THE SCOPE OF DEPERSONALISATION SYNDROME AND THE PSYCHOMETRIC MEASUREMENT OF DEPERSONALISED EXPERIENCE

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SECTION A

PREFACE

It is my belief that there are two basic ways of delivering empathy during therapeutic contact: the first being the sharing of the understanding of environmental *precipitants* of a problem with the patient and the second, sharing the understanding of the *subjective state* that the patient experiences. Psychologists tend to focus heavily on the former, and are expert in teasing out environmental causes and getting the patient to identify them as sources of current distress. Psychologists are less prepared, on the whole, to explore the second area, that of the problematic subjective state. Yet the more severe the psychopathology of a patient, the more complex the subjective state which accompanies the symptom.

As a trainee clinical psychologist, in the early 1970's, it occurred to me that most problematic *psychological states* were construed by practising psychologists as either anxiety or depression. At the same time, one was faced with a variety of presenting complaints, such as the complaint of 'dizziness', 'unreality feelings', unfocussed 'suspiciousness', flashbacks of traumatic past events and ominous feelings of 'impending doom', none of which fitted neatly into either the concept of 'anxiety' or 'depression'. It seemed to me that psychologists were attempting to squeeze all sorts of subjective reports of patients into an excessively narrow framework. Schizophrenia, for example, was considered to be primarily a disorder of 'hyperarousal' around the time of my clinical training. Undoubtedly, acute schizophrenic patients are hyperaroused, but the important question of whether the hyper-arousal was a major primary experience did not seem to be asked.

As a description of schizophrenia, the hyperarousal hypothesis seemed facile, to say the least. The current author observing attempts by a clinical psychologist to reduce the 'arousal'

of a schizophrenic patient by bio-feedback reinforced the point. The arousal level of the patient, who had several electrodes wired to his skin, increased considerably and maintained a high plateau. When asked afterwards about the bio-feedback session, the patient revealed his terror, believing that something was being pumped into him from the apparatus, a delusion not addressed by the attempted therapy.

Later the same year and trained only to recognise the states of anxiety and depression, I was taken aback by a distressed out-patient whose complaint was to 'feel nothing'. In a moment, I felt my various pre-determined lines of questioning slipping away. I found myself wondering whether it was possible to ask about 'nothingness'. In retrospect, I realised I was faced with a patient complaining of depersonalisation symptoms. At the time, I managed to splutter a few clumsy attempts at empathy, such as 'It must feel like being taken out of this world and put somewhere else', and was impressed by the spontaneous look of relief on the patient's face, because someone was trying to take her seriously.

This was the start of my interest in depersonalisation and its relation to dysfunctional states. With it, came the interest in phenomenology, as the science of subjective experience. Though cognitive therapists often describe their approach as 'phenomenological', on the grounds that what the patient *thinks* is the central focus of the assessment, cognitive therapy tends to pre-occupy itself with 'surface problems'. For example, practitioners of cognitive therapy tend to focus on the patient's concrete impressions of the outside world. But what about the quality of the patient's inner *feeling and sensation*?

For several years, I was left wondering whether or not there was a specific clinical culture, or theoretical approach, which embraced this personal curiosity. Several years later, I was fortunate to gain the acquaintance of acknowledged experts in phenomenology, particularly Professor Andrew Sims and Professor Christian Scharfetter. The latter introduced me to a

detailed account of ego-psychology, an approach in the tradition of Carl Jaspers, which helped in forming new ideas about depersonalisation, investigations of which form Section B of the thesis.

Subsequent discussions with Scharfetter became focused on the wider implications of ego-disturbance, including schizophrenia. As my post-qualification experience had widened to include contact with psychotic patients, I was intrigued by the consistently perplexed response of many florid schizophrenics to my question 'How are you?' Scharfetter supplied the answer: the schizophrenic patient may feel alienated from himself, disassociated, giving him the impression that there is no self, that he is not in charge of his actions, is controlled from outside himself, has metamorphosed into someone or something else.

It is little wonder such a simple question is so difficult for a person in such a position to answer. According to Scharfetter and his predecessors, the patient may not fully 'know' he exists and therefore has no stable point of reference from which to answer the question. For Scharfetter, the central feature of schizophrenia was the erosion of self-hood, leading to a diminished sense of 'I'.

Soon after this generous education, I was asked to head up a team delivering therapy to hospitalised acute patients, the topic of Section C. To some extent, I felt prepared, having been given the opportunity to learn a new means of understanding and of responding to florid schizophrenics. With some apprehension, the first of a series of psychotic patients were engaged in therapy, on an in-patient basis.

The positive response of our schizophrenic patients to collaborative and supportive exploration of inner awareness has been enlightening. Acute schizophrenic patients are now seen on a routine basis, three times a week during their admission, for sessions lasting about ten minutes each. With this approach, their response has often been moving, in that even the most

socially avoidant and withdrawn patients have tended to change and request further contact. During therapy sessions, the typical response has been for the patient to abandon a defensive physical posture, as soon as self-awareness problems are addressed. Eye contact has generally been established more readily and patients tend to show greater co-operation.

The shift toward meaningful engagement with disturbed schizophrenics (the material of Section D), was not achieved overnight, and was preceded by several months of training and discussion. The *inner* suffering is often more disturbing than the patient's interpretation of the environment. Yet few clinicians attend to this inner suffering, even though it does not demand elaborate resources to do so. Hence, the literature review of Section D is orientated around the psychological management of schizophrenia, with an emphasis on a structured approach to the psychotherapy of the patient's ego psychopathology. I am pleased to be able to back up the review with some practical examples of on-going clinical work.

Section C is a description of the wider in-patient project currently being undertaken. This section digresses from phenomenological issues, in that the assessment criteria for the project were centered on ward performance. The study is incomplete, but it seemed a timely opportunity to report the initial data and discuss the criteria, in addition to some of the psychotherapeutic procedures involved. Section C represents an interim report, illustrating the setting up of a new service, together with criteria which in the future, may provide us with valuable information about the impact of a specified in-patient psychotherapeutic regime.

Ideally, the optimal content of a doctoral thesis in Clinical Psychology should, in the author's view, be linked to on-going, 'hands-on' clinical work. The whole thesis therefore hangs together as a story, which reflects an autobiographical account of career progression. I am indebted to several educators who have given me a unique perspective. Professor J E Cooper and Dr Mark Averlyne from University of Nottingham, Professor Andrew Sims and Dr Philip Snaith

from University of Leeds and more recently, Professor Christian Scharfetter from University of Zurich. These are all psychiatrists, with a phenomenological and psychosocial perspective. In their various ways, they all demonstrated that amidst the confusion and hopelessness of complex problems, a wide variety of therapeutic opportunities are possible, by systematic investigation, in the context of empathic understanding. Clarification of elusive therapeutic targets is the skill shared by of all the above educators. I am often trying to put myself in their shoes when assessing a difficult clinical situation.

SECTION B

The scope of Depersonalisation syndrome and the psychometric measurement of depersonalised experiences.

ABSTRACT

The purpose of the research was to qualitatively and quantitatively define Depersonalisation phenomena, symptoms of which pervade many neurological and psychiatric disorders. The syndrome of Depersonalisation is a concept referring to a specific range of abnormal self-experiences. An item catalogue was constructed pertaining to Depersonalisation. The catalogue was subjected to empirical analysis, based upon the items elicited from samples of the general public.

Subsequently, a second item analysis was carried out on a reduced catalogue, using clinical probands. The ability of individual items to discriminate between criterion groups was determined, namely, depersonalised patients of various clinical status, and non-depersonalised subjects, the latter comprising patients and public controls. The major null hypothesis under investigation was that item and total catalogue scores obtained from probands and controls would bear no relation to the participants' depersonalisation status; thus, the items would be non-discriminatory and therefore invalid. Items which generated data firmly rejecting the null hypothesis at the $p = <.05$ level of significance were retained. The final scale is presented, together with the properties which have been established to date. The potential utility of the final instrument for clinical practice was critically examined. Also, some theoretical ramifications of the factor structure of the scale were discussed.

GENERAL INTRODUCTION

An overview of the Project

A major task of the mental health professions is to understand and conceptualise painful personal experiences endured by people with mental health problems. In the mainstream clinical psychology literature, the problematic states most cited tend to be 'anxiety' and 'depression', with 'anger' a close third. There are remarkably few other 'feeling quality' concepts explicitly discussed (see, for example, Lindsay and Powell, 1994). However, when carefully listening to patients' accounts of their various complaints, a greater diversity of inner experiences is clearly evident, even within the non-psychotic spectrum and therefore it is likely that a wider series of concepts need to be evolved.

The 'hydraulic models' of the human psyche which have been borne out of the psychodynamic perspective, have tended to portray distress as excessive pressure in the system (Mischel, 1993). Perhaps as a direct result, psychologists have tended, intuitively, to adopt the assumption that distress is the product of feelings and emotions of *excessive amplitude*. For example, there is a widespread implicit assumption that distress is, almost by definition, a state of intrinsic high arousal. In reality, that is not always the case - it is not uncommon for patients to complain of a *loss of amplitude* to their experience. One such complaint refers to a diminution in felt existence, know as depersonalisation, a common but surprisingly little-recognised altered state of consciousness.

The construction of measuring tools to identify difficult-to-recognise or little-known states can potentially help disperse knowledge of them in the field. Though there is a developing psychometry of the depersonalisation, this particular specialised area has far from been exhaustively researched. Providing the means to identify the problem area with a suitable

psychometric tool would enhance future meaningful investigation. Also, the development of a psychometric instrument with empirical properties gives an otherwise ambiguous problem area the extra credence required for it to be incorporated into everyday clinical culture and practice. Placing a 'new' problem area in the mainstream clinical domain in empirical fashion means that it becomes more orthodox and 'safe' to acknowledge, possibly with much benefit to afflicted patients.

This project aimed to develop a self-rating instrument, to identify and measure the established features of depersonalisation. To this end, a series of face-valid items was constructed and the catalogue was subsequently refined and reduced. The smaller number of selected items were used to discriminate between clinically defined depersonalised and non-depersonalised samples, these being the final criterion for the construction of the refined instrument.

It is widely acknowledged in clinical practice that depersonalisation has a number of manifestations and is multi-faceted (see, for example, Sims, 1995). Because of the *range* of associated symptoms, the problem area under scrutiny is often termed the 'Depersonalisation *syndrome*'. Depersonalisation syndrome is a phenomenological concept that refers to a feeling of detachment from the self, or from aspects of the external world. There is an impression of unreality, which is always unpleasant - part of the definition of depersonalised experiences is that they have an exclusively dysphoric, ahedonic tone. For example, patients complain bitterly that their emotional feelings are blunted, that nothing appears real any more, or that they go through the motions in an automatic, disinterested way. Life experience no longer has a normal 'flow' and existence loses its' sense of vividness. One young female patient seen by the current author once remarked, 'From the moment I get up, I don't feel me'. I just go through the motions. When I put my make-up on, it's as if I'm putting it on a different face, someone else's.'

Many authors have consistently observed various related experiences of disassociation over many years. Schilder (1933) reflected:

"To the depersonalised individual the world appears strange, peculiar, foreign, dreamlike. Objects appear at times strangely diminished in size, at times flat. Sounds appear to come from a distance. The tactile characteristics of objects likewise seem strangely altered, but the patients complain not only of the changes in their perceptivity but their imagery appears to be altered. Patients complain that they are capable of experiencing neither pain or pleasure; love and hate have perished within them. They experience a fundamental change in their personality, and the climax is reached when they complain that they have become strangers to themselves." (Schilder, 1933).

Such descriptions, both from patients and clinicians who deal with them, give some indication of the elusiveness of the syndrome. The experiential aspects of the state are obscure and complex. There are no behavioural features specific to the syndrome which might be used to pin-point the psychopathology more exactly. Therefore the clinician is almost totally dependent upon the patients' introspective self-reflections and, as many authors point out, patients struggle to put their depersonalised state into words (see, for example, Torch 1994).

Depersonalisation as a normal reaction

Depersonalisation is both a human experience and a diagnostic concept. Diagnostic systems in psychiatry tend to be pragmatic in acknowledging that many people experience mild forms of various symptomatic states, to an extent limited enough to fall outside of psychopathology. The diagnostic manuals cope with this by excluding individuals who exhibit symptoms which are of insignificant severity, duration, or disruption to people's lives and/or sense of well-being. An obvious example comes from symptoms of anxiety. We are all familiar with

what it is like to be anxious, but relatively few people are diagnosed at any one time as being *clinically* anxious. That is largely because most of us experience anxiety within certain limits. Furthermore, much anxiety experienced by the population at large is transitory and is regarded as adaptive, since it occurs in response to realistic danger.

Similarly, not all experiences of unreality are regarded as requiring clinical intervention. Transitory unreality experiences are reported by about a third of the general population (Dixon, 1963; Trueman, 1984). Young people in late adolescence and early adulthood are particularly prone (Trueman, 1984; Torch, 1997). Epidemiological studies of depersonalisation within the non-clinical population have been carried out, mainly using student samples. An early author who attempted to measure depersonalisation in a non-clinical sample was Dixon (1963), using his 'Self-Alienation Scale'.

Dixon (1963) highlighted that depersonalised experience was not a phenomenon restricted to dysfunctional psychiatric patients; it could also be viewed as a normal experience in everyday life, particularly among the young. Later studies from America confirmed the occurrence of depersonalised experience in roughly one in every three students (Torch, 1987). These later studies used stricter criteria of depersonalisation experiences, since the content of the surveys was influenced by the clinical criteria of a recognised diagnostic framework, in this case, DSM IV (APA, 1994).

These later epidemiological surveys confirmed Dixon's (1963) conclusion that around a third of university students have experienced depersonalisation to some degree during their early adult years. The effect of prevalence studies was to normalise depersonalisation to some extent, in acknowledging that the depersonalised state was not *only* the domain of psychiatric patients. Given the high prevalence of these experiences amongst the general public, it is surprising that depersonalisation as a *social* phenomenon has rarely been discussed. There may be grounds for

construing the condition in social and sociological terms, since the state may have ramifications for the social behaviour of depersonalisation-prone groups, particularly within the youth of society. It is rarely asked whether depersonalised individuals tend to gravitate towards each other in the sociometric sense, nor whether depersonalisation generates specific behaviours in the social context, by individuals or groups.

Fewtrell (1980), in a collaborative international study on student unrest, suggested tentatively that predictors of campus unrest may lie in levels of communal, campus depersonalisation, rather than in the individual variables of 'anxiety' or 'depression'. These latter two 'state' variables have frequently been used to 'explain' a diversity of disruptive social behaviours, but their relationship with disruptiveness is weak. Neither can student unrest be attributed to a progressive social response to conservative politics. There is not a demonstrable relationship between, for example, the occurrence of student riots and reactionary government, when both are variously defined. However, speculation about the relationship between 'collective depersonalisation' and 'social unrest' remains empirically uninvestigated. It is not known whether depersonalised experience is of significance in fuelling anarchistic patterns of political objection, whatever the political persuasion of the pressure group or its aims.

The incidence of depersonalisation in student samples is controversial. It has been suggested that depersonalised individuals tend to be of above average intelligence (for example, Schilder, 1933; Sedman, 1970). However, others have pointed out that the experience is so obscure that only the relatively more articulate are able to report it accurately (e.g., Fewtrell, 1986). It is likely that only a few mental health clinicians enquire about the presence of depersonalised experiences in a particular patient, unless the patient reports corresponding experiences of unreality or automatism. Therefore in all probability, the problem remains unidentified in patients who do not report the symptoms spontaneously and remains unidentified in members of the wider general public.

The possible function of 'normal depersonalisation'

With parallels to the fight-or-flight role of anxiety, the question has been asked about the possible adaptive qualities of depersonalisation. The state has been viewed as a defence mechanism in normal subjects, to guard against the impact of stress by reducing the feeling tone in the face of calamity. This theory was first put forward by Mayer-Gross (1935), who compared it to the 'death mimic response' in animals, that is, a reaction of complete motionlessness when confronted with inescapable danger. In the case of depersonalisation in humans, it is the feelings which are frozen, rather than locomotor activity.

The theory has substantial support from the everyday life experience of normal subjects. Feelings of unreality are very common during hazardous moments of every-day life. For example, Mayer-Gross et al (1969) describe acute depersonalisation described by a psychiatrist, who was involved in a road traffic accident on his way to work:

"The man in question was driving at some speed on a wet road surface and as he cornered fast the car skidded. He immediately experienced a dream-like detachment and found himself steering mechanically and aware of his actions as if he were contemplating some unfortunate victim from a distance. After spinning round several times and narrowly avoiding oncoming traffic, the car finally came to a halt facing in the opposite direction. The driver felt quite calm but when bystanders spoke to him their voices seemed muffled and the surrounding countryside still, remote and unreal. His own voice sounded unfamiliar. He drove on feeling quite calm, arrived at his clinic and rang for his first patient. As the patient entered the psychiatrist's depersonalisation suddenly lifted and he became aware that he was perspiring and trembling severely and his heart was pounding at a rapid rate." (Mayer-Gross, Slater and Roth, 1969, page 121)

The relationship between unreality feelings and anxiety is currently unclear, due to its complexity and the lack of adequate research. On the one hand, depersonalisation may protect against excess anxiety. However, depersonalised experience can in itself be highly distressing (for example, Sedman, 1980; Sims, 1995). Interestingly, some chronically depersonalised patients have described *getting relief* from their depersonalised symptoms when exposed to hazardous conditions. By implication, these patients prefer the anxious state. Shorvon (1946) recorded several examples of the syndrome in Europe, during World War II. In one case, he made the following observations:

"One young man had been almost continuously depersonalised for eight years. He said he felt worse when relaxed and all right if occupied. He supposed he was the only person who would welcome, for instance, a fire as the excitement would relieve his symptoms. The happiest period of his life was when the Gestapo were after him and he was hiding or moving about, living on wheat ears or dry meat. He was symptom-free then." (Page 41).

Depersonalisation and heroism

Documented acts of courageousness in the face of life-threatening circumstances have been evident throughout the ages. The psychology behind carrying out altruistic acts at considerable risk to life and limb is rarely considered. Some descriptions of self-experience during acts of great courage suggest that intense fear capitulates to an entirely different state, in which the subject is essentially fearless or emotionally inert. This reaction is described in detail by several authors, who have interviewed war heroes retrospectively (see, for example, Noyes and Kletti, 1976).

The ramification of these observations is that there is a case to be argued that depersonalisation can be viewed as an adaptive response, perceptually distancing the unfortunate subject from the terror of the immediate circumstances. The adaptive effect, which may have

survival value, is the possible enhancement of coping strategies, by reducing the vividness of the hazard. The distraction of over-powering emotion, or of attending to the danger rather than the task of survival, could reduce the ability of the subject to cope. Therefore an emotional 'freeze' on the imminent crisis, through the mechanism of depersonalisation-type experiences, may aid individual performance to survive. According to Meyer-Gross et al (1963), optimal survival characteristics are maintained by keeping the attentional channels free of the potentially crippling effects of catastrophisation, as a means of reducing the chances of annihilation.

One thing that is clear in such examples of the so-called 'normal depersonalisation' phenomena is that the state serves a regulatory function in some individuals, when finding themselves in a desperate situation. As a response to an abnormal and life-threatening situation, acute depersonalisation may block experiential cues originating from the sympathetic autonomic nervous system, so that the subject's attention and performance is devoted to coping with the hazard, whether it be driving skills during a road traffic accident or defending oneself against the enemy during wartime.

Depersonalisation in unusual, ostensibly non-traumatic situations

Situations in which depersonalisation is precipitated by over-stimulation have been briefly examined above, such as intense fear, fatigue and calamity. It appears that depersonalisation is also associated with *under-stimulating* conditions, such as sensory deprivation (Sedman and McKenna, 1973). A particularly interesting under-stimulating environment reported by Sours (1965) was the milieu of the 'high-altitude' aviation pilot, on solitary flights in the 1960's, by which was meant the experience of flying above 13,000 feet and often, at altitudes much higher, up to 80,000 feet. In high altitude solo flying 30 to 40 years ago, the pilot had little to do, since climatic conditions are more stable, other air traffic was rare and visual contact with the ground in cloudless conditions becomes much less interesting. In a study of 37 pilots who had experienced distress at high altitude, Sours (1965) found that the major sources of psychological

discomfort were feelings of isolation, visio-spatial disorientation and out-of-body experiences, sometimes associated with over-elation and sometimes with fright.

Sours termed such feelings the 'Break-off Phenomena'. In many cases, flying performance was reduced. Nearly half of the sample was found to have anxiety or personality problems prior to these 'break off' experiences and therefore proneness to distress during 'high altitude' flight could be predicted by unstable pre-morbid traits. Sours suggested that other workers in solitary, uneventful conditions, such as overnight freight drivers, sea-farers and radar operators, are not prone to the same phenomena because of the maintenance of vigilance, which he suggests is an essential deterrent to the 'break-off' reaction. Though altitudes have increased in today's commercial and military flying, pilots have more contact with the ground, more traffic to contend with and a great deal more cockpit information to attend to. Therefore the increased stimulation for the pilot, coupled with lower flying time due to greater speeds (and presumably, more efficient screening of pilots) means the prevalence of 'break-off' has probably diminished in commercial and military flying. Publications in this area are not common and may suggest that the topic is often classified as militarily or commercially sensitive.

Depersonalisation and manipulated altered states

The term 'detachment' is often used to describe depersonalisation, but that is not to say that all forms of detached experience are dysphoric or maladaptive. The ahedonic tone of depersonalisation distinguishes the experience from the sought effects of meditative states, in which there is also emotional detachment, but accompanied by a heightened aesthetic awareness. Successful participants of Transcendental Meditation often report the experience of increased receptivity to colour, form and sound, coupled with an internal atmosphere of detachment and inner peace. Interestingly, the casualties of Transcendental Meditation, of which there are significant minority, are almost invariably distressed because of diminished self-experience. Rather than inner peace, there is an eerie silence (Kennedy, 1976).

It has frequently been observed that states of unreality are associated with certain types of drug-induced experiences, including illegal or 'street' drugs. For example, there is a clear association between cannabis intoxication and feelings of unreality, including the impression of detachment from self (e.g., Gossop, 1982). Rather than deter advocates of cannabis use, these experiences of detachment are considered appealing, as exemplified by those who describe themselves, with apparent satisfaction, as being 'spaced out' during a cannabis 'high'. The lack of distress would imply the absence of clinical depersonalisation and the example illustrates the subtle distinction and overlap between a clinical problem and a leisurely pursuit. As with meditation, many of the 'casualties' of cannabis ingestion present with distress stemming from *unpleasant* experiences of detachment (Moran, 1986). What makes the experience pleasant or unpleasant may rest on the subject's interpretation placed upon the experience rather than its primary quality.

Depersonalisation in drug-induced agoraphobia and panic attacks

Both Szymanski (1981) and Moran (1986) have noted a link between prolonged depersonalisation and cannabis use. Moran studied a series of six agoraphobic patients, in whom the onset of depersonalisation coincided with marijuana intoxication. Of these six Australian participants, all subsequently developed anxiety states. The study drew attention to unintended drug-induced effects in the users, who subsequently became phobic and avoidant of situations, amounting to moderate to severe agoraphobia. In all but two cases, the subjects, who had become psychiatric out-patients at the time of the study, were incapacitated to the degree that they were no longer functional in their usual life-styles, including employment, despite avoiding the drug since the onset of their symptoms. As Moran pointed out, the majority of her subjects felt detached and distanced from their environment and from themselves during acute drug intoxication. Such experiences persisted into the phobic stage, implying that depersonalisation may have been implicated in the development of the clinical picture.

Normal and abnormal depersonalisation re-visited

The reader will no doubt deduce that there are many precipitants of the depersonalised experience and that some manifestations of the experience provide a positive advantage to coping. Other manifestations are maladaptive and are associated with severe dysphoria. It is only the latter, usually characterised by chronicity, which give rise to depersonalisation of diagnostic proportions. It is clear, from several of the above examples, that feelings of detachment per se are not diagnostic of clinical depersonalisation. Some forms of detachment are enjoyable and appear to increase the sense of well-being and therefore by definition, such states do not amount to the depersonalised state. The absence of dysphoria is the excluding factor. Even when experiences are present which amount to depersonalisation, they do not necessarily qualify as reaching diagnostic or pathological status. Transitory detachment experiences are often linked to moments of extreme trauma or calamity and the accounts of people so disposed suggest a calming, protective function, which may enhance coping ability. There may therefore be justification for dichotomising depersonalisation into normal and abnormal forms, based on whether the immediate effect of the state produces distress or relief.

Another distinction between normal and abnormal forms of depersonalisation is based on frequency, severity and duration, rather than simply upon presence or absence of the mental state in question. In the clinical context, the distinction is usually made very easily between those patients with prominent depersonalisation and those who do not exhibit the phenomena significantly. The boundary between normal and abnormal depersonalisation is a complex one, partly judged by the context in which the depersonalised experience occurs. It is, of course, unreasonable to classify any adaptive state as abnormal. Also, clinicians are pragmatic and tend to focus on symptoms which cause appreciable discomfort. Therefore if patients exist who have habituated to their depersonalisation, clinicians are likely to ignore it as a feature of the psychopathology and de-emphasise its significance.

Clinical criteria of abnormal Depersonalisation

The Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM IV), describes Depersonalisation Disorder as "characterised by a persistent or recurrent feeling of being detached from one's mental processes or body that is accompanied by intact reality testing" (DSM IV, page 477). To reach diagnostic status, clinical depersonalisation has to be distressing and relatively enduring. DSM IV stipulates that the state is clinically significant only when it is persistent or manifests as recurrent episodes.

The DSM system classifies depersonalisation syndrome as a *'Dissociative state'*, accompanied by sufficient insight to judge that it is the beholder's experience that has changed, not aspects of the beholder's environment, nor his/her autonomy (APA, 1994, page 488). According to DSM IV, "The essential feature of the Dissociative Disorders is a disruption in the usually integrated functions of consciousness, memory, or perception of the environment. The disturbance may be sudden or gradual, transient or chronic" (page 477).

In contrast to the United States DSM system, the current World Health Organisation system, ICD 10 (WHO, 1996) classifies depersonalisation phenomena under '*Other Neurotic Disorders'* and excludes the syndrome from dissociation. All the dissociative categories outlined and defined by ICD 10 are dysfunctional states in which the subject does not attribute the cause of the symptom to *an aspect of self.* For example, hysterical fugue state is characterised by 'sudden travel, in an altered state, with no recall by the subject of how he/she got there'. In another dissociative disorder outlined by ICD 10, hysterical conversion symptoms, a limb or other biological function becomes incapacitated, with no detectable underlying organic pathology. Though rare nowadays, conversion symptoms are viewed as serving to extricate patients from unbearable obligation, though the patient does not acknowledge this and totally lacks insight. Usually regarded as a primitive defence mechanism, conversion symptoms and fugue are a means

by which escape from an unbearable situation is facilitated.

In Multiple Personality Disorder, another dissociative phenomena, there is said to be an adoption of more than one separate identity, so that there is discontinuity of a single integrated personality structure. There are often grossly altered social behaviour patterns across time, and large gaps in recall involving autobiographical details (for example, Sims, 1995). Unlike DSM, the ICD system does not place depersonalisation in the same category as multiple personality, and as a result, in the ICD system, no overlap with multiple personality is implied.

Depersonalisation is included in a small section of the standardised Psychiatric State Examination (PSE), which was developed within the general paradigm adopted by the ICD/WHO classification system by Wing et al (1974). There are two questions, which become the basis of a semi-structured interview, responses to which are scored 0, 1 or 2, depending on severity of each symptom. **A positive diagnosis is made if subjects score 1 or more, out of a total of 4 points. The** first question pertains to derealisation, and the second, to depersonalisation, as detailed below:

1 Have you ever had the feeling recently that things around you were unreal? (as though everything was an imitation of reality, like a stage set, with people acting instead of being themselves? What is it like? How do you explain it?)

2 Have you yourself felt unreal, that you were not a person, not living in the real world? (or that you were outside yourself, looking at yourself from outside? Or that you look unreal in the mirror? Or that part of you did not belong to you? How do you explain it?)

In ICD 10, there are no specific behavioural signs associated with the two symptoms, since the syndrome refers solely to a subjective experience with no particular behavioural sequelae.

Depersonalisation - symptom or syndrome?

A syndrome can be defined as 'a cluster of symptoms that occur together and can be taken as indicative of a particular disease or other abnormality' (Reber, 1995). The term 'syndrome' therefore refers to a group of characteristics which exhibit concomitance, and are considered *pathogenically related* to the same core dysfunction. Though the term syndrome has been used recently in the context of depersonalisation, Sedman (1970), amongst others, raised doubts that there is an insufficiently strong constellation of symptoms in depersonalisation to justify use of the term syndrome. Earlier, the question of whether depersonalisation can truely be called a syndrome has received serious attention from psychopathologists such as Shorvon (1946) and Roth (1960), who concluded that there is a sufficient diversity of distinct features, which co-vary, to justify the term. The notion of 'depersonalisation syndrome' has tended to stick, the features of which are listed below.

The major features of the depersonalisation syndrome

Depersonalisation as a syndrome began to be broken down into various sub-types in the 1930's, when Mapother (quoted as a 'personal communication', in Meyer-Gross, 1935) distinguished between a feeling of detachment from the self, and an associated change in the awareness of the outside world, which may appear unreal and unfamiliar. This change in inner and outer awareness corresponds to *depersonalisation* and *derealisation* respectively. Later, the term *desomatisation* was added, referring to a feeling of alienation from the physical self, as if the body does not belong and is not part of the subject. The list is not exhaustive. For example, Sedman (1970) uses the term *devisualisation* to described experiential detachment from seen stimuli (though to the current author, devisualisation forms a major component of derealisation and seems unnecessarily specific for current purposes). Professor Andrew Sims proposed the additional concept of *de-affectualisation*, in which subjects do not feel in touch with their emotions, even though objectively, their emotional responsivity is observable (Sims, 1994, personal

communication). The inclusion of de-affectualisation in the test specification reported below provided the opportunity to test whether or not the symptom was a valid feature of the depersonalisation symptom constellation.

De-affectualisation in Sims' sense of the term is distinct from psychopathy. While psychopaths are reported as having no feelings of remorse and little empathy or concern for others, de-affectualisation in the depersonalised sense is not accompanied by loss of moral integrity or concern for others. This is an important point, which separates depersonalisation phenomena from such emotions as callousness (Sims, 1995, personal communication). In de-affectualised subjects, the *feeling quality* of, say, concern for others may have diminished, but the concern itself remains intact at a cognitive level, determining the values and behaviour of the individual.

The four main symptom sub-types which subsequently informed the current research are summarised below.

Formal distinctions between symptomatic features of Depersonalisation syndrome

Derealisation	Feeling of detachment from the environment
Depersonalisation	Loss of identification with the self and its activities
Desomatisation	Loss of identification with the body
De-affectualisation	Detachment from current emotions

Dysfunctions with which depersonalisation syndrome is associated

There are a number of psychiatric and physical ailments with which depersonalisation phenomena are commonly observed, of both an organic and a psychogenic nature. Many fascinating questions remain unanswered, such as whether depersonalisation phenomena have primary or secondary status in relation to the other conditions that depersonalisation superimposes. When a depersonalised state is seen in association with known neuropathology, the depersonalised state is normally viewed as the secondary phenomena, generated by the neurological disorder (Sedman, 1970). Primary and secondary processes are easily distinguishable in such cases, when depersonalised experience is clearly observed only subsequent to the neuropathology, with the latter assumed to be causal. For example, when CNS lesions can be observed, and the onset of depersonalisation does not precede the lesions, it is assumed that the brain insult is primary in the aetiological chain. However, as Jaspers (1913/1963) pointed out, lesions as a 'causation' of a mental state is extremely difficult to explain, by virtue of the mystery shrouding the intervening processes whereby organic events are converted into experiential events. Highlighting the association between neuropathology and psychological symptoms leaves the aetiological link between organic factors and cognitive processes completely unexplained.

In other, non-organic symptom presentations, the temporal sequence of symptom-generation is not easily outlined either. This is particularly so with, say anxiety and depersonalisation - some case studies reviewed earlier portray acute anxiety as a trigger of a depersonalised reaction. Yet we also have to acknowledge that depersonalisation is itself anxiety-provoking, causing a series of maladaptive self-statements, or 'hot cognitions' which are catastrophising in nature, particularly fears of losing touch with reality or permanent loss of conscious awareness (see, for example, Moran, 1986; Fewtrell and O'Connor, 1995). Therefore, each case needs to be assessed differently and many examples exist in which there is a mixed picture of anxiety and depersonalisation, where it is impossible to say which condition caused the

other, since the patient reports an order of events which have become circular.

Depersonalisation syndrome has been observed with significant frequency in a number of conditions encountered by GP's, psychiatrists, clinical psychologists, neurologists and physicians, such as benzodiazepine withdrawal (Tyrer et al, 1983), the Capgras syndrome (Christodoulou, 1986) and the Cotard delusion (Ellis and Young, 1990).. Sierra and Berrios (1997) reflected that the syndrome has been associated with schizophrenia, depression, dizziness, anxiety, trauma, epilepsy, obsessional states, personality disorder and drug-induced states. Some of the main clinical pictures in which depersonalisation is often seen are given below, to provide the reader with an impression of how the syndrome relates to other forms of psychopathology.

Examples of other forms of psychopathology superimposed by depersonalisation

Depression

Many clinically depressed patients exhibit depersonalisation (Sedman and Reed, 1963; Sierra and Berrios, 1998). Both states are dysphoric and distressing. However, depersonalisation is clinically distinct from depression on both symptomatic and phenomenological grounds. Whilst depressive illness typically involves the biological sequelae of appetite loss, sleep disturbance, severe impedance of concentration, and irritability, none of these features are necessarily present in depersonalised patients, as the diagnostic manuals inform us. Also, whilst depression characteristically involves the feeling of low self-worth and excessive self-denigration, this particular cognitive style is not typical of depersonalisation (Schilder, 1963; Sedman, 1970).

Panic disorder

Depersonalisation is seen as a component of panic disorder (Cassano et al, 1989). For example, in DSM IV and ICD 10, depersonalisation is one of the characterising symptoms that load the diagnosis of panic disorder. Defining depersonalisation as a *component of the research*

criteria of panic, rules out investigations of the causal relationship between panic disorder and depersonalisation on tautological grounds, though investigation of the inter-relatedness of the various features of panic disorder remains theoretically possible. The integration of detachment experiences and panic attacks under the same diagnostic umbrella emphasises the relatedness of detachment and extreme arousal and/or perceived threat.

The Phobic Anxiety Depersonalisation syndrome (PADS)

Roth (1960) created the concept of PADS in order to emphasise the relatedness of depersonalisation and phobic states. Roth was particularly impressed by the obscurity of the relationship, but tended to see depersonalisation as a defence mechanism, to protect the individual from undue activity of the sympathetic nervous system. The implication is that anxiety is the primary process, which elicits subsequent subjective detachment, to protect the person by bringing about apparent emotional equilibrium.

Post-traumatic stress disorder (PTSD)

Depersonalisation is a symptomatic feature of PTSD, according to both major diagnostic manuals. Despite the protective function of depersonalisation proposed by Mayer-Gross (1935), Mayer-Gross et al (1969), Roth (1960) and others, recent research suggests that prominent dissociative experience during exposure to trauma is a bad prognostic indicator of future PTSD symptoms. For example, Griffen et al (1997) found a positive relationship between dissociation during rape and future onset of PTSD. The quality of the dissociation itself corresponded to depersonalisation phenomena. Such findings cast doubt on the protective circumstances of depersonalisation in the long-term, and it has been suggested that the state may interfere with cognitive-emotional processing which assists recovery (Shalev et al, 1996; Griffen et al, 1997).

Borderline Personality Disorder (BPD)

Borderline personality has received an increasing amount of attention recently, partly due to the gradual realisation by cost-conscious service providers in the mental health field that BPD accounts for a significant number of acute admissions and parasuicides (see, for example, Linehan, 1993). Feelings of unreality and lack of self-authenticity are typical of BPD (Scharfetter, 1995). Patients with a diagnosis of BPD often report desperation in feeling emotionally numb and unfamiliar with themselves.

Organic pathology

Experienced clinicians who comment on the presence of depersonalisation in patients exhibiting neuropathology show concensus in observing the syndrome in mild CNS dysfunction (for example, temporal lobe epilepsy and discrete lesions), but note the absence of the syndrome in severe head injury or severe cerebral anoxia (see, for example, Sedman, 1970). The reason for the exclusion of the syndrome in gross neuropathology may be that in order to experience depersonalisation, the subject needs to be sufficiently neurologically intact to introspect. Recent neuro-imaging techniques have helped identify specific CNS foci, including the pre-frontal cortex and the limbic system (Sierra and Berrios, 1998), often in the absence of brain injury.

Schizophrenia

Depersonalisation has been frequently noted in association with schizophrenia, noteably by Langfeldt (1960), who claimed that some delusions can be traced to depersonalisation phenomena. Langfeldt and other earlier authors had gone as far as focussing on depersonalisation as the central mechanism of the schizophrenic process, including Melanie Klein (1946). As a result of speculation, depersonalisation became an important topic around the 1950's and 60's, because the syndrome was suspected be the core pro-dromal state, prompting a schizophrenic episode.

Langfeldt (1960) suggested that depersonalisation was linked directly to first rank symptoms of schizophrenia, as a passivity phenomenon. In other words, Langfeldt appeared to suggest that depersonalisation experiences were *an intrinsic part of the psychosis.* However, it should be noted that a few years earlier, German-speaking phenomenologists were emphatic that schizophrenic and depersonalised ego disturbances could be clearly distinguished from each other, even in the same patient (Meyer, 1956). The major diagnostic manuals explicitly differentiate between depersonalisation and psychotic phenomena by excluding the diagnosis of depersonalisation when psychotic features are observed, and conversely, ruling out the presence of a psychosis if depersonalisation occurs on its' own, as a single stand-alone feature.

Coupled with the fact that most depersonalised subjects do not develop schizophrenia, the depersonalisation hypothesis of schizophrenia never looked very convincing. Nonetheless, depersonalised experiences are thought to flavour the content of delusions, for example, in generating nihilistic delusions in depressive psychosis (Ackner, 1954). Concerning schizophrenia, Sedman (1970) has pointed out that: 'There is ample evidence that depersonalisation as a symptom occurring in schizophrenia , but this cannot lead to the assumption that depersonalisation is a 'forme fruste' of schizophrenia' (page 11). Similarily, anxiety is also present in schizophrenia, but it is not considered to be of central significance to the schizophrenic process. Nevertheless, it remains open to speculation whether extreme anxiety about 'going mad' can exacerbate a developing psychosis.

Side effects of medication

Though medical side-effects are not usually regarded as 'illness', they are important in that they may discourage the patient from collaborating in treatment and to discontinue medication. Whether or not non-compliance is a major problem depends upon the effects treatment cessation has on the patient's mental state on withdrawal from the regime. In much of Western Europe and the United States, it has become social policy to

adopt the 'community care' model for chronic psychotic patients, especially schizophrenics, who comprise approximately one in a hundred of the population. The Community Care model relies heavily on monitoring patients in the community and ensuring regular ingestion by psychotic patients of their anti-psychotic medication. Non-compliance can have devastating results, either for the patient or his family.

There is a clear relationship between non-compliance and extended duration of treatment for all medical treatments (Sackett and Snow, 1979). Unfortunately, most schizophrenic patients are prescribed long-term maintenance treatment. One of the known side-effects of anti-psychotic medication is depersonalised experience and this is particularly true of the traditional phenothiazines often used to manage psychotic disturbance (see, for example, Sedman, 1980). Depersonalising side-effects may be a major source of non-compliance of schizophrenics living in the community, with costly results, which may include avoidable re-admission to hospital. One implication is that measures of depersonalisation could be used in the investigation of unpleasant side-effects and non-compliance.

The changing importance of depersonalisation through the century

Since depersonalisation was identified by name by Dugas and Moutier (1911), interest in the condition has fluctuated. It was the subject of intense psychoanalytic speculation in the 1940's and 1950's. Psychoanalytic writers are largely responsible for equating the condition with schizophrenia, which probably explains the burst of interest in the topic during 1960's. Though clinicians' fascination with the disorder began to diminish as it became clear that the it was unlikely to be the key process variable of severe mental illness, interest in the disorder this side of the Atlantic received a boost during the early 1980's, when there appeared to be a vogue within psychiatric circles to look at exotic and rare delusional syndromes, such as the Capgras and Cotard syndromes. Phenomenological research suggested that depersonalisation may have a strong role to

play in shaping the content of such delusions (see for example, Wright et al, 1993). There has also been a revival of interest in the United States, for other reasons, particularly following developments in the measurement of dissociative conditions, particularly the development of the Dissociative Experiences Scale (Bernstein and Putman, 1986).

