City Research Online

City St George's, University of London

Citation: Lawson, R. (1997). A survey of Community Clinical Psychology adult out-patients in Northern Ireland: demographic and psychometric aspects. (Unpublished Doctoral thesis, City, University of London)

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/31116/

OUTCOMES AND EFFECTIVENESS : A STUDY OF COMMUNITY PSYCHOLOGY PRACTICE

Submitted in fulfilment of the
requirements for the degree of
Doctor of Clinical Psychology
(DClinPsych)

RUTH LAWSON
Consultant Clinical Psychologist

Department of Psychology
CITY UNIVERSITY
LONDON

October 1997

CONTENTS

CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ACKNOWLEDGEMENTS

I would like to take this opportunity to express my thanks and appreciation to Professor Bor, my supervisor, for his help and guidance throughout this period. I extend my deep appreciation to Mr Roger Woodward for his support, assistance and patience throughout the development of my career in psychology. I would also like to thank Mrs Angela Adams for her persistence and hard work and Mr Brendan Mullen for his support to make this work possible.

I express my deep appreciation to my husband, Richard, and to my children, Claire, Michael and Tara, for all their tolerance and support in their own special ways. Also, to my parents for their continued support and assistance, particularly over the last year, without whom the completion of this dissertation would not have been possible.

DECLARATION

“I grant powers of discretion to the University Librarian to allow this thesis to be copied in whole or in part without further reference to me. This permission covers only single copies made for study purposes, subject to normal conditions of acknowledgement.”

Chapter 1 :

GENERAL INTRODUCTION

1.0 GENERAL INTRODUCTION

From my undergraduate and clinical training in psychology, I have developed and maintained interests in behavioural and cognitive approaches. This emphasised evaluating and measuring the effect of my work. There has also been an awareness of the importance of research throughout my career in Psychology. Previously I was unable to sufficiently prioritise evaluation at a formal level, or in terms of research for publications due to pressure of service demands. However an evaluative and goal-directed approach has recently been the basis of my work in relation to service planning and delivery.

At a clinical level I feel that it is important to establish clear therapeutic goals with each patient to provide direction for intervention. Such an approach also facilitates the understanding of each case and formalises the collaborative relationship necessary between therapist and patient. By identifying goals it is possible to enhance therapist motivation as the progress towards agreed goals is a means of direct feedback of therapeutic progress. Working within an Adult Mental Health setting could be somewhat stressful and with recent changes there could be occasions when it would be difficult to identify a clear direction for the future at both a professional and personal level. Consequently the current work has presented a personal challenge that is rewarding for both my employer and myself. This work aims to formally assess the effectiveness of an out-patient Clinical Psychology service in Northern Ireland. It will also aim to develop a model of outcomes assessment that will be suitable for use by other mental health professionals. In this respect, the work makes a contribution which, at the time of writing, is unique in the Northern Ireland context, in its furthering developments in evidence based practice. At a personal level this work provides the opportunity to exercise research skills in a way that has significance and relevance to current and future service provision and planning. It also requires the use of psychological skills at a consultancy level and will increase communication with others regarding the service of Clinical Psychology.

Within the discipline of Clinical Psychology a number of professional issues have been influenced by the changes in the Health Service. Up until 1987, the profession was largely self-monitored in terms of work patterns, accountability and service provision. This contrasts with the current necessity to market skills and services and the ability to provide a public account for actions and services (Barkham et al., 1995).

Particular challenges arise in each specialism of psychology. In adult mental health, such challenges have emanated from new areas of work such as AIDS/HIV (Bor, 1995), survivors of child sexual abuse (Berliner and Conte, 1990) and applications of psychology to medicine (Littlefield et al., 1990). Additionally there are issues such as waiting lists (Turton, 1993) and budgetary restrictions (Barkham et al., 1995). All such aspects pose a variety of difficulties for the profession. It is worthy of note that the increased demands have provided a wider range of options of work than were available ten to fifteen years ago. At present the resources available to meet these increased demands are often limited. Given this discrepancy between demand and availability it would be possible to view the situation in one of two ways. Firstly, it could be seen as a time of great challenge when the profession could maximise the use of its skills to attract additional resources in areas of demonstrated effectiveness. Secondly, the more pessimistic view would be that, with continued lack of any response to demands for psychological services and skills, purchasers will modify their requirements to overcome this lack of provision.

