their children.
- 12. I would choose the following topic for an essay: The Artist in an Age of Science.
- 13. I feel most at home in a culture in which people can freely discuss their philosophy of life.
- 14. Responsibility among people requires an honest appraisal of situations where irresponsibility has transpired.
- 15. A good driver is observant.
- When people are arguing a question from two different points of view, I would say that the argument should be resolved by actual observation of the debated situation.
- 17. I would like to visit a library.
- 18. If I were visiting India. I would be primarily interested in understanding the basis for their way of life.
- 19. Human morality is molded primarily by an individual's conscious analysis of right and wrong.
- 20. A good indicator of decay in a nation is a decline of interest in the arts.

(Please turn over)

- 21. My intellect has been developed most by learning methods of observation and experimentation.
- 22. The prime function of a university is to teach principles of research and discovery.
- 23. A good driver is even tempered.
- 24. If I am in a contest, I try to win by following a pre-determined plan.
- 25. I would like to have been Shakespeare.
- 26. Our understanding of the meaning of life has been furthered most by mathematics.
- 27. I try to think of myself as a considerate person.
- 28. I would very much like to have written Darwin's "The Origin of Species".
- 29. When visiting a new area, I first try to see as much as I possibly can.
- 30. My intellect has been developed most by gaining insightful self knowledge.
- 31. I would be very disturbed if accused of being insensitive to the needs of others.
- 32. The kind of reading which interests me most is that which creates new insights.
- 33. The greatest evil inherent in a totalitarian regime is alienation of human relationships.
- 34. Most atheists are disturbed by the absence of factual proof of the existence of God.
- 35. In choosing a job I would look for one which offered the opportunity to use imagination.
- 36. In my leisure I would most often like to enjoy some form of art, music, or literature.
- 37. The kind of reading which interests me most is that which stimulates critical thought.
- 38. I prefer to associate with people who are spontaneous.
- 39. In my leisure I would like to play chess or bridge.
- 40. Most people who read a lot, know a lot because they develop an awareness and sensitivity through their reading.
- 41. When visiting a new area, I first pause to try to get a "feel" for the place.
- 42. Many T.V. programs lack sensitivity.
- 43. I like to think of myself as observant.
- 44. Happiness is largely due to sensitivity.
- 45. I would be very disturbed if accused of being inaccurate or biased in my observations.

- 46. A good teacher is primarily one who helps his students develop their powers of reasoning.
- 47. I would like to be a novelist.
- 48. The greatest evil inherent in a totalitarian regime are restrictions of thought and criticism.
- 49. Most people are in church today than ever before because theologians are beginning to meet the minds of the educated people.
- 50. The most valuable person on a scientific research team is one who is gifted at critical analysis.
- 51. Many T.V. programs lack organisation and coherence.
- 52. I like country living because it gives you a chance to see nature first hand.
- 53. Upon election to Parliament I would endorse steps to encourage an interest in the arts.
- 54. It is important for parents to be familiar with theories of child psychology.
- 55. The prime function of a university is to train the minds of the capable.
- 56. I would like to have written Hamlet.
- 57. Higher education should place a greater emphasis on mathematics and logic.
- 58. The kind of reading which interests me most is that which is essentially true to life.
- 59. A subject I would like to study is art.
- 60. I feel most at home in a culture in which realism and objectivity are highly valued.
- 61. The prime function of a university is to develop a sensitivity to life.
- 62. When playing bridge or similar games I try to think my strategy through before playing.
- 63. If I were visiting India, I would be primarily interested in noting the actual evidence of cultural change.
- 64. When buying new clothes I look for the best possible buy.
- 65. I would like to visit an art gallery.
- 66. When a child is seriously ill, a good mother will remain calm and reasonable.
- 67. I prefer to associate with people who stay in close contact with the facts of life.
- 68. Many T.V. programs are based on inadequate background research.
- 69. Higher education should place a greater emphasis on natural science.