THEORETICAL PERSPECTIVES ON DEPERSONALISATION

1 Psychoanalytic models

The idea of depersonalisation as providing some kind of protective mechanism has given rise to more than one model. Whilst Meyer-Gross et al(1963) attributed an acute depersonalised reaction to intolerable external stimuli, the psychoanalysts emphasised its' function in protection from intolerable stresses *within the personality structure.* For example, Sarlin (1962) viewed depersonalisation as a defence against aggressive drives arising from the id. According to Sarlin, the perceptual scope of the individual is restricted and emotionality is truncated, in order that the superego is able to regain control and moderate the psychological field. Stamm (1962) suggested that depersonalisation is a manifestation of regression to the oral phase, in which everyday concerns are suspended and replaced by a desire to return to the nurturant and protective mother. The regression was considered by Stamm to be a response to both aggressive and libidinal urges, as they arise out of the unconscious to conscious awareness.

There are some difficulties of integrating psychoanalytic writings to form a representative opinion on depersonalisation, since different authors may have adopted a different definition of the concept. As Sims (1995) has pointed out, inconsistencies in definition are likely to have arisen due to the psychoanalysts' pre-occupation with the concept of alienation of the psychodynamic ego, rather than describing the actual experiential phenomenon of depersonalisation itself. A good

example of this shortcoming is provided by the psychoanalytic writer, Oberndorf (1950). Deja vu, the impression of familiarity in unfamiliar situations, has sometimes been observed in association with depersonalisation. This prompted Oberndorf to construe 'deja vu' and depersonalisation as interchangeable concepts, a view not echoed by descriptive psychopathologists. Oberndorf proposed that depersonalisation phenomena have a regressive function in the face of novel (and therefore potentially threatening) situations. According to Oberndorf, an individual experiences a deja vu type of familiarity in new situations, as a means of obtaining reassurance that such situations have been encountered earlier, in the presence of a nurturant parent, and are therefore safe.

The problem with Obendorf's view is that deja vu is not seen in the majority of depersonalised cases, as Brauer et al (1970) demonstrated. In a sample of 84 depersonalised patients, Brauer and colleagues found only low correlations between depersonalisation or derealisation and deja vu. The correlations were .32 and .18 respectively. In the current author's opinion, depersonalisation, and particularly the derealisation counterpart is more closely related to *jamais* vu, the feeling of *unfamiliarity* in *familiar* situations. Deja vu does not fit well into the spectrum of depersonalisation symptoms, because the familiarity feeling is in some respects the polar opposite of alienated experience. In deja vu, the external world is described as having connotations it should not have, and is experienced as meaningful in an obscure, undifferentiated way, which contrasts with depersonalisation, in which previously meaningful situations are robbed of their usual emotional connotation.

2 Neurological models

Neuropathologists and neuropsychiatrists have occasionally commented on possible neuroanatomical changes, as a physical mechanism underlying some forms of abnormal emotional detachment. The most popular model relies on the notion of localisation of brain function, the

depersonalised state occurring when different parts of the brain carrying out different functions are unable to adequately communicate with each other. For example, Anderson (1988) considered a number of patients in which depersonalisation was precipitated by CNS lesions. By considering the specific location of lesions in the neurologically damaged depersonalised patients, Anderson speculated that depersonalisation was present when the pathways linking incoming sensory data with the emotional projection areas were severed, so that incoming stimuli were no longer imbued with emotional significance. Anderson cited a single case, in which depersonalisation occurred in a patient with damage to the posterior pituatry area.

The notion of inhibitory influences on normal conductance through neural pathways has gained in popularity. Recent evidence from Phillips et al (2000), largely supports the model proposed by Sierra and Berrios (1998), who argued that depersonalised experience could be defined neurophysiologically in terms of suppressed limbic system activity, caused by inhibitory influences emanating from the pre-frontal cortex. However, Phillips et al (2000) have added an interesting additional factor to the overall neurophysiological picture in depersonalised patients, by use of comparative studies. When presenting public controls, psychiatric non-depersonalised and depersonalised patients with neutral and aversive stimuli, depersonalised patients could be clearly distinguished from both other groups by neural activity within the insula. The insula is a deeply embedded paleocortical area overlapped by all lobes apart from the occipital, situated in the lateral sulcus, which is connected by numerous complex pathways to the thalamus and neocortex. In marked contrast to their non-depersonalised counterparts, not only did Phillips et al (2000) find reduced neural activity in the insula by depersonalised patients in the face of aversive stimuli, but also relatively more neural activity in the same area in response to neutral stimuli. The reverse findings were seen in both the non-depersonalised control samples.

There are always dangers in making giant leaps from the neurological to the psychological, because as Jaspers (1913/1963) warned, the two are different 'spheres of influence' and are not directly comparable. However, the preliminary data of Phillips et al (2000) raise an important speculative question concerning earlier observations, notably by Shorvon (1946) that depersonalised patients experience relief in stressful situations, that is, situations normally judged aversive by the general public. Could it be that: 1) increased neural activity of the insula translates into aversive emotion in all subjects? 2) in depersonalised subjects alone, insula activity is (paradoxically) raised in the face of orthodox, non-threatening stimuli, whilst being (paradoxically) blocked by stressful stimuli?

Pursuit of such empirical questions would require availability of sophisticated neurological measures to explore live neural activity within deep brain structures, whilst simultaneously monitoring depersonalisation and hedonic tone.

3 Psychophysiological studies

Lang (1979) outlined four criteria of anxiety, namely, feeling, thought, behaviour and physiology. The feeling quality of depersonalisation is unusual amongst problematic states, because of its relative absence. The thinking of depersonalised individuals, which often involves various degrees of catastrophisation, is discussed later. There do not appear to be any behavioural patterns specific to depersonalisation, but in the opinion of the current author, clues about the occurrence of depersonalised experience can be gleaned from the *rationale* a patient provides for their behaviour. An example is the relationship between self-harm behaviour and the thoughts which surround it. Unlike other patients who self-harm, depersonalised patients tend to do so to gain sensation, rather than carry out self-punitive, suicidal, or attention-seeking motives. With reference to depersonalisation, out of Lang's four components of psychopathology, physiological criteria are perhaps the least known and most rarely reported.

Because depersonalisation is seen in a diversity of environmental situations and diverse intrapsychic conditions, it is sometimes viewed as one of those states which are difficult to pin down, in terms of its intrinsic nature. However, there is important, albeit limited information concerning the psychophysiological nature of the state. One interesting example is provided by Lader and Wing (1966). They were monitoring the heart rate and GSR output in a young woman prone to depersonalisation, when suddenly, the GSR readings went flat and remained so, represented in graphical form as a straight line. Concerned for her welfare, the investigators went to the adjoining room where the woman was lying on a couch, to enquire how she was, at which point she told them that she had suddenly begun to experience unreal feelings during the session and that the room seemed no longer to exist.

In another study, Kelly and Walter (1968) measured fore-arm blood flow in a sample of neurotic patients. Though the blood-flow volume of chronic anxiety cases was twice that of normal controls, the blood flow of seven depersonalised subjects in the sample was less than that of the control subjects. The data suggested that though anxiety and depersonalisation are often associated, they can be discriminated clearly by physiological as well as phenomenological criteria.

It would appear, then, that the depersonalised experience per se is a low arousal state, which fits with the frequently made observation that depersonalised episodes have a homeostatic role in regulating arousal in over-stimulated subjects. It would appear also that under-stimulation also produces similar feelings in unusual, unremitting circumstances, as reported by Sours (1965). When the evidence is taken as a whole, there appears to be considerable confusion, since the presence of depersonalisation in panic disorder is often described as a frightening experience in itself. It is likely that depersonalisation and anxiety occupy different positions in a phenomenological sequence, which is best examined by a combination of subjective and psychophysiological data, taken simultaneously.

Potentially, physiological data could be taken from ambulatory recordings, during normal day-to-day activities in which recordings are not intrusive and restrictive. The current author would suggest that in the case of panic disorder, depersonalisation lies sandwiched between two anxiety reactions - the initial panic reaction forms the precipitant of depersonalisation, which, once experienced, results in secondary anxiety as frightening feelings of unreality ensue. Such speculation is, to the author's knowledge, untested, but could be investigated empirically in panic disorder patients and those exhibiting Roth's 'Phobic Anxiety Depersonalisation syndrome' (Roth, 1960).

Studies currently being carried out at the Institute of Psychiatry, London suggest that depersonalised patients judge themselves to be emotionally unresponsive in the face of stressful stimuli (in this case, film of a shark attack), in marked contrast to controls, whether the latter are non-depersonalised obsessional patients or members of the general public. The findings were borne out by GSR measures, which illustrated that depersonalised patients maintained low physiological output both in response to a neutral film sequence and the stressful film sequence (Senior et al, 2001, in press).

4 The Phenomenological orientation

Phenomenology is a philosophical position that treats conscious experience as its core material. In that sense, it is the polar opposite of behaviourism; what goes on between stimulus and response, the intervening 'black box' of subjectivity, is the primary concern to the phenomenologist. Ostensibly, radical behaviourists regard such a commodity as abhorrent, fearing that the covert nature of subjectivity renders its study inexact and the subject matter of clairvoyants and other eccentrics (see, for example, Skinner, 1953). In the pragmatic realities of the clinical setting, there is more overlapping of the two disciplines than is immediately apparent. Subjective experiences can never be directly assessed, but are inferred from the self-description of

the subject and therefore the core material of phenomenological research is derived from the subject's verbal report, as well as the overt emotional sequelae that accompany this self-description, in the form of facial expression and subtleties of tone of voice. All these variables are special forms of behaviour.

However, when the respective *lines of enquiry* of phenomenology and behaviourism are compared in the clinical setting, there the similarity ends. Whilst in reality, both behavioural and phenomenological clinicians pay a great deal of attention to both the patient's description of his/her distress and the maladaptive coping behaviours which may ensue, the behaviourist will tend to go on to examine the environmental conditions which prompt or cue the distress. The phenomenologist, on the other hand, places less emphasis on the contribution of environmental factors and, undeterred from the pursuit of covert, subjective material, will more likely investigate inner, subjective processes which are linked to the 'surface' complaint (e.g., Straus, 1966).

Phenomenology and cognitive psychology

The role of the cognitive psychologist in the clinical setting lies somewhere in between behaviouristic and subjective psychology. Like the phenomenologically-minded clinician, the cognitive therapist is interested in the subjective processes of the patient. However, the focus of cognitive therapy is on the patient's thoughts in relation to distal events. Of particular importance to the cognitive therapist is the way in which the patient interprets his *surroundings and external circumstances*. The phenomenological therapist will often make a radical departure from this line of enquiry, searching for predisposing factors which may have generated this bias, originating within the changed *quality of consciousness* of the patient.

Behavioural and cognitively-orientated commentaries on depersonalisation are notably absent in the literature. The likely reason for the dearth of contributions from such 'scientifically-based' doctrines is that the link between clinical depersonalisation and environmental stimuli is at

best obscure. The depersonalised patient complains that his circumstances have changed, and whilst acknowledging that the external world appears different, attributes such changes to within himself. He does not complain of an abnormal world, but of his dysfunctional inner experience. In effect, he has correctly interpreted the world as being the same as usual, but complains, with total insight, that all seems different *because his inner experience has been altered.* This leaves some unimaginative cognitive-behaviour therapists with little material to work on.

Phenomenology and psychoanalysis

Depersonalisation is a manifestation of ego psychopathology, but the term 'ego' has little overlap with the classical psychoanalytic concept of the same name. The psychoanalytic concept is a theory-driven, abstract component of personality structure. The psychoanalytic ego mediates between the restraints of the superego or social conscience, the primitive, self- centred drives of the id, and the individual's need for instrumentality in interacting with the environment. In descriptive psychopathology, on the other hand, the term 'ego' is synonymous with self-awareness, as we know it in Western society (Jaspers, 1913/1963).

Phenomenology is not a particularly unified discipline, in that its various branches do not tightly relate to each other. On the one hand, *transcendental* phenomenology aims to maintain objectivity by attempting to eliminate the subjective bias of the observer. The overall aim of the transcendental branch is to attempt to move closer to objective reality, by eliminating personal biases which the observer inevitably brings along to any given situation, due to factors such as prior personal experience, expectation and other sources of priming of perception. In Spinelli's words, the transcendental approaches attempt to "..set aside conscious experience and arrive at a more fundamental approximation of 'what is'." (Spinelli, 1989, page xi). On the other hand, *existential* phenomenology is focussed on the inner world of the individual, or "..exploration of the potentials for freedom and the unavoidable limitations inherent in human beings' experience of themselves as beings-in-the-world." (Spinelli, 1989, page xi).

It is increasingly acknowledged by theorists of subjectivity that the way people make sense of the world is greatly influenced by background features of the mental state that are evident at the time. For example, it is now widely acknowledged that variants of mood state, such as anxiousness and depression flavour interpretation of what is happening around us. A process inter-twined with interpretation is attentional bias, in that, for example, an anxious person has a lower threshold for perceiving potentially threatening stimuli, whilst a person making an evaluation whilst angry is more likely to perceive the actions of others as provocative and hostile (Mathews and Macleod, 1994). Psychoanalytic writers have long claimed that the process variable involved is projection, in that the beholder of a socially unacceptable emotion tends to attribute the state to others rather than him/herself. A more popular contemporary explanation is that the emotional backcloth of a person at any given moment will act as *a primer of interpretation*, due to a readiness to perceive environmental situations in a manner congruent with the emotion. One explanation for this is that the content of thinking is itself greatly influenced by the selective availability of vocabulary, so that an angry subject, for instance, has more ready access to anger-charged words than when the same person is contented and relaxed (Mathews and Macleod, 1986).

As a general point, Scharfetter (1980), himself a phenomenological psychiatrist, argues that though the psychoanalytic concept of ego differs from its phenomenological namesake, the two are neither mutually exclusive, nor incompatible with each other. Whilst clinical phenomenologists concern themselves with descriptive analysis of disturbed conscious awareness, psychodynamic models are more concerned with possible aetiological mechanisms underlying the symptom. The currency of psychoanalytic theory is therefore different. Unconscious drives and the defence mechanisms resulting from them, are central to psychoanalytic formulation, but these areas are studiously avoided by the phenomenologically-minded. Formulation by the latter goes no further than conscious mechanisms, since they have a strong claim that there is so little known

about conscious experience, that resorting to unseen and unprovable models of unconscious existence is both premature and logically unsound. Binswanger (1963), in a critique of psychoanalysis, reflected:

'Unconscious desire is the vehicle whereby meaning and explanation in psychoanalysis are derived; in dream analysis, where a knife is said to 'mean' a phallus .....the conclusion that knife means phallus, presupposes that all meaning-direction emanates from a biological need. This ignores the possibility that these biological needs are themselves enmeshed in a larger meaning matrix.' (Binswanger, 1963, page 253).

As a branch of descriptive psychopathology, phenomenology concentrates specifically on conscious experience from an objective viewpoint, with no a priori theoretical assumptions. Phenomenology is data-driven, that is, observations are based on what the patient says. The practitioner of the school is primarily interested in constructing a picture of the patient's conscious experience and in this sense, phenomenology can be regarded as the science of consciousness. The data on which phenomenological observations are based are gleaned from rapport with subjects, particularly their first-hand accounts of experience and interpretations they make of the world around them.

Elements of the disordered self, specific to depersonalisation

Scharfetter (1980) regarded all depersonalisation phenomena as primarily forms of distorted *self*-awareness, even when the only presenting symptom pertained to perception of the external world. For example, when derealisation is the only feature of the depersonalisation syndrome present, he suggested that the experience is still generated by an unreal feeling pertaining to 'me'. Scharfetter (1980) purposed that:

"Depersonalisation and derealization go together because the ego and the environment

are really one. The less the patient takes himself for granted, the more unfamiliar and alien does the world around him become" (page 50).

Clinically depersonalised subjects feel they do not belong within themselves. They complain that they are out of touch with their own actions. They feel that their sense of 'being' has changed and that they do not exist in the way they used to know themselves. They invariably realise something has changed inside themselves. They feel something is missing within them, sometimes equating the circumstances to 'a fuse has being pulled out inside'. There is no vibrance to their experience of life. In severe cases, nothing seems life-like or authentic anymore. They feel their perception is altered, describing perception, for example, as 'somehow watered down' and question whether they are fully conscious or fully alive, now that their impressions of the world have diminished in vividness and character.

The Psychometric history to Depersonalisation phenomena

Various ways have been employed to screen for depersonalisation experiences, either by standardised, semi-structured interview or by self-rating scales. Most assessment procedures serve to determine the *present state* of each participant, though there are some procedures specifically designed to assess depersonalisation and related phenomena *retrospectively*. Retrospective scales have typically been used in PTSD research, to assess levels of dissociation previously experienced by trauma victims, during the trauma itself.

Examination of present mental state

The semi-structured interviews provided by the two major diagnostic manuals, representing the ICD and DSM systems, have widespread use within depersonalisation research. The specific interview procedures involved in the ICD system have been described earlier. Basically, the interviewer asks the patient leading questions and subsequently invites the patient to

elaborate, so that a diagnosis can be confirmed or ruled out. The advantage of a semi-structured interview is that it is flexible in allowing for spontaneity in the patient, and in that sense, is open-ended and exploratory, whilst at the same time, the interviewer has a standardised agenda. It is also useful in clinical situations where self-rating is impossible, due to distractibility, poor concentration or some other disability.

The disadvantages of interview ratings are firstly, that investigatory lines of questioning by the interviewer require considerable experience and training, which is not easily available. An important part of such training is the process of *ruling out the presence of other diagnoses,* so that training in the PSE interview (of ICD 10) tends to be necessarily global, however specific the future task of the trainee. Depersonalisation is a small corner of the spectrum of psychopathology covered in PSE training and usually receives only fleeting attention. On the basis of the training alone, clinicians may be poorly equipped to assess depersonalisation phenomena confidently, without further clinical experience. The manual guidelines to assess frequency, intensity and duration, on which a diagnostic decision is based, leave much to clinical judgment.

PSE training is carried out in the field, at accredited ICD training centres. The SCID-D (DSM-R) is the United States' equivalent of the PSE and has similar restrictions.

Assessment of 'Peritraumatic' dissociation

Peritraumatic experiences refer to subjective events which have previously occurred during a traumatic ordeal. Interest in the US, particularly related to PTSD arising in Vietnam war veterans, has resulted in the development of specialised semi-structured interviews to assess the degree of dissociation in life-threatening circumstances, in the Peritraumatic Dissociative Experiences Scale, Rater Version or PDES-RV (Marmar et al, 1994). The scale has been adapted for wider use, with rape victims, in the form of the Peritraumatic Dissociation Index or PDI (Griffen et al, 1997). Both teams of researchers were interested to establish whether subsequent,

chronic PTSD symptoms could be predicted by retrospective reports of higher peritraumatic dissociation, which appears to be the case. The PDES-RV and PDI are both derived from Bernstein and Putman's Dissociation Experiences Scale (see below). Examples of the PDI are:

'During the assault:

-Did you feel numb?

-Did what was happening seem unreal to you, as though you were in a dream or watching a movie or a play?'

All the above interview procedures are psychometric in the sense that they are rated empirically, are subjected to investigations of inter-rater reliability and have sample norms. Assessments based on ICD-10 or DSM IV contain the drawback of regarding depersonalisation as a binary variable (presence or absence of diagnosis), even though it is widely acknowledged that normal and abnormal *shades* of the same condition are seen. Together with the fact that the severity of abnormal depersonalisation varies within and between patients, it would appear logical to regard depersonalisation phenomena as a continuous variable and to regard the threshold between normal and abnormal depersonalisation as requiring subtle differentiation.

Self-rating questionnaires

Self-rating questionnaires have their advantages and disadvantages over interview assessments and behavioural criteria in the mental health field. Self-ratings carry the risk of being less valid, owing to pressure some subjects may feel, in giving the responses they perceive to be the most socially desirable, often in the direction indicating less morbidity. Conversely, other participants who do not have a clinically definable problem, may self-rate in such a way that indicates the presence of unusual characteristics - particularly some student subjects, who may enjoy the idea of exhibiting 'oddness' within themselves, which may be exaggerated. Such

discrepancies may lead to false negatives amongst subjects who suffer from a certain symptom, and false positives in others who don't. The more face valid and transparent an item catalogue is, the greater the risk that the catalogue may invite deliberate deviation from truthful responding. There is less risk of such errors occurring in semi-structured interviews, since an interviewer with clinical expertise is able to confirm or disconfirm initial responses by fielding further exploratory questions of an open-ended nature, constantly examining inconsistencies in subjects' response patterns.

A major advantage of self-rating scales is that they overcome the need for face-to-face contact with expert assessors, who are often difficult to find, are usually expensive, and hard pressed for time. Closed-ended questionnaire items reduce the risk of variation in assessment criteria and allow large groups of subjects to be accessed over a relatively short space of time and overcome the risk of rater bias during investigation (though they do not overcome the risk of rater bias in defining the criterion groups for external validation).

The following self-rating scales have been used to assess depersonalisation:

Dixon's Self-Alienation Questionnaire (Dixon, 1963)

The first recorded attempt to measure depersonalisation in psychometric form was by Dixon (1963). This Nottingham-based study examined the responses of a twelve-item scale, known as the 'Self Alienation Questionnaire', which was administered to students at the local university. The items are all written in the past tense and there are no norms for clinical levels of self-alienation. The Self-Alienation Scale is comprised of twelve items (see Appendix), but has rarely featured in subsequent research. It was nonetheless the beginning of the psychometric endevour.

The Dissociative Experiences Scale (Bernstein and Putman, 1986)

Bernstein and Putman (1986) addressed the wider, global concept of disassociation, in a scale termed the 'Dissociation Experiences Scale', or DES. Within the spectrum of dissociative experiences represented by the DES items, Carlson et al (1991) found factor-analytical evidence of three distinct item clusters, namely, 'Absorption', 'Amnesia' and 'Depersonalisation/ derealisation'. The item-statements are posed as exemplification of what is experienced by certain individuals, and begin 'Some people..... (have the exemplified experience).' The subject is then asked if the same statement applies to him/her. In the view of the current author, some, but not all the items have good face validity, a view previously put forward by Juni (1995). Satisfactory, face valid items include the derealisation items, such as:

'Some people have the experience of feeling that other people, objects, and the world around them are not real' (item 12) and

'Some people sometimes feel they are looking at the world through a fog so that people and objects appear far away or unclear' (item 28)..

Item 28 is of questionable content quality:

'Some people sometimes find that they hear voices inside their head that tell them to do things or comment on things they are doing'.

Hearing non-existent voices, whether inside or outside the head is closely associated with schizophrenia. Whether the voices are described as 'inside or 'outside' does not rule out schizophrenia when there is a running commentary (see, for example, Lindsay, 1980). In any case, the item is too atypical of depersonalisation: in the author's experience, many depersonalised patients complain of alienation from their voluntary motor movements, but remarkably few depersonalised patients complain of alienation of thought. Therefore on balance, in the author's view, the item has too close a resemblance to psychotic complaints - and could lead either to an under-diagnosis of schizophrenia, or include single-symptom schizophrenic patients with, say,

command hallucinations or hallucinated running commentary of their own actions, who are mistakenly identified as depersonalised. The item is therefore far too complex and controversial.

Further doubts have been raised about the three factor solution obtained within the Dissociation Scale, from a statistical perspective, on the grounds that responses to DES depersonalisation/derealisation items exhibited a continuous dimension, while responses to items purporting to tap some other forms of dissociation included in the scale, such as hysterical amnesia, exhibited a distinct binomial distribution (Waller, 1995). As Waller pointed out, within patients identifiable as dissociated, there is a sub-group who exhibit severe forms of the disorders, excluding depersonalisation phenomena, which have an all-or none quality. The observation is consistent with widely-held clinical observations, as reflected in the two major diagnostic manuals, that manifestations such as fugue state and psychogenic amnesias emerge spontaneously and are not incremental.

In a recent study, Simeon et al (1998) administered Bernstein and Putman's DES to 50 patients exhibiting positive DSM III-R criteria of depersonalisation and twenty controls. Factor analysis by Varimax rotation replicated three clusters similar to those established by Carlson et al (1991). The Depersonalisation/derealisation factor was generated by a five-item sub-scale, as detailed below:

item 7: *Standing next to self / like looking at another person*

item 12: *Surroundings seem unreal*

item 13: *Body does not belong to one*

item 24: *Can't remember if just did or thought something*

item 28: *Looking at the world through a fog*

There was a high correlation between Depersonalisation/derealisation items and those measuring more severe dissociative disorders, such as Multiple Personality Disorder, prompting

Simeon et al (1998) to suggest continued investigation of the DES and the development of more specialised scales, to specifically address depersonalisation. The recent indications, then, suggest that the DES may have some utility in depersonalisation research, but may lack the construct validity to be the final psychometric benchmark of the condition.

GOALS OF THE PROJECT

The aims of the current thesis are as follows:

1 To form a set of principles, by which to guide the description of depersonalisation phenomena.

2 Development of the conceptual framework within which to construct items pertaining to depersonalisation.

3 The construction of items pertaining to depersonalisation phenomena, which are guided by the conceptual framework, in the form of self-referential statements describing the experience or its opposite. The item catalogue should be broad enough to cover all the concepts involved.

4 To carry out a preliminary item analysis on the normal population, to select out items which best conform to an expected pattern of distribution, variance and co-variance.

5 Through a second line of enquiry, with a reduced catalogue and new criterion groups, identification of those items which distinguish between clinically depersonalised and non-depersonalised subjects, with a view to forming a final item catalogue.

6 Demonstrate the external validity of the catalogue, with a view to establishing a formal psychometric scale for the measurement of Depersonalisation phenomena.

PROCEDURE

1 Guiding philosophical principles

a) Heidegger and the concept of 'dasein analysis'

The term 'dasein' is of special significance to the phenomenological school and provides us with an indication of how adherents of the school proceed with clinical assessment. The term was used by Heidegger (1927) and is central to the phenomenological method. Dasein in the clinical context refers to a 'snapshot' of consciousness at any one time, a sample of psychological experience at its various levels, at any given moment. As an observational method, emphasis is placed on the total subjective space, or global conscious experience. In the clinical context, investigations of this nature require skilled questioning of the patient. The patient may be acutely distressed or disturbed, and therefore the method demands considerable sophistication in developing rapport, at times when there may be barriers to communication between client and clinician.

Many observers, including William James (1890/1983) assumed that consciousness is stratified and that there are various 'layers' of experience that enter consciousness simultaneously (for example, a feeling state superimposed on an expectation). Baars (1988) has provided useful examples of various levels of conscious awareness, which appear self-evident. The 'clearly conscious' phenomena are the central focus of attention at any given moment, for example, attended percepts, clear mental imagery, deliberate inner speech, material deliberately retrieved from memory. Presumably, a patient's spontaneous verbal reports reflect his/her central focus of attention at the time. Fleeting images and peripheral background events, may be 'barely conscious', unless they are unexpected and contain an element of surprise. On the edge of consciousness lies contextual information, which provide the setting in which experience takes place, something which influences the interpretation of events, but which may register in

consciousness only vaguely, shaping the evaluative atmosphere. For a discussion of levels of consciousness, see Baars (1988, pages 19-21).

A *dasein analysis* attempts to capture and reflect consciousness at the various levels, which are in play simultaneously. As an observational method, dasein analysis can be contrasted with Beck's *vertical arrow assessment*. In the latter, Beck (1988) proposed the investigation of surface propositions in relation to underlying assumptions and expectations, including personalised rules which determine the evaluation of events, the *schemata*, of which the subject may be only vaguely aware, or oblivious of at the time. However, Beck's model is orientated around how the subject makes sense of his environment and his social self, or self-concept. Heidegger's dasein analysis attempts to envelop a wider scope of assessment, to include the emotional atmosphere and impressions of the beholder of himself *as an operational system.*

The principals of dasein analysis had influenced the author's interaction with depersonalised patients, to the extent that attempts were made to trace the internal atmosphere in which surface complaints were contextualised. In this respect, the emotional atmosphere and inner sensation, often at the 'barely conscious' level of conscious attention, were investigated. With regard the current study, particular attention in this respect was given to the ego-awareness of participants, as a set of internal variables which, though contributing to the quality of consciousness of any given individual, may be psycho-active without awareness, oblivious to the executive self (or 'observer ego' - Scharfetter, 1980; 1996).

De-affectualisation had been identified as a novel variant of depersonalisation (Sims, 1997, personal communication) and was given particular consideration, as a relatively new concept. An example of dasein analysis comes from a patient who presented as distressed, saying that he no longer 'felt for' his children the way he used to. He was not clinically depressed and during the session, appeared emotionally responsive, frowning and lowering his voice when

describing his reported indifference, with obvious engagement and concern. When asked what he was feeling during the session, he looked remorseful and shook his head, replying that he could not even feel anything when describing his stunted reaction to his children, which from an objective viewpoint, was clearly to the contrary. After clarification, it was established that he was aware he exhibited emotional responsivity, but felt as if his emotions 'no longer registered inside'.

The picture illustrated a key quality of de-affectualisation, the discrepancy between outward signs of emotional depth, accompanied by an inner detachment from the feeling state. A pattern began to emerge during clinical observations made by the current author prior to this research, in which de-affectualised patients portrayed emotions appropriately, but the emotions were not felt as owned. A similar pattern had been described much earlier by Schilder (1933, op cit). Clinical observations of various 'internal atmospheres' such as these were noted and later discussed with expert clinical advisers and influenced item construction profoundly by inclusion of the egopsychopathology dimension to the item specification.

From regular contact with depersonalised patients, the current author had become aware that their complaints varied considerably, between and within subjects. An example of within-subject variation was provided by a 30-year-old male patient, who spoke of both alienation from himself ('I have lost part of my existence') and alienation from his surroundings ('People and places seem far away. Objects stare me in the face, but don't register as *real* objects'). Variation of items was therefore considered essential, and much consideration was to be given later to how the variation could be systematised and made explicit.

b) Empathic and genetic understanding

Jaspers (1963) distinguished between two levels at which consciousness can be understood, namely *static* and *genetic* understanding. 'Static understanding' is the appreciation of the components of the psychological field at a given time, whilst 'genetic understanding' refers to

the causal relationships between these components (if any) and thus the antecedents of subjective events which are current. Genetic understanding has nothing to do with constitutional factors or heredity, but refers to the psychological means by which the present subjective space of the observed participant has been generated. Static understanding, by contrast, refers only to the various components of conscious experience, with no reference to their genesis or causal links.

The approach to the item construction involved both static and genetic levels of analysis, by the inclusion of implied links between two mental events, or a mental event and behaviour. For example, one item referred to self-harm as a means of gaining feelings of reality, while another referred to the habit of constantly looking at one's own reflection in the mirror, arising out of feelings of unfamiliarity. These are relational propositions, based on evidence provided by depersonalised patients, as to where the meaning of a particular act. By including such items, it was hoped that autotherapeutic strategies would be integrated into the item catalogue, because it is difficult to approach depersonalisation without alluding to how people cope with the state. Though the formation of relational statements helped shape the character of the final item catalogue, their classification into 'static' versus 'genetic' propositions was not carried out, due to the complexity of the categorisation.

CONCEPTUAL STRUCTURE OF THE CATALOGUE

Consultation of expert opinion re conceptualisation

Two clinical experts advised on this project, Professor Andrew Sims (Leeds) and Professor Christian Scharfetter (Zurich), both of whom kindly availed themselves as advisers in descriptive psychopathology. This was a unique opportunity to discuss and explore phenomenological approach to depersonalisation which might be the most useful in elucidating the state, based on the above principles. According to Scharfetter (personal communication), three of the five ego dysfunctional areas he described are implicated in depersonalisation, namely, ego

vitality, ego activity and ego identity (personal communication, 1994), a view supported by Andrew Sims (Sims, 1995, personal communication). It was decided that the three ego psychopathology concepts should influence item construction, to reinforce the breadth of scope of the catalogue. Both authorities were also consulted over the definitions of depersonalisation symptom-types and supported all four definitions of derealisation, depersonalisation, desomatisation and de-affectualisation.

OPERATIONAL DEFINITIONS OF DEPERSONALISATION SYMPTOM SUB-TYPES

Introductory note

Considerable insight accompanies all primary depersonalisation experiences, so that the idea of estrangement, and feeling 'once removed' from self and environment are recognised by subjects as being an altered subjective state rather than representing a more fundamental transformation of self and external world. Therefore patients attribute their depersonalised experiences to their own distortions of inner awareness and do not report the delusional conviction that the self or the external environment are truly alien. They complain instead of changes in *their perceptions* of themselves and the environment. Depersonalised experience is by definition not psychotic in origin, but nonetheless is sometimes implicated in a wider clinical picture in which a psychosis is present. Adhering to the strict ICD and DSM definition of depersonalisation, which excludes psychotic phenomena, items were constructed which avoided portraying a psychotic style of perception or interpretation.

Clinical description of each of the four syndrome categories

De-affectualisation

Emotional experience is perceived as truncated and inauthentic. The subject describes his/her feelings as 'dead' and emotional reactions as out of reach or lost. Though blunting of affect need not be present, the subject feels unmoved by events which might normally have emotional significance to him.

Derealisation

The subject feels detached form the external world, which takes on a strange or unreal quality. Complaints are largely based on perception of visual and auditory stimuli. The problematic experience becomes particularly disturbing in the presence of familiar stimulus situations, which lose connotation and are described as curiously different and remote.

Desomatisation

Refers to feelings of estrangement and detachment from segments of the body, which feel they no longer belong to the subject as a whole. Complaints often include the impression that the matter of which body parts consists has been transformed, as if becoming an alien, non-organic substance.

Depersonalisation

Though depersonalisation is used as a generic term which includes all four of the present categories, it is also used more specifically to refer to the feeling of personal estrangement, so that the subject feels out of touch and uninvolved with his own inner awareness. This results in

complaints that self-induced activity seems automatic, particularly locomotor action, as if induced and controlled from outside of psychological space. Rather than the outside world appearing changed, the subject feels a stranger unto him/herself. It is the narrower, more specific use of the term 'depersonalisation' that we are using here, rather than the global concept which expresses all aspects of the syndrome.

Operational definitions of the dysfunctional ego states relevant to depersonalisation

Introductory note

The Dysfunctional Ego refers to distortions in self-awareness. The typology below is part of a wider classification of five ego psychopathology types, and the three categories outlined are believed to be those areas of the ego which are most implicated in depersonalisation experiences. Unlike the latter, concepts of the dysfunctional ego are intrinsically linked to psychotic as well as non-psychotic phenomena and therefore the concept of ego dysfunction covers a wider scope of psychological experience than depersonalisation concepts, in terms of the breadth and severity of the overall psychopathology. For current purposes, the category definitions and certainly the items themselves, are biased toward non-psychotic manifestations of ego psychopathology, with no reference, for example, to over-compensation typical of severe mental illness.

Clinical description of each of the three ego dysfunctional types

Dysfunctional Ego Activity

The impression that one is not participating in one's own thoughts, feelings or actions. The subject feels that his intentional acts are no longer self-induced, as if emanating form outside of subjective space. Voluntary responses take on an automatic quality so that the individual no longer feels a sense of identification with what he is doing. Some authors describe this ego dysfunction in information-processing terms, for example, as a weakening of the link between

action plan and action.

Dysfunctional Ego Identity

Fundamental change in the experience of self, which has a discontinuous quality. Subjects express this by reporting feelings of disintegration of inner awareness, or the intuitive impression that their personality and existence have been transformed or replaced. Disturbance of ego identity involves components of self-image which are more basic than social role. In the latter, despite change of circumstances, the subject acknowledges he is the same person through time.

Dysfunctional Ego Vitality

This aspect of ego function refers to the feeling that one is alive and functioning, the converse of which is the feeling of lifelessness and nihilism. Some subjects complain that their bodies feel insubstantial or are withering away. Others perceive the external world as grey and inert or complain that time is standing still. In the severest form of dysfunctional ego vitality, subjects believe they are dead or that their very existence has stopped.

Test specification: Contents-Manifestations Index

The first step when constructing a rating schedule is to provide a 'blueprint' of its components. Given the merits of looking at both the surface structure and deep structure of depersonalisation, the current author searched for a means of incorporating both, by adopting an approach suggested by Rust and Golombok (1989). This involved forming a matrix table, in the form of a 'Contents-Manifestations Index'. The horizontal axis constituted the 'Contents'. Contents serve to indicate the abstract or theoretical range of constructs, referred to in the above text as the 'deep structure', .involving the classical concepts of ego psychopathology. Importantly, the ego states are intrinsically bound to the *dasein analysis* of depersonalisation. The generally agreed areas of inner awareness, as previously described, relate to ego Vitality, Activity, and Identity.

The 'Manifestations' axis represents ways in which the 'Contents' are exhibited by the subjects, for our purposes, how the content areas shape the presenting complaint. The spectrum of depersonalisation complaints have been traditionally classified according to *perceptual style*, based on the view that could be grouped according to the *focus of the detached experience.* Some patients complain that they are detached from themselves, others complain they are detached from their bodies, whilst others complain they are separated from the outside world. As discussed earlier, the distinction was reflected by the concepts of depersonalisation, desomatisation and derealisation respectively.

In summary, it was decided to construct an item template to schematise our catalogue specification. The template was based on two conceptual systems, firstly, depersonalisation symptomatology, and secondly, the classical ego dysfunctional states relevant to the syndrome. Both dimensions reflect qualities of subjective experience and were therefore compatible with our overall phenomenological perspective. The perspective required us to generate items which

reflected conscious experience. The nosological model used in item specification is schematised below.

TABLE !: CONTENTS MANIFESTATIONS INDECES ADOPTED FOR THE PURPOSE OF ENHANCING SCOPE

MANIFESTATIONS (symptoms)	CONTENTS (ego pathology area)		
	Identity	Activity	Vitality
Derealisation	rI	rA	rV
Depersonalisation	pI	pA	pV
Desomatisation	sI	sA	sV
De-affectualisation	aI	aA	aV

Classification of an initial 27-items according to the item specification

Each item from the original 27 was assigned by the author to one of the above cells, based on clinical judgement. For example, item 1 was assigned to cell 'aA', as it judged by the author to represent both the symptom of 'de-affectualisation' (a) and the dysfunctional self-awareness area of 'ego Activity' (A). The matrix gave the study a theoretical structure which guided the construction of a wider set of items. The broadening of the item catalogue was a direct result of the nosological framework, which exposed gaps in the scope of the original catalogue.

This content-analysis of the item catalogue revealed a biased distribution of items within the matrix, in that the frequency with which items were allocated to some cells was greater than other cells. The sub-types of items representing the de-emotionalisation symptom (J, K, L) and dysfunctional ego Vitality (C, F, I, L) were particularly sparse.

TABLE 2: DISTRIBUTION OF ITEMS IN THE INITIAL CATALOGUE WITHIN THE C.M. MATRIX

MANIFESTATIONS (symptoms)	CONTENTS (ego pathology area)		
	Identity	Activity	Vitality
Derealisation	3	4	3
Depersonalisation	3	5	1
Desomatisation	3	1	3
De-affectualisation	0	1	0

A paucity of items was most evident in the areas of de-affectualisation and ego Vitality. Deficits in item-range were found in the following conceptual areas, as represented by the cell structure:

aI, sA, aA, pV, aV

Development of the 90-item catalogue

Between five and eight items were found for each of the cells, totalling 90 provisional items. These items were derived from two sources:

a) Statements quoted verbatim by patients complaining of depersonalisation phenomena. These statements, which were judged representative of the syndrome per se were documented in the case notes by the author over approximately nine years of normal clinical practice. Literal quotations were indicated in the traditional way, that is, between inverted commas, to discriminate between the author's clinical impressions and what the patient actually said in describing the experience. The relevant case files were then coded at the front

b) Classical descriptions from the literature, which informed further variants.

Controlling for response bias

Since the statements were obtained in the clinical context, by the elicitation of symptoms, as items, all had a positive response bias. This meant that confirmation of depersonalisation symptoms was indicated by affirmative responses to individual items. There are major drawbacks to instruments with uni-directional response bias, especially because once respondents get accustomed to answering in the affirmative or in the disconfirmative, an habitual direction of responding tends to occur (see, for example Anastasi, 1967). Therefore it was decided to give the rating schedule a better balance by generating items with a negative bias, that is, items which when answered in the affirmative indicated absence of the state in question.