The significant recruitment problems, with vacancy rates as high as 20-30% (Manpower Planning and Advisory Group, 1990) would suggest that such chronic manpower difficulties require attention. It may be necessary to consider the provision of Clinical Psychology expertise in more indirect ways. Such methods would include consultancy, staff training and service development work (Kat,1991). Overall, it is clear that there will be direct changes in our current methods of working as well as our level of accountability.

In 1991, reforms were aimed at the structure of the National Health Service and introduced features that previously would have been more restricted to the private sector workings. This has led to a wide variation in the way in which psychology services are organised across the Health Service (Meikle and Zadik, 1995). The types of services available are now much more individualised and are much more dependent on local conditions. The factors influencing the changes include decentralisation, increased accountability, the introduction of the purchaser/provider split, quality strategies and Korner audits. The latter aimed to describe and quantify the work of psychologists while clinical audit was also introduced to facilitate the review and analyse the processes in the delivery of client services. The focus of accountability has moved to questions such as “Do services make a difference?”, “Is the information collected meaningful and relevant?” and “Are services cost-effective?”.

Formal contracts that have developed in relation to service specifications now make concrete the amount of work that has to be delivered. These include the number of sessions per week, patients per session and outcome measures, volume of work, level of referrals, and the nature of work being direct or indirect. The concern within the profession regarding the reduction of perceived autonomy of the role has centred around the limitations that would be placed upon practitioners if purchasers insist on a style of service provision which professionally is deemed inappropriate. It is clear that issues such as these need to be addressed by health care professionals and are best tackled in a systematic and comprehensive way in order to clarify assumptions about priorities and methods (Barkham et al., 1995). By pursuing this approach it could be argued that clinical psychology may well be one of the best equipped professions to deal with such questions given the research skills and problem solving approaches provided by our specialist training.

Since the introduction of a number of the changes within the Health Service, the use of research skills and the emphasis on effectiveness have become more of a priority than in the past. Consequently, for many clinical psychologists there has been a change in the nature of their work and perhaps the proportion of time spent in direct client contact has decreased. Previously within the profession research may have been considered to be more of a luxury compared with the necessity and requirement that it is now seen to be. Currently many clinicians are required to carry out research with an emphasis particularly on the evaluative nature of service delivery. As a result, the work for this thesis is influenced by not only the interests of the clinician in relation to difficulties and challenges surrounding an out-patient population but also the question of treatment effectiveness. This is pertinent at present and will no doubt continue to be influenced by the overall environment within which services are provided. As a result, the main thrust of this current research focuses on outcomes related to a general out-patient population for clinical psychology services.

The issue of outcome measurement and its development has been influenced to some extent by some of the same pressures and changes as those experienced by the profession of Clinical Psychology. These include increased accountability, responsibilities for budgets and the subsequent concern regarding the costs of health care provision that have been apparent for some time. Other influences include attempts to standardise health care initiatives around best-practice and the increase in audits. These have included both the type and quality of care being provided. There is much available literature addressing why outcome approaches should be embarked upon, the difficulties with such approaches and the purposes to which the information should and would be put (Clement, 1996). These issues will be further developed and considered within the two studies carried out as the main part of this research (3.0, 4.0).

It was felt that it would be important to examine outcomes in terms of provision of treatment but particularly in relation to a population that is representative of patients referred to Clinical Psychology for out-patient services. Consequently the area of anxiety was selected for the focus of the review of the literature. Given that measurement is the main theme throughout this research, it is this that has been looked at in relation to anxiety. While measurements are important, and the literature provides a wide range of work related to anxiety, it was felt appropriate to consider theoretical and practical issues of measurement. Thus the importance of relating clinical work to our theoretical knowledge is acknowledged, with an emphasis on the need for experimental developments. This review is presented in 2.0. The importance of the relationship between theory and clinical practice is often not acknowledged (Barlow, 1996) and this work aims to highlight these areas.