(Please turn over)

- 70. I like to think of myself as logical.
- 71. When people are arguing a question from two different points of view, I would say that each should endeavour to assess honestly his own attitude and bias before arguing further.
- 72. When reading an historical novel. I am most interested in the factual accuracy found in the novel.
- 73. The greatest evil inherent in a totalitarian regime is distortion of the facts.
- 74. A good driver is considerate.
- 75. Our understanding of the meaning of life has been furthered most by biology.
- 76. I would like to have been Galileo.
- 77. My children must possess the characteristics of sensitivity.
- 78. I would like to be a Geologist.
- 79. A good indicator of decay in a nation is an increase in the sale of movie magazines over news publications.
- 80. I would be very disturbed if accused of being illogical in my beliefs.
- 81. Most great scientific discoveries come about by thinking about a phenomenon in a new way.
- 82. I feel most at home in a culture in which the expression of creative talent is encouraged.
- 83. In choosing a job I would look for one which offered a specific intellectual challenge.
- 84. When visiting a new area, I first plan a course of action to guide my visit.
- 85. A good teacher is primarily one who is able to discover what works in class and is able to use it.
- 86. Most great scientific discoveries come about by careful observation of the phenomena in question.
- 87. Most people who read a lot, know a lot because they acquire an intellectual proficiency through the sifting of ideas.
- 88. I would like to visit a botanical garden or zoo.
- 89. When reading an historical novel. I am most interested in the subtleties of the personalities described.
- 90. When playing bridge or similar games I play the game by following spontaneous cues.

P.E.P. ANSWER SHEET

Ref. No. M F (Please Circle)

Please circle the response that indicates your answer.

D = Disagree $MD = Moderate disagreementMA = Moderate Agreement$ $C = Complete agreement$								N = Neutral						
N	MA	С	31.	D	MD	N	MA	С	61.	D	MD	N	MA	С
N C	MA	C	32.	D	MD	N	MA	С	62.	D	MD	N	MA	С
N C	MA	C	33.	D	MD	Ν	MA	С	63.	D	MD	N	MA	C
N C	MA	C	34.	D	MD	N	MA	C	64.	D	MD	N	MA	C
N C	MA	C	35.	D	MD	N	MA	C	65.	D	MD	N	MA	C
) N	MA	C	36.	D	MD	N	MA	C	66.	D	MD	N	MA	C
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) N	MA	C	38.	D	MD	N	MA	C	68.	D	MD	N	MA	C
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D N	MA	C	40.	D	MD	N	MA	С	70.	D	MD	N	MA	C
D N	MA	C	41.	D	MD	N	MA	C	71.	D	MD	N	MA	C
D N	MA	C	42.	D	MD	N	MA	С	72.	D	MD	N	MA	C
D N	MA	С	43.	D	MD	N	MA	C	73.	D	MD	N	MA	C
D N	MA	C	44.	D	MD	N	MA	C	74.	D	MD	N	MA	С
D N	MA	C	45.	D	MD	N	MA	C	75.	D	MD	N	MA	C
D N	MA	C	46.	D	MD	N	MA	C	76.	D	MD	N	MA	C
D N	MA	C	47.	D	MD	N	MA	C	77.	D	MD	N	MA	С
D N	MA	C	48.	D	MD	N	MA	C	78.	D	MD	N	MA	C
D N	MA	C	49.	D	MD	N	MA	C	79.	D	MD	N	MA	C
D N	MA	C	50.	D	MD	N	MA	C	80.	D	MD	N	MA	C
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D N	MA	C	57.	D	MD	N	MA	C	87.	D	MD	N	MA	C
D N	MA	C	58.	D	MD	N	MA	C	88.	D	MD	N	MA	C
D N	MA	C	59.	D	MD	N	MA	C	89.	D	MD	N	MA	C
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APPENDIX 2.14 DESCRIPTION OF ORGANICISM-MECHANISM

"Mechanism. The root metaphor of the mechanistic worldview is the machine, and its dynamics are essential Newtonian. The universe is understood as being composed of discrete parts that are inherently at rest. The static parts and relations between then are the basic units to which all objects and events are ultimately reducible. The epistemology of this view asserts that reality is external to the knower, and the knower comes to copy or reflect the world to various degrees of precision. The object of knowledge is therefore distinguishable from the subject. The ideal form of explanation in mechanism is a reductionistic analysis of parts and their functional relations. The parts are related in antecedent-consequent interactions. The scientific methodology generated by the mechanistic worldview is empirical, disciplinary, and stresses the precedence of sense data over concepts.