Negative bias items were chosen according to three criteria, namely:

i) from pilot interviews with a total of eleven patients, asking them to outline self-experience which occurred "when well" in the case of patients with primary depersonalisation. During types of experience in which depersonalisation is always absent, the experience might be viewed as its antagonist or polar opposite. Verbatim descriptions were recorded by hand in the case notes, from constructs elicited from a comparison of the elements 'me when well' and 'me when affected' (by depersonalised experience).

ii) from a more theoretical perspective, items were constructed which attempt to reflect the feeling of "personalisation" (Galdston, 1947). These related to vivid experiences of the self, its actions, the body and of being in the world

Final items generated

Since it was desirable to construct items which could fill the gaps in the catalogue's construct range, a brainstorming exercise was considered. We already had definitions of the twelve categories, including the five categories which were under-represented. It was decided to

gather together a small group, comprising an experienced psychiatric nurse, a sociable Borderline personality, and a lecturer in Clinical Psychology. The author attended as a participant observer/recorder. It was put to this group that we required them to generate statements which would typify self-descriptions of individuals experiencing the under-represented categories. The author, who recorded much of the discussion verbatim, subsequently selected out the statements which were judged to be the purest and most relevant, in terms of the definitions of each of the five 'states'.

The new series of items, 90 in all, derived through the various processes, were then presented to the experts, for discussion of their face validity, in accordance with our conceptual system. Five modifications were made, three involving re-classification of items and two involving deletion and re-wording. For example, a modification was made to an item assigned to the derealisation/Vitality cell, 'I am floating away from reality'. Scharfetter pointed out that the item did not meet the category specification. The point of reference in this item was 'I' as the subject, who recedes from the object, 'reality'. Strictly speaking, this would be a depersonalisation item, unless the item was modified, so as to place the external environment as the subject. This is because derealisation items should reflect the receding environment as the primary point of reference, not the self. The item was reconstructed to read: 'Reality is floating away from me'. Thus the ego's environment ('reality') became the subject and the self became the object ('me').

The 90 item catalogue (D90), according to conceptual grouping

DEREALISATION SET

Derealisation: Identity

27 I usually feel at one with my surroundings

10 I sort of 'look through' myself in the mirror

25 I witness what I am doing as if it is someone else

31 When I look at my reflection, I never doubt that it's me

34 Familiar things seem somehow altered in appearance

15 Friends and acquaintances often strike me as changed and unfamiliar

16 I am frequently looking on, as if not part of things

Derealisation: Activity

13 I feel really tuned in to my senses

20 My experiences of the things around me can be quite vivid

36 I like to be adventurous to get new experiences

38 Things around me often seem rich in colour

43 I can get engrossed in conversation

54 I never doubt my faculties

Derealisation: Vitality

40 I wish I could experience things less intensely sometimes

3 Reality is floating away from me

6 The outside world seems like it's the other side of a glass pane

14 Nothing seems absolutely concrete or real

22 Though I'm aware of things, nothing seems to register anymore

29 I feel as if I am not in the world

41 The outside world seems remote

45 I ask myself whether situations I'm in are really happening

47 Objects seem to retreat into the distance

53 As soon as I stop concentrating, everything seems far away

57 Frequent bored phases occur, during which little seems to mean anything

62 I often wonder if I'm asleep and my life is all a dream

88 It always seems I am looking form afar, even at things nearby

9 Life seems like a film played in front of me

30 The world sometimes appears two-dimensional or flat

DEPERSONALISATION SET

Depersonalisation: Identity

5 I exist in harmony with my being

8 I feel at home with myself as a complete person

83 I feel as if I've changed deep down, by losing a part of my normal self

52 My normal self-awareness is lacking in some way

49 I feel as if I'm not me at all

44 My usual self shines through most of the time

42 When I talk about myself, I feel as if I am talking about someone else

33 Deep down, I know myself nowadays

17 One thing I'm sure of, I'm the same old me

90 Even when I try, I can't form an opinion about myself that lasts

84 My mind feels like it's been scattered into bits

106 The inside of my head feels like a merry-go-round

Depersonalisation: Activity

130 My life seems to be carrying on without me

12 At times, I would describe myself as clear-headed

23 I usually get into the swing of things

46 Mental images are easy to conjure up

48 I act the part without feeling at all involved

72 When I decide to do something, I don't feel in charge

74 The uncomfortable feeling I'm not in control never leaves me

58 My actions appear automatic, as if controlled from outside of myself

68 Generally, my actions flow easily

37 I feel 'down to earth', with my feet firmly on the ground

59 To stop myself going mad, I fight to keep my concentration

73 Even when I don't want to, I analyse my every action as I'm doing it

80 As soon as I lose my concentration, I stop feeling real

Depersonalisation: Vitality

26 Quite often, time seems to stand still

61 I can't relax without keeping on the go

77 Even without changes in my life, I feel I've left my life behind

78 A great deal of the time, I find myself wondering if I really exist

85 I feel switched on to life

87 I often feel I am paling into insignificance

28 I sometimes experience a dream-like detachment from myself

76 I can't get any life back into what I do

DESOMATISATION SET

Desomatisation: Identity

111 My right hand doesn't feel linked up with my brain

21 My body does not feel it belongs to me

39 My hands sometimes feel they're not mine

65 It's as if I'm in a different body to my own

82 I feel I'm held together by cotton wool or plasticine

100 Often, my arms and my legs don't feel attached to me

101 My body is in harmony with my being

107 I feel as if I don't take in any air when I breath

Desomatisation: Activity

18 Texture is interesting to the touch

24 My actions feel they come naturally

69 When I do something, I never question whether it's me doing it

70 When I talk to someone, I nearly always feel it's not me speaking

71 Sometimes, I feel wooden, as if my actions are controlled like a puppet

35 I observe my movements like a spectator

Desomatisation: Vitality

32 My physical self feels tangible and alive

63 My body seems lifeless, as if its not functioning

64 I feel dead from the neck down

99 Parts of my body feel awkward, like putty or concrete

112 Parts of my face feel like plastic

120 I cannot feel pain properly

DE-AFFECTUALISATION SET

De-affectualisation: Identity

2 I am fully in touch with my emotions

131 Even when I feel something inside, it doesn't fully register in my head

50 I sometimes feel blank and shut off from my feelings

110 When I feel happy or sad, it doesn't seem to register in my mind

79 My emotions feel lost in space

94 When I worry, it's difficult to feel concerned

98 I feel 'once removed' from my emotions

97 My 'heart' and my 'mind' have moved apart

De-affectualisation: Activity

11 When I laugh, it's like someone else laughing

51 Sometimes, I feel a sense of thrill

96 I don't experience any of my usual feelings anymore

93 When I'm pleased about something, the pleasure doesn't feel mine

104 When I say something personal, it really means something to me

De-affectualisation: Vitality

66 I'm so numb inside, I have to inflict pain to know I'm still there

19 I don't think about my feelings - they look after themselves

56 I still experience periods of inspiration these days

60 Tranquillity and stillness really bother me

67 During sad moments, I cannot even feel depressed

89 I don't experience my emotions any more

92 My emotions have died within me

105 Like everyone else, I can sometimes get involved with people I meet

Instructions to subjects

We specified the reason for requesting subject to rate themselves on the items, and at the same time painted the items as within the bounds of normal experience. This is because the evidence of Trueman (1984) and Dixon (1963) indicates that depersonalisation was likely to be common in some of our control samples. By identifying and highlighting an unusual range of experience likely to be shared by the depersonalisation-prone in the sample, we ran the risk of amplifying the distress arising out of the symptom itself. It seemed that the best way to allay subjects' anxieties about themselves was to de-pathologise the symptoms, as in the statement 'Some people experience the following....'

Instructions to subjects and their compatibility with item phraseology

Until now, very little consideration had been given to what instructions subjects would be given to orientate them to the items and the method of self-rating. It was decided that the instructions to non-clinical subjects must be identical to instructions to clinical cohorts, otherwise the interpretation of any given item may vary. The experts had declined to eliminate any items on the basis of content-validity. Ironically, their blanket approval posed a problem since the length of the catalogue was considered excessive for cohorts, especially those probands administered the catalogue in NHS waiting rooms.

Frequency and duration variable

The distinction between normal and abnormal depersonalisation, being largely based in frequency and duration, reflected in the scaling by a five point Likert scale, containing the forced choices '*Never true, 'Rarely true, 'Sometimes True', Usually true* ' to '*Always true*'. Scoring was on a 0 – 4 scale, the direction of which was in accordance with the response bias of the particular item.

Biographical data

Age, clinical status and gender were assessed. Subjects were asked to give their age in years, and give their gender.

The final D90 catalogue as a preliminary instrument

The final D90 catalogue is presented overleaf, with item codes (which did not appear on the schedule administered to participants).

The actual D90 instrument, as administered to the first band of participants, is presented in Appendix 1 (labelled 'D90', the label itself not appearing on the administered version).

CODED D90 ITEM CATALOGUE

D90 Catalogue

1	-rA	My experiences of the things around me are quite vivid
2	+aI	Whether I feel happy or sad, it fails to register
3	+pI	When I talk about myself, I feel as if I am talking about someone else
4	+sA	I feel wooden, as if my actions are controlled like a puppet
5	-pI	One thing I'm sure of, I'm the same old me
6	+aA	When I laugh, it's like someone else laughing
7	+aI	My emotions feel lost in space
8	-pA	I feel 'down to earth', with my feet firmly on the ground
9	+rV	I ask myself whether situations I'm in are really happening
10	+rA	I doubt my faculties of sight and hearing
11	+aV	My emotions feel numb
12	-rI	When I look at my reflection, I know it's me
13	+pV	Time seems to stand still
14	+rI	Familiar things seem somehow altered in appearance
15	-rV	I wish I could experience things less intensely
16	-rA	I feel really tuned in to my senses
17	+aV	Tranquillity and stillness really bother me
18	+aA	When I'm taken by surprise, I feel like it's not happening to me
19	-pI	I feel at home with myself as a complete person
20	+pI	I feel as if I'm not me at all
21	-aI	I am fully in touch with my emotions
22	+sV	I feel I'm floating outside of my body
23	-aV	I don't think about my feelings - they look after themselves
24	+pV	I experience a dream-like detachment from myself
25	+rI	Even friends and acquaintances strike me as changed and unfamiliar
26	-aA	When I do something out of the ordinary, I feel a sense of thrill
27	+rV	Life seems like a film played in front of me
28	-aI	My 'heart' and my 'mind' go hand-in-hand
29	+rA	It's difficult to get involved in conversation
30	+rV	Though I'm aware of things, nothing seems to register anymore
31	-sI	My body feels natural
32	+aV	I'm so numb inside, I have to inflict pain to know I'm still there
33	+rV	Reality is floating away from me
34	+sI	My hands feel they're not mine
35	+rV	The outside world seems like it's the other side of a glass pane
36	-rV	Life is interesting and meaningful
37	+sV	It's difficult to feel pain properly

38	+aV	My emotions have died within me
39	+pI	Even when I try, I can't form an opinion about myself that lasts
40	+aI	I feel blank and shut off from my feelings
41	-rA	Things around me seem rich in colour
42	-pV	I feel switched on to life
43	+rV	I find myself wondering if I'm asleep and my life is all a dream
44	-pA	Generally, my actions flow easily
45	+sV	My face feels like plastic
46	-sA	I move naturally
47	+sI	My arms and my legs don't feel attached to me
48	+sI	It's as if I'm in a different body to my own
49	+pA	My life seems to be carrying on without me
50	-pI	My usual self shines through
51	-aA	When I say something personal, it really means something to me
52	+pV	I find myself wondering if I really exist
53	+pA	As soon as I lose my concentration, I feel distant
54	+pA	Even when I don't want to, I analyse my every action as I'm doing it
55	+rV	It seems I am looking from afar, even at things nearby
56	-rA	I like to be adventurous to get new experiences
57	+aA	My usual feelings have gone
58	+pV	My mind is in a fog
59	+pI	I feel I've changed deep down, by losing a part of my normal self
60	+aV	It's difficult to feel depressed, even during sad moments
61	-aV	I have moments of inspiration
62	-sV	My physical self feels tangible and alive
63	+rV	As soon as I stop concentrating, everything seems far away
64	+rI	I sort of 'look through' myself in the mirror
65	+aA	When I'm pleased about something, the pleasure doesn't feel mine
66	+sV	Parts of my body feel awkward, like putty or concrete
67	-rI	Generally, I feel at one with my surroundings
68	+sA	When I'm speaking, it sounds like someone else
69	+sI	My right hand doesn't feel linked up with my brain
70	+rV	I feel I'm on another planet
71	-pA	Generally, I would describe myself as clear-headed
72	-rA	Texture is interesting to the touch
73	+sA	I observe my movements like a spectator
74	-aV	Like everyone else, I can get involved with people I meet
75	+pI	My mind feels like it's been scattered into bits

76	+rI	I find myself looking on, as if not part of things
77	-sA	When I go for a stroll, I am quite certain that it's me walking along
78	-pA	I can easily picture things in my imagination
79	+sI	When I breath, it feels as if no air enters my lungs
80	+pA	My actions appear automatic, as if controlled from outside of myself
81	+pV	I feel I am paling into insignificance
82	-rV	I feel I'm very much part of things
83	-sI	My body is in harmony with my being
84	+sV	My body feels it could disappear into thin air
85	+pA	I act the part without feeling at all involved
86	-pV	I can relax by sitting quietly
87	+sI	I feel I'm held together by cotton wool or plasticine
88	+pA	I get the uncomfortable feeling I'm not in control of my thoughts
89	+pI	The inside of my head feels like a merry-go-round
90	-sV	My body is sensitive to temperature

EXAMINING THE PROPERTIES OF THE D90

The desired end-product was a device to detect depersonalisation and discriminate between depersonalised and non-depersonalised patients known to psychiatric services. In view of the shortcomings of psychometric instruments currently available, the aim was to create a new screening tool for clinical depersonalisation. Therefore at a later stage, it was necessary to engage cohorts as criterion groups, formally screened for presence or absence of clinical depersonalisation.

However, in the preliminary analysis, using the D90, general public controls were used, since depersonalisation levels in the adult community at large can be expected to follow certain patterns (see above, pages 4 - 11). These patterns related to both severity (we would expect low mean scores from the general public, for every item) and relationship to age (vulnerability to depersonalisation in controls peaks around the late teens/early twenties and diminishes thereafter).

The construction of the instrument involved large amounts of raw data. There were two major stages to the item analysis, involving different groups of subjects in each. Stage 1 consisted of the preliminary validation of the catalogue and a preliminary item analysis, based on public controls. For our purposes, Stage 2 constituted a more stringent form of validation and item analysis. This is because Stage 2 was based on a variety of patient samples, some of whom exhibited a positive diagnosis of depersonalisation and other patients who did not, as well as a public control sample. Most of the data, presented as tables and graphs, are included in the Appendix. Summary tables and major statistical findings are reported in the text.

Stage 1: Empirical investigation of the D90 catalogue.

. The two clinical experts looked at the nature of the items and the *task demand* of the catalogue as a self-rating instrument. The author was advised that the D90 catalogue of untested items was far too large to be administered to psychiatric patients, who are not always co-operative and often have problems of sustained attention. A user-friendly format for the clinical context could potentially be devised by splitting the 90-item catalogue into, say, two sub-sets of 45 items, so that half the clinical sample could complete each sub-set. However, this would have reduced the power of the item analysis for clinical purposes, in particular by halving the numbers of patients used in the discriminant function calculations for each item. To overcome this problem, samples from the general public were used for preliminary item analysis and item elimination.

Nature of the samples comprising Stage 1 subjects

Participants for Stage 1 of the analysis were recruited from four different sources, namely, undergraduate psychology students, registered at City University (sample 1), post-graduates undergoing various vocational training courses, for whom psychology was a component of their courses, again from City University (sample 2), factory workers from the Ford Motor Company (sample 3) and finally, two patients, seen privately by the author, both diagnosed by independent clinicians with primary depersonalisation (sample 4). A summary of the characteristics of the Stage 1 samples is given below:

Sample 1: Undergraduate Psychology students from City University, London

n=118

mean age (115 known): 20.64 yrs

median age 19.00 yrs

sd age 5.06 yrs

age range 17 - 63 yrs

gender m/f/unknown 29/86/3

Sample 2: Mature Postgraduate students from City University (usually seconded by the Dept of Health and in full-time employment

n = 95

mean age 32.51yrs

median age 31.50 yrs

sd 8.07

age range 21 - 52 yrs

gender: unfortunately, the gender for group 2 was not recorded

Sample 3: Paint shop workers from the Ford Motor Company at Dagenham

n = 12

mean age 39.83 years

median ..44.5

sd 12.31

age range 20 - 56 yrs

m/f/unknown: 12/0/0

Sample 4: Primary depersonalisation patients

n 2

mean age 21.00

median n/a

sd 2.83

range 19 -23 yrs

m/f: 0/2/0

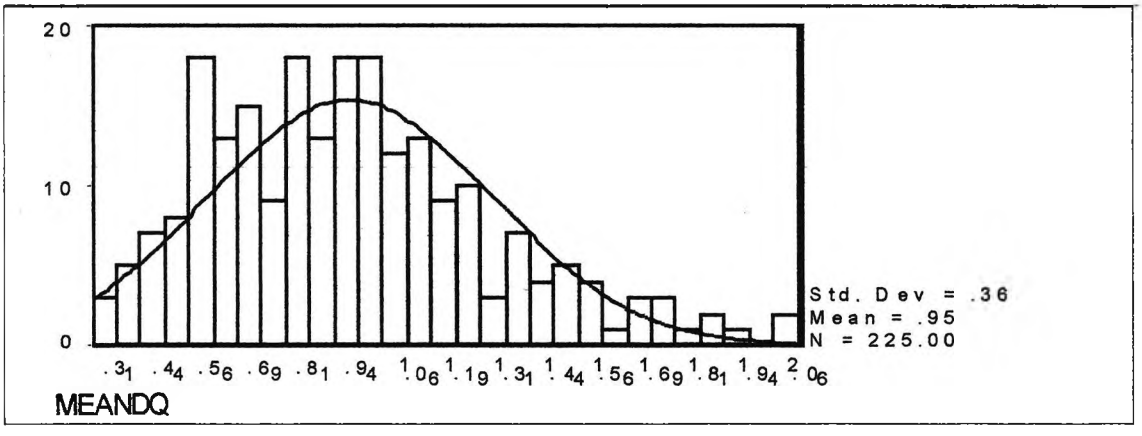
(see also Appendix 2)

Preliminary analysis of the D90 catalogue total scores, based on normal samples

Three of the four Stage 1 samples were included in the analysis for normal samples, with Sample 4 being excluded (see discussion) Before carrying out our item analysis based on the seven criteria listed above, the total scores of the data set were examined in terms of their overall distribution and in relation to the ages of the subjects. This preliminary perusal of the data gave an indication of whether subsequent item analysis was worthwhile. A modest scatter of total scores, with a positive skew and scores restricted to the lower end of the potential range of the scale, would indicate an expected pattern and therefore a desirable distribution. Such a distribution would indicate that though there was variability, the catalogue elicited relatively low total scores for controls.

Since the age range of controls was 17 years - 61 years, we would expect a trend towards diminishing total scores the older the subjects.

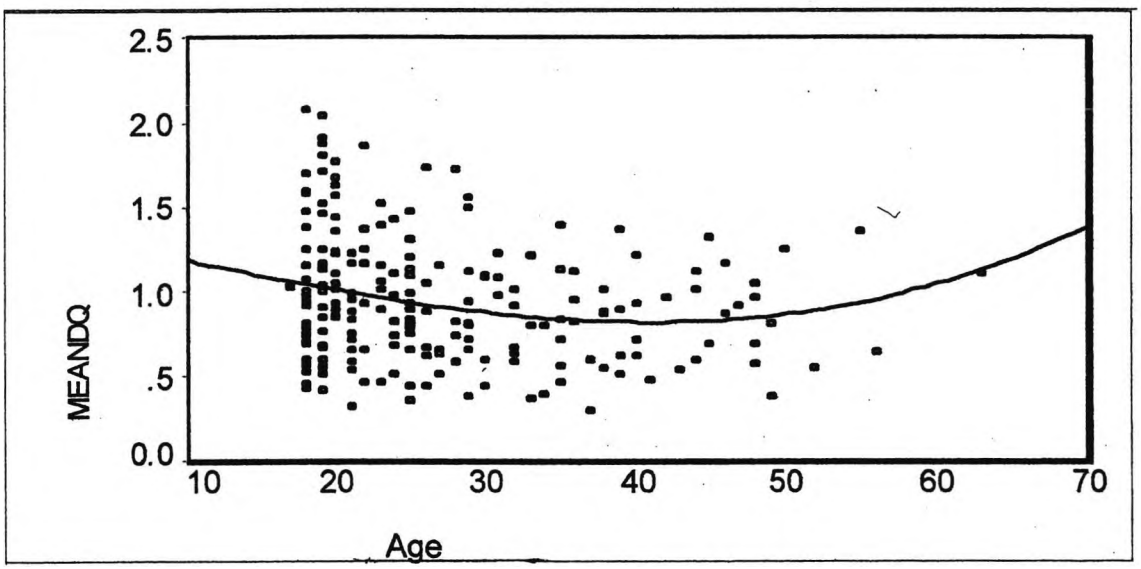
Figure 1: Distribution of total scores, expressed as mean item scores (potential range 0 - 4.0) in controls for the D90, with superimposed normal distribution curve



Relationship between age and D90 scores

The correlation between the D90 totals and age were compared for each participant. The correlation between age and D90 totals was $r = .175$ ($n = 217$; $p = .01$), indicating a small but significant inverse relationship (see Appendix 2). This relationship is consistent with previous observations based on normal population samples (see, for example, page 5 above). A more detailed analysis of age:total score distribution is outlined in the scatter-plot below (Appendix 2a).

Figure 2 Relationship between total score and age in controls for the 90-item catalogue



As can be seen from the above scatter-plot, there is a general trend for D90 totals to diminish with age, from 17 years – 63 years in the cross-sectional data. At first glance the computer-drawn graph of total score plotted by age appears to have a distinct 'U'-shape appearance, contradicting the expected. However, this trend is produced by the handful of subjects aged 50+, particularly the single 63-year old subject, who had a disproportionate influence on the shape of the graph, owing to the low number of subjects occupying the higher age bands.

Summary of preliminary results (90-item catalogue)

The distribution of total scores conformed to the expected in that they were resembled a near-normal distribution with a positive skew. Younger subjects were more likely to score higher than older subject as a whole. Underlining the relationship of total scores and age, when the subjects were classified according to sub-group membership, mean total scores of the sub-groups conformed to the expected, with the oldest sub-group, the factory employees, exhibiting the lowest scores, followed by post-graduates, while the sub-group with the lowest mean age, the undergraduates, scored highest (see Table 3 below and Bar Chart overleaf). Preliminary evidence of the catalogue's applicability in the clinical context was provided by data from the two depersonalised patients, the scores for whom were markedly higher (see below).

Table 3: Mean total catalogue scores of subjects by criterion group (with standard deviations bracketed)

	Undergraduates	Postgraduates	Ford Sample	Patients
N	118	95	12	2
Total D90	91.63	78.49	77.12	186*
SD	(34.00)	(29.98)	(31.24)	(N/A)

The mean D90 total scores for the three groups were overall significantly different, with one-way ANOVA ($F[2,222] = 4.79$, $P < .01$), see Appendix 2i and 2ii.

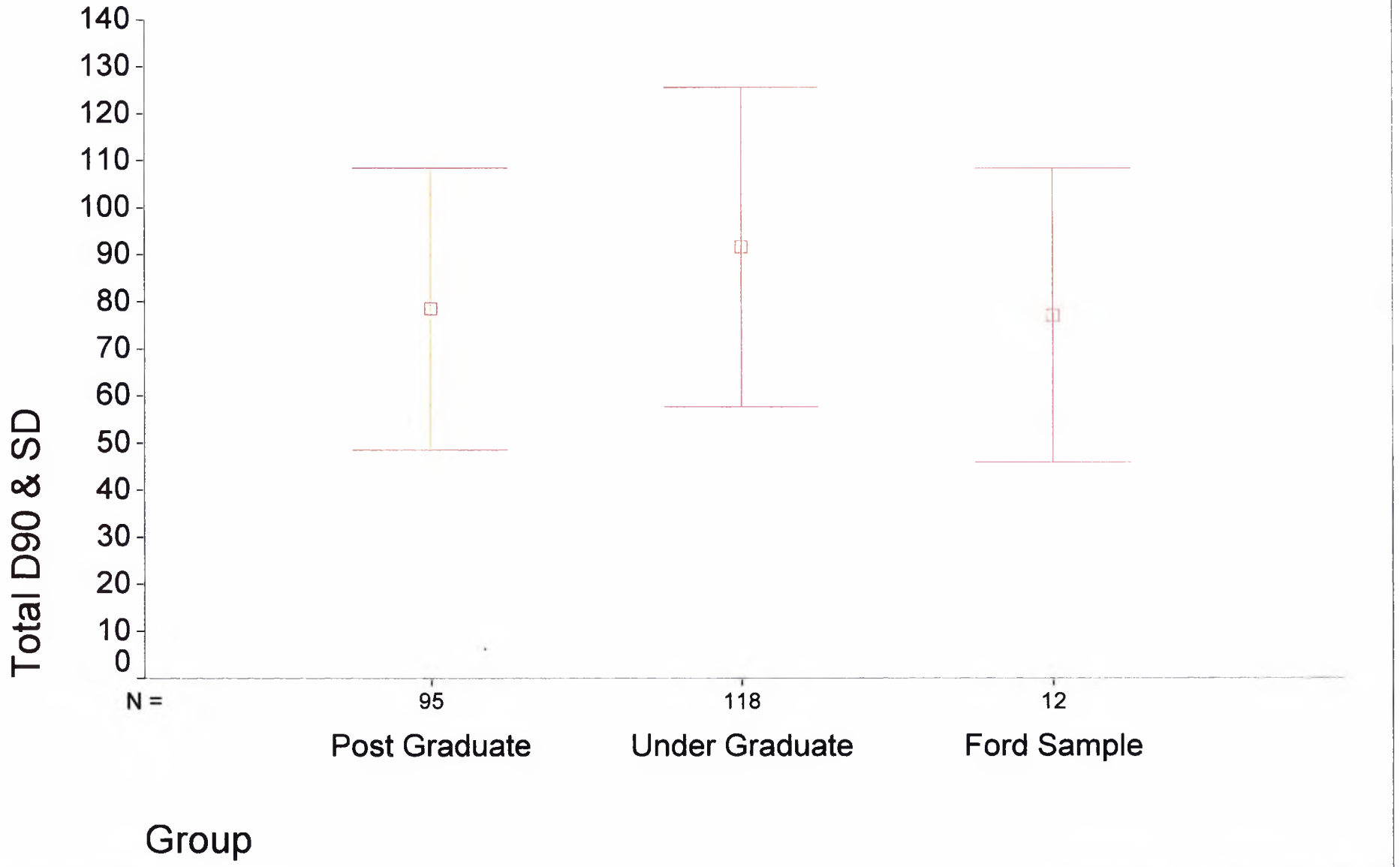

D90 scores by sub sample groups
Total D90 & SD
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
N =
95
118
12
Post Graduate
Under Graduate
Ford Sample
Group

Figure 3

Subsequent Post-Hoc multiple comparisons indicated that the mean D90 score for the undergraduates was significantly higher than the mean for post-graduates (Bonferroni test, P = .01, see Appendix 2ii). Although a trend was observed for the Ford sample to have lower scores than the students, due to the small sample size, there was no statistical significance. The patients were markedly higher than all controls (no test appropriate for such a small clinical sample).

Factorial analysis of the D90 items

It was of interest to know whether clustering of items occurred on the basis of parsimony, which might imply sub-types of the depersonalisation phenomena being measured, despite the relatively low proportion of subjects to items. It was of particular interest to investigate whether the responses of the normal subjects suggested a pattern of clustering, orientated around the three ego pathology sub-types, or the four depersonalisation symptom categories, as represented by the Contents and Manifestations axes of the C-M Index.

To this end, a factor analysis of the raw data was carried out, using a Principle Component Analysis, with Eigen values over 2.0 reported. The number of item clusters in a data set can be identified with reference to the Eigen values found within the data (cf page 143-144).

Table 4: Eigen values (first five factors) from responses of normals to the D90

(see Appendix 2v)

Factor	Eigen value	% of Var	Cumm %
1	20.88004	23.2	23.2
2	4.95647	5.5	28.7
3	3.96193	4.4	33.1
4	3.68991	4.1	37.2
5	3.37741	3.8	41.0

The above table illustrates that the responses of *normal subjects* to the D90 produced a single, distinct factor, as shown by the steep drop in Eigen values occurring after factor one, which accounted for 23.2% of the variance. The next most prominent factor accounted for only 5.5% of the variance and thereafter, of course, further factors accounted for progressively less variance. The data strongly suggests that D90 items load one substantial factor, but bearing in mind most controls were assumed non-depersonalised, the factor was unlikely to represent 'general depersonalisation'.

An important conclusion from the item analysis was that because of a single, dominant factor, the total score could be regarded as an approximate representation of the catalogue as a whole, without the need to split the catalogue into sub-tests.

Principles underlying the initial item elimination

1 Theoretical constraints

Item typology

There was a major theoretical constraint to item elimination: an effort had been made during construction of the original items (forming the D90 catalogue), to accumulate items of broad scope. It was intended that all known aspects of depersonalisation should be represented. To this end, the Contents-Manifestations Index yielded twelve theoretical clusters of items. It was hoped to include items pertaining to measure each of the twelve theoretical constructs.

With this in mind, the selection and elimination of items was not entirely empirically based. A systematic procedure was followed, exerting its' own bias, in selecting three statistically acceptable items belonging to each category, even when a fourth or fifth item belonging to a particular category were statistically superior to the three chosen from another. This qualitative correction ensured range, which was important, since we did not know whether there were some theoretical sub-types of depersonalisation with which our initial sample of subjects, which were 'normal' or 'non-clinical control' subjects would be unfamiliar.

Apparent bizarreness of items

For reasons outlined on page 65 , there were distinct advantages in using members of the general public for item analysis of the D90. However, one reservation of using non-clinical cohorts for the initial item analyses was that while features of 'normal' depersonalisation would be comprehensible to the samples of the general public, features of abnormal depersonalisation might not. Naturally, we did not want items to be eliminated on that basis. Therefore any item that it was felt was at risk of exclusion by dint of low clarity, in the light of the item's clinical loading on extreme depersonalisation was labelled 'Abnormal'. This was in order to give special

consideration to items which may be obscure to normals, but authentic to patients. We could not run the risk of eliminating items, based on responses of a normal sample, which tapped abnormal depersonalisation in patients. This is because it was intended that the final catalogue resulting from the research had an intended use as a clinical instrument. The tagging of 'Normal-range' and 'Abnormal' items was a somewhat casual distinction, but played a small part in the selection of a smaller catalogue, if two items belonging to the same theoretical category were equally weighted in terms of the criteria below, as an additional factor to enhance item range (see page 131 above).

2 Psychometric constraints

Negative bias items had been integrated into the D90 catalogue, for a specific purpose: it was anticipated that some dysphoric subjects would have a tendency to rate *all* items relating to *absence of 'well-being'* in the affirmative, regardless of whether a particular item reflected a subject's specific mental state or not. Response bias, based on a 'negative mind set', might be particularly common in psychiatric patients, especially when positive bias items are delivered in succession. Hence the need for negative bias items in the initial D90 catalogue.

During item selection to form the reduced catalogue, it was decided to give preferential treatment to the statistically acceptable items, which had negative bias. Priority was given to one negative bias item belonging to a each conceptual category of our original theoretical matrix, even when there was a third *positive* bias item which exhibited superior statistical properties. However, there were two categories in which no statistically acceptable negative bias item could be identified. In such cases, all three items selected from that category were of positive bias. Positive bias items of the D90 out-numbered those with negative bias by about four to one.

Given the over-riding constraints outlined above, the aims of the initial item analysis were to refine the catalogue on the basis of the following criteria:

1 *Item facility:* Our first criterion was the mean score for each item, derived from controls. Bearing in mind the nature of the sample on which the data was based, that is, a normal population sample, mean item scores should be relatively low. The potential range of the item means, known as the 'facility index', was between 0.0 and 5.0. We did not expect any of our facility indices to approximate the lowest value, since many observers have recorded the presence of depersonalisation phenomena in the normal population. Nonetheless, since the scale was intended to discriminate between normal and abnormal levels of depersonalisation, desirable items should portray facility indices which were relatively low, covering about 40% of the lower range of scores, that is, somewhere in the region of 0.5 - 2.0 (see Appendix 3i).

2 *Variance:* We expected some of our normal population to be depersonalised, as reflected in the studies on normals reported in the literature, quoted earlier. Items with very low variance in the general adult population were considered to be of little value, since low variance is an indication of little variability in the responses they elicit across subjects. Given the age distribution of our normal sample, we assumed that all items should detect depersonalisation in some subjects. On the other hand, very wide variance for any particular item would be undesirable, since it would imply that the normal sample were straying into 'severe depersonalisation' range and such an item would therefore detract from the catalogue's clinical discrimination power.

3 *Item : Total score relationship:* The correlation between each item with the total score was calculated as a phi coefficient. We already had some indication that our catalogue pertained to depersonalisation phenomena, based on the approval of its face validity and content validity provided by the two clinical experts of international acclaim, for our D90 catalogue. Over half of

the items had already been approved as face valid by a previous expert panel, assembled at a more local level within the Trent Region, several years prior to the current study. Therefore items with a low item:total score correlation were considered undesirable, as they were considered to exhibit characteristics which ran contrary to the overall trend of the catalogue. Certainly, items which were negatively correlated were considered undesirable, whether the negative correlations were significant at the .05 level or not.

4 *Clarity index:* It was important that the items were comprehensible to our current and future subjects. We therefore asked our initial batch of subjects to judge whether each of the ninety items were 'clear' or 'unclear' in their content, giving us the so-called 'clarity index', which was expressed as a percentage of those finding the item understandable in content. Generally, it was intended that all the items would be rated by the vast majority of our initial sample as clear. Therefore a clarity index was arbitrarily set above 90% , preferably 95%, as acceptable.

5 *Skewness:* We expected the distribution of scores for each item to be to the left, that is, for the majority of our control respondents to choose the 'Never true' or 'Occasionally true' categories for the positive bias items and the 'Always true' or 'Usually true' categories for the negative bias items. Such collective response patterns for our controls would yield a skew to the left, expressed empirically as a 'positive skew', for example, a skewness score of around +0.88.

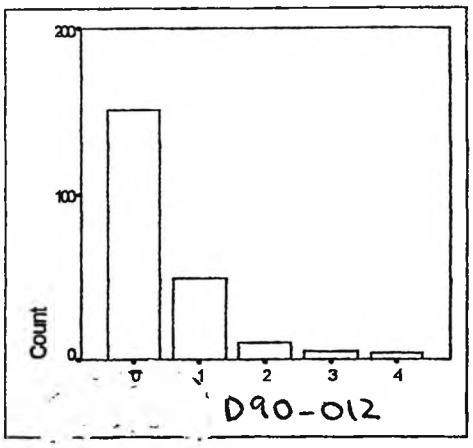
6 *Relationship between item score and age:* As previously outlined, we were able to determine a theoretically predicted criterion for our controls, based on numerous observations in the literature which alluded to the fact that depersonalisation tended to be most common and most severe in young adults. The age of our sample ranged conveniently between 18 years to 61 years. The relationship between depersonalisation and age is observed to be weak, but is consistently reported in epidemiological surveys. Therefore expected a small but statistically significant

correlation between collective scores on each item with age of the subjects was favoured.

7 *Patient mean:* As mentioned above, we had the opportunity of administering the 90 item catalogue to two patients who exhibited primary depersonalisation to a severe and clinically significant extent. By chance, both patients were referred to the current author at a time which coincided with the construction of the catalogue. Though a sample of two did not feature in the more elaborate statistical analyses, we were concerned to see whether these two patients scored relatively higher on the scale than our normal controls. We would have been rather worried had they portrayed relatively 'normal' scores. The patients both had markedly higher total scores than any of our control subjects, falling outside the range and distribution of normal scores. Despite the small number of patients involved at this stage of the survey, individual items with low patient means therefore gave rise to tentative scepticism and guarded concern.

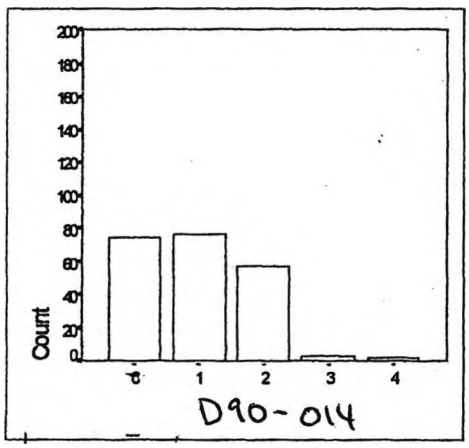
A summary of the properties of all the D90 items is given in Appendix 3ii. For illustrative purposes, the profiles of items belonging to one of the twelve conceptual categories (Derealisation / ego Identity), and their subsequent item analysis, is given below.

Profiles of items belonging to the Derealisation/ego Identity (rI) item category



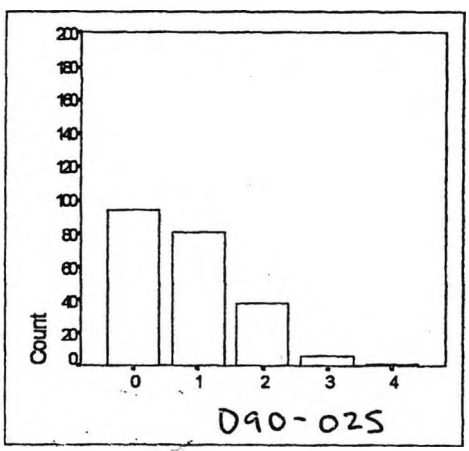
Facility index	0.47	
Clarity index	98.2 %	
Clinical Status	ABNORMAL	
Item:Total score	+ 0.310	P = 0.001
Item:Age	+ 0.061	P = 0.7
Variance	0.70	
Skeweness	+ 2.25	
Patient Mean	1.00	

Q: ~~When I~~ look at my reflection, I know it's me.



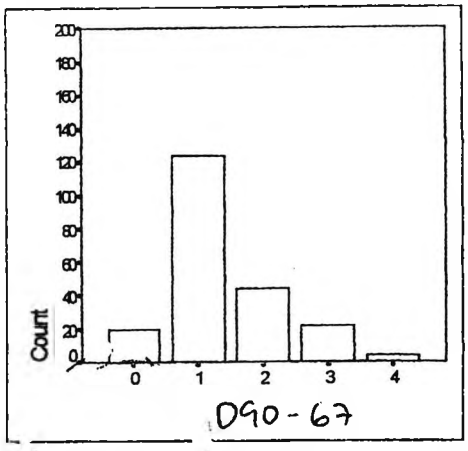
Facility index	0.98	
Clarity index	95.2 %	
Clinical Status	ABNORMAL	
Item:Total score	+ 0.466	P = 0.001
Item:Age	- 0.150	P = 0.3
Variance	0.76	
Skeweness	+ 0.52	
Patient Mean	4.00	

Q: ~~Familiar~~ things seem somehow altered in appearance.



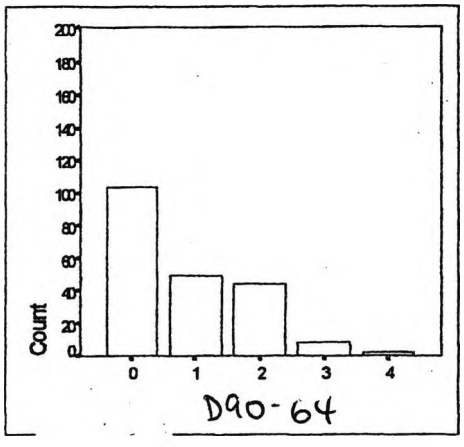
Facility index	0.81	
Clarity index	98.2 %	
Clinical Status	ABNORMAL	
Item:Total score	+ 0.472	P = 0.001
Item:Age	- 0.124	P = 0.071
Variance	0.72	
Skeweness	+ 0.82	
Patient Mean	3.50	

Q: Even friends and aquaintances strike me as changed and unfamiliar.