The issue of measurement is carried forward in relation to the main research component of the thesis in that the first study (3.0) examines the suitability of psychometric measures for use in clinical practice within a general population attending out-patient psychology clinics. It was seen as essential to investigate the measures for use in any outcomes approaches on effectiveness as the suitability of measures will be the foundation from which any claims regarding treatment effectiveness can be made. The Health and Personal Social Services for Northern Ireland have published the report of the Regional Strategy for Health and Social Well-Being, 1997-2002 (Department of Health and Social Services, 1996). In this document one of the four underlying principles identified as the basis for the strategy, and considered central to successful implementation, is the principle of increased emphasis on effectiveness and measuring outcomes. The document is explicit in emphasising the importance of basing decisions about services and interventions on firm evidence that the service or intervention has a beneficial effect on the patient. It also states that, "during the period of the strategy, the Department will expect both purchasers and providers to pay more attention to evidence of effectiveness and to withdraw interventions which are shown to be ineffective" (pp. 15). The document further states that by 1998 an agreed approach to outcome measurements should be in place for mental health services. Clearly the focus of this thesis is timely for both patients, managers, the Trust and purchasers.

The issue of measuring the effectiveness of treatments is therefore of concern, not only to interested researchers but to many others. Given this, the results of research will be required to be clinically relevant to the patients and therapists as well as to purchasers and providers. Consequently the design of appropriate research is of the utmost importance. The approaches to treatment must be representative of the populations served and the outcomes must be both relevant and practical. The second study within the present thesis focuses on these issues (4.0). These include the investigation of effectiveness of treatment interventions across a wide population using measures identified as suitable within the first study (3.0).

Within the populations investigated there has been no attempt to select on the basis of any specific variables or diagnosis. However it was felt that it was important to be able to demonstrate the utility of selected measures in an individual case. This has been presented in the case study (5.0). The same scales used in Studies I and II have been used in the Case report to detect post-treatment change. The patient was presenting with an identified depressive illness and treated with cognitive therapy. The case presentation demonstrates the benefits of the use of psychometrics and an outcomes approach. However it also shows that if the focus concentrates exclusively on measurement this may eventually obscure the main process by which clinical work is conducted, the therapeutic relationship. The complexities of which are examined in more detail within the discussion of Study II (4.5). Suggestions for the extension of the current work are also addressed, particularly in relation to the inclusion of cost in the analysis of outcomes.

The work undertaken within this thesis aims to have broad applicability in relation to the timing of the research and the influence of the Department of Health strategy. It also aims to take cognisance of the professionally relevant issues and the economic importance of providing evidence of effectiveness.

This work presents the concept of measurement in a series of levels, initially the experimental and theoretical relating to anxiety. Then at the level of describing those using services before evaluating the effectiveness of the treatment provided. Finally, the individual case study is presented to examine the application of a particular therapy while being able to measure aspects of the symptoms presented. It is with these influences foremost that the work was conceptualised and has now been presented in its completed form. It is hoped that this work will influence the practice of Clinical Psychology in North Down and Ards as a result of the findings and recommendations.

1.1 REFERENCES

Barkham, M., Firth-Cozens, J., Frankish, P. and Milne, D. (1995). How to measure clinical outcomes in a world of service contracts. *Clinical Psychology Forum*, 75, 34-36.

Barlow, D. (1996). Health Care Policy, Psychotherapy Research and the Future of Psychotherapy. *American Psychologist*, 51(10), 1050-1058.

Berliner, L. and Conte, J. (1990). The process of victimisation : the victim's perspective. *Child Abuse and Neglect*, 14(1), 29-40.

Bor, R. (1995). Gay and lesbian counselling. *British Journal of Clinical Psychology*, 34(4), 641-642.

Clement, P. (1996). Evaluation in private practice. *Clinical Psychology : Science and Practice*, 3(2), 146-159.

Department of Health and Social Services. (1996). *Health and Well-Being : into the next millennium. Regional Strategy for Health and Social Well-Being*, 1997-2002, Executive Summary.

Kat, B. (1991). *Models of Service in Clinical Psychology*. BPS: Leicester.

Littlefield, C., Robin, G., Murray, M. and Craven, J. (1990). Influence of functional impairment and social support on depressive symptoms in persons with diabetes. *Health Psychology*, 9, 737-749.

Manpower Planning and Advisory Group. (1990). *Clinical Psychology Report*. London: Department of Health.

Meikle, J. and Zadik, T. (1995). Survey of Clinical Psychology Service. *Clinical Psychology Forum*, 83, 40-41.

Turton, B. (1993). Dealing with referrals: tired of waiting. *Clinical Psychology Forum*, 55, 24-27.