Persons in the mechanistic worldview are represented as reactive, passive, and completely determined by their environments. They have no inherent functions, and development (progression towards endpoints) is mere appearance. Their *personalities* consist of quantifiable stimulus-response contingencies, and persons are distinct from their environments. Historically, the image of personhood stems from John Locke's *tabula rasa* (Allport, 1955). It became refined by the 18th century empiricists Berkeley and Hume, by James and John Stuart Mill in the 19th century, and is presumably manifest in the work of modern behaviourists."

"Organicism. The root metaphor of the organismic worldview is the living organism, and its dynamics are more Lorenzian (1977) than Newtonian. The universe is inherently active and changing. Any apparent stability is the product of rational concepts. Such concepts are holistic and give meaning to an organisation of parts. The epistemology of this position maintains that, although the world and the knower are unified, the world can be known by apparent rational activity. Thus, the known world is an active construction of the knower-in-context. The ideal form of explanation in organicism is a synthetic understanding of organised complexity. Functions or goals are defined in relation to structures that serve them. The scientific methodology generated by the organismic worldview is rational, ecological, and stresses the precedence of concepts over sense data. It seeks to establish rules of order and organisation prior to empirical validation.

Persons in the organismic worldview are seen as active, changing, purposive, and autonomous. They have inherent psychological functions and structures that give meaning to behaviour. Development is a reality, and persons are self-differentiating, creative and symbolic. Each individual has a unique personality system, but is also an integral part of a larger interpersonal system. Historically, the model of personhood as active and changing was formulated by Leibniz in the late 17th century, was developed by Kant and Hegel, and is presently seen in Piaget's developmental psychology, general systems theory, and in aspects of the "third force" psychologies of Maslow and Rogers." (Johnson, Germer, Efran and Overton, p828).

APPENDIX 2.15 MILLON INDEX OF PERSONALITY STYLES - TRAIT DESCRIPTIONS

Brief Definitions of MIPS Scales

Motivating Aims

Enhancing. Persons scoring high on this scale tend to look for the bright side of life, are optimistic about future possibilities, find it easy to enjoy themselves, and face the ups and downs of their lives with equanimity.

Preserving. Persons scoring high on this scale focus on and intensify the problems of life. Perceiving the past as having been personally troubling, they always seem to be waiting for something else to go wrong, and feel that things are likely to go from bad to worse. They are easily upset by minor concerns and disappointments.

Modifying. Persons scoring high on this scale take charge of their lives and make things happen rather than wait for them to occur. They are busily involved in modifying their environments and arranging events to suit their needs and desires.

Accommodating. Persons scoring high on this scale undertake little to shape or alter their lives. They react to the passing scene, accommodating to circumstances created by others; they seem acquiescent, are unable to rouse themselves, lack initiative, and do little to generate the outcomes they desire.

Individuating. Persons scoring high on this scale are oriented to actualize their own needs and wishes—that is, they seek to fulfill themselves first, worry little about the impact of their behavior on others, and tend to be both independent and egocentric.

Nurturing. Persons scoring high on this scale are motivated to meet the needs of others first—to attend to other people's welfare and desires at the expense of themselves. They are seen as nurturant and protective, taking care of others before taking care of themselves.

Cognitive Modes

Extraversing. Persons scoring high on this scale turn to others to find stimulation and encouragement. They draw upon friends and colleagues for ideas and guidance, inspiration and energy, as well as garnering assurances of self-worth from them and taking comfort in their presence.

Introversing. Persons scoring high on this scale prefer to use their own thoughts and feelings as resources, gaining inspiration and stimulation primarily from themselves rather than from others. By contrast with extraversers, introversers experience greater serenity and comfort by distancing themselves from external sources, preferring to heed the prompting that comes from within.