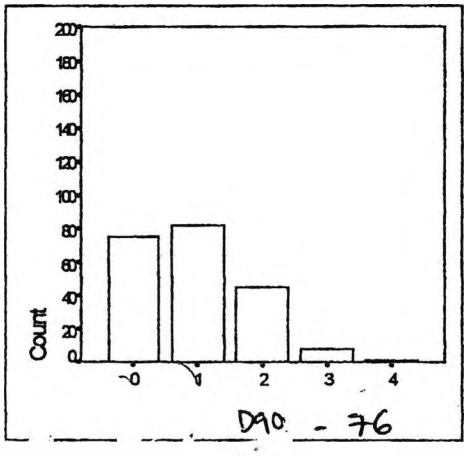
Facility index	1.37	
Clarity index	94.2 %	
Clinical Status	NORMAL	
Item:Total score	+ 0.623	P = 0.001
Item:Age	- 0.250	P = 0.001
Variance	0.74	
Skeweness	+ 0.89	
Patient Mean	4.00	

Q: Generally, I feel in touch with my surroundings.



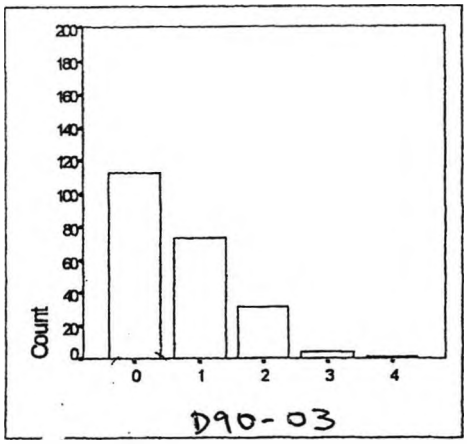
Facility index	0.83	
Clarity index	93.8 %	
Clinical Status	NORMAL	
Item:Total score	+ 0.178	P = 0.01
Item:Age	+ 0.146	P = 0.04
Variance	0.94	
Skeweness	+ 0.89	
Patient Mean	2.00	

Q: I sort of look through' myself in the mirror.



Facility index	0.95	
Clarity index	94.7 %	
Clinical Status	NORMAL	
Item:Total score	+ 0.407	P = 0.001
Item:Age	- 0.040	P = 0.6
Variance	0.76	
Skeweness	+ 0.62	
Patient Mean	2.00	

Q: I find myself looking on, as if not part of things.



Facility index	0.69	
Clarity index	98.7 %	
Clinical Status	NORMAL	
Item:Total score	+ 0.413	P = 0.001
Item:Age	- 0.025	P = 0.7 N/S
Item:Gender		
Variance	0.67	
Skeweness	+ 1.03	
Patient Mean	3.00	

Q: *'When I talk about myself, I feel as if I am talking about someone else'.*

The basis of item analysis as illustrated by the derealisation/Identity (rI) sub-catalogue

Like the eleven other sub-catalogues, the total scores of the rI sub-catalogue were positively correlated with the total score of the D90. Within the rI sub-catalogue, all six items exhibited a positive correlation with the total D90 score. The relationship was significant in all six cases, to either the .01 or .001 level, though there was considerable variation in the degree of correlation, which ranged from r = +0.178 to +0.623. (see Appendix 3i & 3ii).

The two negative bias items (item 12, *'When I look at my reflection, I know it's me'*, and item 67, *'Generally, I feel in touch with my surroundings')* were compared to each other, owing to the desirability of retaining at least one from each sub-catalogue. Of the two, item 67 orrelated more highly with the D90 total score, the item facility was lower and the correlation with age was a significant negative correlation, which was not the case with item 12, which showed no relationship with age. There were marginal differences in clarity for both items, with item 12 being slightly superior with an index of 98.2% as opposed to 94.2% for item 67. The skewness of +2.25 for item 12, was superior to a skewnesss of +0.89 for item 67, though item 12 was too high

facility index of 1.37, showing control subjects' responses were not largely restricted to the depersonalisation-disconfirmatory option, '*always*'.

The histogram of frequency distribution of responses for item 67, shows the majority of subjects opted for the response '*usually*' rather than *'always'*. This might be a reflection of the clinical status of the item, which was '*normal*'. The clinical status of item 12 was *'abnormal'* and therefore it is not surprising that compared to item 67, more responses elicited by our public controls was the depersonalisation-disconfirmatory extreme response '*always*'.

When all these factors were taken into account, item 67 was the chosen negative bias item of the two. Reassuringly, the '*patient mean*' far exceeded the control subjects' ' in item 67. This difference, though in the right direction, was less pronounced in item 12, giving the tentative suggestion that item 12 might not discriminate as well between depersonalised patients and controls.

Accepted and rejected items of the D90 as a result of item analysis

Category rI: derealisation/dysfunctional ego Identity

Accepted rI items

Generally, I feel in touch with my surroundings' (item 1)-ve bias

Familiar things seem somehow altered in appearance ' (item 10)

Even friends and acquaintances strike me as unfamiliar' (Item 15)

Rejected rI items

I sort of 'look through' myself in the mirror

I find myself looking on, as if not part of things

When i look at my reflection, i know its not me

Catgory rA (derealisation/dysfunctional ego Activity)

rA accepted items

I doubt my faculties of sight and hearing'

I feel really in tune with my senses

Texture is interesting to the touch (-ve bias)

rA rejected items

It's difficult to get involved in conversation

Things around me seem rich in colour

I like to be adventurous to get new experiences

My experiences of things around me are quite vivid (-ve bias)

Category rV (derealisation/dysfunctional ego Vitality)

rV accepted items

I find myself wondering if I'm asleep and life is all a dream'

I feel I'm very much pat of things (-ve bias)

It seems I am looking from afar, even at things nearby

rV rejected items

I feel I'm on another planet

The outside world seems like it's the other side of a glass pane

Life seems like a film played in front of me

Though I'm aware of things, nothing seems to register any more

Reality is floating away from me

Life is interesting and meaningful

As soon as I stop concentrating, everything seems far away

I ask myself whether situations I'm in are really happening

I wish I could experience things less vividly

Category pI (depersonalisation/ego Identity

pI accepted

My mind feels like its scattered into bits'

I feel at home with myself as a complete person (-ve bias)

When i talk about myself, I feel as if I'm talking about someone else'

pI rejects

The inside of my head seems like a merry-go-round

My usual self shines through

I feel I've changed deep down, by losing a part of my normal self

Even when I try, I can't hold an opinion about myself that lasts

One thing I'm sure of, I'm the same old me

I feel as if I'm not me at all

Category pA Depersonalisation/dysfunctional ego Activity

pA accepted

My actions seem automatic, as if controlled from outside of myself'

My life seems to be carrying on without me

I feel 'down to earth', with my feet firmly on the ground (-ve bias)

pA rejects

I act the part without feeling at all involved

I get the uncomfortable feeling I'm not in control of my own thoughts

Generally, my actions flow easily

As soon as I lose my concentration, I feel distant

Even when I don't want to, I analyse my every action as I'm doing it

I can easily picture things in my imagination

Generally, I would describe myself as clear-headed

Category pV depersonalisation/dysfunctional ego Activity

pV accepted:

I find myself wondering if I really exist'

My mind is in a fog

I can relax by sitting quietly (-ve bias)

pV rejects

I experience a dream-like detachment from myself

Time seems to stand still

I feel i am paling into insignificance

Category sI desomatisation/dysfunctional ego Identity

sI accepted

It's as if I'm in a different body to my own'

My arms and my legs don't feel attached to me

My body is in harmony with my being (-ve bias)

sI rejects

My hands feel they're not mine

My right hand doesn't seem linked up to my brain

I feel I'm being held together by cotton wool or plasticine

When I breath, it feels as if no air enters my lungs

My body feels natural

Category sA desomatisation/dysfunctional ego Activity

sA accepted

I feel wooden, as if my actions are controlled like a puppet'

I observe my movements like a spectator

I move naturally (-ve bias)

sA rejects

When I'm speaking, it sounds like someone else

When I go for a stroll, i am quite certain that it's me walking along

Category aI de-affectualisation/dysfunctional ego Identity

aI accepted

Whether I feel happy or sad, it fails to register'

I feel blank and shut off from my feelings

I am fully in touch with my emotions

aI rejected

My emotions feel lost in space

My 'heart' and my 'mind' go hand-in-hand

Category aA de-affectualisation/dysfunctional ego Activity

aV accepted

I'm so numb inside, I have to inflict pain to know I'm still there'

My emotions feel numb

aV rejects

Tranquillity and stillness really bother me

I don't think about my feelings - they look after themselves

I have moments of inspiration

It's difficult to feel depressed, even during sad moments

My emotions have died within me

Like everyone else, i can get involved with people i meet

aA accepted

When I feel pleased about something, the pleasure doesn't feel mine

When I'm taken by surprise, I feel like it's not happening to me

When I say something personal, it really means something to me (-ve bias)

aA rejects

When I laugh, its like someone else laughing

My usual feelings have gone

When I do something out of the ordinary, I feel a sense of thrill

Category sV desomatisation/dysfunctional ego Vitality

sV accepted

I feel I'm floating outside of my body

Parts of my body feel awkward, like putty or concrete

My physical self feels tangible and alive (-ve bias)

sV rejects

My body feels it could disappear into thin air

My body is sensitive to temperature

My face feels like plastic

It's difficult to feel pain properly

See the selected 36 items overleaf, in order of presentation (with codes presented here, but not shown on the scale when administered to participants).

A copy of the actual instrument, as presented to the second generation of cohorts, used in subsequent investigations below, is provided in Appendix 4i (label 'D36' excluded from administered instrument).

Table 4 : ... D36 Items and Codes (format not as presented to participants)

No.	Code	Item
1	-rI	Generally, I feel in touch with my surroundings
2	+aI	Whether I feel happy or sad, it fails to register
3	+pI	When I talk about myself, I feel as if I am talking about someone else
4	-sI	My body is in harmony with my being
5	+s	I feel wooden, as if my actions are controlled like a puppet
6	-pA	I feel 'down to earth', with my feet firmly on the ground
7	+rA	I doubt my faculties of sight and hearing
8	+aV	My emotions feel numb
9	-rA	I feel really tuned in to my senses
10	+rI	Familiar things seem somehow altered in appearance
11	+aA	When I'm taken by surprise, I feel like it's not happening to me
12	-pI	I feel at home with myself as a complete person
13	+sV	I feel I'm floating outside of my body
14	-aI	I am fully in touch with my emotions
15	+rI	Even friends and acquaintances strike me as changed and unfamiliar
16	+aV	I'm so numb inside, I have to inflict pain to know I'm still there
17	-rV	I feel I'm very much part of things
18	+pA	My actions seem automatic, as if controlled from outside of myself
19	+aI	I feel blank and shut off from my feelings
20	+rV	I find myself wondering if I'm asleep and my life is all a dream
21	-sA	I move naturally
22	+sI	It's as if I'm in a different body to my own
23	+pA	My life seems to be carrying on without me
24	-aA	When I say something personal, it really means something to me
25	+pV	I find myself wondering if I really exist
26	+rV	It seems I am looking from afar, even at things nearby
27	+pV	My mind is in a fog
28	-sV	My physical self feels tangible and alive
29	+aA	When I'm pleased about something, the pleasure doesn't feel mine
30	+sV	Parts of my body feel awkward, like putty or concrete
31	-rA	Texture is interesting to the touch
32	+sA	I observe my movements like a spectator
33	-aV	I can feel close to people in whose company I feel at ease
34	+pI	My mind feels like it's been scattered into bits
35	-pV	I can relax by sitting quietly
36	+sI	My arms and my legs don't feel attached to me

EMPIRICAL INVESTIGATIONS OF THE D36 CATALOGUE

1 **The samples to which the D36 was administered**

- Role, age, gender

2 **Distribution of D36 total scores for the three groups**

- Mean scores, distribution, correlation with age across and within the groups

3 **Distribution of D36 total scores between depersonalised and non-depersonalised samples**

4 **Discriminant function of D36**

- For three criterion groups, public controls, non-depersonalised patients, and depersonalised subjects

5 **Factor structure of D36 catalogue**

- Eigen values, scree plot

6 **Item analysis of D36 catalogue**

- Internal consistency of each item, contribution to total score
- The discriminant function of the D36 catalogue, item by item

7 **Summary table of properties of each item**

8 **Split-half reliability of the final instrument**

1 The nature of the samples to which the D36 was administered

Each paticipant agreed in writing to take part in the study, verbally and in writing. The scales were completed anonymously. The major diagnosis was noted in the Warley patients only (sources 6 and 9), which was obtained. directly from the case notes. In clinical cases, consent was also obtained from a patient advocate, usually the patient's Named Nurse, confirming the patient was willing to take part in the study and understood the purpose of the study was for research purposes only and was anonymous.

The total number of participants used to investigate the D36 catalogue was 161. There were three criterion groups which comprised the participants of the study, namely, public controls (n = 92), patient controls (n = 33) and depersonalised patients (n = 36). See Appendix 1a.

The samples were accessed through a variety of sources, as follows:

Public Controls (n = 92): These were mental health personnel, operating at all levels, derived from three sources, namely, employees at Warley Hospital (then BHB NHS Trust, now part of North East London Mental Health Trust) (n = 4), employees of the Institute of Psychiatry, London (n = 51), and staff employed at the University of Zurich Dept of Psychiatry (n = 37). All were fit for work at the time and they were generally enlisted for the project in the lunch hour, in the respective canteens of the above institutions.

Non-Depersonalised Control Patients (n =33): The sample was derived from two sources, Warley Psychiatric Hospital (n = 36) and the Dept of Psychiatry, Institute of Psychiatry (n = 27).

Depersonalised patients (n = 36): The majority were derived from the Institute of Psychiatry (n = 27) and consisted of both psychiatric and psychiatric patients, the remainder coming from Warley Hospital (n = 9).

The reason for the collaboration with the Institute of Psychiatry was that the author had been approached by the head of its' new Depersonalisation Research Unit, to request the use of the D36 catalogue, following an academic presentation concerning the D36 catalogue at University of Leeds and the Institute itself. The offer of collaboration with the Depersonalisation Research Unit was welcomed, because at the Unit, all patient samples were routinely screened by PSE-trained staff, for presence or absence of depersonalisation phenomena, which was usually not the case in other institutions (see Discussion).

Experimental Method

For the purposes of the research, the PSE-diagnosed presence or absence of depersonalisation was viewed as the major independent variable and item scores the dependant variable (in the sense that depersonalisation status was assumed to have an influence on scale scores, but participants' responses to the scale did not influence presence or absence of clinical depersonalisation). This was a comparative study, in which the participants were usually grouped in three separate ways:

1 Three groups, according to membership to either

a) Public controls, not PSE-screened for depersonalisation, but assumed not to be depersonalised.

b) Patient controls, who were non-depersonalised patients, accessed from various sources, not always disclosed, but who were PSE-diagnosed as non-depersonalised..

c) Experimental patients, who were clinically depersonalised by PSE criteria from various sources, not always disclosed.

The characteristics of these three groups (including responses to the items) could be compared, either simultaneously, or by various comparative analyses of each individual group with another - that is a:b (one control with the other), b:c (patient controls with experimental patients) and a:c (public controls with experimental patients).

2 Two groups, comprising the same patients, but with groups a and b merged for comparison with group c (a + b : c, which in effect meant a larger merged control sample, containing patients and public, could be compared with the experimental sample).

3 Grouping of all participants was carried out in ways, which took into account bio-social data, with a view to examining the potential effects of bio-social factors as extraneous independent variables which might potentially exert a contaminating influence on the dependant variable, the D36 item scores. The bio-social variables were age, gender and nationality.

Preliminary bio-social details of the participants, according to the grouping variables

1 The Age range of the participants, according to criterion group.

Age of participants was derived from the bio-social data requested on the questionnaire and is tabulated below:

Table 6a: Mean age in years and age distribution of the three criterion groups in Stage 2

	Public controls	Patient controls	Depersonalised patients
N	92	33	36
Mean age	30.89	38.33	33.77
Standard deviation	11.33	11.60	9.47

The mean ages for the three groups were significantly different, using one-way ANOVA ($F [2,153] = 5.29$, $P < 01$). See Appendix 5ii

Table 6b: Mean age in years and age distribution of the two criterion groups used in Stage 2

	Merged control sample	Depersonalised pts
N	121	35
Mean Age	32.74	33.77
Standard deviation	11.80	9.47

The mean ages between the two groups are not significantly different, $t = .63$; $df = 154$; $p = 63$

See Appendix 5iii.

2 Gender distribution within the three criterion groups

The sex of participants was also requested on the questionnaire and was completed by all but four participants, as below:

Table 6c: Frequency of gender, Criterion Group (two controls)

	Frequency of Gender	
	Male	Female
Public controls	42	49
Patient controls	14	18
Depersonalised patients	16	19
Total	72	86

For participants with known gender, Chi = .06, df = 2, p = .97, see Appendix 5iv.

Table 6d: Distribution amongst the depersonalised and non-depersonalised samples, Criterion Groups by gender (merged controls)

	Frequency of Gender	
	Male	Female
Controls	56	67
Depersonalised patients	16	19
Total	72	86

Chi = .0, df = 1 p = .98

Of the 158 participants of this study (out of 161) for whom gender was known, the proportion of females was slightly higher then the proportion of males (46% and 54% respectively) and this was so for both the depersonalised and non-depersonalised samples. The distribution of males to females in both groups did not differ significantly from the expected, so that a 2x2 cross-tabulation of criterion groups across gender yielded no association between depersonalisation as a diagnosis and gender using the chi test (see Appendix 5v).

Table 6e: Numbers of subjects in the three criterion groups, according to nationality

	British	Swiss	Total N
Public controls	55	37	92
Patient controls	33	-	33
Depersonalised patients	36	-	36
Total N	124	37	161

Psychopathology of the criterion groups

Diagnosis of the subjects was not known in the majority of depersonalised patients (from the Institute). However, limited BAI and BDI data was available. In view of the possible influence of general psychiatric morbidity on the total scores, as an extraneous independent variable, this data was taken into account.

Comparison of D36 total scores for the criterion groups

Descriptive statistics concerning total D36 scores have been tabulated, including mean, range, median, mode and standard deviations, for all participants and the three criterion groups and for all participants and two criterion groups, when the public and patient controls are merged. The criterion group comparisons are also presented in histogram form. For ease of visual perusal, the horizontal axes of each histogram are identical, representing categories of D36 total scores, each of a 10-point range. Figure 6a illustrates the frequency distribution of total D36 scores for all participants collectively. Figures 6b, 6c and 6d illustrate the frequency distribution of total D36 scores for participants of each of the three criterion groups.

Distribution of D36 scores for all groups

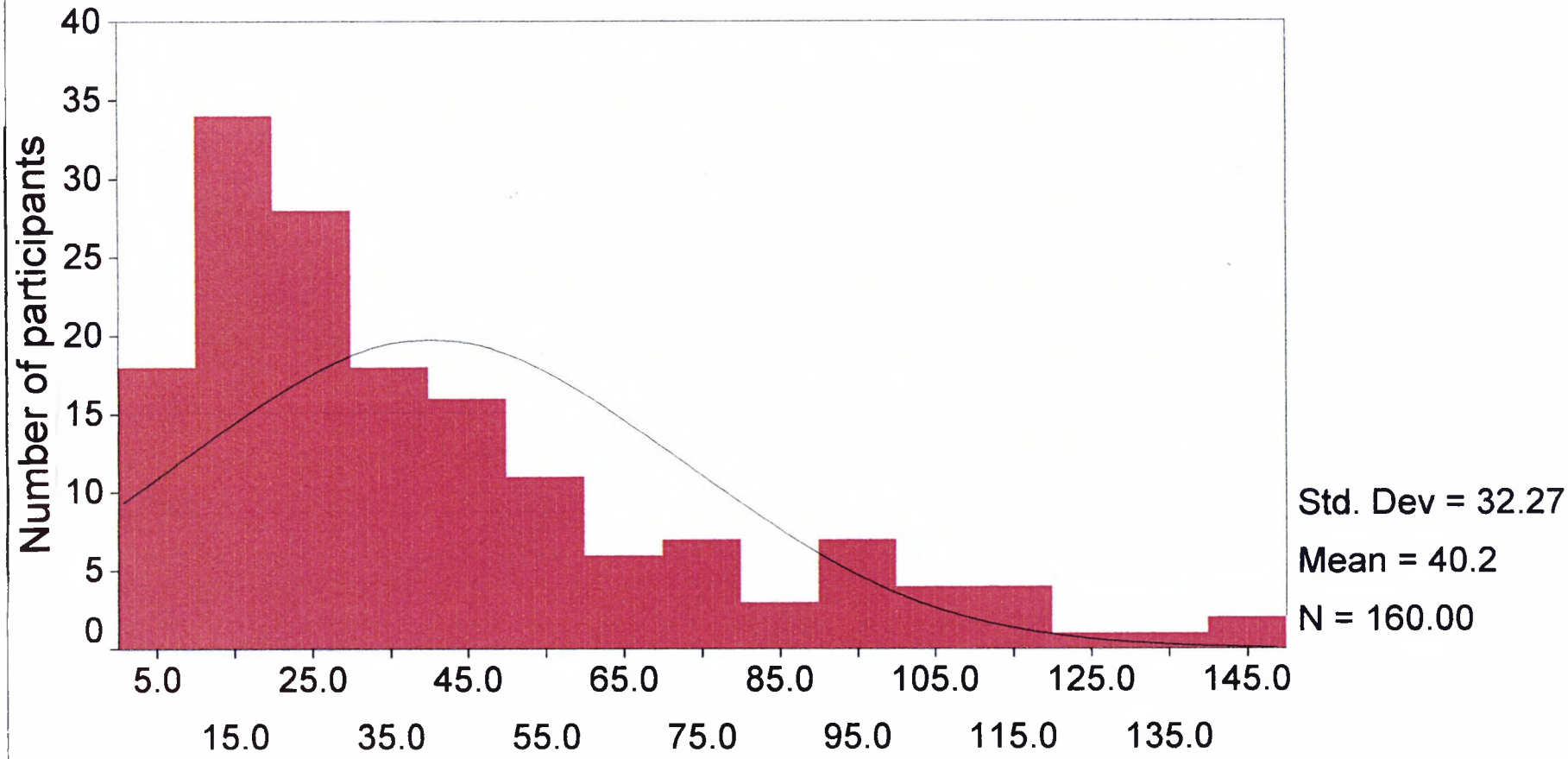


Figure 6a

Distribution of D36 scores for public controls

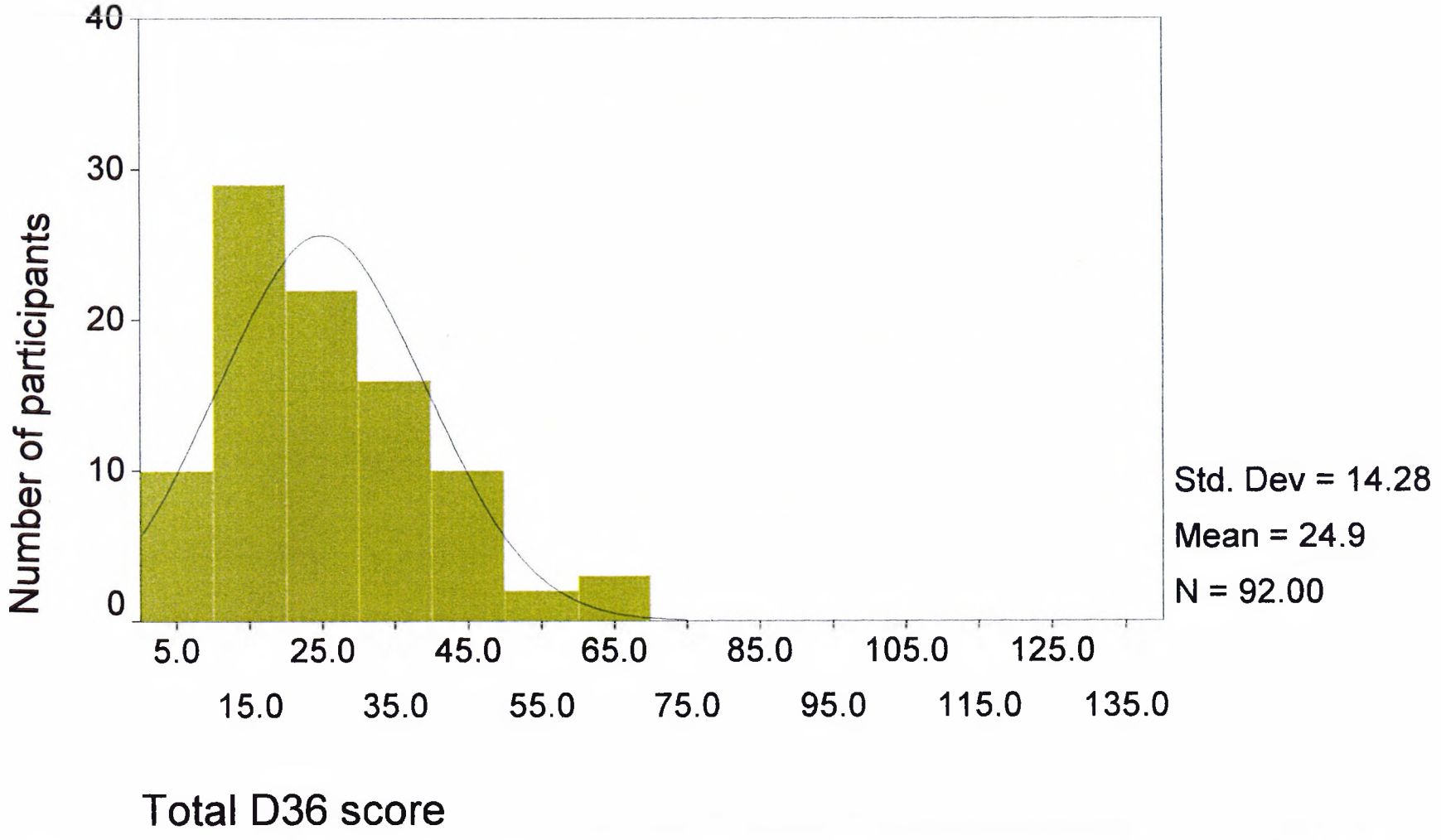


Figure 6b

Distribution of D36 scores for patient controls

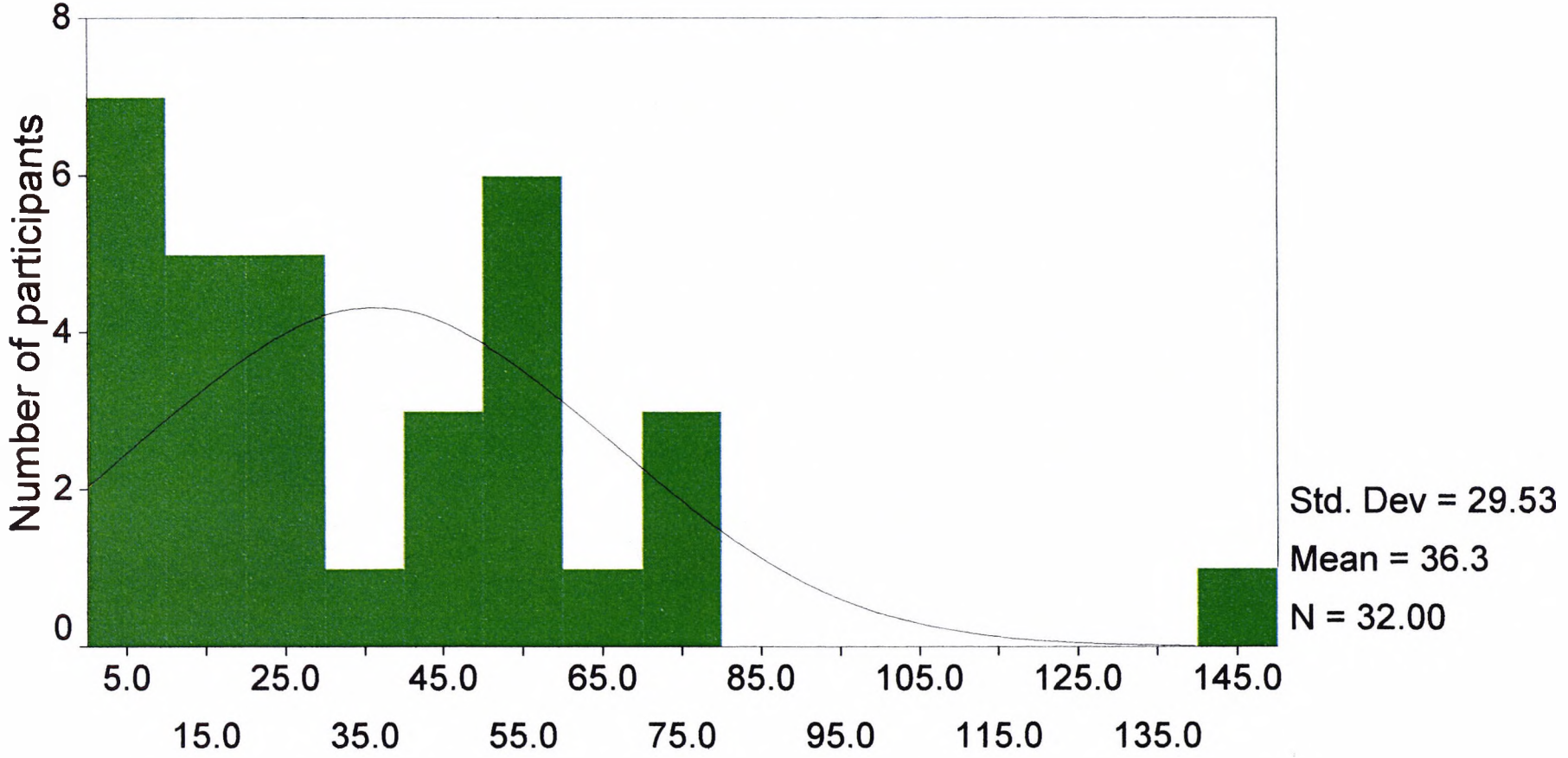
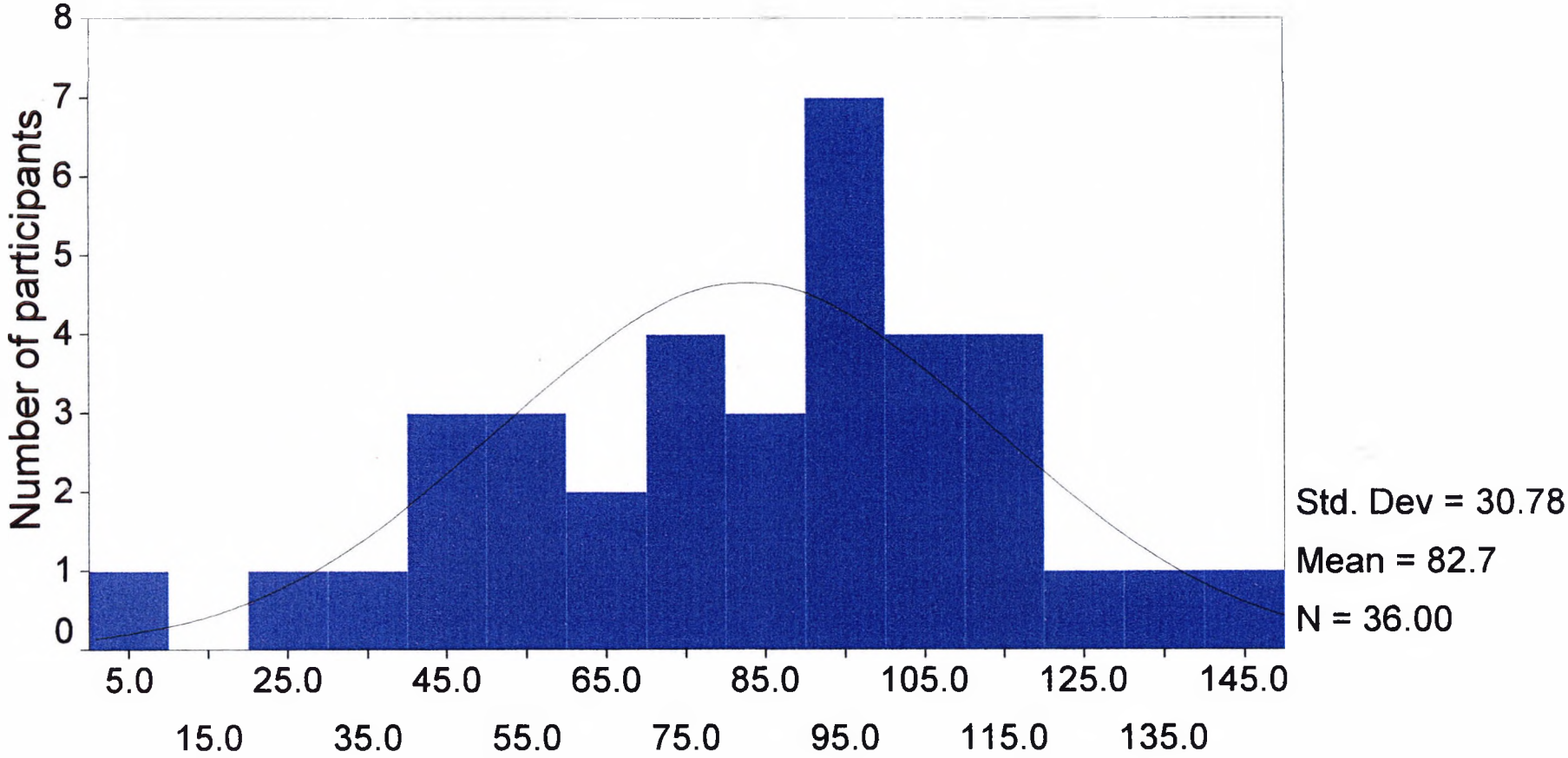


Figure 6c

Distribution of D36 scores

for depersonalised patients



Total D36 scores

Figure 6d

Table 8a: Mean D36 scores across the three criterion groups *(Groups 1, 2, and 3)*

		Mean D36	
	No. subjects	**Mean total score**	**SD**
Public controls	(n = 92)	24.95	14.28
Non-depersonalised pts	(n = 32)	36.34	29.53
Depersonalised patients	(n = 36)	82.67	30.78
Total sample	(n = 160)	40.21	32.27

The D36 total scores between the three criterion groups were highly significantly different, using one-way ANOVA ($F [2, 157] = 86.5$, $p < .001$)

Using post hoc tests, all three groups were significant from each other. (see Appendix 6i).

Table 8b: Mean D36 scores for merged controls (Groups 1 + 2) and the experimental sample (Group 3)

	Sample size	**Mean D36**	**SD**
Non-Depersonalised samples (combined)	(n = 124)	27.89	19.90
Depersonalised patients	(n = 36)	87.67	30.78

For the merged controls, the differences in mean values obtained were again highly significant, the merged controls scoring approximately a third the scores of the experimental group ($t = 10.1$; $df = 43.8$; $p = < .001$). See Appendix 6ii.

Means and SD's of Clinically Depersonalised sample, according to source

Most of the experimental group came from the Institute of Psychiatry, London, for reasons already discussed. The remainder were from the author's local hospital. Because the local source consisted of acute in-patients only, while the Institute patients consisted of approximately half of both, a comparison of the two was made, in terms of D36 scores.

Table 8c: Comparison of Institute and Warley depersonalised patient samples, according to D36 mean totals

	Mean D36 score	SD
Warley sample (n = 9)	85.33	28.11
Institute sample (n = 27)	81.78	32.08

No formal statistical testing of the difference was carried out, owing to low numbers, but the data from the two sources appears comparable, with the Institute sample showing slightly lower D36 scores, but slightly higher standard deviation of scores, suggesting considerable overlap in total scores between the two sub-samples.

3 Relationship between demographic variables of participants and D36 total scores

The demographic variables of age and sex were investigated in relation to total score, (discussion : to rule out the possibility that the differences in D36 total scores could be explained in terms of age or gender, rather than criterion group membership).

Table 8d: Relatedness of D36 total scores and gender of participants

	Mean D36 score	SD
males (n = 71)	38.46	29.81
females (n = 86)	41.51	34.49

t = -.59; df = 155; two-tailed significance = .559, p = >.05 (see Appendix 6iii)

Table 8e: Relatedness of D36 scores and gender, according to criterion group

	Mean D36 score		SD		Mean difference	sig
	males	females	males	females		
Public controls	27.19	23.35	15.06	13.44	3.84	n/s
Patient controls	23.00	44.61	17.82	33.50	21.61	*
Depers patients	80.63	85.42	28.51	33.64	4.79	n/s

*There were no significant D36 differences according to gender in either public controls or depersonalised patients, but females scored significantly higher than the males in patient controls (t = 2.1, df = 29, p = < .05), see Appendix 6iv.

Relatedness of D36 scores and age for the whole sample (n = 155)

As with the D90 cohort data, the D36 data was examined in terms of relationship between total score and age. For the whole D36-related sample, there was a slight, insignificant positive correlation (r = +.014, p = >.05, see Appendix 5i), with the highest scorers on the scale tending to be aged between the mid 20's and mid-30's (see scatter-plot overleaf). Further exploration of the data were carried out to ascertain whether a similar age:total score relationship was consistent between the three criterion groups, as below.

Table 8f: Correlation of D36 with age, within the three criterion groups

	corr coefficient	sign
Public controls	-.067	n/s
Patient controls	+.105	n/s
Depers patients	-.318	n/s
All participants	+.014	n/s

Though the strength and direction of correlations seen above varied between the groups, the relationship between age and D36 scores was not significant for any of the three cohorts. The strongest age effect was seen in the depersonalised group, which almost achieved significance at the .05 level (see Appendix 5i).

Table 8g: Total D36 scores of public controls according to nationality

Nationality	British	Swiss
(No. of subjects)	(n = 51)	(n = 37)
Mean D36 score	26.10	23.95
SD	14.28	14.8

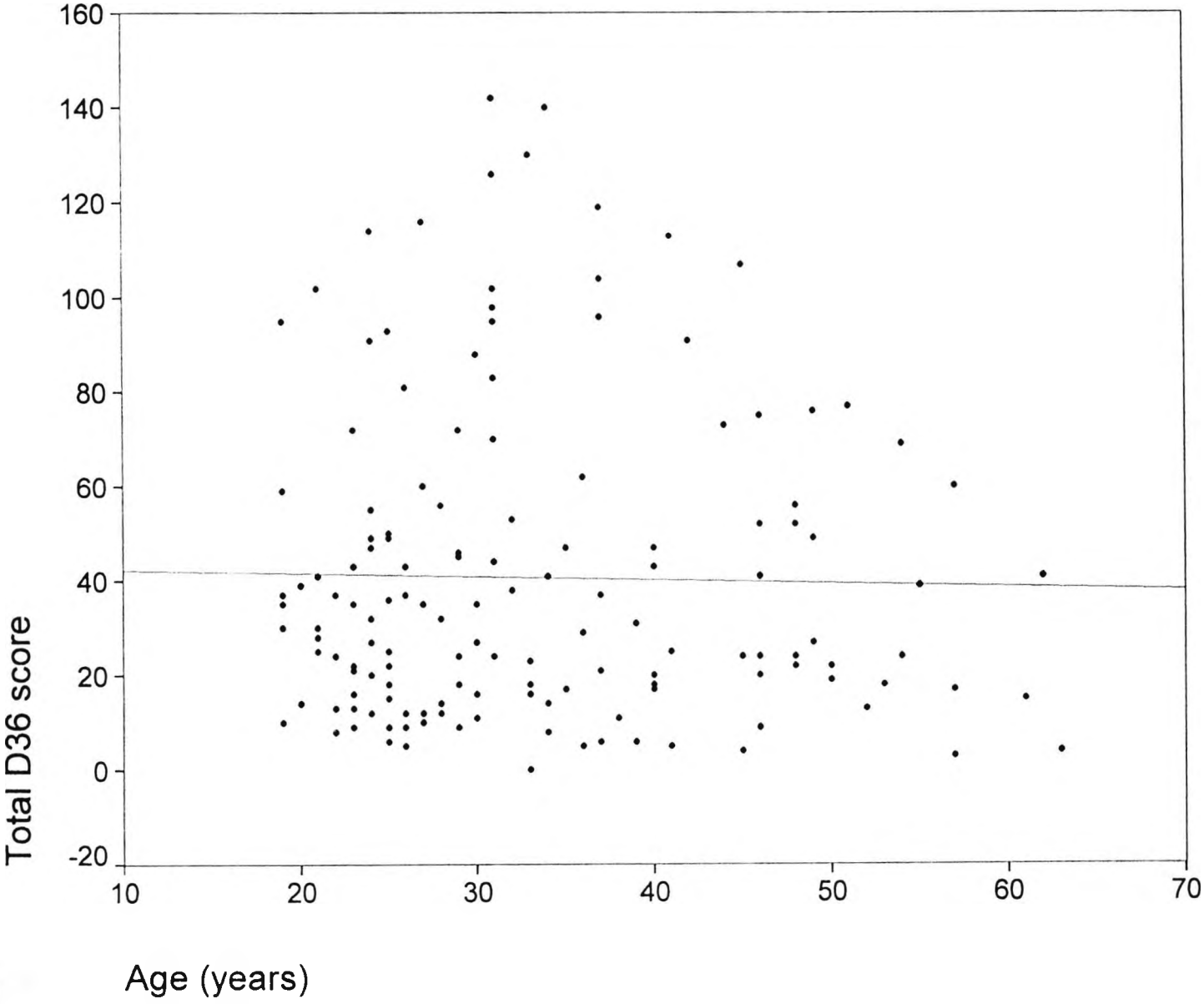
f = .019, p = .951

Swiss and British control scores, when compared, showed mean scores within similar range, with comparable standard deviations. These differences between the nationalities of controls was not significant.