Chapter 2 :

LITERATURE REVIEW

CONTENTS

2.0 LITERATURE REVIEW

A CRITICAL REVIEW OF ANXIETY - THEORY AND MEASUREMENT

The anxiety disorders have been the focus of much investigations over the past twenty years and, given the subsequent controversies, will continue to provide questions for a considerable time in the future. Such controversies include issues of classification (Barlow et al., 1994), theoretical perspectives (Clark, 1986; Gray, 1982; McNally, 1989; and Bandura, 1989) and treatment approaches (Beck et al., 1985; Foa and Kozak, 1986; Rachman, 1991). In parallel with such controversies, there is an increased requirement to measure outcomes of therapeutic intervention (review, 4.2). In this respect, the anxiety disorders have also yielded much research activity.

This review aims to examine the development of safety signal theory (Badia, Culbertson and Lewis, 1971) as applied to anxiety disorders and their treatment. In addition, the review will consider methods of measurements used with anxiety disorders in clinical practice. The conclusions will aim to propose an approach that will link the theory with practice in a systematic, yet practical way to enhance both the understanding and treatment of anxiety disorders.

2.1 ANXIETY DISORDERS

The classification of disorders subsumed under the general term of anxiety disorders is taken to include generalised anxiety disorder (GAD), panic disorder, obsessive compulsive disorder (OCD) and agoraphobia. These are discussed below.

2.1.1 Generalised Anxiety Disorder

The first inclusion of Generalised Anxiety Disorder (GAD) within the DSM-III (American Psychiatric Association, 1980) classification described the symptoms of chronic, heightened, diffuse anxiety. Unlike phobic anxiety there is a global unease with the concept of GAD. The differentiation of GAD from other anxiety disorders is difficult, given some shared symptoms such as somatic disturbances like headaches, faintness, shortness of breath and difficulty swallowing. Barlow (1988) regards GAD as the fundamental process associated with all other anxiety disorders. While it has been proposed that it is a fundamental process, it is also considered to be more chronic than panic disorder and patients usually are symptomatic throughout most of their lifetimes (Byrne and Byrne, 1993). Onset is gradual with a pattern of exacerbations and remissions. Rapee (1985) highlights the length of time between onset of the disorder and clinic presentation at an average of almost twenty-five years. Such a time lapse might also be indicative of either an indication of the fluctuating nature of the illness or of difficulties in seeking professional help. The latter would contribute to the problems of diagnoses frequently associated with GAD

(Rapee, 1991). Unlike other anxiety disorders, there is not as large a discrepancy between males and females presenting with GAD but there is still a predominance of females. Rapee (1985) found 61% of presenting cases to be female. In the review of GAD (Rapee, 1991), it is proposed that the problem could be considered as the "basic" anxiety disorder, given the similarity between it and high trait anxiety. The difficulty in making significant progress in relation to GAD is affected by two main factors. These are the relative lack of research within the area since the acknowledgement of GAD as a separate classification (DSM-III, American Psychiatric Association, 1980) and the low rate of presentation at clinics despite being considered one of the more prevalent anxiety disorders within the general population (Rapee, 1991).

2.1.2 Panic Disorder

As with GAD, there is a long history of recognition of panic disorder but designation as a separate classification was in DSM-IIIR (American Psychiatric Association, 1987). The central features are unexpected panic attacks at a frequency of three to four a month. The somatic symptoms include palpitations, tremor, nausea and dizziness. The illness can be acute or chronic and there are frequent complications of phobias, depression, obsessions, or addictions (Keller and Hanks, 1993). Prevalence has been estimated at 9% for those with occasional panic attacks, with 1.5% of the population fulfilling the DSM-IIIR criteria (Klerman, 1991). As with GAD, there are problems of co-morbidity with depression and other anxiety disorders (Andrews, 1991) and a smaller number receiving treatment than affected by the disorder (Stahl and Soefje, 1995). While the low rates of presentations for professional help might suggest that panic disorder does not require attention, Keller and Hanks (1993) draw attention to high suicide rate with those diagnosed. Prevalence is estimated at 2% of the general population with twice as many females affected.