Brief Definitions of MIPS Scales (continued)

Sensing. Persons scoring high on this scale gather their knowledge from the tangible and concrete, trusting direct experience and observable phenomena over the use of inference and abstraction. The practical and "real," the literal and factual are what give these individuals comfort and confidence.

Intuiting. Persons scoring high on this scale prefer the symbolic and unknown to the concrete and observable. They are open to the intangibles of life and are inclined to seek out and enjoy the more mysterious experiences and speculative sources of knowledge.

Thinking. Persons scoring high on this scale prefer to process the knowledge they have by means of logic and analytic reasoning. Decisions are based on cool, impersonal, and "objective" judgments, rather than on subjective emotions.

Feeling. Persons scoring high on this scale form their judgments by heeding their own affective responses to circumstances, by evaluating subjectively the impact of their actions upon those involved, and by following their personal values and goals.

Systematizing. Persons scoring high on this scale are highly organized and predictable in their approach to life's experiences. They transform new knowledge in line with what is known and are careful, if not perfectionistic, in arranging even minor details. As a result, they are seen by others as orderly, conscientious, and efficient.

Innovating. Persons scoring high on this scale are inclined to be creative and to take risks, ready to alter and recast whatever they come upon. They seem discontented with the routine and predictable, spontaneously modifying what is given by following their hunches and seeking to effect novel, unanticipated consequences.

Interpersonal Behaviors

Retiring. Persons scoring high on this scale are characterized by their lack of affect and their social indifference. They tend to be quiet, passive, and uninvolved; they may be viewed by others as quiet and colorless, unable to make friends, as well as apathetically disengaged.

Outgoing. Persons scoring high on this scale seek social stimulation, excitement, and attention. They often react dramatically to situations around them, but, typically, they lose interest quickly. Colorful and charming socialites, they also can be demanding and manipulative.

Hesitating. Persons scoring high on this scale are usually shy, timid, and nervous in social situations, strongly wanting to be liked and accepted, yet often fearing that they will be rejected. At the same time that they are sensitive and emotionally responsive, they are mistrusting, lonely, and isolated.

Brief Definitions of MIPS Scales (continued)

Asserting. Persons scoring high on this scale tend to feel that they are more competent and gifted than the people around them. They are often ambitious and egocentric, self-assured and outspoken. Others may see them as arrogant and inconsiderate.

Dissenting. Persons scoring high on this scale tend to act out in an independent and nonconforming manner. They often resist following traditional standards, displaying an audaciousness that may be seen either as reckless or as spirited and enterprising

Conforming. Persons scoring high on this scale are likely to be upstanding and self-controlled. They relate to authority in a respectful and cooperative manner, tend to behave in a formal and proper manner in social situations, and are unlikely to be self-expressive or to act spontaneously.

Yielding. Persons scoring high on this scale are their own worst enemies: They are accustomed to suffering rather than pleasure, are submissive, and tend to act in self-demeaning ways. Their behavior renders ineffective the efforts of others to assist them, and causes the yielders to bypass opportunities for rewards and to fail repeatedly to achieve despite possessing abilities to do so.

Controlling. Persons scoring high on this scale are forceful and often domineering and socially aggressive. They tend to see themselves as fearless and competitive. To them, warmth and gentleness are signs of weakness, which they avoid by being strong-willed and ambitious.

Complaining. Persons scoring high on this scale are characterized by their tendency to be passive-aggressive, sullen, and generally dissatisfied. Their moods and behavior are highly changeable: At times, they relate to others in a sociable and friendly manner; on other occasions, they are irritable and hostile, expressing the belief that they are misunderstood and unappreciated.

Agreeing. Persons scoring high on this scale tend to be highly likeable socially, often relating to others in an amenable manner. They form strong loyalties and attachments to others. They cover any negative feelings, however, especially when these feelings may be viewed as objectionable by the people they wish to please.

Millon, T. (1994) Millon Index of Personality Styles-Manual. San Antonio, USA: The Psychological Corporation-Harcourt, Brace and Company.