Table 8h: Correlation between total D36 score and age (in controls) according to nationality

	British	Swiss
Correlation with age	+.009	-.215
Sig of r	n/s	n/s

Relationship between age and total D36 score for all subjects (n=155)



Rsq = 0.0005

Figure 7

THE D36 IN RELATION TO PSYCHOPATHOLOGY

It was felt important to investigate other available clinical variables of the two patient samples, apart from their depersonalisation status, in order to explore the possibility that differences in their respective D36 scores were attributable to a form of psychopathology other than depersonalisation. Unfortunately, there was not as much clinical information available to the author as hoped. This was because the main source of patient data came from the Institute and because of the Institute's means of accessing patients, not all the participants had undergone a full mental state examination at the time of the current study.

There were two sources of information regarding the psychopathology, the first being diagnosis in a limited sub-sample and the second, anxiety and depression measures obtained from psychometric instruments, the Beck Anxiety Inventory and Beck Depression Inventory. For those patients for whom data was available, these criteria were compared to the D36 scores. .

Table 9a: Comparison of BAI/BDI scores in the control and depersonalised patients, for whom scores established (SD's in brackets)

Beck instrument	Control Patients	Depers Patients
	N = 22	N = 13
BAI	16.00 (13.44)	25.77 (14.11)
BDI	16.09 (11.12)	25.54 (9.61)

The difference in distribution of BAI scores between groups was significant at the .05 level ($t = -2.04$ $df = 33$; $p = <.05$). The difference between BDI scores between groups was significant at <.05 level ($t = -2.54$; $df = 33$; $p = < .05$).

The inter-relationship between Beck Anxiety Inventory and Beck Depression Inventory (BAI and BDI) scores and D36 total score was carried out for all the patients as a merged group and separately for the clinically depersonalised patients, using the Pearson's test.

Table 9b: intercorrelations of D36, BAI and BDI scores in all rated patients (n = 35)

	D36	BAI	BDI
D36	-		
BAI	**0.66*** **	-	
BDI	**0.66*** **	**0.72*** **	-

*** significant at .001 level

As can be seen by the above data, all of the three intercorrelations were significant at the .001 level.

Table 9c: Intercorrelations of D36, BAI and BDI in depersonalised patients rated (n = 12)

	D36	BAI	BDI
D36	-		
BAI	**.63***	-	
BDI	**.62***	**.57 (n/s)**	-

*significant at .05 level

D36 scores and diagnoses of the patients for whom major diagnosis was known

The only patients for whom specific diagnoses were known were those patients seen directly by the author, amounting to five controls and nine depersonalised patients. Evidence of responses to the scale and diagnosis is therefore somewhat anecdotal, but nonetheless, of clinical interest. The author's particular work setting was acute admissions wards, which do not routinely screen formally for depersonalisation and are more concerned with major diagnoses. However, during the time window of the research, nine acute psychiatric in-patients were encountered, and the diagnoses recorded.

Only five non-depersonalised acute in-patients were administered the D36 which, in retrospect was inadequate, especially in view of the fact that the majority of acute in-patients were likely to have been non-depersonalised. The problem was that the referring psychiatrists remembered to flag up patients who spontaneously reported prominent depersonalisation symptoms, but needed to be repeatedly reminded to identify with certainty depersonalisation-negative patients. This difficulty is in itself revealing, in that it suggests that on the whole, psychiatrists do not usually screen for features of depersonalisation, unless the syndrome is mentioned by patients themselves. Nonetheless, in retrospect, more effort could have been put into persuading the author's psychiatric collegues to investigate *absence* of the syndrome as intensively as marked presence of the syndrome.

Table 9d: D36 totals (in ascending order of score) for patients with known main diagnosis, by criterion group

Control in-patients (n = 5)		**Depersonalised in-patients (n = 9)**	
Diagnosis	**D36 total**	**Diagnosis**	**D36 total**
		Depression	24
Depression	4	Personality dsdr	72
Bi-polar	5	Depression	73
Personality dsdr	9	Schizophrenia	88
Substance abuse	10	PTSD	91
Schizophrenia	52	Paranoid psychosis	95
		Schizophrenia	95
		Pers dsdr/PTSD	104
		Primary depers	126
Mean total D36	**16.00**		**85.33**
Standard deviation	**(20.28)**		**(28.11)**

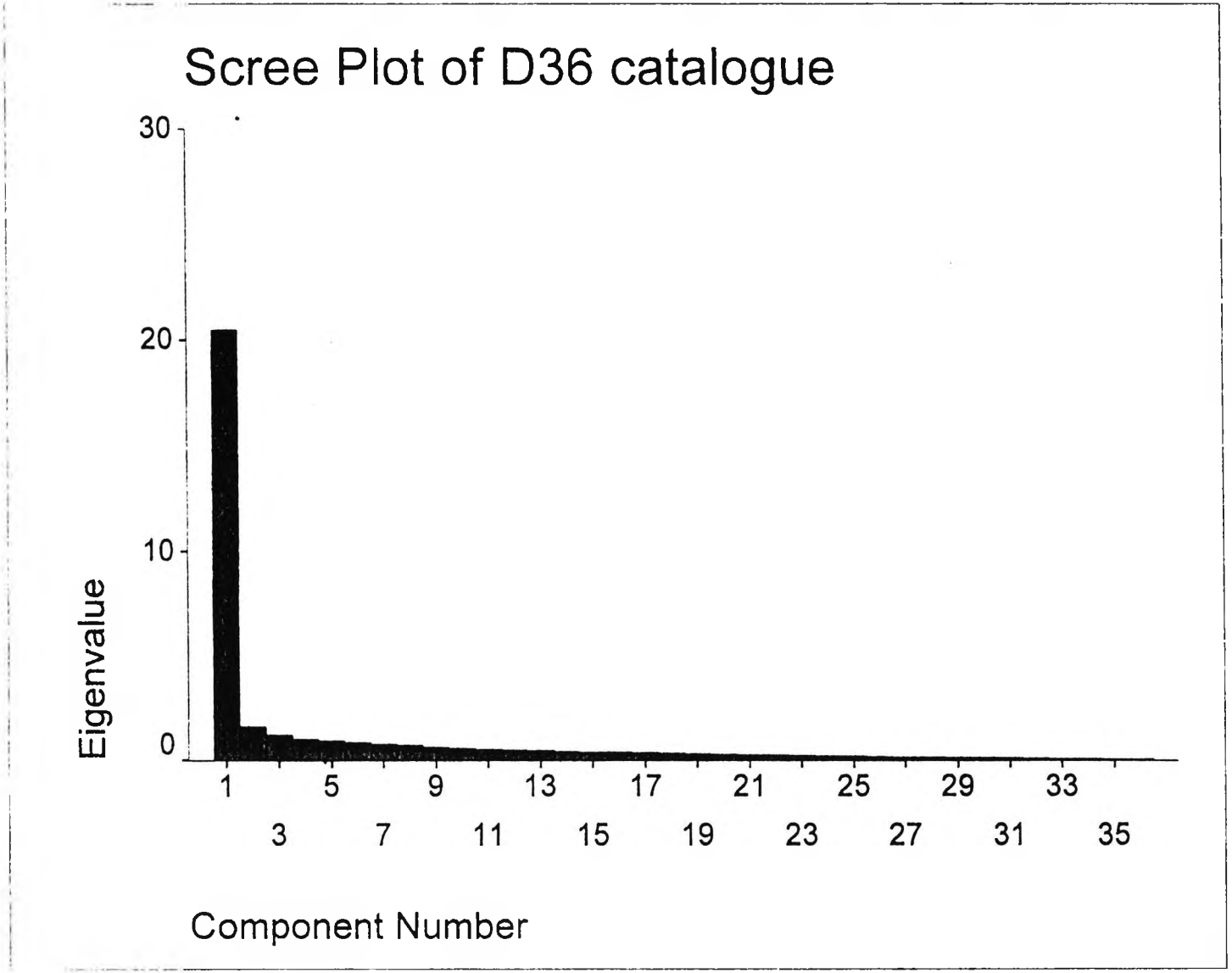
There is a marked difference in mean D36 scores between the small samples of control and experimental acute in-patients, though the sample was too small to formally test differences between means for the two groups. For further information, see Discussion section below, pages 158 -159.

The calculations above have used the total score of the catalogue, assuming it to be a meaningful, unitary measure of depersonalisation phenomena. However, before going further to carry out an item analysis, it was important to investigate the possibility of co-varying sets of items, each set forming their own distinct cluster. Using Varimax rotation, the Eigen values of the D36 catalogue are given below, using all participants of the study, together with a scree plot, showing the contribution of successive hypothesised factors within the data set (cf Appendix 6vf).

Table 10: Eigen values over 1.0 from D36 catalogue, derived from all participants (n = 161), by Varimax rotation

Component	Initial Eigenvalue	%Variance	Cumulative %Variance
1	20.38	56.60%	56.60%
2	1.64	4.55%	61.16%
3	1.25	3.47%	64.63%
4	1.05	2.92%	67.55%

Figure 10: Scree plot of the D36 catalogue, using scores for all participants overleaf


Scree Plot of D36 catalogue
30
20
10
0
Eigenvalue
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
Component Number

Given that the items were classified three-ways (ego dysfunction) and four-ways (symptom type), a three component (Appendix 6vi) and four component rotation (Appendix 6vii) was carried out, to ascertain whether the item loadings to either provided a clinically meaningful relationships between the items The data derived from these rotations, is evaluated in the Discussion section below, but did not yield any substantial theoretically coherent structure.

5 DISCRIMINANT FUNCTION OF THE D36 CATALOGUE, BASED ON TOTAL SCORE

A comparative analysis of the distribution of total D36 scores was carried out for the three criterion groups – the two control groups and the experimental sample. This was done by expressing the efficiency with which total D36 scores could predict group membership of the participants to each of the three groups, expressed as 'classification accuracy'.

Table 11a:..Classification accuracy of the D36, according to group membership of the three criterion groups

		Predicted Group Membership		
	no. subjects	**Gp 1**	**Gp 2**	**Gp3**
Public controls (Gp 1)	**(n = 92)**	**63**(68.5%)	**26**(28.3%)	**3**(3.3%)
Non-depersonalised pts (gp 2)	**(n = 32)**	**17**(53.1%)	**10**(31.3%)	**5**(15.6%)
Depersonalised patients (gp 3)	**(n = 36)**	**2**(5.6%)	**7**(19.4%)	**27**(75.0%)

Canonical discrimination = .7241, p = < .001

Percentage of cases correctly classified = 62.5%

(see Appendix 6i)

Classification accuracy of the D36 total scores, according to depersonalisation status, using data from all participants

A further comparative analysis of the distribution of D36 total scores was carried out, by re-ealculating the classification accuracy for two groups: all controls as a merged sample, and the depersonalised sample, to reflect the degree to which all control participants and clinically depersonalised participants exhibited distinct ranges of D36 scores.

Table 11b : Discriminant analysis of D36 two ways, according to depersonalisation status, using all participants

	Predicted Group Membership	
	Non-depersonalised	**-Depersonalised**
Merged controls (n = 124)	**115**(92.0%)	**10**(8.0%)
Depers patients (n = 36)	**8**(22.2%)	**28**(77.8%)

Canonical discrimination = .7111 p = <.0001 Correctly classified = 88.82% (see Appendix 6ii) (A visual comparison of total scores between the groups can be made by referring to Figures 6a – 6d, pages 99-102 above).

Discriminant function of the D36 between control and experimental patients

For use in the clinical context, one would expect a robust instrument measuring depersonalisation to be able to identify depersonalised patients from other psychiatric patients not experiencing the condition. With that in mind, the public controls were excluded, so that the item catalogue could be assessed in terms of its efficiency in identifying the syndrome from a background of other psychopathology (see Table 11c below).

Table 11c: Classification accuracy of the D36, using patients only

	Correctly classified	
	Gp2	**Gp3**
Control patients (n = 32)	**27**(84.4%)	**5**(15.6%)
Depersonalised patients (n = 36)	9(25.0%)	**27**(75.0%)

Canonical correlation = .6136; significance = .0001

Percentage of cases correctly classified = 79.4% **(see Appendix 6iii)**

Discriminant function of the D36 as a tool for epidemiological surveys of the normal population

In surveys of the general public, it would be possible to employ the D36 in detecting levels of ICD 10-defined abnormal depersonalisation, whilst avoiding costly clinical interviews with PSE-trained clinicians. The ability of the catalogue was examined in differentiating the non-clinical control sample (members of the public) from depersonalised patients, thus excluding the control patient sample.

Table 11d: Classification accuracy of the D36, using depersonalised patients and public controls

	Predicted gp membership	
	1	**3**
Public controls (1)	**88**(95.7%)	**4**(4.3%)
Depersonalised patients (3)	**7**(19.4%)	**29**(80.6%)

Canonical correlation = .7906

significance = <.0001

%cases correctly classified = 91.41%

(see Appendix 6iv)

Discriminant function of the D36 amongst non-depersonalised public and control patient samples

The instrument was intended to tap depersonalisation, whilst avoiding tapping

other forms of psychopathology and therefore in a discriminatory analysis of controls, low classification accuracy would be desirable.

Table 11e: Classification accuracy of D36 total score, using public controls and patient controls only

	Predicted group membership	
	1	2
Public controls (gp1)	63(68.5%)	29(31.5%)
Patient controls (gp2)	18(54.5%)	15(45.5%)

Canonical correlation = .252 significance = <.01 % correctly classified = 62.9%

(see Appendix 6v)

Table 11f: Summary of D36 discriminatory properties

Significance of the difference between groups:

Groups Compared	Classification Accuracy	Canonical Correlation	Wilk's Lambada	f ratio	significance
All three groups	**62.7%**	**.724**	**.476**	**86.52**	***
All controls: Depers.	**88.8%**	**.711**	**.494**	**161.62**	***
Control pts: Depers pts	**79.4%**	**.614**	**.623**	**39.86**	***
Public: Pt Controls	**62.9%**	**.252**	**.937**	**8.25**	**
Public:Depers pts	**91.41%**	**.791**	**.375**	**210.02**	***

*** p= <.001
** p= <.01

ITEM ANALYSIS OF THE D36 CATALOGUE

The fact that the total score of the D36 score co-varied significantly with expert clinical judgement concerning presence or absence of depersonalisation meant that the total score could be regarded as a reasonably accurate measure of depersonalisation. Given that all the items elicited a substantial range of responses on their corresponding0 – 4 scale, it seemed likely that the majority of them contributed to the discrimination power of the whole catalogue. However, it was not certain that all items had this contributory effect.

To check for possible 'rogue items', that is items that made no contribution, or even a negative contribution to the discriminatory power of the catalogue, two types of item analysis were carried out. Firstly, the internal consistency of each item was determined, by calculating the correlation between each item and the D36 total score (see Appendix 8ii), followed by an analysis of the discriminatory power of each item, using the Mann-Whitney test (Appendix 8iii), comparing the sums of ranks between item scores belonging to each criterion group, together with univariate ANOVA's (Appendix 8i).

Discriminant function of the catalogue's constituent parts, item by item

A major potential utility of the catalogue was based on its' discriminant function and therefore it was decided to investigate the performance of each item in its ability to distinguish the criterion groups. The discriminant function was calculated according to each item's ability to detect significant differences in group membership to merged controls (groups 1+2 together) and depersonalised patients (group 3), then discrimination of group membership to a restricted sample of patients only, that is, the control patients (group 2) and experimental patients (group 3).. In either case, all the item means for the control group, whether merged controls or patient controls only, was lower than the experimental group (a desired outcome). A summary of the relatedness of item scores according to group is given in Appendix 8 and below.

The data for group comparisons computed by the Mann-Whitney test was compared to the same group comparisons computed by univariate ANOVA's. The ANOVA's compare individual item scores for groups 1, 2 and 3, but not, of course, merged controls (1 +2) with group 3. The ANOVA results are reported in the Appendix and basically, identify the same favourable and unfavourable qualities of the 36 individual items, in greater detail. The related Newman Kuels are also presented in Appendix 8i, the results of which enabled a direct comparison with the Mann-Whitney analyses. There is a high level of agreement with the Mann-Whitney except for two items (see Discussion below, page 136).

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Table 12: Significance of the relationship between individual item scores, according to criterion group comparisons (see Appendix 8ii)

Item	Correlationwith total score	Significance of difference Groups (1+2) : 3	Significance of difference Groups 2:3	Significance of difference Groups 1:2	Sig of diff Gps 1:3
1	+ .769***	***	***	n/s	***
2	+ .652***	***	*	n/s	***
3	+ .816***	***	***	n/s	***
4	+ .748***	***	***	n/s	***
5	+ .830***	***	***	n/s	***
6	+ .788***	***	***	n/s	***
7	+ .568***	***	*	*	***
8	+ .810***	***	***	**	***
9	+ .681***	***	***	n/s	***
10	+ .754***	***	***	n/s	***
11	+ .774***	***	***	n/s	***
12	+ .793***	***	***	***	***
13	+ .769***	***	***	n/s	***
14	+ .726***	***	***	n/s	***
15	+ .784***	***	***	n/s	***
16	+ .661***	***	***	n/s	***
17	+ .728***	***	***	n/s	***
18	+ .820***	***	***	n/s	***
19	+ .804***	***	***	*	***
20	+ .792***	***	***	n/s	***
21	+ .668***	***	**	n/s	***
22	+ .843***	***	***	n/s	***
23	+ .825***	***	***	**	***
24	+ .616***	***	***	n/s	***
25	+ .817***	***	***	n/s	***
26	+ .855***	***	***	n/s	***
27	+ .812***	***	***	n/s	***
28	+ .787***	***	***	n/s	***
29	+ .804***	***	**	***	***
30	+ .764***	***	***	n/s	***
31	+ .528***	***	N/s	***	***
32	+ .754***	***	***	n/s	***
33	+ .615***	***	*	n/s	***
34	+ .797***	***	***	*	***
35	+ .564***	***	N/s	***	***
36	+ .807***	***	***	**	***

n/s = not significant

*** = significant to .05 level**

**** = significant to .01 level**

***** = significant to . 001 level**

Assuming all patients were correctly diagnosed for PSE-determined Depersonalisation syndrome by the experts, the most desirable result would be a highly significant difference in the distribution of item scores between the patient groups, but a similar or widely overlapping distribution of item scores between the control groups (because controls are defined as not exhibiting the experimental variable, depersonalisation).

A sure sign that an item tapped extraneous psychiatric characteristics would be if that item efficiently differentiated the patient controls and public controls. There was therefore a strong argument for eliminating items which differentiated the responses of control patients and public controls, moderated by the same item's ability to discriminate clearly between control and depersonalised groups. (see Discussion p136).

Comparison of classification accuracy of positive and negative bias items, according to 'depersonalisation status' group membership, using data for all participants

It was of some interest to compare the efficiency of positive bias and negative bias items of the D36 in identifying depersonalised and non-depersonalised participants. Therefore two sub-scores of the D36 were derived, based on the direction of scoring, that is, items were sub-divided according to their negative or positive bias. The results are represented in the relevant Results Tables below. These tables calculate classification accuracy of the two item sub-sets, when either all subjects are used, so that non-depersonalised patients are merged with public controls to form one control sample, and when the same calculation is restricted to patients.

Next, the discriminant function of the D36 was carried out using depersonalisation status (positive or negative). This required merging the two groups which were assumed more or less depersonalisation-free, that is, the public controls and control patients, to examine the ability of the D36 to assign membership to this cohort and to the remaining group, the depersonalised patients. A comparison of mean D36 scores for the two groups is also provided.

Discriminant function of theory-driven sub-sets of D36 items

Since the items used in this study were constructed on the basis of a pre-determined theoretical structure, it was decided to examine sets of items, group according to theoretical communality. Thus, item sets were formed in two ways - firstly, in terms of the depersonalisation symptom they represented and secondly, in terms of their egopsychopathology type. These item sets were then examined regarding their contribution to the internal consistency of the D36 scale as a whole (see Table 13 below). Items were also classified according to positive or negative bias and subjected to a similar analysis.

The discriminant function of each sub-set of items was also examined, for classification accuracy, when group membership was varied according to depersonalisation status, and depersonalisation status amongst patients only .

Table 13a

Comparison of positive and negative bias items in terms of discriminant function based on depersonalisation status (all samples)

Item bias	Canonical Correlation (sig)	% Correctly Classified
Positive	.7134 (<.0001)	88.2
Negative	.6612 (<.0001)	86.96

Table 13b

Comparison of items according to depersonalisation symptom in terms of discriminant function based on depersonalisation status (all samples)

Item According To Depersonalisation Symptom	Canonical Correlation (sig)	% Correctly Classified
De-affectualisation	.6361 (<.0001)	86.34
Depersonalisation	.7093 (<.0001)	89.44
Derealisation	.6996 (<.0001)	88.2
Desomatisation	.7026 (<.0001)	88.2

Table 13c

Comparison of items according to dysfunctional ego awareness in terms of discriminant function based on depersonalistion status (all samples)

Type of Dysfunctional Ego Awareness	Canonical Correlation (sig)	% Correctly Classified
Activity	.6866 (<.0001)	88.82
Identity	.7024 (<.0001)	88.82
Vitality	.7121 (<.0001)	89.44

Table 13d

Comparison of positive and negative bias items in terms of discriminant function based on depersonalisation (patients only)

Item Bias	Canonical Correaltion (sig)	% Correctly Identified
Positive	.6097 (<.0001)	82.61
Negative	.5478 (<.0001)	73.91

Table 13e

Comparison of items according to depersonalisation symptom in terms of discriminant function based on depersonalisation status (patients only)

Items According To Depersonalisation Symptom	Canonical Correlation (sig)	% Correctly Classified
De-affectualisation	.5009 (< .0001)	75.36
Depersonalisation	.5921 (< .0001)	78.26
Derealisation	.6052 (< .0001)	79.71
Desomatisation	.6179 (< .0001)	82.61

Table 13f

Comparison of items according to dysfunctional ego awareness in terms of discriminant function based on depersonalisation status (patients only)

Type of Dysfunctional Ego Awareness	Canonical Correlation (sig)	% Correctly Classified
Activity	.5695 (< .0001)	76.81
Identity	.6032 (< .0001)	79.71
Vitality	.6018 (< .0001)	79.71

Split-half reliability of the D36

'Split half' is a misleading term, in that the term does not refer to a correlation of the first half of a test with the second half (that is, it does not compare the sub-totals of items 1 – 18 with the sub-totals of items 19 – 36 of the D36), but correlations of every item with the remaining 35. This is another measure of internal consistency, this time taking a blanket view of all items in relation to one another. The spit half reliability of the D36 was found to be .95, which was acceptable (see Appendix 9)..

DISCUSSION

General aims and achievements of the research

Starting with a large item catalogue of face valid items pertaining to depersonalisation, the task of the research was to make a preliminary validation and then reduce the catalogue to a size which was 'patient-friendly'. All items of both catalogues purported to measure clinical depersonalisation, whether they had positive or negative bias. The validation of the 90-item catalogue was far less stringent than the 36-item catalogue in that almost all participants to which the D90 scale was administered were controls. Therefore the validation process could not depend upon measuring the degree to which the D90 discriminated between participants at either end of a depersonalisation continuum, save for the two primary depersonalisation patients who happened to present themselves at this stage of the research.

In the main, the external validation of the D90 scale rested upon an assumption that public controls would not score highly on clinical levels of depersonalisation and by implication, that public controls would generally rate themselves in such a way that would be typical of non-depersonalisation, with a few exceptions. Because the *expected* D90 total score was assumed low for public controls (the two patients were excluded from the normative data-set), the criterion group was expected to exhibit a skewed distribution, towards the low end of the potential D90 score range.

Validation of the D90 catalogue was based on conformity of the total scores to expected age-related criteria, with scores descending as a product of maturity in adulthood, empirical support for which was evident from the overall negative correlation of total scores with age. Relationship with gender was also observed and compared against slightly higher expected totals

in females, which also was the case.

The Ford sample of twelve male shop-floor workers, albeit small, provided the opportunity to investigate whether social class had any major effect on scores. To this end, the Ford workers were compared to males from the other sub-sample for whom gender was known (the undergraduates), thus controlling for any possible gender effect. The results showed a trend for the Ford workers (consisting of older males) to score lower than the undergraduate males, though not significantly (see Appendix 2).

Given the approval of the two experts regarding face validity and the conformity of total scores to the expected, it was felt that an item analysis could be carried out, based on internal consistency. The factorial structure of the D90 gave little justification for breaking the catalogue into sub-scales (for further discussion, see below). Each of the 90 items was compared with total scores, 87 of which exhibited a positive correlation, to the .05 level of significance or above. The high internal consistency of most items meant that there was considerable flexibility to select items for the D36, according to the test specification criteria described under the 'Procedure' section.

The three items which correlated negatively with the total score were excluded from further consideration. Of these, two were significant to the .05 level or above. Before discarding them, their content was qualitatively reviewed. These items had nothing in common in terms of their symptom-type or ego-dysfunctional nosology, but their clarity in deces may explain their unsuitability for further use.

Reason for labelling items for severity

Sims (1995) has observed that "the actual self-description of depersonalization is similar in normality to that of mentally ill people describing the symptom" (page 204), a comment which appeared to minimise the risk of losing items inappropriately by preliminary item analysis of

control data. That is, we assumed that we would not eliminate items on the basis of controls which were relevant only to depersonalised patients, since the style of reporting depersonalised experience was expected to be similar in both groups. Despite such reassurances in the literature, we were sceptical of the assumption of parsimony in self-report between clinical and non-clinical groups. The assumption has never been proven by the authors that claim it. Much the pity if severity and duration influenced style of self-reporting, for example. There was danger that items applicable to clinical subjects might be eliminated on the basis of poor range of responding (disconfirmative) in normals. Thus, there was a risk of eliminating items in the preliminary factor analysis which were precisely those which would discriminate between normal and abnormal depersonalisation, and which possibly discriminated between the clinical groups. There is no guarantee that controls experience the extreme and bizarre self-descriptions of clinical probands.

The labelling of some items as 'severe', in effect dichotomised the catalogue in a different way. The labelling process itself was carried out single-handedly by the author, without the use of a blind co-rater, with whom to compare opinion. Therefore the 'severity' construct has no inter-rater reliability. The variable of severity was qualitative and was deliberately omitted from any empirical analysis. However, the informal 'tagging' of items, albeit from the author's viewpoint only, helped assess whether 'Severe' items were included on the basis of the first, major item analysis of this study, that of reducing the 90 item catalogue to a manageable 36. Some sort of monitoring seemed appropriate, given that both 'Severe' and 'Non-Severe' items had been administered to a large sample assumed to be free of psychopathology. Furthermore, there was a danger that severe items might be excluded because of being rated as 'Unclear' within the Clarity Index, due to the intuitive unfamiliarity of severe items by an unafflicted sample of the public at large. The D90 contained a proportion of 41.1% 'Abnormal' items, whilst the D36 contained 52:8% 'Abnormal' items, which more than satisfied the author's concern.

The final selection of items for inclusion in the D36 was a complex process, because of the competing demands and constraints laid down and given the complexity, was as much an art as a science. It was a lengthy and time-consuming process. The reader was spared a complete account of this selection process, but an exemplification of the process was given in the Procedure, by presenting examples of accepted and rejected items belonging to each of the twelve item categories arising out of the Contents-Manifestations Index.

In contrast to the validation of the D90, the total for all D36 items were analysed using Discriminant Function Analysis (see Table 11a and Appendix 6), which gave a canonical correlation of 0.724 for subjects from the three groups (p = less than .0001). Assuming probabilities of membership to the three groups (n = 92 public controls, 32 non-depersonalised patients, 36 depersonalised subjects), the discriminant function achieved 62.7% classification accuracy. The level of discrimination was considered acceptable, given the expected similarity in D36 total score distributions for the public and patient control groups (Groups 1 and 2).

When the subjects were dichotomised, into depersonalised (n = 36) and non-depersonalised (n = 124), the classification accuracy rose to 88.8% (canonical correlation = 0.711; p = < .0001). When the scale was tested for use as a clinical instrument, using patients only (n= 36 depersonalised, 33 non-depersonalised), the classification accuracy was 79.4% (canonical correlation was 0.614; p = less than .001), indicating greater difficulty differentiating clinical cohorts.

The discriminant function of the instrument dropped when required to allocate membership to three groups compared to two. A reduction of classification accuracy is to be expected with increase in criterion groups, since the greater the number of groups, the larger the error of estimating membership. Interestingly, most of the increase in classification error occurred

in distinguishing subjects belonging to the two non-depersonalised controls, which is a desirable result. In fact, the ideal would be if groups 1 and 2 were indistinguishable on the basis of total score. The classification accuracy of membership to the control groups (patients and public) was 62.4% and the canonical correlation was .252, p = <.01. These were favourable results, even though the correlation was significant to the p = .01 level.), since the differentiation between control groups was less clear, as would be theoretically expected.

Discriminant function of the D36 in the clinical context

The 'clinical context' refers to use with patients only. To investigate the clinical utility of the instrument, we needed to ascertain the degree to which it could sort cases into Groups 2 and 3, the two patient samples. Here, classification accuracy fell below that obtained using all controls, to 79.4%, (canonical correlation .614; p = <.0001). This finding is probably explicable by the overlap between depersonalisation and other clinical conditions, such as schizophrenia and depression (see pages 18 – 22).

Potential use of the instrument to identify clinical depersonalisation in normal population surveys

It would be expected that the potential overlap between depersonalisation and general dysphoria is largely avoided when depersonalised patients are compared to a general population sample . This assumption was confirmed when Group 3 (clinically depersonalised) and Group 1 (normal population) were compared. The discriminant function of the D36 instrument was at its' highest when differentiating these cohorts, with 91.41% classification accuracy (canonical correlation .79; p = <.001), suggesting that the instrument could have potential utility in demographic surveys, or incidence of specific mental health morbidity in the non-psychiatric population. such as those presenting at A & E Depts with minor self-inflicted wounds (see p 164)..

Item Analysis of the D36 catalogue

One of the final statistical exercises of the above research served to investigate the properties of the D36 items individually, to ascertain:

a) each item's contribution to the total score, to provide a measure of internal consistency. Internally consistent items were, of course, those which correlated highly and significantly with the D36 totals (see Table 12 and Appendix 8).

b) discriminant ability of each item, measured in a number of ways. Discrimination power was expressed in terms of statistical significance, established by the Mann-Whitney test (see Table 12.and Appendix 8iii). Poor or outstanding items were examined more closely by reference to univariate Analyses of Variance (Appendix 8i). As discussed previously, desirable items were those which discriminated well between controls and experimental samples, but did not discriminate well between the two control samples.

The Summary Table data (Table 12) shows that all items were positively correlated with total score, to the .001 level of significance, according to the Mann-Whitney test and Newman Kuels tables (Appendix 8). The item with the highest consistency was item 26 ('It seems I am looking from afar, even at things nearby'), which had an item:total score correlation of .855, p = <.001, closely followed by item 22 ('It's as if I'm in a different body to my own'), r = .843, p = <.001. These were classified as derealisation/ego Vitality dysfunction and desomatisation/ego Identity dysfunction respectively, both with positive bias.

The two lowest items in terms of internal consistency were item 31 ('Texture is interesting to the touch'), r = .528, p = .001 and item 35 ('I can relax by sitting quietly'), r = .564, p = .001. These items were classified as derealisation/ego Activity dysfunction and

depersonalisation/ ego Vitality dysfunction respectively, both with negative bias. However, in the author's retrospective opinion, the relatively weak contribution of these items to the scale as a whole was more likely due to the poor face validity of item 31 and possible contamination with agitated depression in the case of item 35.

With regard discriminant ability, all items exhibited mean scores in the expected direction with regard the merged controls and depersonalised groups. Differences between item scores for controls and depersonalised patients established by the Mann-Whitney test were significant to the .001 level, whether participants from the public were used or whether they were merged with patient controls. However, when only patient criterion groups were used, two items (items 31 and 35, the two with the lowest internal consistency quoted above) failed to discriminate between presence or absence of PSE-depersonalisation. Both were characterised by marginal mean differences between Groups 2 and 3, item 31 because both of these means were low, and item 35 because both item means were high, in each case accompanied by large standard deviations in item scores for both groups. Three others discriminated only to the .05 level (items 2, 7 and 33), all of which had relatively low internal consistency (.568 - .652) as measured by the Mann Whitney.

Based on the Mann-Whitney, twenty six of the thirty six items (72%) failed to discriminate between the two control groups (1 and 2) to the .05 level, which was a desirable result, suggesting the bulk of D36 items were not discriminating on the grounds of 'patienthood' in the absence of depersonalisation. One of these, item 28, was found to discriminate significantly according to the Newman Kuels table summarising its' properties, one of the few conflicting results arising out of the Mann-Whitney and ANOVA's for the same item. Of the remaining items, three discriminated to the .05 level of significance (items 7, 19 and 34), three to the .01 level (items 8, 23 and 36), and four to the .001 level (items 12, 29, 31 and 35), as calculated using Mann-Whitney. These latter four items were particularly efficient at discriminating in a manner

for which they were not designed, because they were discriminating between patient variables other than depersonalisation. The four items were:

12 'I feel at home with myself as a complete person' (type –pI)

29 'When I'm pleased about something, the pleasure doesn't feel mine' (type +aA)

31 'Texture is interesting to the touch' (type –rA)

35 'I can relax by sitting quietly' (type –pV)

There are several conclusions which can be drawn from the **summary table**. The first and most important is that all items had a positive role in both contributing to the total score significantly and in discriminating between criterion groups on the basis of presence or absence of depersonalisation when either all participants were considered, or when public controls and depersonalised patients were used. On that basis, it was considered justifiable to retain all items.

Nonetheless, not all items met the more stringent criteria of discriminating efficiently between depersonalised on non-depersonalised patients, whilst not discriminating efficiently between patient and public controls. 10 items fell into this bracket (items 7, 8, 12, 19, 23, 29, 31, 34, 35 and 36). As a sub-set, these items had no apparent common thread in terms of the nosology of sub-types of depersonalisation they purported to measure, nor item bias. As can be deduced from above, the two particularly weak items were items 31 and 35, since these are the only items to fail both of the stringent criteria (that is, they failed to significantly discriminate between control and experimental patients *and* discriminated significantly between patient and public controls. In further research, they are likely to be monitored carefully, with a view to possible exclusion. With the benefit of hindsight, the face validity of these two items was weak. Item 31 ('Texture is interesting to the touch') was included in an attempt to tap a quality of derealisation which went beyond de-visualisation to include tactile sensation, but it may have been over-ambitious to construct such an item with a negative bias. The author can only speculate that a

positive bias item measuring the same experiential area (such as 'Whatever I touch, the texture seems meaningless and uninteresting') may have elicited a more definitive response from the participants. Item 35 ('I can relax by sitting quietly') can be criticised on the grounds that it doesn't directly represent depersonalised experience at all, but was an attempt to measure the effect of the depersonalised state in eliciting relaxation-induced anxiety.

Perhaps the most controversial items were those with high internal consistency which discriminated significantly between all three criterion groups, which may imply that they were measuring PSE-depersonalisation, but were also corrupted by an extraneous variable. Items 12 ('I feel at home with myself as a complete person'), 23 ('My life seems to carry on without me') and 29 ('When I feel pleased about something, the pleasure doesn't feel mine') discriminate depersonalised from non-depersonalised groups, but also discriminate non-depersonalised patients from public controls. It is important that these two items are also monitored closely in future research in refining the instrument and may need to be sacrificed, despite their positive qualities. The source of the concern is that in the author's opinion, there is an unhealthy high correlation between the D36 and the BAI/BDI, from the limited data available (see earlier discussion). Items such as 12 and 29 may tap into a general dysphoria measure and ought to be tested for their correlation with Beck's instruments, to ascertain whether they are more highly correlated with BAI and BDI total scores than total D36 scores. If so, they would be discarded. Again with the benefit of hindsight, item12, a negative bias item, may carry the risk of inviting participants to express diverse forms of personal dissatisfaction, too general to be included.

The large standard error exhibited by control patients for items 12 and 29, approximated that of depersonalised patients, may suggest this was the case. Item 29, however, has, according to the experts, a strong construct validity in measuring de-affectualisation symptoms and would be discarded with great reluctance. Item 23 may be contaminated with something other than dysphoria, such a 'locus of control', rather than measuring pure dissociation of actor and action.

Of the remaining 'good' items, the most prominent (good discriminators and significant correlation with total scores above r = .8) are the seven below:

Item 3: 'When I talk about myself, I feel as if I'm talking about someone else'

Item 5: 'I feel wooden, as if my actions are controlled like a puppet'

Item 8: 'My emotions feel numb'

Item 18 'My actions seem automatic, as if controlled from outside of myself'

Item 22: 'It's as if I'm in a different body to my own'

Item 25 'I find myself wondering if I really exist'

Item 26'It seems I am looking from afar, even at things nearby'

These items represent the full range of symptom types and ego-dysfunctional types (though being less than twelve, do not represent the range of combinations of symptom and ego-types). The main limitation of the items is that they are all positive bias items. None of the negative bias items reached the above criteria, but some did so (also seven) when the inclusion criteria were similar to above, except that the internal consistency criterion was lowered to an item:total score correlation of above r = .7. These items were as follows:

Item 1: 'Generally, I feel in touch with my surroundings'

Item 4: 'My body is in harmony with my being'

Item 6: 'I feel 'down to earth', with my feet firmly on the ground'

Item 14: 'I am fully in touch with my emotions'

Item 17: 'I feel I'm very much a part of things'

Item 28 'My physical self feels tangible and alive'

Item 32: 'I observe my movements like a spectator'

Like the positive bias items, the negative bias set above represents a good mix of depersonalisation clinical sub-types. One negative bias item which had a good correlation with the total score (r = .793) which was excluded was item 12 ('I feel at home with myself as a complete person'), because of it's ability to discriminate highly significantly between the patient and public controls. Though it was intended to measure being in touch with one's 'inner being', it may be contaminated with self-actualisation issues, that is, self-dissatisfaction due to a rift between high level personal ambition and low perceived personal achievement.

The reader should note that the above lists of superior items is not meant as a brief version of the D36, but serves only to give a flavour to the character of core D36 items, in the absence of further item analyses

The concept of 'Personalisation' and the problem of 'happy-clappy' content

Items pertaining to 'Personalisation' were the negative bias items. It is helpful to clinicians and theoreticians alike, when conceptualising a given area of psychopathology, to have some sort of notion of it's opposite. For example, it is widely assumed that the opposite to 'anxious' is 'relaxed' and that anxiousness is associated with sympathetic CNS activity whilst relaxation is associated with parasympathetic activity. On this assumption, the reciprocal inhibition of anxiety was introduced, using relaxation-orientated techniques. The relationship between anxiety and relaxation may not be as straight-forward as initially imagined by early behavioural psychotherapists, but it is clear to see how the notion of a state as a bi-polar dimension has therapeutic implications.