2.1.3 Obsessive Compulsive Disorder

Obsessive Compulsive Disorder (OCD) is regarded as the fourth most common psychiatric disorder after phobias, substance abuse and depression (Kyrios et al., 1996). The central features of this disorder are obsessional thinking and compulsive behaviour. The aversive thoughts or images are recurrent and frequently relate to "prohibited" activities, contamination, orderliness or fear of illness and death. Such thoughts lead to an increase in anxiety which is reduced by compulsive behaviours or thoughts. The aim of treatment is to attempt to ignore or suppress anxiety-provoking thoughts or impulses or neutralise them with another thought or action (DSM-IIIR, American Psychiatric Association, 1987). Regier, Narrow and Rae (1990) report a lifetime prevalence of 2.5% and it is associated with co-morbid anxiety and mood disorders. Robins et al. (1984) reported that almost 70% have a history of major depression and 30% have a history of another anxiety disorder. There are conflicting results about gender differences in symptoms prevalence (Regier et al., 1990; Sanavio, 1988).

There has been ongoing debate regarding the relationship between OCD and forms of obsessional personality. Again there is conflicting evidence with some supporting the existence of the relationship (Black, 1974) while others refute it

(Steketee, 1990). In common with other anxiety disorders the measurement problems compound issues of diagnosis and treatment (Tallis et al., 1996; Kyrios et al., 1996). Reviews of treatment of behavioural (Hiss, Foa and Kozak, 1994) and cognitive-behavioural approaches (Freeston et al., 1996) acknowledge the benefits of a cognitive approach while emphasising the importance of the behavioural analysis.

2.1.4 Agoraphobia

Michelson (1987) reports that agoraphobia accounts for more than 60% of all phobic disorders and regards it as one of the most severe and chronic of the phobias. Phobias being defined as unreasonable fears associated with the avoidance of situations or objects to the extent that life is interfered with (DSM-IV, American Psychiatric Association, 1994). Agoraphobia is defined as the inability to be in public situations or alone at home due to the fear of panic attacks and/or depersonalisation (De Moor, 1983).

Bourden et al. (1988) estimate life-time prevalence at 7.7% for women, with or without panic. Onset is usually in adulthood (Ost, 1987). Agoraphobia has been considered a “women’s syndrome” (Foa et al., 1984, pp. 445) and women are about four times more likely to be diagnosed with agoraphobia than men (Chambless and Mason, 1986). Bekker’s (1996) review concludes that these views are accurate but she also suggests that the current sex role approach is too narrowly focused.

Treatment for agoraphobia was reviewed by Michelson et al. (1988), who compared cognitive, behavioural and psychophysiological treatments. They concluded that while the treatments produced equally statistically significant treatment gains, which were maintained post-treatment, the results were successful but not complete. A number of subjects continued to experience symptoms. Their recommendation favoured a combined therapy.

Rachman (1983, 1984) developed a new therapeutic approach related to the use of safety-signals in his attempt to improve treatment effectiveness (this will be reviewed in detail in 2.3).

2.2 THE DEVELOPMENT OF SAFETY SIGNAL THEORY

Common to much of the work on the anxiety disorders are the concepts of safety, threat and avoidance. The safety signal hypothesis has been developed (Badia et al., 1971) and subsequently applied to treatment approaches. The review will describe the development of this approach and examine its suitability as a model for use with anxiety disorders.

Mowrer's (1939) two-factor learning theory was influential in the understanding of conditioning of fear and has been extensively used in theoretical accounts of anxiety disorders (such as Foa and Steketee, 1979). There were two steps proposed as causal factors in producing avoidance behaviour. The first involved the acquisition of fear through the classical conditioning of some stimulus class to a primary aversive event. The second stage produced the avoidance behaviour where the reinforcer is regarded as fear reduction consequent to escape from an anxiety evoking component of that stimulus class. "Fear ..... motivates and reinforces behaviour that tends to avoid or prevent the recurrence of the pain producing (unconditioned) stimulus." (Mowrer, 1939, pp. 554). However, the two-stage theory was criticised in both the laboratory (Solomon and Wynne, 1953, 1954) and clinical (Hodgson and Rachman, 1974) situations. The criticisms focused on the over-emphasis on the motivating role attributed to fear in human behaviour. Rachman (1976) summarised the views "even if fear is a necessary cause of avoidance behaviour (and this itself is questionable), there are grounds for concluding that it is not necessary for the continuance of avoidance behaviour" (pp. 127).

The evidence provided to support the conditioning theory of fear acquisition has mainly come from experimental research on animals. There are at least two main difficulties; one being the failure to acquire fear in situations likely to be frightening, and the second the means by which human fears are found to be conditioned (Hallam and Rachman, 1976) and the Equipotentiality Premise. The failure to acquire fear in situations which would be considered frightening, such as war-time experiences, are not always found (Rachman, 1991).