The term 'personalisation' was adopted by Galdston (1974) to reflect an adaptive state of being in the world and relations with sense of self, as the polar opposite of the depersonalised state. There was some difficulty in defining 'personalisation' operationally, by constructing items

to reflect the state. Nonetheless, the negative bias items, modelled on the personalisation concept, approximated the classification accuracy of positive bias items in discriminating between depersonalised and non-depersonalised subjects. The finding indicates that our personalisation items exhibited acceptable external validity, almost as good as those for depersonalisation.

The negative bias items, representing personalisation, may help define the direction in which we might wish the depersonalised patient to change, since they generally highlighted some kind of self-actualising mode of peak experience, such as the statement 'Generally, I feel tuned in to my senses'. But what this actually means to the man in the street, or typical patient, is another matter. Though the properties of the pathological end of the spectrum are fairly tightly defined, considerable thought needs to be given to more down to earth statements in the D36 instrument. One criticism the author has about his own work on item construction is that the negative bias items lacked the profundity of positive bias items, through lack of experience in interviewing subjects on the positive end of the depersonalisation-personalisation spectrum.

There may be other ways to tap healthy qualities of consciousness which are incompatible with depersonalisation (and have the potential to displace it), apart from feeling engaged and tuned in, full of self-authenticity. If future negative bias items are constructed, particularly for interview purposes, an attempt will be made to avoid the 'happy-clappy' content common in the D36 negative bias items. For example, some negative bias items would not translate well into the clinical setting. Interview questions such as 'Are you very much a part of things?' (see item 17) and 'Do you move naturally?' (see item 21), might appear frivolous in the clinical setting. These items smatter too much of the health farm, or represent trite ideals some of our patients would rather avoid. Other negative bias items appear more palatable to a wide range of the population, cutting across social class boundaries of what is and is not the perceived optimal state. For example, the question 'When you say something personal, does it really mean something to you?' (derived from item 24) seems a little less 'health-conscious' and may therefore

fit better in a semi-structured interview, as does the question 'Generally, do you feel in touch with your surroundings?' (see item 1). There might be problems converting item 6 into the question 'Do you feel down to earth, with your feet firmly on the ground?'. As an exploratory interview item, it may erroneously signal to the patient that the enquirer is about to break either wonderful or tragic news.

Within the negative bias items, item 35 was of great interest, as item analysis could potentially have revealed whether restlessness and an inability to settle were associated with depersonalisation, as hypothesised by its' inclusion in the D36. Evidence of the association was only partially supported by the discriminatory properties of the item, evaluated during the item analysis of the D36 (see page 135 above). The reader is reminded that depersonalisation is generally considered a low arousal state (see pages 26 – 27 above). The acceptable co-variance of the item with other items and the total score may be suggestive of an aversion which depersonalised patient may have to the usual notions of tranquillity. This raises an interesting question: does the depersonalised patient tend to seek high arousal to achieve a subjective state which is incompatible with low arousal, as an autotherapeutic attempt to alleviate the symptom?

Factorial structure of the D90 and D36

The reader will recall that for the D90, there was no justification for the construal of depersonalisation sub-types, corresponding to the original theoretical conceptualisation or any other basis (see Appendix 2 and Figure 4). Strictly speaking, factor analysis using such a large catalogue, was not appropriate, since the number of subjects (n = 161) was substantially less than the minimal proportion of subjects to items, which should be roughly 3:1, or a minimum of 270 participants. Also the item variance was (unsurprisingly) low, since the participants were public

controls. Therefore it is unsurprising that there was little factorial structure above a single factor observed (see Appendix 2v)..

However, the participants administered the more condensed catalogue, the D36, were proportionally greater when compared against the number of items, giving a participant:item ratio of 161:36, or between 4:1 and 5:1, with a greater variance of item scores. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) was more than 0.5, indicating sufficient participants, whilst the Bartlett test of sphericity was less than .05 significance, suggesting sufficient variability within the correlation matrix to proceed. (see Appendix 6).Therefore the data set involving the D36 in Stage 2, might, it was considered, reveal structures within depersonalisation, undetected in the D90. For example, a wider variance of responses was exhibited by our Stage 2 subjects, particularly due to the prominent *clinical features* of depersonalisation provided from the depersonalised patient sample. A factor analysis of the D36 data-set was carried out (see Appendix 6v), in the expectation that the increased character to the data compared to the D90.

The Eigen values obtained from the whole D36 data set also revealed that relative to a single dominant factor, there was little evidence of separate depersonalisation sub-types, using all subjects (see also page 116 and page 145 below). It is still possible that a data set derived exclusively from patients with depersonalisation as a *symptom* may reveal independent classes of depersonalisation not yet identified. Unfortunately, insufficient depersonalised patients were available in the above study to carry out a factor analysis based exclusively on abnormal depersonalisation. This was a major limitation to the scope of investigation, regarding clinical forms of depersonalisation.

The initial stage of the D36 factor analysis (before rotation) revealed that all 36 items were positively correlated with each other. There were four factors with Eigen values above 1.0. The Rotated Components Matrix revealed that most of the items (21 of 36 items, 58.3%) loaded

the first factor. These items were of diverse nosological range, with no particular clinically meaningful connection, nor common item bias, probably reflecting the presence of a general, dominant factor, which accounted for 28.4% of the variance.

The fourth factor was loaded by only three items (8.3% of the catalogue), specifically, items 21(-sA, 'I move naturally'), item 24 (-aA, 'When I say something personal, it really means something to me'), and item 33 (-aV, 'I can feel close to people in whose company I feel at ease'). Apart from the mutual negative bias these items share, there is no particular relatedness which clearly stands out, including depersonalisation sub-type or semantic style, suggesting the factor is a statistical artefact.

The remaining factors (2 and 3) potentially provided a window of statistical observation of clinically meaningful co-varying of items, each factor making a sufficient contribution to the explained variance to contribute significantly to the internal statistical structure of the catalogue. Factor 2 contributed 18.7% to the variance after rotation, Factor 3 contributing 11.5%, collectively over 30%, that is, more than the general, dominant first factor. Perusal of the clinical sub-types the items pertained to measure revealed an apparent random distribution of ego-pathology sub-types (dysfunctional ego-Activity/Identity/Vitality) across Factors 2 and 3, but a greater reprentation of the symptom sub-type de-affectualisation loading Factor 3, all with positive bias (four out of the six items had '+a' codings). These four items were item 2 (+aI, 'Whether I feel happy or sad, it fails to register'), item 8 (+aV, 'My emotions feel numb'), item 19 (+aI, 'I feel blank and shut off from my feelings') and item 29, 'When I feel pleased about something, the pleasure doesn't feel mine').

However, detracting from the assumption of factorial elegance, the remaining two items loading Factor 3, item 31 (-rA, 'Texture is interesting to the touch') made the highest contribution, with a factor loading of .629, this item having been identified as a weak item for it's poor internal

consistency (page 138 – 9 above). The remaining item loading Factor 3, item 35 (-pV, 'I can relax by sitting quietly') had also been identified as weak for the same reasons and was conceptually unrelated to de-affectualisation. Adding to the ambiguous quality of Factor 3 as a de-affectualisation dimension was that two Factor 3 de-affectualisation items (8 and 29) overlapped with components 2 and 1 respectively.

Confirmation of the absence of sub-types of abnormal depersonalisation awaits further research, in which a sufficient number of PSE-diagnosed depersonalised patients can be added to our D36 data set, enabling a factor analysis based on clinically depersonalised subjects alone. Our preliminary indications do not give us much hope of finding naturally occurring factors, which calls into question the pragmatic value of depersonalisation syndrome sub-types.

One possible source of 'factorial amorphousness' in the data set may have arisen from the conceptual difficulties in the allocation of items to the fixed categories dictated by the Contents-Manifestations Index, from the outset of scale construction. For example, item 11 ('When I'm taken by surprise, I feel it's not happening to me') was classed as a de-affectualisation/ego Activity item, on the assumption that the symptom frame of reference was based on affect, rather than an external event, in other words the source of alienation was unreality of the emotion, not the external event from which the 'surprise reaction' is normally elicited. Seen as a detachment from the external event itself, the symptom would be classed as derealisation, not de-affectualisation. Similarily, the ego-dysfunctional classification was judged to be ego-Activity, in that 'going-through-the-motions-of surprise' did not seem 'mine', though there is an argument for classifying this as an ego-Identity item, because the item implies 'not being sure of me being me'. Item 15 ('Even friends and acquaintances strike me as changed and unfamiliar') was firmly classified as a derealisation symptom by the experts, but equally may have reflected the person's lack of emotional reactivity in their presence. Item 30 ('Parts of my body feel awkward, like putty or concrete') purported to measure a desomatisation/ ego Vitality problem – Vitality because of

the use of the analogy of inorganic materials, expressing a deadening of bodily sensation and in-touchness of the soma. But there is an argument for this analogy (which is sometimes used by depersonalised patients) to imply a change in self-image and possibly therefore, an ego-Identity manifestation.

Added to the problem, there was no formal process put in place to check the inter-rater reliability of the 12-way classification, nor for the four-way or three-way classification corresponding to the symptom categories and ego-dysfunctional categories respectively. The allocation of all the items to the categories was guided by feedback from the two experts, but they were not requested to categorise each and every item themselves, because the author was anxious to avoid over-burdening them with pen-and-paper tasks.

These shortcomings may have affected the accuracy of the categorical process and thus the unity of items belonging to each categorical system, but in the author's opinion, this was unlikely to have affected the catalogues' factorial character (or lack of it), given that the search for factors was not tied to these constructs. Whatever the degree of conceptual difficulty in the three-way and four-way nosology of items, the Contents-Manifestations approach appeared to generate themes for item-generation, producing plenty of diversity. It was expected that the factor analysis would have indicated a systematisation to this diversity, by identifying some meaningful item co-variance across participants, beyond item bias, but this does not seem to have been the case.

Possible effects of the sampling procedure on questionnaire scores

There were several sources of bias in the sampling of all criterion groups. Firstly, the public controls involved in the D90 and D36 catalogues did not comprise a broad range of the public at large, in the sense that they tended to come from groups most widely available for the study. In the D90, apart from the small Ford worker sample, all the 'normal' subjects were either

undergraduates from the Social Sciences and Humanities faculty or post-graduates. No attempts were made to classify them according to social class or intelligence. Though a major demographic variable distinguishing the groups was assumed to be age, there may have been other distinguishing factors, involving life-style, which could potentially have contributed to the differences in sub-group scores.

With regard intelligence, it is widely acknowledged that universities have admitted a wider range of abilities over the past few years and therefore the IQ difference between the Ford worker sample and the undergraduate sample, for example, is likely to have been less than, say, twenty years ago. The post-graduates, however, would be expected to have a higher IQ than both groups, given their acceptance for higher level courses. However, though there have been some writers who have expressed the tentative idea that the incidence of depersonalisation phenomena is directly proportional to IQ, these views are speculative. Moreover, the speculative relatedness largely arises out of the *spontaneous reporting* of the symptom, given the possible difficulties of low IQ individuals to articulate a subjective experience of this nature. However, spontaneity of self-description was not required, or at least, the requirement was considerably diminished by the fact that closed ended items were used (in the form of statements) and the responses required were forced choice selection of the appropriate position on the Likert scale.

Another potential pitfall in sampling was co-operation. The level of acceptance to volunteer to complete the form (expressed as the percentage of persons approached completing and returning the questionnaires) was not formally recorded. With regard the student samples taking part in the administration of the D90, it is known that there was 100% take-up (since the number of completed forms matched the number of students in the lecture theatres on both occasions). It was not possible to ascertain the refusal rate of the Ford sample, but acceptance was apparently well above average (with no defaced schedules returned).

No effort was made to equate the public sample used in the D90 with those of the public controls in the D36, though in retrospect, it would have been an excellent idea to administer the D36 to similar samples as the D90, the following year, by targeting a different generation of control participants enrolled on the same courses. In fact, it would have been desirable to increase the numbers of public controls considerably by such a method, which may have had the effect of increasing the significance of the established trends in the data comparing controls with experimental subjects. It was not possible to extend the patient controls easily, because of the necessity of a PSE-trained diagnostician to rate the patients specifically for depersonalisation, the main reason why the source of depersonalised patients was the Institute of Psychiatry, where clinicians had been appointed specifically for that purpose as part of a special medical treatment trial. All data on the Institute participants in the current study were, of course, derived prior to administration of the new medication targeting depersonalisation symptoms. (The D36 was/will be administered also at post-treatment, but the current author is not party to this information). All the raw data from every source was delivered to the current author for coding and evaluation, eliminating all possibility of assessor bias in marking and transcribing the data. Though the results were relayed back to the Institute for their own use, all statistical analyses reported above were carried out by the current author, as an independent researcher, though greater collaboration may occur in the future concerning further subjects.

The fact that all the non-patient samples were not PSE-rated or subjected to any clinical examination, nor any form of questioning concerning mental health issues (beyond 'fitness to work' by their presence in the workplace or academic institution) meant that there was a shortcoming of the public controls containing the normal distribution of Depersonalisation scores expected in the general population. Unfortunately, this meant that the public control sample was likely to contain a minority of subjects who were clinically depersonalised at the time and there is some evidence that may have been the case, given, for example, the extreme scores of two of our public controls used in the D36. The lack of clinical assessment of controls may therefore have

weakened the discriminatory power of the instrument slightly, but this does not appear to have altered the overall expected direction of scores. More specific issues involving potential extraneous variables, with particular reference to age, gender and nationality differences is given below, in which the distribution of total scores is discussed in relation to total catalogue scores.

The relationship with the Institute of Psychiatry in the research was that the D36, as provisional and partially validated instrument, would be administered to participants of the trial carried out there. In a collaborative exercise, the Institute had decided to adopt the D36 as the second best available instrument available, based on the evidence about the item catalogue at that time (the construct validity and item analysis data concerning the D90/D36 presented at the Leeds Symposium on Psychopathology, 1997). The collaboration was limited, in the sense that some of the subjects in the research were known to have been recruited via the Internet and the newspaper ads. Not all of these participants were non-psychiatric, but an unkown number were classed as either 'Primary depersonalisation' or 'Secondary Depersonalisation'

Diagnosis and D36 scores

The absence of knowledge regarding diagnosis, except for the Warley sample, meant that it was not known whether the control patients and depersonalised patients as a whole were matched in terms of psychopathology. It is unlikely that the matching of control and experimental patients would have been possible, given the noted association of the depersonalisation syndrome with specific psychiatric conditions. However, it would have been interesting to have investigated selective responding of specific diagnostic groups to specific D36 items, particularly in the depersonalised sample. Such an investigation would reveal whether or not the manifestation of secondary depersonalised experience varies according to the type of primary diagnosis. According to Sims (1995) and Scharfetter (1980), diagnosis-specific forms of depersonalisation do not occur and therefore such an investigation might add little information, but further research in this area is likely to continue in the future.

With regard the local Warley sample, albeit very limited in size (n = 6), the mean D36 score for depersonalised patients was very similar to that of the Institute depersonalised patient sample (85.33 and 81.78 respectively, with comparable standard deviations, as reported earlier). However, the mean D36 scores for patient controls was markedly different for the two centres, with the Institute control patient mean (n = 24) being well over twice that that of Warley control patients (40.11, sd = 29.71 ; 16.00, sd = 20.29 respectively). This difference may have been a reflection of the very low numbers of patient controls in the Warley sample, but may also have been due to the tendency for Warley psychiatrists to refer *prominently non-depersonalised patients*, without going through elaborate PSE depersonalisation detection procedures, given that the project was not a part of their busy schedule, in marked contrast to the Institute diagnosticians, who had dedicated clinical time allocated to the task. In retrospect, the author should have spent more time encouraging local referrals.

The Warley sample, studied diagnostically, did not show any distinctive patterns between the criterion groups. Clinical details of specific patients will not be entered into here, except to say that D36 scores varied widely within diagnostic samples (for example, the three depressives exhibited D36 scores of 4, 24 and 73; the two personality disorders, 9 and 72, (see page 114, Table 9d). The three schizophrenics had more closely related scores, even though one had no secondary depersonalisation while the other two did (52 , 88, 95 respectively).

The highest scorer was the only person with Primary Depersonalisation, with a D36 score of 126. The reader will recall that the maximum possible score on the D36 is 144. Caution should be exercised in interpreting the significance of the single case result, in that data from this single case does *not* imply that patients with Primary Depersonalisation score markedly higher than their Secondary Depersonalisation peers. It should be borne in mind the small Warley sample consisted entirely of acute in-patients, and that it is relatively rare for patients presenting with

Depersonalisation as the primary diagnosis to be hospitalised, except for further clinical investigations to be carried out. Normally, Primary Depersonalisation patients in contact with Mental Health services would be managed on an out-patient basis.

Relatedness of Age and D36 scores

The Table in the Results section pertaining to Age shows that the age distribution of the three criterion groups was significantly different. It is widely acknowledged that the 'age window' for depersonalisation prone-ness is late adolescence to early adulthood (roughly 17 years – 23 years), opening up the possibility that the D36 scores were influenced by age, which was not controlled. Public controls were the youngest, with a mean age of 30.89 years, control patients were the oldest, with a mean age of 38.33 years, the depersonalised patients having a mean age of 33.77 years. When the three groups were compared two at a time, the only significant difference in age distribution was between the two control groups and conveniently, the statistical significance of the difference between controls and the experimental sample was erased when the two control groups were merged ($p = .593$), controlling for age for comparisons involving merged controls. It was not the case that the oldest group (non-depersonalised patients) had significantly lower total D36 scores than the other groups, so that the distribution of D36 scores for the criterion groups did not conform to the small negative correlation between age and depersonalisation established in many epidemiological surveys of the general public. Therefore differences in mean D36 scores between the three criterion groups were unlikely to be attributable to an extraneous age variable.

On the basis of age alone, we might expect the patient controls, who were the eldest with a mean age of 37.53 years, to have the lowest D36 scores, followed by the depersonalised patients, with a mean age of 34.31 years, followed by the public controls, with lowest mean age of 30.91 years. Since the variance was higher in the patient controls, thus suggesting a larger number of outliers in age terms, for age to be a

major contributory factor to depersonalisation, one might expect the depersonalisation scores to have the widest variance in this group, which was not the case (see Table I).

Depersonalisation in the elderly

To the author's knowledge, there have been no extensive studies of depersonalisation-proneness in the elderly. The likely reason for this is that clinicians in the 'Care of the Elderly' branch of mental health services rarely report depersonalisation as a prominent aspect of the psychopathology of older people. Because most empirical investigations are inspired by prior clinical observation, it appears there has been little justification for looking at this relatively small corner of Elderly research. However, there is a possibility that depersonalisation-proneness, though decreasing through middle age, begins to increase again in subjects approaching retirement. Since all our subjects were students and/or employed, one might speculate that if depersonalisation increases in older subjects, it is not the result of the major life event of retirement, though it could, of course, be due to the major life event of becoming a student.

Relatedness of Gender and D36 scores

Of the participants for whom gender was known (n = 156, or 96.89%), 72 were male and 86 female (45.6% and 54.4% respectively). The difference in gender frequency was significant, but varied little between the two patient groups, the sampling of which was not influenced by gender. However, as mentioned earlier, there was a deliberate sampling bias of public controls to approximately match the gender ratio of patients, so that overall, the proportion of males to females varied little between the three samples. The deliberate manipulation of sampling of public controls was considered important, because many of the analyses involved comparison of the three criterion groups and two groups (merged controls and experimental participants). Had the distribution of gender been significantly different between the control samples, the merging of the controls would have produced methodological problems, in that assumed homogeneity for the

purposes of the analyses (absence of depersonalisation) would have been confounded by heterogeneity of gender distribution.

To a reasonable degree of certainty, the insignificant chi concerning gender distribution across the groups ensured that significant differences in psychometric depersonalisation ratings between the two probands was unlikely to be a gender-driven effect and more likely to be symptom-driven effect, even if there were sex differences in the prevalence of depersonalisation.

The overall differences between D36 scores and gender for the total sample for whom gender was known (n = 157) was in the expected direction, in that females scored higher than males (41.51 and 38.46 respectively), though this difference was statistically unreliable (p = .559), presumably due to the wide standard deviations for both sub-samples (34.49 and 29.81 respectively). A Discriminant Analysis yielded a canonical correlation of .0484, for total scores between the sexes, which was also not statistically significant.

The main conclusion to be drawn for current purposes is that significant differences in total scores of subjects administered the D36 could not be explained by differences in gender distribution between the depersonalised and non-depersonalised criterion groups. However, there was an anomaly in the data that merited further attention, and a further breakdown of D36 scores according to gender is provided for each criterion group. Both depersonalised patients and control patients exhibited a trend for females to have higher scores than males, possibly suggesting that being female has a contributory effect on severity of depersonalisation symptoms (more subjects would be required to ascertain whether the gender contribution reached significance with a larger sample). Anomalies were evident in a) the patient controls, in that despite the modest number of subjects, the gender difference in total scores (23.00 for males, 44.61 for females) was significant to the .05 level and b) the public controls, who exhibited a gender difference (albeit non-significant) in the opposite, non-expected direction, with males scoring higher than females.

With regard the patient controls, a gender difference so marked that females scored almost twice as high as males seemed an unusual, unexpected finding. The standard deviation of scores for females was correspondingly higher than for males (33.50 and 17.82 respectively) and almost identical to the standard deviation for depersonalised patients. When individual D36 scores were examined, it was clear there three subjects who could be defined as prominent outliers, in the sense of having a negative PSE diagnosis for depersonalisation whilst exhibiting D36 scores above 70. These were subject 93 (total score 142), subject 98 (total score 77) and subject 110 (total score 76), all of who were female participants.

All three subjects came from the Institute sample of control patients. Unfortunately, it has not been possible to obtain further information on these patients so far. Possible sources of error are a) that the patients were mis-diagnosed for depersonalisation (which is unlikely, given the clinical experience of the team concerned), b) that there was a coding error following the diagnosis, c) that the D36 is a poor discriminator of depersonalisation status for female control patients, or d) that the D36 is not a suitable instrument for females with a specific diagnosis. The most obvious explanation for the highest score is that it came from a non-depersonalised patient intent on impressing the assessor of her psychological burden.

Given the small number of participants within the female control patients, it was decided not to pursue the issue further for current purposes, though gender differences in relation to D36 scores is likely to be monitored closely as data accumulates in the future, particularly within the female control patient sub-sample.

Despite these anomalies, the mean D36 scores for the female control patient sub-sample was significantly lower than the female experimental patient sub-sample (44.61 and 85.42 respectively, $p = <.001$). Overall therefore, the D36 elicited responses in both male and female

control patients which could be differentiated from the responses of depersonalised patients of the same gender. On these grounds, it was not expected that the obscure relationship between gender and D36 scores in a minority of control patients reflected a substantial shortcoming of the scale.

D36 scores in controls, according to nationality

Since it had already been established that the selected items for the D36 generally elicited low scores in controls (based on stage 1 of the research using large groups of public controls responding to the D90), it was not considered necessary to incorporate a large sample of public controls in stage 2. However, the smaller D36 catalogue introduced a potential extraneous variable, that of a new item order effect and this was the second reason for using samples making up a non-depersonalised criterion group. This included samples of public controls, which gave us an additional advantage of confirming that this new item order effect had not influenced the response pattern of public controls to individual items in any major way. At the outset of the study, it was envisaged that the final instrument might be used outside the English-speaking world, particularly in Europe. A European sample was therefore included. The D90 catalogue was written in English and the D36 had not been translated into any other language. A Swiss sample from Zurich was included, because the majority of German-speaking Swiss are fluent in the English language. We wanted an indication early in the study as to whether the European public (who had English as a second language) responded to items in a similar pattern to English-speaking British subjects. A translation into German and Japanese is underway, but had not been completed at the time of the study and therefore it was considered the next best thing to administer the items in English to English-speaking Europeans.

The British public sample exhibited slightly higher D36 scores than the Europeans, though the difference was not significant (British and European public control scores: 26.10 and 23.95 respectively, $p = .951$, see Table of Results section and Appendix). This was reassuring,

tentatively suggesting that the instrument might be used in international studies, and gave encouragement for translated versions to be tested, initially comparing norms amongst the general public, possibly followed by patient groups, for whom translation would be essential. An item analysis based on internal consistency was not carried out between nationalities, but is planned for the future, to determine whether some items need to be excluded because of cultural bias.

In a further enquiry concerning the cross-cultural parity of the catalogue, the relationship between age and D36 scores was analysed when the public control file was split by nationality. The Swiss sample showed an expected low negative correlation of total score with age ($r = -.215$), though the British sample exhibited no relationship ($r = +.009$), neither of which was significant to the .05 level (see Results). These minor differences may be statistical artefact or explicable in terms of the age of the two samples – the Swiss sample was slightly younger than the British sample (29.97 years and 31.52 years), and since the standard deviations were similar, the Swiss sample was slightly more likely to contain subjects within the age window for maximum depersonalisation prone-ness, possibly increasing the likelihood of a negative correlation.

Comments on the Psychopathology of the criterion groups used in validation of the D36

The current study was not primarily interested in the relationship between depersonalisation and diagnosis, except inasmuch as our primary external criterion rested only on presence or absence of clinical depersonalisation. More to the point, the parameters of the ethical agreement from the Institute of Psychiatry, where most of our depersonalised patients were obtained, excluded specific knowledge of the blend of diagnoses beyond clinical depersonalisation. However, we were concerned to examine our data set to see whether other factors were associated with D36 total scores. The two most common non-depersonalisation symptoms likely to be present in the patient groups, anxiety and depression, were investigated. To this end, anxiety and depression inventories were administered to our patient samples, in the form

of the Beck Anxiety Inventory and the Beck Depression Inventory. The patients' BAI and BDI total scores were then examined in relation to their respective D36 totals, for which a partial positive relationship was found, as expected, reflecting shared general dysphoria. Inevitably, there was likely to be a high correlation between anxiety and depersonalisation scores and between depression and depersonalisation scores. This is because depersonalisation is intrinsically linked to both. Roth's concept of the Phobic Anxiety Depersonalisation syndrome or PADS (Roth, 1960) is an illustration of the close relationship between depersonalisation and anxiety. Another example is provided by the close relationship between panic attacks and depersonalisation, with the result that in DSM IV, depersonalisation is listed as one of the eight diagnostic criteria of Panic Disorder. In clinical depression, depersonalisation is also common and is sometimes regarded as a poor prognostic indicator of a depressive illness. Inevitably therefore, it would be expected that there is considerable overlap between depersonalisation, anxiety and depression. The important question is whether we can be sure that the D36 is measuring aspects of the depersonalisation syndrome, rather than providing an oblique measure of other symptomatology).

Though high inter-correlations might be expected from a clinical perspective (since the close association between depersonalisation and anxiety/depression is widely known), the high correlations do not help to establish the D36 catalogue as measuring something different from either anxiety or affective disorder, but the strong association between all three instruments remains a problem from the psychometric, if not phenomenological point of view. (To address this point further in a larger sample, a comparison of differences in D36 scores between control and depersonalised patients could be made in patients whom BDI and BDA scores were known; if the D36 means were more significantly different than BDI or BDA means, this would at least give some indication of the relative superiority of the D36 in identifying depersonalised patients).

Some comments on the relative validity of theory-driven sub-sets of items, in terms of discriminatory power

As described earlier (see 'Contents-Manifestations Index), the same 36 items were categorised two ways, on the basis of symptomatology and egopsychopathology. On statistical grounds alone, one would expect the classification accuracy of ego dysfunctional sub-sets of items to be higher than symptom-based sub-sets, because the larger number of items per category in the ego-based nosology. There were four categories in the symptom-set nosology, while only three in the ego-dysfunctional nosology. The way the item selection for the D36 was structured, this resulted in 9 items purporting to measure each depersonalisation symptom-type and 12 items purporting to measure each ego-dysfunctional sub-type.

No strong factorial trends emerged when items pertaining to all three sub-types were constituents of the same catalogue. This does not invalidate the existence of the three sub-types - their existence is self-evident on face validity grounds. The presence of a single dominant factor, both in stages 1 and 2 of the research, highlights the existence of all three forms of the disorder of depersonalisation, but also highlights the intimacy of the relationship of all three, to an almost seamless degree, as defined by the intercorrelation of total scores of the individual items.

Potential wider uses of the scale: drug efficacy research

Earlier, the possible contribution of depersonalisation in contributing to unpleasant side effects and subsequent non-compliance was raised, in the context of anti-psychotic medication. When new medication is assessed during efficacy trials, it may be justifiable to take into account not just the clinical effectiveness of the drug, but the full range of side-effects, including depersonalisation. In the final analysis, the patient's well-being and co-operation may rest upon developing anti-psychotic drugs which have the least negative side-effects. As an additional

outcome criterion in comparative drug trials, it would probably be fairly straight forward and unproblematic to include a self-rated depersonalisation measure, such as the FDS. To the author's knowledge, there have been few studies which examine the effects of medication such as neuroleptics on non-neurological side-effects, yet all medication is ineffective if over-ridden by defaulting patients.

The search for a treatment of depersonalisation

Medical strategies

The optimal medical management of primary depersonalisation has never been established. Sedman (1970) reviewed a number of outcome studies for the psychotropic treatment of depersonalisation and concluded that there were no predictable benefits from medication, nor from ECT. Furthermore, he reflected that medical intervention carries the risk of exacerbating the syndrome. To date, the psychiatric treatment of depersonalisation remains unclear and there is much caution in the literature in establishing a treatment strategy. When depersonalisation is secondary to a major diagnosis, such as schizophrenia, depressive illness, or temporal lobe epilepsy, it is customary practice to address the primary pathology. However, there are many unfortunate patients for whom the primary disease process is successfully controlled, but in whom the depersonalised overlay persists. A sound psychometric instrument is needed, to measure both efficacy of a targeted depersonalisation treatment and might also help decipher whether any given medication has depersonalising side-effects.

Psychological strategies

Because many psychologists and allied therapy professionals tend to be less acquainted with the construct of depersonalised experience than the major phenomenological constructs of anxiety and depression, psycho-social strategies for depersonalisation are scant. However, there is a growing awareness amongst clinicians that depersonalised patients exhibit a specific cognitive signature (see, for example, Senior et al, 2000). There is often considerable catastrophisation,

particularly concerning either the anticipated loss of consciousness or the anticipated retraction of perceptual awareness / diminution of function of the receptors..

Nosological classification of depersonalised experience

In retrospect, it was evident *on qualitative grounds alone* that variations in self-reports of depersonalised experience (in terms of the sub-types of the C-M Index) would not necessarily yield distinct categories of depersonalised experience, detectable by factor analysis. It became evident during these invaluable consultations with the experts that qualitative *surface differences* between the item typologies were over-shadowed by their *phenomenological relatedness.* For example, the surface differences between derealisation and depersonalisation are well defined conceptually, in terms of the point of reference being the outside world or one's inner being. During the classification process of the original D90 catalogue, the author had, in the clinical experts' view, mis-classified item d90-17 as a derealisation item. The item read 'I am floating away from reality'. The experts interpreted 'from reality' as 'from the external surroundings'. Scharfetter helpfully observed that the point of reference of the item (in grammatical terms, the subject) was 'I', and that the grammatical object was 'reality'. The implication was that the item reflected that the subject ('I'), not the object ('reality') was dislocated ('floating away'). On these grounds, the item was correctly re-classified as a depersonalisation item. An equivalent derealisation item was constructed, which reflected the source of dislocation as the participant. The corrected derealisation item read 'Reality is floating away from me', in which subject and object were the reverse of the original item.

Such examples illustrate that surface distinctions in self-reporting may reflect a style of reporting more than a distinction in expressed meaning. Phenomenologically, the participant is reporting a sense of detachment, but whether this is attributed to the external world receding or a reduction of awareness is possibly an arbitrary distinction, both ways of expression amounting to

the same core meaning. In very recent clinical contact with patients presenting with derealisation and depersonalisation, the current author has sought clarification over the issue, by asking the question 'Do you feel that you are floating away from reality, or do you feel that reality floating away from you?'. This has invariably been answered with a shrug of the shoulders or utterances implying that either or both It is unfortunate that both items were not part of the catalogue, since there is a clear empirical question which could have been tested – that is, when items are differentiated into different sub-types on the basis of whether it is the participant or his environment which is receding, do they tend to correlate highly with each other? Clinical observation would suggest considerable co-variance and parsimony and may imply that depersonalisation is more homogenous than previously considered, a conclusion which would be consistent with our factor analytic data.

Depersonalisation and self-harm

In the author's view, the development of treatment strategies for depersonalisation is of pressing concern to the mental health services, particularly following growing concern about patients with Borderline Personality Disorder. When listening to the accounts of such patients, it is evident that many of them go to extraordinary and sometimes bizarre lengths to try and relieve themselves of the burden of unreal detachment, including self-harm strategies.

A potential, but obscure positive aspect of self-harm in patients is that intentional self-injury provides a viable route to psychiatric services for people who are at the time not articulate enough to express their level of distress. Many admissions to acute psychiatric beds are passed on from Accident and Emergency Departments. There is a well established trail of repeated self-harm patients through A & E Departments which tend to baffle attendant staff. Some arrive, self-mutilated and dripping in blood, but have only a vague account of their distress, as if nothing dramatic had happened. These patients describe how, after they inflicted an injury, by cutting

themselves, pulling their hair out or burning themselves with cigarette stubs, they experienced relief of their painful state of mind. One may ask legitimately what this state of mind might be?

On a wider, societal level, some young adults pose a hazard to society in anti-social sensation-seeking activity, and this tends to peak at roughly the same age that proneness to depersonalisation is highest in the normal population. The relationship between sensation-seeking and proneness to depersonalisation in the community is unknown, but in many respects, sensational experience is the polar opposite of depersonalised experience, particularly in the opposite extremes of *vividness* of experience. Many accounts of depersonalisation suggest a dissatisfaction based on a kind of 'watered down, diluted' perception. The question might usefully be asked whether some forms of sensation-seeking represent auto-therapeutic attempts to escape from depersonalised self-alienation, as an alternative to self-harm.

It is suggested in some of the above examples that some self-destructive and socially destructive acts may be motivated by a need for depersonalisation-reduction. In this sense, depersonalisation may be viewed as an aversive drive state, to be reduced by whatever means the bearer has at his/her disposal. Given the frequent observation that depersonalisation-distressed patients often respond immediately to accurate empathy, phenomenological counselling methods may evolve to deal with special, low-amplitude experiences of unreality, exhibited by groups of brazenly anti-social sensation-seekers.

A possible therapeutic strategy for depersonalisation, based on the above findings

There are no established treatment strategies for depersonalisation, though skilled phenomenological counselling, including informed empathy are generally thought beneficial. Since propositional self-statements appear to take on a regular pattern in depersonalised patients, methods to change in this area, that of secondary catastrophisation, may help reduce general

distress. The typical catastrophic suppositions of depersonalised subjects in crisis are:

a) that they may end up deaf or blind, effectively cut off from the world,

b) that reality will recede, leading to madness or dementia, and

c) consciousness will be lost, capitulating to some sort of 'dark hole', or vacuous state.

d) that the state is ever-lasting and will never abate.

e) the apparent absence of feeling the patient suffers in a normally emotional context (such as meeting with close others, such as close family members, not seen for some time) is misinterpreted by the depersonalised individual as a sense of his/own indifference or callousness, impacting negatively on self-image.

The establishment of de-affectualisation as an integral part of depersonalisation may suggest a further supposition which characterises the syndrome, that of self-accusation of callousness and being emotionally cold and uncaring. The discovery of a de-affectualisation component of depersonalisation may be of potential benefit in informing counselling strategies, by reassuring patients with a depersonalisation diagnosis that though they may be out-of-touch with their emotions, they remain as caring as before acquiring the disorder.

Though a formal trial has never been carried out, in the present author's experience, these propositional self-statements are useful with self-mutilating patients, who may present with no coherent complaint spontaneously. They may often be judged as 'attention-seeking', because they are unable to report convincing symptoms of anxiety, depression or psychosis. However, there is substantial indirect evidence that while some recidivist self-harmers are full of self-hate and punish themselves, others are depersonalised and are engaging in attempted auto-therapeutic activity to escape from emotional numbness and detachment from self (see for example, Fewtrell and O'Connor, 1995). It is noteable that many self-harmers come from groups of patients considered to be vulnerable to depersonalisation experiences, including, for example, patients with an early history of sexual abuse. Self-harm many be the only strategy that unresourceful

borderlines have to relieve self-alienation.

Reflections on the relationship between depersonalisation and theories of emotion

There is ample justification for describing depersonalisation as a slightly altered state, but no-one appears to have discussed the integration of the depersonalised state into the more general picture of human psychological experience. The strong de-affectualisation component of the syndrome gives rise to speculation that the depersonalised state could be regarded as a special kind of emotion, though to the author's knowledge, the field of emotion theory has not commented on any aspect of the syndrome by name. Yet reports from patients informs us that depersonalisation influences the feeling tone of experience considerably.

Relationship between depersonalisation and theories of emotion

Is Depersonalisation an emotion? Because many depersonalised individuals complain of 'no feeling' or 'being out of touch with feeling', the component 'de-affectualisation' was tested as the symptom variable implying detachment from emotional experience. During the item analysis of the D90, individual items representing the de-affectualisation sub-catalogue had good internal consistency, suggesting that the subjective quality addressed was indeed a co-variant of other depersonalisation phenomena and possibly an important intrinsic part of the syndrome itself. The concept of de-affectualisation is new. Items pertaining to the same construct are absent in the DES taxon outlined by Carlson et al (1991), though are vaguely referred to in the Peritraumatic scale (Marmar et. al, 1994) in the question "Did you feel numb?" (at the time of the traumatic event).

Despite depersonalised experience involving changed emotional experience, to the author's knowledge, there has been no direct reference in the literature to how depersonalisation, as a concept, relates to contemporary theories of emotion, such as the models forwarded by Plutchick (1980) and Frijida (1987). Such theories have in common a reductionist approach to the

classification of emotions, share the notion that a feeling state at any given moment comprises one or more of five or six basic emotional components, and have a concensual view that 'surprise' is one of those basic emotions.

The notion of a few basic emotional components, uniform across individuals, has evolved hand-in-glove with the models of a fixed range of 'hard-wired' emotions, generated by separate neural circuits, orientated around hypothalamic activity. Each 'hard-wired' emotional component is described as fluctuating and therefore exhibits variation and range, the implication of which is that the components are bi-polar. It remains to be seen whether 'Surprise', as a bi-polar construct, is loaded by 'depersonalisation', or its' 'de-affectualisation' component. 'Surprise' in the emotional construct sense involves unpredicted events of emotional significance, whilst the common complaint associated with depersonalised experience is the absence of feeling reaction.

The development of further assessment methods for SMI depersonalised patients

Given the severity of some of the complaints in which depersonalisation is implicated, it is doubtful that self-ratings of depersonalisation, like the D36, will be robust enough to elicit symptoms from the most severely incapacitated individuals. Deluded patients are often distracted and pre-occupied and find it much easier to reply to questions in the context of a supportive interview, rather than providing self-ratings as part of a 'pen and paper' exercise. Other patients may be organically impaired, introducing doubts about the validity of self-ratings of intellectually dysfunctional subjects. An interview schedule can partially overcome some of the drawbacks of self-ratings, in that follow-up questions can clarify the patient's answers and check whether replies from the patient provide a consistent account.

A semi-structured interview procedure, derived from the D36, may be required to ensure

the inclusion of subjects with severe neurological and psychiatric disorders. Guidelines for the interview procedure currently provided by the PSE are extremely brief and rely heavily on the rater's prior knowledge in this area of dysfunction, which is not adequately directed by the diagnostic manuals themselves. For this reason, a relatively more detailed interview procedure will be constructed, based on the most valid items of the scale for each of the twelve theoretical sub-divisions of the scale. It is envisaged that such an interview will be validated against the D36 for subjects able to complete both, and against a formal diagnosis of depersonalisation, derived from the PSE.

For efficacy trials of treatment outcome, it may be useful to obtain an indication of the *severity* of depersonalisation, treated as a continuous variable, as well as a binary expert judgement of presence or absence of the symptom. Assessing depersonalisation intensity in non-depersonalised samples cannot be done using standardised diagnostic procedures, since they do not assess normal depersonalisation. Yet ratings of severity are important in giving early indications of the *direction in the course* of a particular symptom.