The prediction from conditioning theory would be a direct relationship between injury and fear and yet this is not evident. The Equipotentiality Premise states that any stimulus can become transformed into a fear signal and that the specification of the stimulus chosen is not significant. This would apply if any stimulus could be shown to become a fear signal, as the theory would suggest stimulus choice is not of relevance. Seligman et al. (1971) have provided arguments which make this premise untenable. Further evidence is provided by the variation in the incidence of fears of snakes compared with more common animals. This would not be predicted if all stimuli, in this case animals, have equal chance of becoming fear signals.

Conditioning has been shown to be selective (Rachman, 1991) in that some stimuli are more easily transferred into conditioning signals than others. Memory of previous associations with the conditioned stimulus has been shown to influence the establishment of conditioning. It is also the case that conditioning can take place when stimuli are separated in time, in space, to discrete stimuli and also abstract relationships between two or more stimuli. Consequently, conditioning is seen as highly flexible yet lacking predictive utility. Clark (1988) proposed a cognitive explanation of panic to improve the range of conditioning theory to include cognitions. Rachman (1991), in a proposed neo-conditioning theory, acknowledges the improvement upon previous conditioning theory but also identifies remaining limitations such as fears acquired without any contact between the fear stimulus and the aversive event. He concludes, "Fears can be acquired by conditioning and by other processes. These other processes include vicarious transmissions and transmissions of verbal information. To conclude, conditioning is best construed as one of the three pathways to fear." (Rachman, 1991, pp. 171).

The importance of the contribution of individual differences in relation to fear acquisition has been developed (Eysenck and Rachman, 1965) to improve the understanding of why some individuals condition more readily and are likely to develop excessive fears. More recent reviews of this are provided by Eysenck (1992).

While Mowrer (1960) introduced safety signals as a concept in relation to fear acquisition, the issue of their relevance for persistent avoidance was developed by Gray (1971). He concluded, "The reinforcing value of such safety signals appears to be independent of the degree of fear aroused by the warning signals, so that they could continue to maintain avoidance behaviour even after the fear has diminished to a considerable degree." (pp. 175).

When contemplating the confrontation of any threat, a safe base is essential. Examples from childhood to adulthood confirm the need for safety. A SAFETY-SIGNAL refers to a stimulus that reduces the probability of anxiety behaviour in a fearful situation. A signal can indicate that the threat is either less severe or less likely to occur. Consequently, anything which realistically or perceptively reduces the likelihood of an unpleasant event can function as a safety signal. The other method of operation of safety signals involves the direct reduction of anxiety responses. This would also include responses that compete with anxiety responses, such as eating or walking. These function by inhibiting the anxiety responses.

The prediction from the safety signal hypothesis is that, in the absence of a reliable predictor of safety, the subject will remain in fear. This can be concluded from the findings of Badia et al. (1979). This involved the investigation of whether preference for a signalled shock condition over an unsignalled condition was mediated by the signals predicting shock or by the stimulus correlated with the absence of shock. The signals predicting shock were tones preceding the shocks by five seconds and the stimulus correlated with the absence of shock was a light. It was proposed that the preference for signalled shock over unsignalled was found that the signals would be more critical compared with the predictor of safety. If this was upheld, it would support the view that preparation for shock accounted for the preference behaviour. If the preference was controlled by the presence of identifiable shock-free periods (safety), then the correlated stimulus would be critical. The results showed that the rats preferred the signalled condition when the warning signal was completely dependable (ie all signals followed by shock) and when the signal was extremely undependable (few signals followed by shock). This suggested that, as a factor determining the choice for the signalled condition, the dependability of the signals as a predictor was unimportant. Badia et al. (1976) also investigated the extent to which choice for a signalled condition was affected by the dependability of the signal identifying a shock-free period. In this case, all signals were followed by shock but not all shocks were preceded by a signal. These results showed that, as the dependability of the safety varied, so did the preference for the signalled condition. Badia et al. (1976) concluded that such results indicated that the dependability of the signal predicting a shock periods was not as important as the dependability of the signal predicting a safe period. These results provide support for the safety signal analysis in relation to the importance of dependability of the safety signal in terms of preference over the dependability of the signal predicting shock.