CONCLUDING REMARKS

The above research was inspired by several exasperated patients, seen by the author, reporting experiences of unreality and detachment from themselves, others and the external world. Their exasperation was heightened by a failure to be understood by those around them and (all too often) the apparent inability of these patients to elicit understanding and assistance from mental health services they had consulted thus far. Some had bitter memories of their first attempts at seeking help. For example, one twenty six year old male reported that on first consulting his general practitioner about what he described as 'feelings of nothingness', his GP retorted that since he didn't feel anything, he should be grateful, because many of his patients were in physical pain. Clearly, this particular medical practitioner had little understanding of the *psychological* pain of self-alienation or dissociation. Some of the author's patients had revealed that this apparent naivety was not restricted to clinicians outside of the mental health professions. Some patients described a non-committal or disinterested response from psychiatrists and other mental health personnel.

A new Depersonalisation scale was constructed, as an alternative to the Dissociation Experiences Scale, created by Bernstein and Putman (1986). The DES is an instrument which, from the outset, was not intended to measure depersonalisation exclusively, but a range of 'dissociation experiences', of which depersonalisation was assumed to be a small part. The theoretical underpinnings of the DES are ambiguous, but the conceptual structure is assumed to mirror DSM IV criteria, since these criteria formed the basis of its external validity. Only in retrospect have researchers started to disentangle items measuring depersonalisation from the remainder, and this item sub-scale is not the same as that considered to have construct validity by its' authors;- hence the establishment of the DES Depersonalisation 'taxon' or factor by Carlson (1991) within the original scale.

In contrast, the product of the current research, the D36 catalogue, was created specifically to measure Depersonalisation, with theoretical underpinnings which are grounded in the syndrome. It remains to be seen whether the new conceptual approach used to generate items pertaining to depersonalised experience exemplified by the D36 bears more fruit than the approach used to construct DES items. A subsequent phase of research might be to compare the discriminatory power of both scales when predicting group membership to diagnosed depersonalised and non-depersonalised participants, when all participants have been classified according to both DSM IV and ICD 10 criteria. Whichever scale was found to have the greatest diagnostic efficiency, it is useful to have two psychometric measures to measure the same basic phenomenon for comparative purposes.

In the meantime, the D36 catalogue has been re-named the Fewtrell Depersonalisation Scale, or FDS (Fewtrell, 2000), for further research purposes and is currently in use. The biggest challenge facing the FDS is whether it predicts a DSM diagnosis better than the DES or DES taxon and whether a valid interview procedure can be evolved.

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SECTION C

DOCTORAL CASE REPORT (PILOT EFFICACY RESEARCH)

INTRODUCTION OF AN IN-PATIENT THERAPY REGIME, WITH SPECIAL REFERENCE TO BORDERLINE PERSONALITY DISORDER

Over the past decade, there has been an intensification of interest in the treatment of acute psychiatric patients who receive time-limited hospitalisation This interest has been partly due to the financial restraints and cost pressures attached to in-patient service provision. A pilot scheme was recently introduced within two acute admissions wards of a traditional British psychiatric hospital, which consisted of ward-based psychotherapeutic programmes, with the aim of changing the prevailing institutionalised, medically-orientated atmosphere. This policy was implemented by the formation of a small team to deliver a package of individual and group therapy procedures. The team was managed by the present author. The conceptualisation of the project is discussed. Though it is premature to report outcome data, criteria developed to begin evaluating the impact of the project are discussed. Project development issues, including the political problems which needed to be overcome in association with implementation, are also discussed.

Introduction

The project reported below, which is in its' early stages, represents an attempt to enrich the debate on acute in-patient care, by providing a preliminary investigation about newly introduced psychological interventions to supplement orthodox psychiatric care. The study serves to outline the treatment strategies employed and investigations concerning their potential effects on ward performance indicators. .

History of the In-Patient Therapy project

Traditionally-orientated practices tend to predominate within large, well established psychiatric institutions. These institutions were the 'mental asylums' of bygone days. The Mental Health Act Commission (MHAC) was set up some years ago as one of the statutory body to periodically inspect psychiatric services, nation-wide within the UK, with a given set of parameters (cf Dept of Health and Welsh Office, 1993). These parameters include a review of psychological interventions, the availability of which is encouraged as part of a general policy to encourage treatment diversity.

Following a recent inspection of local facilities by the Mental Health Commission, local senior managers have been inspired to look into ways of improving the quality of care available to acute inpatients. It was decided, as a matter of policy, that procedures should be firmly in place, which focused on patients' psychological well-being as well as medical aspects of their problems. As Lead Psychologist for Adult Mental Health, the present author was consulted about ways of changing the emphasis of patient care, to enable a more holistic approach. An important part of the brief was to 'change the ward culture'.

Addressing deficits in the range of in-patient care was the product of intense debate, local management being concerned to orientate acute services toward a more comprehensive treatment provision. The funding of a pilot scheme was arranged and it has been left to the present author to determine the means by which this change should take place, including specific outcome criteria by which the project could be evaluated.

The proposed policy change applied to the adult acute psychiatric wards for the under-65's. At the author's instigation, it was decided to run the scheme initially as a pilot and limit the novel regime to two of the four acute admissions wards, which meant that the remaining two wards were potential 'control' wards for research purposes. The term 'research' is used loosely, because the primary purpose of the project was not methodological rigor. The project was intended *from the outset* to take the form of a clinically pragmatic policy change. Empirical and methodological purity had to take second place to the immediate needs of current patients during their short-stay admissions, together with external pressure for prompt action.

During the twelve-month pilot phase of the project, which is the focus of this report, there were many changes in ward conditions, independent of the project. These can be regarded as extraneous variables, which encroached on the project itself. For example, all four wards were temporarily relocated whilst re-decoration and renovation work took place, two at a time. To add to the demands of pure research, there were changes of staff, including consultant psychiatrists and this is likely to have resulted in changes in admission and discharge patterns, each psychiatrist having a unique style of working. The intended experimental and control conditions were in operation throughout this period.

Overall philosophy of the project

At the outset, there were sound abstract ideas and intentions from senior management, to broaden acute in-patient treatment, but few guidelines concerning implementation. In many ways, this is understandable, because it is unrealistic to expect senior managerial staff in a non-clinical role to have a vision of new ways of working in the clinical context, or any substantial ideas about the effects of such a change. To clarify matters, the current author decided to construct a 'mission statement'.

A vision of care was suggested which roughly equated that of the local Community Mental Health Teams, that is, multi-disciplinary activity, involving access to all disciplines, on a needs-lead basis. We aimed to provide a potential service to patients irrespective of the severity of their illness and irrespective of the level of social incapacity. The 'mission statement' which became the general guide to our approach to ward-based work was:

'To engage as many acute in-patients as possible in constructive dialogue and meaningful activity, from early in the admission until discharge, in order to enhance the effects of medication and accelerate recovery to the point of re-entry to the community'.

The comment about enhancing the effects of medication was included to allay the reservations of some of the psychiatrists, and to emphasise that the project was complimentary to on-going medical care. The team wanted it known that we acknowledged and supported the need for medication, especially in the management of severe and acute problems, rather than took an 'anti-medical' stance.

Observations of ward activity and the engagement of patients

The nature and level of patients' 'on-ward activity', gleaned from informal observation

Once the feasibility of the project was agreed, the wards were observed periodically between the hours of 9.00am and 5.00pm by the author, at different times of the day, from the perspective of the activity of the residents. At any one time, about 10% - 15% of residents were on leave or visiting. About a third of in-patients who were not on leave were found to be either in bed or on their beds, usually awake with eyes closed or gazing fixedly. About 10% were attending wards rounds, undergoing visits to specialists outside the hospital, or talking with nursing staff or doctors involved in their care. The remainder were usually watching television, smoking in the smoking area, or shuffling restlessly up and down the corridors of the ward.

It was rare for patients to be occupied in active, focussed activity outside of psychiatric interviews, except when their respective allocated nurses talked to them, the frequency of which varied from ward to ward and from patient to patient within each ward. There was frequent self-harming incidents, involving a minority of patients, usually those with a primary diagnosis of Borderline Personality Disorder. Generally, it was noticed that the more demanding and manipulative patients gained the maximum attention, though to be fair, there were many exceptions to this. The informal observations made suggest that ward services have changed little since the study of Whalen and Mushet (1990), who found that few patients received regular formal psychological input during their in-patient stay (to their apparent disappointment at the point of discharge).

The nature of the in-patient sample

Collective composition of new admissions to the four adult acute wards for previous year

A survey of ward residents at the outset of the project revealed an overall range across the four wards as follows:

Primary diagnosis	**% of ward residents**
Schizophrenia/schizo-affective disorder	25.1%
Paranoid psychosis	8. 4 %
Major affective disorder (incl psychotic depression)	25.6%
Personality disorder	11.0%
Organic presentation / Learning Diffs	8.0%
Substance abuse	6.3%
Neuroses, including PTSD	14.2%
Ambiguous picture or diagnosis not yet established	2.9%

Creation of the 'In-Patient Therapy Team'

It was decided to establish a multi-disciplinary team, rather than a team of professional psychologists. This is because a team-composition which did not overlap

with the nursing role might be seen to be 'elitist' and separate from ward personnel. We were hoping that ward staff *would identify with* the project, possibly with a view to them adopting some of our more fundamental procedures. Budgetary constraints allowed us to begin the project with the following staff:

1 Staff Nurse (E-Grade) (1.0 wte)

2 Nursing Assistant (0.5 wte)

3 Assistant Psychologist (1.0 wte)

4 Occupational Therapist (0.6 wte)

5 Consultant Clinical Psychologist (the present author, 1.0 wte)

6 Art Therapist (0.2 wte)

In addition, we had on placement Trainee Counselling Psychologists (0.6 wte). These trainees have proved invaluable in supporting our team nursing and OT staff. Apart from the formal supervision all team members received, there was much informal 'peer supervision' between trainees and non-psychology staff, which has proved to be an important source of staff liaison.

Previous clinical experience of the team and further staff development

The team consisted of staff at all levels, all of whom had considerable experience of ward patients. Even our Assistant Psychologist, who had just completed his undergraduate studies, had previously worked in the hospital as a nursing auxiliary in the vacations. All members had previous experience as co-therapists in patient groups and some kind of one-to-one patient contact, though not all had direct experience of formal therapy procedures. It was decided, nonetheless, that all members of the team would have the opportunity to do both individual and group therapy work.

Twenty five hours of staff training was carried out with the new team, prior to the introduction of the project to the wards. The staff were trained in client-centered counselling by the author, based on the approach of Rogers (1951). The training took place during a series of six evening sessions of two hours each, which included role-play to enhance practical application. Rogerian counselling was judged to be an important starting point, as the enhancement of accurate empathy can be regarded as a sound introduction to any form of therapeutic contact. These practical exercises also served to unite the members of the team, who were previously unacquainted. There was no formal training in group work, but it was decided that all groups would have a lead therapist and a co-therapist, at least one of whom would have a professional qualification, with experience of Adult Mental Health.

Because levels of expertise, experience and training varied between team personnel, a set of guiding principles were established, about the practices (and limitations to the practices) of each grade and profession. Some exclusive roles were fairly obvious, such as initial Activities of Daily Living (ADL) assessments being carried out by qualified Occupational Therapists. Other professional therapeutic roles had greyer boundaries, such as each person's role in one-to-one therapeutic contact. A grading of therapeutic activity and prescribed roles within that model is provided in the In-Patient Therapy Team 'Information Pack' (see Appendix)

Because of the newness of the role for all staff, roughly 15% of the team's time was spent in supervision, most of which was carried out by the author.

Patient consultation at the outset of the programme

Patients were consulted as a group about future plans for in-patient therapy. Requests ranged from practical help in resolving domestic issues and problems of

housing, requests for general support and consultation (including information about medication), the desire for groups and individual therapy, help with confidence problems, acute anxiety and panic attacks, to bizarre requests such as assistance in insulating the walls to prevent alien influences getting through the brickwork.
It was important the team was perceived to be responsive to as many ideas as possible, so that the client group felt respected and acknowledged.

Planning for Groups

From the outset, it was agreed within the team to include CBT-based, skills-based and supportive groups, but exclude psychoanalytic group psychotherapy and sensitivity training in the form of 'encounter groups'. (for a concise comparison, see Davison and Neale (1998), pages 558 – 567). This was because as with all our initial treatment planning, we needed to take the vulnerabilities of the in-patient sample into account. In this respect, the classical text by Lieberman, Yalom and Miles (1973) was of particular interest, in highlighting the potential risks of highly emotionally-charged groups to participants with a poor sense of identity and low self-esteem. As a form of risk management, our groups were orientated towards developing coping strategies, in which the psychological defences of participants were protected, in contrast to the provocative 'insight-inducing' group procedures outlined, for example, by Casriel (1971).

Team participation in group therapy provision

Given these aims and limitations, in subsequent meetings, group therapy procedures were constructed by the new team, during a series of brain-storming exercises, with a substantial contribution from the occupational therapist. The group procedures were ranked according to sophistication of content, or *task demand*, that is, the demands that each group would make on participants. A series of procedures was

thus evolved for seven groups, which varied in scope. We wanted to create a series of groups which would appeal to *the whole range of ward patients*, from the most expressive and autonomous to the most socially handicapped. The lowest common denominator in terms of social disability were the types of group in which reticent and even mute patients could participate.

Roughly a third of the acute in-patient sample had been diagnosed psychotic, with further deluded patients amongst the Affective Disorders, and therefore it seemed important to think hard about group content which would be supportive, but neither emotionally or socially over-demanding. Another factor in planning for groups was incorporating sufficient variability to allow for progress and diminishing social handicap as patients improved. We were able to suggest that patients could progress through the series of groups, starting with groups which suited the current level of functioning, and progressing to the pre-discharge group, which patients could attend a few weeks prior to discharge from hospital, to prepare them for life outside, in the 'community'. The series of programmes were bound into folders for future reference, as rotated sequences in daily use.

The treatment regime

1 Group Procedures

The nature of our groups were influenced by Yalom (1983), who emphasised the benefits of group coherence for in-patients, but warned against the possibility of overwhelming vulnerable patients by expecting too much of them (for example, spontaneous emotional interaction). Much of the actual, task-orientated content and skills-based structure was derived from the practical procedures outlined by Powell (1992). The group types used in the current project (seven in all) are

presented in rank order, in terms of the level of social ability required to participate. The groups with the greater task-demand appear higher in the list.

Pre-discharge group

Attended by patients within 3 - 4 weeks of discharge, with a view to discussing problems to be faced on discharge, particularly in the home situation, since increased coping with domestic atmosphere and improvements to a difficult home atmosphere are known to render the long term prognosis more favourable and reduce the risk of relapse (cf Brown et al, 1973).

Attention was also paid to making patients aware of their respective relapse signatures, that is, the pattern of signs and symptoms which formed the hallmark of a relapse, based on prior experience of the patient. Making patients aware of their relapse signatures is an approach adopted by many cognitive psychologists, particularly those working with the severely mentally ill. Encouraging patients to act upon the early signs of a relapse by seeking professional help and support can shorten or prevent the ensuing episode and accelerate recovery (Birchwood and Tarrier, 1992).

Social skills group

This group was concerned with the fostering of social skill, both in the form of assertiveness and self-confidence in dealing with interpersonal interactions. The group was structured in such a way that the first twenty minutes was devoted to potentially difficult situations, such as handling a disagreement or rebutting the unwelcome approaches, eg from unwelcome callers on the doorstep, based on a package adapted for SMI patients by Hogarty et al, 1991)

Personal development group

We were concerned that life in hospital may have the unwanted effect of

impairing the autonomy and clear sense of identity of patients, as suggested in the literature (see, for example Russell Barton, 1959). Therefore a set of group procedures were constructed aimed at eliciting pre-morbid memories, that is, facilitation of recall of events prior to admission, to do with patients' life-style and tastes outside of hospital. The group was designed for patients who had had several admissions during the previous twelve months, or patients whose admission had been lengthy (longer than 60 days). This way, less able patients were kept in touch with their identity, so that their long-standing self-image was not detrimentally affected by the process of in-patient care.

Anxiety management group

During the anxiety management group sessions, participants were introduced to methods of relaxation, particularly the technique of Jacobsen (1937). Jacobsen's approach involved the contraction and subsequent relaxation of specific muscle groups. It is a procedure which has survived the test of time by remaining in the clinician's repertoire for over half a century. More recently, the detrimental effects of hyperventilation have been clearly demonstrated to be critical in the genesis of panic disorder (Clark, 1988). Therefore group-conducted anxiety management procedures included exercises in controlled breathing and psych-education regarding the effects of over-breathing. Apart from methods of physiological arousal reduction, some group sessions in this treatment category were concerned with catastrophisation of relatively benign social and physiological events. The effects of 'fearing the worst', in the form of automatic, negative thoughts, is well known in both anxiety, panic disorder and depression (see Beck, 1988).

Art therapy group

The group required no pre-requisite skills, apart from the ability to put

brush to paper. This group was run by professional art therapists seconded to the team for one session per week for each of the two experimental wards. Interpretation of patients' work was made, if it was felt the patient was receptive, along psychodynamic lines. A typical interpretation, which followed discussion of the patient's background, was reference to the possible symbolic meaning of the created work, in terms of the patient's projected fantasies.

Activities of Daily Living (ADL) Group

It is acknowledged that severe mental illness has a detrimental effect on coping strategies in general, for example, as measured by the HoNOS scale (Department of Health (1993). Major life events (pleasant or unpleasant) are known to upset vulnerable patients (Brown, Harris and Peto, 1973), but we also knew from local experience of community care that even minor unpleasant events were catastrophised by the severely mentally ill and often resulted in admissions a few days or weeks later. For this reason, we set out to introduce problem-solving exercises, designed to increase ability to cope with everyday mishaps. For example, one question posed to the group was: 'You've got your shopping bags out ready to do the shopping, close the front door and then realise you've locked yourself out without keys, with no-one inside. What would you do?'

Social Support Group

This group was for the most vulnerable and socially incapacitated patients, who found difficulty in partaking in interactive groups. Social support took the form of a group walk around the grounds once a week, during which there was no particular obligation to talk. This group was designed to be the most fundamental of all psychological input containable by group work, from which only high risk and some catatonic patients were excluded.

The walk was complimented by board games held on the ward, together with any activity suggested by our occupational therapist to occupy impaired patients. For example, severely depressed patients with minimal concentration have sometimes been provided with sheets of newspaper to shred for later use as paper mache. Simple constructive or destructive tasks with a meaningful purpose can usually be carried out successfully by almost any patient (see Powell, 1992).

Each group type was carried out on a weekly basis, with variation over time guided by a series of rotated procedures.

1 One-to-one procedures for individual patients

Borderline Personality Disorder

The proportion of personality disordered patients admitted over the previous 12 months was 11.9%, yet the proportion of patients with a primary diagnosis of Personality Disorder *occupying an acute bed at any given time* was considerably higher (around 23%). This suggested that the length of stay of the PD group, most of whom belonged to the Borderline PD category, was generally longer than that of other diagnostic groups. Therefore we felt a necessity to examine the characteristic problems of the Borderline more closely. Though Borderline Personality is recognised in the two major diagnostic manuals as a formal disorder, it is not classed as a severe mental illness in terms of psychopathology in either ICD 10 (see World Health Organisation, 1993, page 123-4) or DSM IV (where it is classified as an Axis II disorder, automatically excluding SMI problems – see American Psychiatric Association, 1994, pages 25 – 27).

Mental Health admissions within the NHS are made on pragmatic grounds, irrespective of the severity of the dysfunction implied from the patient's diagnosis. Prioritisation of cases is influenced by risk factors, in terms of danger to self or others. Many severe Borderlines had been identified in other local clinical audits as 'revolving door' patients, that is, patients with a high frequency of re-admission. On a national level, this in-and-out-of-hospital 'revolving door' status of Borderline clients is related to a high incidence of self-harm, usually in the form of self-mutilation, or self-poisoning by overdose (Swales et al, 2000). Though admission to psychiatric hospital is not inevitable following self-harm, many of our Borderlines enter hospital repeatedly this way and continued self-harming throughout their admission (Linehan, 1993; Swales et al, 2000).

Local team provision for psychotherapeutic contact with Borderline acute in-patients

Perhaps controversially, limits were deliberately set on the degree to which Borderline patients were allowed to dictate the nature of their one-to-one contact, though compromises were essential. The author was mindful of the findings of Whalan and Mushet (1990) that Borderlines tended to seek 'administrative help', that is, enlist the support of staff to sort out their problems, whilst remaining in a passive role, simultaneously expressing a great deal of hostility to the care system itself.

Management of Borderline patients was modelled on the Object Relations therapeutic approach. An Object Relations model differs from the medical model in that the patient is not seen to suffer from symptoms, but from what is sometimes known as 'contact disturbance' (Kaiser, 1965). Symptoms are viewed as secondary to the patient's difficulties in dealing with close, current interpersonal relationships. Treatment involves focusing on the atmosphere between client and therapist. The

client's transference reactions are seen as an expression of earlier, usually damaged bonding with caretaker figures (Cashdan, 1988).

Object Relations is a psychodynamic approach, in which the 'object' is human and the 'relations' refers to subjective or external events which contribute to human relationships. The subjective events may be fantasies or have a direct connection with memory of real interpersonal events (Kernberg, 1976, 1984). There is no single 'source' theory to the Object Relations approach, but rather, a number of theories have contributed to the overall approach. (see for example, Kleine and Tribich, (1981); Guntrip (1971); Fairbairn (1954), which have become classical works). These models are rooted in child development, emphasising that fellow human beings are an acquired taste, fostered initially by the nurturant mother, the first potential 'good object'. Klein proposed that intractable psychological damage may result from a disturbance in the process of attachment. Fairbairn (1954) exemplified the view of Object Relations theorists in proposing that the ultimate goal of personal development was not primarily to satisfy bodily drives such as eroticism. Like Klein, he saw interpersonal attachment as more important, particularly the need for acceptance. From a clinical perspective, Object Relations Therapy explores early frustrated attachment experiences, and conflicts between autonomy and dependency, as manifest in the patient's shifting transference, during the course of psychotherapeutic contact.

With particular reference to the BPD patient, Cashdan (1988) set out an ORT procedure, which progresses through four distinct stages. The first stage is the establishment of emotional communication through empathy. These conditions foster the second phase, that of *projective identification* from the client. During projective identification, the client begins to attribute to the therapist certain characteristics and

feelings (often erroneously), which are based on the characteristics of the client's previous caretaker figures. During this strong transference (which often fluctuates between positive and negative transference reactions) the client attempts, usually unwittingly, to provoke specific responses from the therapist, which are congruous with the invested attribution. The therapist is required to recognise the manipulation and control his/her own counter-transference by abstracting him/herself from the manipulation, with a view to supplying feedback.

Cashdan (1988) outlined a simple classification of the major stances of projective identification adopted by the Borderline patient in therapy, which attempt to manipulate the therapist's disposition toward him. These are:

1 Need for dependency ('I can't survive'), serving to elicit a caretaker role from the therapist.

2 Need for power ('you can't survive'), serving to render the therapist impotent and ineffectual.

3 Need for eroticism ('I'll make you sexually whole'), serving to arouse the therapist's erotic interest in the patient

4 Ingratiation (I give you my admiration, so you owe me), serving to elicit the therapist's appreciation and devotion.

'The actual messages that make up the moment-by-moment interactions of projector and recipient give the behavioural form to what hitherto existed only in the realm of imagination. Whether sexual, dependent, sacrificial, or controlling in nature, they give the projective identification its peculiar stamp' (Cashdan, 1988, page 77).

The third stage involves exposing the patient's manipulative strategies, a

manoeuvre which needs to be done tactfully, so as not to alienate the patient. 'The therapist enters the relationship with the knowledge that the interaction with the patient will sooner or later take on manipulative qualities. By creating an interpersonal milieu in which projective identification is likely to occur, the therapist creates an in vivo opportunity to deal with them in the here-and-now' (Cashdan, 1988, page 82). This is a stage of feedback from therapist to the patient, a successful end to which is marked when: '...patients begin to realise that their maladaptive ways of relating to the therapist are no longer viable. Their behaviour takes on a less driven quality and they begin to interact with the therapist somewhat differently. Instances of projective identification crop up now and then but they become less frequent and less intense as time goes by. A calm settles over the relationship and the patient starts to wonder what comes next.' (Cashdan, 1988, page 131).

The fourth and final stage is the termination process, in which the patient is helped to successfully disengage from therapy, by illuminating changes in the client-therapist relationship and investigating possible ways such changes can be applied to other relationships in the client's every-day life, outside the therapy context. Many ORT therapists recommend that termination of therapy should be discussed early in the relationship, so that it is viewed by the client as a predictable, rather than unforeseen loss.

Treatment of affective disorder

For clinical depression, our therapy procedures were influenced by the information-processing studies associated with mood disturbance. Such literature informs us that depressed patients tend to: a) have a biased recall of autobiographical events, in which shameful or regrettable events and failure experiences are over-represented in consciousness, whilst b) pleasant and positive events are more difficult

to retrieve, modification of which has usually been found to be of benefit (see, for example, Bradley,1994, who reviewed strategies aimed at producing a more balanced self-appraisal).

Treatment for panic disorder and acute anxiety

Panic disorder symptoms usually comprise acute psychophysiological crises (for example, Fewtrell and O'Connor, 1995). In rare cases of panic disorder, acute distress occurs without accompanying physiological arousal (Beck, 1988). The common feature of all panic disorder is catastrophisation of circumstances, due to perceived inability to cope, though background worry is a potent pre-cursor of panic and therefore acknowledgement and attention to background issues, particularly issues which arose prior to the symptom was considered important. It is generally agreed that panic attacks also require symptomatic treatment, but do not usually respond to simple relaxation techniques (Snaith, 1981; Fewtrell and O'Connor, 1995). Just because the patient is able to achieve a state of relaxation in the clinical setting does not necessarily mean that the effects of the state can impact upon an acute psychophysiological crisis characteristic of a panic attack. Many experts in the field feel that the panic-prone patients require a coping strategy and that this is best acquired by simulating the conditions of the panic state in the clinical setting. The patient is then taught how to recover, using self-control methods, with a view to applying a similar homeostatic focus in the natural setting (see Clarke, 1988).

Locally, preferred line of symptomatic treatment for panic symptoms was Snaith's Anxiety Control Training procedure (ACT), an autogenic treatment outlined elsewhere (Snaith, 1981). In brief, patients were exposed to a relaxation technique and relaxing imagery, followed by a simulation of the panic condition, brought about by introducing distressing imagery and measured periods of voluntarily controlled

hyperventilation. Subsequently, the patient was returned to the relaxed state, by the re-introduction of a summary Jacobsen-based procedure, a change of imagery and controlled breathing. This involved the patient's active participation. Subjective ratings of distress were taken at standard points throughout the procedure and are to be reported elsewhere. The whole procedure occupies about fifteen minutes of each session and should be repeated across several therapy sessions.

Treatment of patients with florid psychosis

Referred psychotic patients were seen as early as possible after admission, in order to attempt to strike up a working relationship by the development of rapport. Cognitive therapy methods were employed, based on the work of Nelson (1997), for both hallucinations and delusions. Also, an approach termed 'Ego Consolidation' was introduced, based on a recent empirical model of schizophrenic self-awareness (Scharfetter, 1996). Both approaches are outlined elsewhere (see Section D of this thesis).

Investigations into the impact of the In-Patient Therapy Team

Preliminary considerations concerning the empirical issues to be addressed

The major question to be asked was whether or not the new regime would have an impact over and above 'treatment as usual', that is, whether being a patient on one or other of the experimental wards was more beneficial than being a patient in the 'treatment as usual' context, supplied by the two control wards. We had no baseline data and therefore planned a comparative study of two ward environments.

Controlling for catchment areas and composition of the acute admissions wards

It is well established that the prevalence of severe mental illness (SMI) for any given catchment area can be predicted extremely accurately by demographic variables. Estimates of psychiatric morbidity in the UK has been refined considerably over the years. Currently, the preferred formula for calculating the estimated prevalence of SMI problems for a given geographical area is based on the Jarmen Indices, calculations of which are based on data supplied by each electoral ward and borough. Deliberate matching of the two control wards and the two experimental wards occurred, in that the Jarmen indices of the catchment areas for our control and experimental ward pairs was roughly similar. This meant that the areas served by both sets of wards were comparable in terms of the potential numbers of SMI individuals they contained, that is, the catchments of each ward pair were matched for projected morbidity.

Comparability of composition of the control and experimental ward residents

As a further line of enquiry into ward comparability, a brief survey was carried out at the outset of the project to get an idea of the types of residents on each of the four wards. This was expressed as the absolute number and the percentage of each patient group, according to primary diagnosis. Diagnoses for this cross-sectional

survey were derived from each patient's case notes, as recorded at the beginning of current admission.

Outcome criteria

As a preliminary comment, it should be noted that this study was on-going at the time of publication. Actual empirical values are not reported. The operational criteria of the project are outlined qualitatively rather than quantitatively, with a view to discussion of their merit, rather than for the purposes of empirical evaluation or statistical analysis.

It was felt that outcome measures should incorporate variables already considered important by the organisation itself, not least as a persuasive means of ensuring continued organisational support, in the form of future funding. Outcome measures have been operationalised by the following criteria:

1 Frequency of major incidents of disturbance

One of the nursing staff in the team made a chance remark a few months into the study, that the atmosphere on the two experimental wards had changed in that patients were far more predictable. She said: 'Sometimes, you would start a (nursing) shift on one of those wards and you would wonder what was going to happen. You could sense the atmosphere as soon as you walked in and on certain days, you knew something was wrong, someone would explode. It's not like that any more. Nearly always you go onto the wards and it feels relaxed'.

Following these anecdotal reflections, it was decided to search for possible criteria which would reflect such a potential change. Fortunately, we are able to obtain data retrospectively, which systematically reflects disturbed incidents fairly accurately, in the form of 'Ward Incident Forms', which were completed by ward staff as a

standard nursing procedure whenever a potentially hazardous incident occurred. After several inquiries, we found out that these incident sheets were collated by the Quality Department of the Trust throughout the duration of the project, on a month-by-month basis (a fact unbeknown to us at the outset). Unfortunately, baseline data before the initiation of the project was unavailable (they could not be located), but it was felt that this kind of data may be highly illuminating, so we have requested and received all of the data going back to the initiation of the project.

2 Staff sickness

It was speculated that if the level of tension on the experimental wards had diminished during the introductory months of the project, staff morale may have improved. We would normally have administered an occupational satisfaction scale on the one hand, and a measure of capacity to cope, for example, the Maslow Burnout Inventory. However, prior experience had taught us that these scales are usually met with much scepticism by nursing staff, whether ward-based or community-based. The more hard pressed staff become, the greater their cynicism towards attempts to measure the subsequent effects. Instead, we looked at staff sickness, which was our alternative indicator of well-being associated with job satisfaction. We had the advantage of having available to us records of the number of days of staff sickness per ward per month, for the period of the pilot and the months prior to the project and so again, we have retrospective criteria, despite 'hitting the ground running'.

3 Number of days admission per patient

We were aware that as in any NHS Trust, financial pressures were an important constraining influence on working practices. It is essential for any NHS Trust with acute admissions wards to have available beds for new patients, who often relapse without notice in the community. If there are no available beds, a new

admission may be either postponed, or in urgent need, the patient can be transferred to outside facilities, which the referring Health Authority is obliged to finance, as an 'extra-contractual referral'. Therefore we were anxious to examine the effect of the project on number of days stay, to the point of discharge. In a recent Canadian study of acute in-patients, including psychotic patients, Edward-Chandran et al (1996) found that reducing the length of in-patient stay by up to one third did not result in an increase in re-admission rate and therefore *shortening* the length of stay was not regarded as over-ambitious. (Nonetheless, it was quite obvious that Edward-Chandran et al's clinical environment was somewhat different from ours, in that these authors reported a reduction of mean length of stay from 25 days to 16 days, while our own length of stay was 38.7 days, which warrants further investigation regarding general clinical practice and discharge policy).

One of the immediate concerns was a possible swing in the opposite direction – that improving the quality of care might increase the motivation of patients to extend their admission. The mean length of stay per patient per anum is becoming available to us and we will therefore able to examine the impact of the project on bed occupancy patterns.

4 Number of complaints arising out of the project

Formal complaints within the NHS are dealt with via an established and impartial system of review. As a measure of 'culture clash' between old and new ways of working, it was felt important to monitor formal complaints directed toward any member of the team carrying out prescribed duties, from either patients or staff. The activities of the team were initially met with a generally positive attitude, but experience has soon informed us that after a brief 'honeymoon period' in the system, opinions of ward staff became divided, with some expressing scepticism. One of the

main reservations expressed toward the team was that we might inadvertently cause the mental state of our patients to deteriorate, by focussing patients' minds on their respective problems. Such scepticism needs to be viewed in the context of the training of most of the mature ward staff, when they had been student nurses. It has been commonplace for some of the older ward nurses locally to emphasise the potential dangers in re-traumatising patients, without regard to the negative effect of abandoning patients to their private worlds.

5 The Ward Atmosphere Scale

The one criterion of potential change requested by local senior management was patient satisfaction and it was decided (with scepticism by the current author – see discussion) that an evaluation of ward atmosphere might reflect such a change. Because the NHS managers became increasingly interested in this variable at the time, it was agreed to attempt to measure it, using the 'Ward Atmosphere Scale'. The scale measures the degree of satisfaction with ward services, including the perceived degree of patient autonomy and perceived attitudes of staff to patients, including the perceived relevance of professional attention. Since the WAS was designed for completion by either staff or patients, both groups were surveyed at the outset and was repeated at the end of the project.

Productivity and referral rates

The availability of the novel treatments to the ward residents belonging to the experimental regime was of major importance, as widespread patient contact with the new service was a pre-condition of its' potential effects on ward output and performance. Not all patients were referred for one-to-one or group therapy. We therefore looked at the 'uptake rates', as expressed by the proportion of patients

referred for therapy on the two experimental wards. This started at 32% of admissions after three months, rising to around 61% currently, several months into the project.

General comments on the nature of the outcome criteria

Though the interventions being implemented were addressed to patients as individuals, our outcome data does not look at changes within individuals, but investigates changes to the wards as a whole. The measures, some of which involve staff members, are largely unrelated to alleviation of symptoms and therefore the data provided does not comprise an efficacy study. Instead, the investigations focus upon data which reflect *impact on the functioning of the wards as components of a service delivery system.* Process and efficacy research concerning individual response to specific treatments was not the prime concern of the current thesis and will begin later.

Much of the recording process, from which our criteria will be derived, has been routine for several years, as a part of the customary audit. Importantly, the psychiatrists, with a powerful influence over the discharge date for any given patient, were not informed that mean length of stay was being observed as part of the study. The design therefore has a 'blind' component regarding the nature of the criteria upon which the study focussed. It is essential that *the system, including key staff, is oblivious* of the new purposes to which routine audits are being used.

The data will be studied in blocks of three month intervals, probably over three years. This gives the opportunity to observe trends in the data, while hopefully ironing out weekly fluctuations. For the most favourable outcomes (in research terms), one might intuitively expect exposure to the experimental condition to

have an incremental effect through time. In empirical terms, this would mean that our two experimental wards would show a staggered improvement, whilst the control wards would show relative stability in these criteria over the same time period.

Mean length of stay reflects the number of days from admission to discharge and is obtainable as monthly blocks. Fortunately, by the time of publication of the current thesis, there had been no formal complaints. However, we did receive two approaches from ward managers, expressing their reservations on both occasions (see discussion).

Patient satisfaction: the Ward Atmosphere Scale

The WAS was intended primarily as a barometer of patient satisfaction. There is a general hope and expectation by all personnel involved with the research, including senior managers, that there would be measurable improvements in the psychometrics pertaining to perceived quality of care, by the recipients, except for the current author; patient satisfaction data need to be viewed in the context of other empirical research, which has established little or no correlation between clinical improvement and patient satisfaction, using a variety of measures for each (see, for example, Willer and Miller (1978); Attkinson and Zwick (1982); Pekarik and Wolff (1996)). In the latter study, Pekarik and Wolff (1996) surveyed a total of 152 US out-patients, who were administered a clinical outcome scale pre- and post-treatment comprising the Brief Symptom Inventory (Derogatis and Spencer, 1982). Clinical change was calculated by a comparison of pre- and post-treatment measures. Satisfaction was measured by a four item Likert-scaled questionnaire about quality of and confidence in the care received, at the end of treatment. There was a small, non-significant *negative* correlation between satisfaction and clinical change ($r = -.06$). This is not explicable in terms of a rift between BSI-based criteria and

patients' self-assessment of clinical improvement, since the latter also correlated *negatively* with satisfaction (r = -.07). Though these studies tend to lack detail when reporting the assumed independent variable (i.e., treatment regime/s), there is obvious scepticism about the value of patient satisfaction variables when they are unrelated to clinically-defined well-being.

Though Pekarik and Wolff's (1996) study involved 'mild-moderate' problems in the out-patient, rather than in-patient setting, with a minority of Personality Disorders (8%), it would not be surprising if severe Borderlines made similar negative evaluations of patient satisfaction following better, objectively defined social adjustment. Negative reaction to discharge is well documented in this client group (Linehan, 1997; Swales et al, 2000), which leaves the clinician somewhat perplexed about the (well-intended) purposes of gathering any patient satisfaction criteria. Our own results regarding the Ward Atmosphere Scale remain to be seen.

Concluding remarks

The above project involves the provision of individual treatment and group programmes, referral for which is at the discretion of ward nurses and doctors. The whole project had the financial support and approval of the Trust management and the managerial support of the local senior nursing hierarchy. Though there is incomplete data and an absence of pre-experimental baseline data, two possible analyses are possible. The first involves a comparison of data, couched in the above criteria for the experimental and control wards, at fixed points in time. The second involves comparing trends in the data within the experimental wards through time as the project becomes progressively more established.

Unfortunately, because the main effort has been concentrated on training

and establishing good clinical practice, research has not been a priority and data was not collected from the outset. However, criteria have been deliberately chosen (after much soul-searching), which require little effort to collect, since they are an intrinsic part of the on-going audit of the institution. At least some of these data also have the advantage of being available retrospectively. They do not reflect quality of care of the individual patient, but are unusual, in that the variables attempt to measure the quality of ward function.

With regard the in-patient psychotherapy regime itself, special consideration was given to providing a service which has taken into account the vulnerabilities of the whole range of acute in-patients, by special attention to the high degree of social disability. This has resulted in the engagement of patients who might otherwise have been excluded therapeutic contact.

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SECTION D

SOME PHENOMENOLOGICAL REFLECTIONS ON COGNITIVE THERAPY STRATEGIES FOR SCHIZOPHRENIA

Cognitive therapy for schizophrenia primarily focuses on the patient's interpretation of the outside world. In contrast, continental clinicians from the classical phenomenological tradition have tended to focus on the inner, subjective experience of their schizophrenic patients. A recent empirical study, based on extensive self-report data, has confirmed that schizophrenic patients have a distinctive pattern of distorted self-experience, or 'egopsychopathology'. Current cognitive therapy strategies for schizophrenia are examined in the light of ego-psychopathology, and in particular, in the light of the empirical validation of schizophrenic self-awareness.

A review of the evolution of the concept of schizophrenia is followed by theories of cognition that attempt to describe the schizophrenic process. It is argued that these cognitive models, which gave birth to cognitive therapies for schizophrenia, are inadequate in coming to terms with the true nature of the illness. An alternative model of schizophrenia, which emanates from the Zurich school, is described. The two models give rise to differing therapeutic strategies, examples of which are described, with a view to comparing and contrasting them. It is proposed that psychotherapy for schizophrenia could be enhanced, by combining both models in the treatment of the same patient.

Introduction

Historical background to schizophrenia

A brief historical review is considered relevant, as the current conceptualisations of schizophrenia are still evolving and will be contextualised. Long before the emergence of the modern-day diagnostic systems, Henroith (1827) observed a specific psychological dysfunction in mentally ill patients, involving the diminished capacity of some individuals to experience themselves as living, inner-directed beings. Henroith described the disorder as an illness of 'me-ness', that is, a failure of the person to identify the self as the distinct, central point of his wilful activities and experiences. This was the earliest detailed account of the fundamental disorders of self-awareness, or egopsychopathology.

It is difficult to imagine the era when 'insanity' was viewed as a single, undifferentiated entity. An early pioneer in differential diagnosis, Kraepelin (1886), discriminated, on purely descriptive grounds, between three types of insanity. Kraepelin's three basic sub-types corresponded to detectable neurological disorders, affective disorder, and 'dementia praecox'. This latter group, which had a much poorer prognosis than disorders of mood, served to focus attention on a constellation of symptoms which Henroith had previously outlined. Clinical presentations of this type were later termed 'the schizophrenias' by the Zurich-based psychopathologist, Eugene Bleuler (1911).

In the patients he described as schizophrenic, Bleuler suggested there was a split between emotions, thoughts and behaviour. He considered a failure of

synchronicity between these three aspects of the psyche to be responsible for the widespread disintegration of functioning seen in these patients. The contribution of Bleuler and Kraepelin amounted to speculative hypotheses, informed by the close observation and careful questioning of their patients. Their aim was to try to isolate out a particular patient group who were in need of specific therapeutic assistance and could be identified by their poor prognosis.

Since Bleuler's era, the definition of schizophrenia has been progressively refined, formalised by Schneider (1959). Schneider dichotomised the main features associated with schizophrenia, into the so-called first rank and second-rank symptoms. The *second rank* symptoms were those usually present in schizophrenia, but not specific to the diagnosis (for example, bizarre ideation and behaviour, hallucinosis and poor social functioning, characteristics shared by other psychotic patient groups). Importantly, the *first rank* symptoms were specific to schizophrenia and therefore an effect of the nosology was to discriminate the condition from the other psychoses. The first rank symptoms comprised auditory hallucinations, specific types of delusions and specific anomalies of perceptual experience (see below). These diagnosis-specific features have profoundly influenced the two major diagnostic systems of the United States (the DSM classification system) and the World Health Organisation (the ICD classification system).

Schneider's first rank symptoms of schizophrenia

1 Delusional perception: a sudden rush of meaning, during which bizarre ideas are spontaneously formed, apparently 'out of the blue', whereby the subject attributes new significance to the world, a world which is invested with strange and novel properties,

not shared by others. The patient's interpretation of self and the surrounding world takes an abrupt turn, often resulting in a feeling of enlightenment by the patient, since his bizarre perspective has confirmed everything which was previously puzzling.

2 Auditory hallucinations: the perception of sound stimuli, including speech, which are not grounded in distal acoustic events. Auditory hallucinations have an audible quality, distinguishing them from the perceptual experiences the subject attributes to imagination. The subject can 'hear voices', for example, but the auditory percept has no source in the distal environment.

3 Thought disorder: this refers to the subject's experience of thinking, rather than the content of his thoughts. The subject has the disturbing impression that his thoughts can be taken away, inserted into his brain, or heard outloud, against his/her will. The subject may feel that his thoughts merge with those of other people and are therefore no longer uniquely his.

4 Delusions of control: the conviction that one's feelings, drives and actions are being manufactured from outside subjective space. The subject has the conviction that he is no longer generating his own intentions and executing his own psychological and physical acts. This group of symptoms are sometimes referred to as 'passivity experiences', because the subject feels driven from outside of himself and feels the spectator of his own responsivity. He believes the executive control of his psychological field, or parts of it, is being manipulated against his will, sometimes to the extent that he adopts the view that all his free will is effectively lost.

Current World Health Organisation criteria for schizophrenia involve an

expanded set of criteria, to include specific disorders of verbal expression (such as neogilisms) and the negative symptoms of schizophrenia (such as apathy and emotional flatness, when not attributable to neuroleptic medication or clinical depression). For a positive diagnosis, symptoms should be evident for much of the time over a duration of one month. A succinct description of the criteria for schizophrenia, with particular reference to research, is provided in the WHO text 'Diagnostic Criteria for Research', currently DCR-10 (WHO, 1993, pages 64-69).

The diagnostic criteria of schizophrenia, whilst illuminating in their own right, do not reflect the overall picture of the condition. They are simply the defining criteria of the clinical sub-group, upon which more detailed studies of descriptive psychopathology should be based. This essay is concerned with the qualities of schizophrenia from the client-centered, psychotherapeutic point of view. The currency of the psychotherapeutic approach is *the significance of a problem for the patient.* Schizophrenia, from an experiential viewpoint, is not a static dysfunction, but a process, which can progress unabated. This is particularly so if the therapeutic milieu is not sufficient for the affected person to communicate his/her experiences.

Recent models of schizophrenia from cognitive psychology

Cognitive psychology is beginning to concentrate upon the mechanisms which generate and maintain psychotic (particularly schizophrenic) symptoms. Three major cognitive perspectives on schizophrenic phenomena are outlined briefly below.

1 Efferent models: 'sense of effort' or 'action identification' dysfunctions

Action Identification problems of schizophrenics arise, according to Frith, from a deviation in 'sense of effort', associated with self-monitoring. In normal experience, Frith (1987) proposes that the subject is reflexively informed of his willed, intentional actions, including psychological acts such as thinking, as they are carried out. This 'sense of effort', or feeling of participation in one's own self-induced activity, is assumed to be transmitted via specific neural pathways, as the activity is occurring. The role of this fundamental aspect of action becomes vividly self-evident when it is dysfunctional.

When 'sense of effort' is lacking, willed, motor actions are not 'felt' as belonging to the bearer. Frith suggests that under such conditions, the first rank symptom of delusions of control arise, as a means of explaining the source of goal-directed activity. It has been proposed by a variety of authors that delusions of control arise because the patient does not experience the inner cues of the 'doing' of an action, and therefore the patient develops the hypothesis that his own actions have arisen from outside of himself. When *thoughts* are no longer 'felt' as occurring, it has been proposed that they may be 'heard' as a *voice.*

According to Frith (1992) the Action Identification problems are not limited to altered experiences of self-determined events, but also influence the patient's social judgement. Because the patient's activities are alien to himself, he also cannot empathise with the intentions of others. Social interaction then becomes difficult for the patient, who may be puzzled by the speech and social gestures of other people. Responses of other people may seem odd and out of place, since they appear inappropriate to the patient's construal of the circumstances, because he has failed to integrate the circumstances of others into his assessment. The patient may become suspicious of other people's motives and develop delusions of a paranoid nature.

2 Afferent model: failure of filtering

Other authors have constructed models which attempt to account for schizophrenic phenomena, based on dysfunctional attention to distal stimuli, and hence the perceived significance of environmental events. This is an alternative mechanism to that provided by action identification theorists, in that the deficit in schizophrenia is described as primarily a dysfunction of perceptual filtering by the subject. The best known filtering model is outlined by Hemsley (1987), who proposes that the subject's perception becomes confused, because *all aspects of the environment* are evaluated as important, including irrelevant material. The normal processing of sensory information relies on selective attention and the prioritisation of stimuli from the environment, because there is a limit to the volume of data that can be held in the centre of attention (and thus in the centre of consciousness) at any one time.

In a later paper, Hemsley (1994) has extended his 'filter-failure' model by arguing that the entry of trivial material into the centre of consciousness raises memories and schema which are irrelevant to the immediate task in hand. According to Hemsley, feelings and thoughts are activated which are not appropriate to the situational demands with which the patient is confronted: 'Following a loosening of the perceptual context, attention may be captured by incidental details of the environment. Normally such an aspect of the situation would not reach awareness, but its registration prompts a search for reasons for its occurrence' (Hemsley, 1994, page 110).Thus, delusions are borne out of making inaccurate interpretations of environmental events, because the interpretations are based on irrelevant data from memory, which are totally out of context. The patient's interpretation of a situation becomes ostensibly bizarre because the patient's consciousness is flooded with feelings and thoughts which do not easily fit with external referents.

According to Hemsley's theory, inappropriately accessed memory data mislead the patient, who scans the environment for an explanation. For example, the accessing of anxiety-provoking memories may give the patient the impression of being under threat, in circumstances the patient would normally judge to be innocuous. To the patient, the *environment* appears to have taken on an unorthodox atmosphere, but the changes have come from *within the self.* A delusion is formed to incorporate and 'explain' the atmosphere.

3 Models which account for the maintenance of delusions

Many cognitive therapists stress that once delusions have been formed, the belief system is maintained by selective attention to information which supports the ideation (for example, Birchwood et al, 1988). This selective attention may in part be due to a reflexive hypersensitivity to certain types of stimuli. For self-protection, the patient retreats from society, isolating himself from corrective information and feedback. By rejecting the views of others, because they no longer correspond with his own, the patient is entering a path of 'malignant alienation'. The patient is in great need of social milieu and clinical interaction which moderate his world view.

Cognitive therapy for schizophrenia

The essence of cognitive therapy is to modify the patient's interpretation of events around him, on the assumption that the source of the psychological problem lies in his interpretation of those external events (Beck, 1971). Also, cognitive therapy attempts to modify self-concept, which may be defined as one's own perceived characteristics, including positive attributes and limitations, from

the perspective of the past, the present and the future (for example, Warner, 1994).

Specific Cognitive-Behavioural procedures designed to help schizophrenics

Steering a neutral position

One of the golden rules for the therapist, Nelson (1997) suggests, is to steer a course which neither involves agreeing nor disagreeing with the patient's erroneous thoughts. To agree involves collusion with the patient, whilst to disagree with the delusion often leads to immediate rejection of the therapist as a credible messenger. At worst, an atmosphere of ensuing antagonism may prompt the patient to integrate the therapist into his delusional interpretation, by perceiving the therapist to be part of the plot. During initial clinical contact with the patient, Nelson therefore recommends sympathetic, but neutral feedback to the patient, such as 'It must be very difficult for you to cope with these impressions'. Sometimes, things do not go smoothly, in that the patient will overtly invite the therapist to agree with his impressions, in which case it is recommended that the therapist defers an opinion.

Pacing by self-monitoring

Early cognitive manipulations focused on modifying the content of schizophrenic symptoms by enhancing the *tempo* of cognitive functioning. On the assumption that the conscious processes of schizophrenic patients are frantic and chaotic, Meyers et al (1976) encouraged a hospitalised patient to monitor his thoughts and speech, with a view to pacing himself by covert self-instruction. The report suggested dramatic favourable change, in that the patient became more socially aware and his symptoms were less evident. The method employed was straight-forward and fairly simple to apply with a receptive patient, and should not be over-looked as part

of the care and treatment package provided.

Illumination of less dramatic interpretations, by Socratic dialogue

Later manipulations have tended to be more focused. Since schizophrenics have jumped to erroneous conclusions in judging a given situation in a delusional way, the emphasis of therapeutic activity is to encourage the patient to form more realistic explanations of the events that have been wrongly interpreted. As Nelson (1997) points out, the task in highly complex and there are many pitfalls. Therefore much skill is required, helped by the following guiding principles:

At an early stage, the cognitive therapist will usually start to introduce an alternative viewpoint, usually implied rather than stated, by Socratic questioning (Nelson, 1997). During Socratic dialogue, the therapist explores and questions the patient's viewpoint, by adopting the role of almost naive curiosity and in doing so, hopes to set the seeds of self-questioning and doubt in the patient's delusion. For example, in response to the patient's delusion that others around him are secretly mocking him by coughing, Nelson recommends gentle probing, such as, 'Do you think there are other reasons why some people might cough, apart from to laugh at you?'; 'Is it possible that some people may cough, regardless of your presence?'; 'Do you think some people cough when you're not there?' 'When you have had a cough, was it to make fun of others?' These are all questions which invite the patient to reformulate his ideas (Nelson, 1999, personal communication).

Inviting alternative hypotheses to delusional propositional statements

Examples which are exceptions to the patient's scheme of things, for example, entertaining the notion that *some* coughing goes on without reference to him,

can be used to reflect upon subsequent examples, in later sessions. For example, the patient may be asked 'Is it possible that coughing may have been caused by a throat or chest infection?' Approaches which encourage a way into reducing the conviction of delusional thinking by the introduction of alternative hypotheses, have yielded promising results in some studies, which usually take the form of individual case studies (Nisbett and Ross, 1980).

Reality testing

Clinical judgement is critical in timing the stage at which the patient is encouraged to test out the alternative hypotheses, through behavioural experimentation. For example, many patients withdraw from society and are effectively agoraphobic, due to perceived danger in the streets outside. If the patient is to complete his improvement in delusional thinking, he has to discover for himself that his situation is different from how he has construed it. Nelson (1997) points out it is very important to manoeuvre the patient into situations in which reality-testing, that is, feedback from the environment, can occur. For example, our patient above could be encouraged to approach people at random to find out if they cough or mock him. Sometimes, patients are resistant to admit that their previous impressions were wrong, and sometimes it is necessary to make a compromise, such as allowing the patient to believe that the threat was present, but has subsided.

D*istraction techniques*

Methods of distraction are particularly popular in the treatment of hallucinations. Various writers have found that getting patients to name objects around them, or counting backwards, and similar mental exercises can reduce the impact of hallucinations in dominating the patient's consciousness. These strategies attempt to

introduce new material into consciousness which is incompatible with auditory hallucinosis. One difficulty with these methods is that it is impractical for patients who exhibit constant hallucinosis to label or count as an on-going activity. Nonetheless, the vividness of hallucinations can vary, so that some patients find considerable relief in blocking out their hallucinations at their most intense, giving them an impression of greater control. Manipulation of structured sensory input is also used, mainly through the use of Walkman personal stereos, which, of course, is more easily implemented for longer periods. Music tapes in have been found particularly useful in truncating hallucinated voices, with the result that some Health Authorities in the UK provide hallucinating patients with Walkman equipment.

Therapeutic procedures for hearing voices, focusing on inner experiences

Bash (1961/83), notes a splitting of consciousness, so that hallucinations and normal perception exist side-by-side. Bash wrote:

'A peculiar extension of the conscious with little or no change in the degree of consciousness is found in hallucinosis. The patient hallucinates more or less continuously while perceiving his environment and its contents in a normal way and dealing with it effectively. The hallucinations accompany his acts and his thoughts like a radio or like a cinema in a communicating room. He can turn his attention to them or to objective reality more or less at pleasure or divide it between both. The conscious consists, so to speak, of two chambers opening into each other..... It is no rare phenomenon in schizophrenia, though often overlooked' (Bash, 1983, page 8)

Frith (1992), Nelson (1997) and Haddock et al (1998) all argue that hallucinated voices represent patients' disassociated cognitive activity. To attempt to

reduce the level of disassociation, Nelson encourages her patients to regard hallucinated voices as 'automatic thoughts', or the patient's 'inner voice' and to focus on the quality of these voices, for example, by describing the acoustic properties and contrasting them with voices with a known external source. Haddock et al (1998) compared the effectiveness of distraction techniques with focusing, in which the patients was encouraged to distinguish voices from percepts of distal origin. They discovered that focusing methods produced marginally better results than distraction, particularly in terms of patients' self-esteem. More will be said about the focusing approach later, since focusing is essentially a phenomenological method and illustrates the overlap between the cognitive and phenomenological traditions.

Providing explanations to the patient

Many cognitive psychologists who comment on schizophrenic experience, have accepted the belief that there is a biological basis to these experiences. Frith (1995), for example, suggests on the basis of physiological evidence that dopamine deficiencies within the CNS are implicated in schizophrenia. Nelson (1997) takes the issue one step further by recommending that the patient is told that 'bio-chemical imbalances' are responsible for some of the patient's anomalous experiences.

Neuropsychological deficits in schizophrenia are backed by experimental data, a succinct review of which is provided by Frith and Done (1989) and later by Cutting (1994). There is a trend within cognitive therapy to attempt to educate schizophrenic patients in the nature of the deficits, by informing them that they are struggling with a damaged or altered neurological apparatus. This policy of psycho-education therefore provides the rationale that the schizophrenic is suffering from a form of physical illness which is not directly observable. As Fowler et al (1995) point out, because of the covert nature of the illness, 'It is therefore

unsurprising that people with psychosis do not often recognise their experiences as signs and symptoms arising from some types of biological impairment and, when asked, may strongly disagree that their experiences arise out of illness. Typically people with psychosis will describe their experiences as carrying a special, and often terrifying personal significance for them as individuals. Their view of their problems as expressed in delusions is almost always that it is the world that has changed, not themselves.' (page 52)

Whether it is necessary to include some sort of biological rationale of schizophrenia in communication between therapist and patient is debatable. Irrespective of the empirical validity or otherwise of the organic hypotheses of the aetiology of schizophrenia, psychotherapeutic communication may best address the urgent issue of the disintegrating sense of self which is typical of the condition. In the author's opinion, the restoration of the sense of self-hood in schizophrenia may best be served by the application of phenomenological rather than neuropsychiatric knowledge (see pages 22 – 29 below).

Fowler et al (1995) believe that there is benefit to be gained in getting the patient firstly to acknowledge that he is labouring under information-processing deficiencies and secondly, that the deficits are caused by brain abnormalities. The re-attribution of sensory experiences from external sources to neuropsychological sources within the individual is seen by these authors to be a positive (and presumably practical) step in therapy, achieved by adopting strategies which neurologists have used in developing insight in their patients: 'Undoubtedly processes associated with developing trust in another person's perspective on the world are a crucial ingredient of cognitive behaviour therapy. However, we also believe that the insights about links between brain dysfunction and psychotic experiences provided by cognitive-neuropsychological theories can often be shared with clients, to help them to adopt a new understanding about the nature of their problems. The type of therapeutic strategy implied by

such an analysis may be somewhat similar to that described by Oliver Sachs (1985).' (Fowler et al, 1995, page 52).

Though it may be the case that neuropathology is implicated in at least some of the schizophrenias, it is suggested by the current author that giving a neurological 'explanation' of the patient's experiences leaves the patient unreceptive to the promotion of insight-based psychological therapy. The patient is steeped in experiences which are alien to him. Therefore telling him his misinterpretations of the environment are neuropathological in origin does not help him. A delusion arises from the patient's experience of himself, his ego-awareness, not his neuropathology.

The phenomenological perspective

Phenomenology, the study of conscious, subjective experience, is a field which studiously avoids making explanatory links between direct experience and physical pathology. The justification for this, as stated by Jaspers (1913/1963) is that organic pathology and subjective experience occupy different *'spheres of influence'*, with no direct connection between them. The key to this argument lies in the definition of 'explanation': the association between neuropathology and subjectivity. For Jaspers, there is an 'impenetrable jungle' between the physical and the psychological. For cognitive science, this may not be as true today as it was in Jaspers' day. For cognitive neuropsychologists, for example, Jaspers' 'impenetrable jungle' is beginning to be traversed by the intermediate conceptual device of information- processing. For example, it is postulated that malfunctioning within the septo-hippocampal area of the brain, possibly induced by irregular dopamine production (Gray et al, 1991), results in distortions of self-monitoring, in that data pertaining to self-induced action is blocked from awareness. This mechanism is seen to be responsible for the 'sense of effort' deficiency (Frith, 1992), otherwise

known as 'action identification' distortion (Vallacher and Wegner, 1989).

Whatever the merits or otherwise of neuropsychological models in explaining psychotic experience from a perspective of biological determinism (for which the late 20th century is sometimes referred to as 'the Age of the Brain'), it should be remembered that schizophrenic patients present as persons, not CNS structures. The development of neuropsychological models of schizophrenia will never surpass the important intervening entity, between organic apparatus and symptom, that is, the patient himself. The question needs to be raised about what sort of information the patient would find the most helpful in 'explaining' his symptoms, and specifically, whether the frame of reference should be neurological or psychological. In other words, should the nature of the patient's brain be illuminated during therapy, or the nature of his subjective experiences, his inner awareness?

The continental tradition of phenomenology has tended to adopt a different perspective from the cognitive Anglo-American tradition. Generally, European clinicians are more interested in qualities of inner awareness, rather than more empirically-orientated aspects of CNS data flow. There is considerable potential in the integration of ego psychology and cognitive psychology. However, through the decades, there has been regrettably little communication between the two traditions. This is partly because of language differences. Most continental phenomenologists are German-speaking and publications have tended to be written in the German language. There are noteable exceptions, namely, Jaspers (1913/1963), Schneider (1959), Fish (1963), Scharfetter (1980/1996) and in the UK, Sims (1995).

Within the field of psychopathology, the continental tradition is much older and well established than the Anglo-American tradition, to the extent that continental phenomenology dominates the core, descriptive concepts concerning severe forms of psychopathology. Jaspers

(1913/1963) outlined four ways in which the person is able to authenticate himself and his existence.

European and Anglo-American conceptualisation of 'self' in normal subjects

The American information-processing theorist, Bernard Baars, wrote recently that: 'some notion of "self" in psychological theory is not a luxury, not a metaphysical or artificial issue, but a necessity for any complete psychological framework. In this respect "self" is like consciousness, a core psychological entity that stubbornly survives all attempts to ignore or circumvent it. Self-other differentiation is a central concern in perceptual-motor systems, in mother-child interaction, in the development of autonomy' (Baars, 1988, page 326). Baars makes an important distinction between two aspects of self, namely, *self-concept*, and *self-system.* Self-concept comprises a set of beliefs about oneself in a social context. Dramatic deviations in usual self-concept occur in many disorders. For example, in depression, the individual's self-evaluation may change from positive self-regard to an impression of worthlessness and self-loathing (the antithesis to ideal self). Self-concept concerns how the individual sees him/herself functioning in a psychosocial role. In schizophrenia, self-concept may be distorted in a variety of specific ways. For example, the patient may view himself as a special form of victim, who has been singled out, spied upon, invaded and persecuted. In both depression and schizophrenia, the patient may view himself as inert, or as a ghost who has been totally annihilated. Alternatively, due to overcompensation, the patient may believe himself to be re-born as the messiah or universal saviour. All these self-referential views reflect opinions about 'what I am', the social identity of a person.

Baars' second aspect of self, the *self-system*, corresponds to William

James' notion of 'self as agent', the actor and the doer. For Baars, this is the more elusive concept of self, partly because it is reflexive under normal circumstances - I know it is *I* who am experiencing and doing certain things, usually without self-reflection. Often, when European psychopathologists talk about disorders of self, they correspond to dysfunction experiences of the self-as-system.

Jaspers set out to contrast the *self-system* of the psychologically healthy adult and schizophrenic patients (Jaspers, 1913/1963). On the basis of intuition and clinical experience alone, he divided felt-existence into four distinct areas, namely, Identity, Demarcation, Consistency/Coherence, and Activity. An account is given below of Jaspers' four areas of self-experience, or ego-experience *as experienced by the healthy psyche*. Jaspers suggested that schizophrenic patients exhibit dysfunctional aspects to at least one, but often all four of these dimensions:

1 Ego Identity: awareness that I am the same person through time, even though my predominant mood, beliefs or social role may change

2 *Ego Demarcation:* Awareness that I have boundaries, which separates 'me' from everything that is 'not me'

3 *Ego Consistency and Coherence:* Awareness that I form a single unit, the parts of which form an integrated whole

4 *Ego Activity:* Awareness that produces the certainty that my actions and inner events are my own, instigated by me, from within me

Recent European concepts of the dysfunctional self in schizophrenia

Christian Scharfetter, based at University of Zurich, has carefully documented the self-reports of schizophrenics for many years. Scharfetter (1980) was in broad agreement with Jaspers' model, but proposed that there was a further, distinct area of disordered self-awareness which Jaspers did not mention, concerning the certainty of existing and being alive, which he termed 'ego Vitality'. Most healthy individuals rarely consider the validity of their existence, since experience of self-existence is reflexive and comes naturally, requiring little or no conscious consideration. However, such reflexive impressions usually lacking in some patients seen in the clinical setting, particularly severe depressives, borderlines and schizophrenic patients (Scharfetter, 1996). For Scharfetter, Vitality is the most basic of all the ego dysfunctions, because its' converse, the feeling of being dead, of annihilation, suspend all other feelings of the functioning self. Without feeling and believing one has life, there can be no meaningful boundaries, feelings of participation in one's actions, or continuity of self-hood.

Severe pathology of the five dimensions, summarised from Scharfetter, 1996)

Dysfunctional Ego Vitality: the impression of not being present as a living entity

Dysfunctional Ego Activity : the impression of no longer being the self-governing agent of one's own day-to-day acts

Dysfunctional Ego Consistency/Coherence: the impression of having disintegrated, of no longer being a holistic, synchronised entity.

Dysfunctional Ego Demarcation: the impression of lacking psychological and/or somatic boundaries, to the extent that body and mind can be penetrated.

Dysfunctional Ego Identity: the impression of not being the same person through time, due to reasons of metamorphosis or mystical transformation.

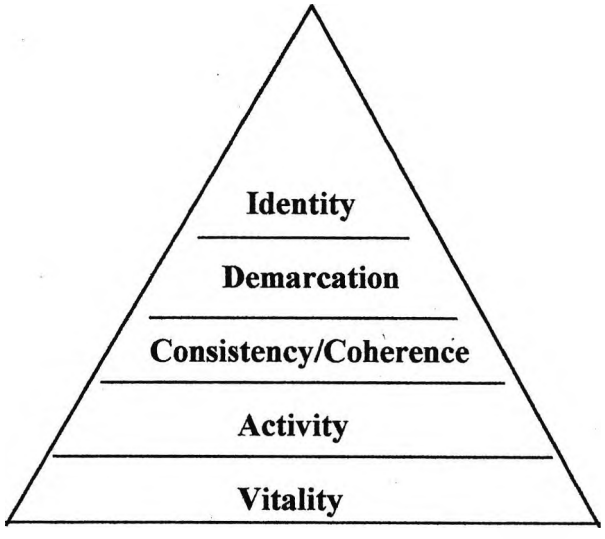
Sims (1995) has expressed scepticism about the validity of this fifth ego-dimension, arguing that it can be subsumed under ego Activity, on the grounds that one feels alive and in existence because one senses one's own inner activity. However, Scharfetter (1996) has since published evidence in support of his own model, following an elaborate multi-centre study. A large number of ICD and DSM-defined schizophrenics were interviewed in detail about areas of experience pertaining to the self. The study spanned twenty years and involved 552 schizophrenic subjects. The interviews conformed to a semi-structured procedure and items representing each of five ego dimensions were contained within the assessment. The interview scale, which can be administered only by experienced raters, is known as the Ego Pathology Profile (EPP). The EPP is translated into seven languages and the English version is supplied in the Appendix. It has an inter-rater reliability of .85 (Scharfetter, 1996).

After grouping the items according to the five dimensions, Scharfetter subjected the responses on individual items to factor analysis, carried out by Varimax rotation, in order to ascertain whether theoretically anticipated constellations of items could be observed. The results of the confirmatory factor analysis showed that the items formed a predominant, five factor matrix, with the exception that 5 of the 41 items loaded an ego area which they did not pertain to represent. The results are published elsewhere (Scharfetter1996).

Speculation concerning the organisation of the ego-dysfunctional states

Scharfetter (1996) proposed that the five disorders of self-experience could be hierarchical in their organisation, reflecting severity. Ego Vitality, because it represents the certainty of being alive, is the most basic, upon which all impressions of existence and its uncertainties depend. Next comes ego Activity, because without ownership of one's own intrapsychic activity, there can be no evaluation of I as actor. Then Coherence and Consistency, upon which ego Demarcation, evaluation of one's boundaries depends. Without all of these features, ego Identity, the appreciation of continuity of the same 'me', cannot sustain itself.

A diagrammatic representation of the speculative hierarchy is given below.



There is a trend toward some convergence of thinking between Anglo-American and European views of schizophrenic experience. This is particularly evident in the common ground which the classical phenomenological concept of 'ego Activity' problems and the information processing concept of 'Action Identification'/'Sense of Effort' problems share (see, for example, Hemsley 1998, for an information-processing account of automatism). Both viewpoints focus

upon the quality of alienation and detachment between the patient's action plans and the action itself. As a result, both traditions hypothesise that the rift may lead to delusional ideation concerning the source of the action initiation, so that the patient is left with the impression that he is the passive agent, performing under the initiative of outside forces beyond the self.

Ego-orientated counselling for schizophrenia

The decoding of schizophrenic speech in terms of abnormal self-awareness

Schizophrenia is defined only in terms of those experiences lying outside normal range. It is possible, nonetheless, to conceptualise the psychology of schizophrenic and healthy subjects *as occupying different points on the same experiential dimensions.* These dimensions, by which normal and schizophrenic experience can be compared, are the constructs of felt-existence.

The concept of the 'phenomenological ego' in schizophrenia is bursting with psychotherapeutic implications. The availability of a structure to identify the self-experiences of schizophrenic patients, provided by the Jasperian/Scharfetterian model yields material which is by and large unchartered by clinical and counselling psychologists of the contemporary Anglo-American tradition. Here are some typical subjective problems derived from ICD10 diagnosed acute schizophrenics by the author, together with model responses from the therapist which exemplify the ego-orientated approach.

Example 1 - Identity

Patient: 'My parents are not my real parents, I was adopted.' (though current parents known by family doctor to be biological parents).

'I have changed into something else, I am half man, half woman'

Therapist: 'I see, at the moment *you feel distinctly different within yourself* than before and you have some ideas about why'.

Example 2 - Demarcation

Patient: 'My thoughts can be heard outloud. I am thinking in unison with all the politicians of the world'

Therapist: 'It sounds like you *feel there's no boundary* between your mind and what is outside it.

Example 3 - Consistency/Coherence

Patient: 'My mind is split into four - good, bad, god and the devil. The good part is in Westminster Abbey and the bad part is in York Cathedral'

Therapist: You are *feeling so disintegrated*, that your mind feels scattered into bits'

Example 4 - Activity

Patient: 'You have to get rid of the micro-chip in my brain. I am being controlled by a computer'

Therapist: 'It sounds like you *feel you aren't participating in your actions*, because they don't feel yours.

Example 5 - Vitality

Patient: I am finished.....I have died, I am a ghost of my real self, I have rotted away, I am an empty shell. Even my soul has been taken away.

Therapist: 'There is *such a numbness inside that you feel as if you no longer exist*, even though we are talking together.'

The italics are provided to highlight the core message in each of these simple interchanges. These examples are fundamental illustrations of a technique, which is termed 'Ego Consolidation', as a means by which the patient is invited to discuss his inner state (Fewtrell, Legg and Scharfetter, 2000). In alternative terminology, ego consolidation can be seen as a means of bringing the self-system (see Baars, 1988) into access of the reflective self, or 'observer ego'. In other words, the patient is guided toward introspection, with a specific goal. The aim is to enhance the patient's awareness of what his happening within himself, as a way to compare and match his inner state to his manifest psychotic experience.

Strengthening the observer ego as a means of limiting the effects of severe egopsychopathology

The observer ego, or reflective self, describes the mechanism by which an individual places himself and his situation in context. A simple example in non-psychotic patients comes from potentially distressing altered states as a result of intoxication from substance abuse. As Scharfetter (1996) pointed out, in drug-induced states, the principle of self-reflection may be of crucial importance: 'The central watcher is the observer ego. How important this function of ego-consciousness is may be exemplified in an experimental psychedelic-induced altered state of consciousness:

as long as the observer ego is in the position of knowing what is going on, the subject is not lost in a horror trip or psychosis' (page 14).

In the above example, Scharfetter wished to illustrate the co-existence of at least two levels of awareness, both of which can occur in central consciousness simultaneously. Firstly, alien drug-induced percepts impinge upon conscious awareness, which may be disturbing to the individual. Secondly, the same individual may have the potential to moderate the interpretation of these percepts by accessing the knowledge that the drug-induced percepts are generated by factors other than data based on external reality. The insight that what is experienced may be inconsistent with the rules of normal perception has the potential to abstract the individual from the apparent 'reality' and assign to it the label of '*distorted perception of* reality'. The implication is that the individual is able to adopt a wider perspective by generating the propositional self-statement that the drug-induced percepts are not really 'out there' in the distal environment, thus reducing their impact and apparent significance. Such 'meta-cognitions' of the observer ego rob the aberrant percepts of their immediacy. The executive self, in effect, offers comments on the stimuli which pervade the ego, so that the ego is informed of the context surrounding the ego's environment.

Alerting the ego to its' perceptual influences is the key to Ego Consolidation. The patient in example 3 later complained that he was being subjected to clandestine spiritual influences, which were 'willed' to him by a secret sect, controlling his thoughts and movements. According to the ego-structural model, this second delusion of control was a second manifestation of an ego Activity disorder. We were then able to point out to him the following: 'You feel alien from your own thoughts and actions, as if you're not participating in them. There are now two theories

which you have, the first being an electronic model in which a computer is beaming in signals which control you, the second being a spiritual theory, based on control be a sect. The important point is that *you don't feel a part of your actions and thinking*, as coming from within, and you're trying to figure out why, *because you and your actions feel split off from each other'*.

The variability in the patient's delusions gave us a window of opportunity to illustrate to the patient that his beliefs were simply hypotheses to attempt to explain his own severe self-alienation. The ego is informed of a covert process, that of alienation from self-induced action.

Further reflections on the current stance of cognitive therapy for schizophrenia

The current stance of cognitive therapists, in line with the information-processing models of cognitive theory, is one of biological determinism. This neuropsychological legacy of the so-called 'Age of the Brain' may have had the detrimental effect on cognitive therapists of distracting them from core *subjective* analyses of schizophrenics. It is suggested that the most important material with which to work psychotherapeutically with florid schizophrenics is material pertaining to inner impressions and sensations, which impact upon sense of self. In the acute phase of a schizophrenic illness, delusions may vary through time and are therefore *pathoplastic.* This means that sustained efforts to persuade the patient to adopt a non-delusional perspective may not be achievable through techniques aimed at modifying delusions about the environment, such as the perceived external agent controlling him. The perceived external agent of control may change, but the delusion is likely to persist, attributing control to something/someone else in the environment. Challenging delusional beliefs about the environment may therefore be a rather oblique attempt to manage the schizophrenic process,

lacking acknowledgement of primary experiential process.

An important question arising out of the pathoplasticity of delusional content is whether delusions switch arbitrarily, or whether there are systematic changes from one delusion to another. Many psychoanalytic therapists argue that there is a systematic pattern to delusional content, the key to which lies in the patient's early experience of a cold, rejecting caretaker/s (see, for example, Fromm-Reichmann, 1952). However, the overall efficacy of treatments based on linking present symptoms with childhood experience has lost favour, partly owing to the unimpressive long-term outcomes of such approaches (Stone, 1986),

Fowler et al (1995) outlined an agenda for the assessment of schizophrenic patients for cognitive therapy (pages 99 - 104), which covers psychotic interpretations, behaviour, symptoms, degree of insight and psychometric assessment, including intellectual and emotional criteria. At first glance, this may appear a fairly comprehensive range of investigation. However, in the light of the observations of ego psychopathologists, the assessment agenda may reveal a certain incompleteness. There is an omission of data regarding self-experience, involving what Baars would term the self-system, as outlined by Jaspers and Scharfetter . Whether this is an important omission depends on its clinical utility.

The trial by Fowler et al (1995) consisted of 13 patients subjected to weekly cognitive therapy of one hour's duration and a control group of 8 schizophrenics, who received a weekly hour of non- specific social support. The CT treatment was conducted over a twelve month period, with follow-up for two years. The outcome criteria were elaborate, including measures of self-esteem, symptom ratings, psycho-social adaptation and the overall level of disruption and disturbance. Like many efficacy studies of response to psychological treatment by psychotic patients, the results demonstrated partial relief of symptoms, distress and disturbed

behaviour, with modest gains maintained at follow-up.

Adapting the notion of 'self-awareness' to the field of schizophrenia

Therapists with experience of psychotic patients all recognise that self-appraisal is a key dysfunctional area. However, there are considerable differences in how the self-appraisal of psychotics is conceptualised. On the one hand, cognitive therapists focus on a range of self-appraisal criteria *which are shared by non-psychotic patients,* such as self-hate, worthlessness and excessive self-criticism. These are all criteria embedded in the notion of distorted social self, or self-concept, which is assumed to be the central pathogenic process in both neurotic and psychotic complaints. This has lead Fowler et al (1995) to conclude: 'In managing dysfunctional beliefs about self and others amongst people with psychosis, the approaches we use are based essentially on the traditional approaches to managing dysfunctional assumptions described in cognitive therapy of depression.' (page 139). In the current author's opinion, based on clinical experience, this therapeutic orientation is overly restricted.

Given the empirical findings of Scharfetter (1996), Fowler et al's assertion is difficult to accept, since it is not sufficiently holistic. In the author's opinion, the self-referential ideation of psychotic patients is generated by inner sensations which are qualitatively different than those generated by affective disorder. Some contemporary cognitive psychologists have a tendency to regard self-referential ideation of psychotics within a framework which is too restrictive in scope. For Scharfetter and his phenomenological colleagues, it is not only self-worth which is adversely affected, but also the patient's evaluation of personal properties in relation to the external environment. The typical nihilistic concerns associated with dysfunctions of vitality, the feelings of vulnerability which are generated by demarcation problems, and the feelings of inauthenticity which are generated by impressions of personal metamorphosis are poorly

addressed by current cognitive therapy writers. Such processes, alluding to the self as a functional unit, are well established as intrinsic to severe Borderline Personality, depressive and psychotic disorders (Scharfetter, 1996).

In recent field research, two types of pilot investigation were carried out, regarding ego-orientated therapy for acute schizophrenic in-patients. The first task, which seemed to us fundamental, was to ascertain whether Scharfetter's five-factor coding system of schizophrenic delusional beliefs had inter-rater reliability amongst trained raters. A record the delusions of patients was kept, verbatim, and they were then subjected to an inter-rater reliability, amongst two British ego psychopathologists trained in Scharfetter's (1996) nosology. These were compared with each other and with Scharfetter's own ratings of the same transcribed delusions. The inter-rater reliability between all three raters was above 90% (Fewtrell, Edwards and Scharfetter, unpublished).

One of the biggest problems for psychologists attempting to engage acute schizophrenic patients therapeutically is the patient's reluctance to engage in on-going therapeutic contact (Nelson, 1997). In a recent empirical study, which attempted to illuminate possible distortions of self-awareness in response to patients' reported delusions, we are finding that florid schizophrenic in-patients rarely refuse psychotherapeutic contact and are motivated to attend therapy sessions, when the reflections of the therapist are based on these patients' inner experiences (Olsen, 2000; Fewtrell, Olsen and Edwards, 2001).

Linking neuropsychological deficits and symptoms in the clinical context may represent an attempt at premature closure, since florid schizophrenic patients are not accustomed to making direct links between neuropathology and experience. Therefore this kind of attributional link, offered to the patient as an 'explanation' of his or her experiences by

contemporary cognitive therapists, may not be the optimal means by which to reduce delusional conviction. Perhaps what the acute schizophrenic patient needs is guidance by which to help re-frame perceptual experiences which are salient to his every-day concerns. Whether the approach of 'Ego Consolidation' is beneficial to the florid schizophrenic patient, which affects the prognosis favourably, remains an empirical question.

Pilot trials, to establish patients' appreciation of the Ego Consolidation approach, are currently underway. Preliminary data suggests that the approach maintains the commitment of florid schizophrenic in-patients to therapeutic contact, with low refusal rates and favourable patient ratings of the contact itself (Olsen, 2000). Motivation for therapeutic contact is surely the most basic pre-requisite of potential therapeutic gain. The next step with regard empirical research is firstly, to establish whether the ego consolidation approach is sufficiently distinct from cognitive therapy packages, exemplified by that of Fowler et al (1997) and secondly, whether the Ego Consolidation approach can offer the acute schizophrenic relief, in psychological and psychosocial terms, objectified using the same outcome criteria as those outlined in the Fowler et al (1997) trial.

Transcripts used to compare therapeutic responses of standardised statements, typical of florid schizophrenics presentations, suggest that the two approaches are not equivalent and have their own distinctive style. It is clear, for example, that cognitive therapists and ego consolidation therapists, when invited to advocate optimal therapeutic responses to typical statements of florid schizophrenics, supply a qualitatively different therapeutic verbal reaction. The orientation of the therapist (cognitive or ego-consolidative) can be accurately identified by sophisticated blind raters, on the basis of the style of the therapeutic response (Fewtrell, manuscript in preparation).

To optimise therapeutic gain in florid schizophrenics, it is unclear whether ego consolidation approaches (as outlined in the transcripts above) should be regarded as independent of cognitive therapy approaches, nor whether ego consolidation approaches can be used to facilitate readiness for subsequent cognitive approaches as a dual, sequential strategy. However, the preliminary data (to be reported elsewhere) suggest that the two strategies are distinct, can be differentiated on empirical grounds, and aid florid schizophrenic patients as a dual-stage approach.

At present, leading information processing theorists in the field of schizophrenia who have moved towards the area of ego psychopathology, such as Hemsley (1998), seem to be more interested in integrating their observations into a neuropsychological model than focussing on possible psychotherapeutic implications. Though neuropsychological models may eventually generate new methods of investigation and courses of action, the translation of organic pathology into information processing models remains speculative. The re-definition of schizophrenia in ego-pathology terms, for which there is available data, may provide more clinically pragmatic from a psychotherapeutic point of view.

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