2.3 CLINICAL APPLICATION OF SAFETY SIGNAL RESEARCH

Rachman (1983, 1984) applied the safety signal perspective to agoraphobia in order to improve therapeutic gained achieved with this disorder. He proposed that this approach would facilitate the understanding and consequent treatment of the anxiety disorders. He continues by describing methods of enhancing therapeutic procedures. This involves increasing the reliance on safety signals and also increasing the range of signals perceived as indicating safety. Safety signals are placed in avoided situations and the individual is encouraged to approach. He claims to see the relevance of this application for agoraphobics who construe their anxieties in terms of safety. This is not necessarily the mode of presentation for the majority of agoraphobics in that they often do not, at least initially, construe their difficulties in terms of safety.

While the approach by Rachman (1983a and 1983b, 1984) does appear to be in accordance with the safety signal hypothesis, there is a lack of experimental evidence with humans to demonstrate that the implications of the earlier animal studies of Badia and his colleagues are generalizable. This does not prevent the use of this conceptualisation of anxiety to develop more effective treatments.

However the lack of substantial evidence since these proposals were put forward suggest that it is necessary to consider the shortfall in human investigations before developing therapies based on untested theoretical proposals.

Craske et al. (1995) have begun to address the apparent lack of investigation of safety signal relevance with clinical samples. They summarise the findings in relation to prediction being shown to be preferred over lack of prediction:

1. preference is found for prediction of aversive events, by knowing the intensity or duration or by the presence of a preceding signal (Weinberg and Levine, 1980);
2. generally more emotionality or physiological disturbance is shown with unpredictable events than predictable ones (Averill and Rosenn, 1972; Miller and Berman, 1983);
3. symptoms of chronic anxiety, depressed mood and various cognitive deficits can be the result of prolonged exposure to unpredictable events (De Cola and Rosellini, 1990); and
4. "learned helplessness" effects can be minimised by including a signal at either the onset or termination of the aversive event (Overmier and Murison, 1989; Minor et al., 1990) or by presenting a feedback signal at the start of shock-free periods between trials (De Cola et al., 1988).

Safety signals analysis proposes that unpredictability results in chronic distress due to the absence of reliable safe periods. Consequently, predictable aversive events, while they are distressing at the time of impact, are regarded as less debilitating than unpredictable events in the long term (Craske et al., 1995). The warning signals of panic onset appear to have a combined function as safety signals, given that the cues predict panic and also the anticipated panic cessation followed by a panic-free period. In relation to panic attacks, it has however been reported that the cue or signal may become fear-provoking (Minor et al., 1991). If the fear of a cue then is in addition to the already established fear of an unconditioned stimulus (the panic attack), then the predicted aversive events might be more distressing than unpredicted aversive events. There is clinical support for this suggestion by Street et al. (1989) who found higher anxiety during cued than during uncued panic attacks. Craske et al. (1995) found higher levels of general distress with unpredicted panic attacks than predicted panics. These results support the findings of animal research in relation to predictability. However, the limitations of the study by Craske and her colleagues include difficulties with measurement of the levels of distress. Carter et al. (1995) investigated the effects of a safe person on induced anxiety following a biological challenge among panic-disordered patients with agoraphobia. Their results were consistent with the safety signal theory and cognitive model of panic. In this study, psychometric tools for physical and cognitive symptoms and avoidance behaviour. In addition, physiological measures of pulse rate were also used, indicating a return to more objective methods of measurement.

Wells et al. (1995) applied a safety signal approach to the maintenance of social phobia. Other applications include the work of Foa and Steketee (1979) with obsessive compulsive disorders. Consequently, the interest in the benefits pursuing this route are increasing. However the need to identify suitable measures that could link the theory with the clinical applications remains a source of future work.

2.4 MEASUREMENTS OF ANXIETY

Agras and Jacob (1981) highlighted the view that one of the most neglected aspects of study in the area of anxiety is that of measurement. At the time of their publication, this state of affairs could have been considered unfortunate or even regrettable. However, given the current requirement for accountability as one of the main themes of changes in the National Health Service (detailed review in 4.2), comments of this sort are unlikely to be tolerated. Consequently, it is imperative within any theoretical conceptualisation to be able to construct testable hypotheses. These can then inform experimental design for research with human subjects and ultimately clinical samples. Within the context of the anxiety disorders, problems of measurement have restricted both the linking of theoretical perspectives and clinical practice as well as the demonstration of effectiveness of treatment approaches. The importance of the latter has increased significantly with the recent National Health Service reforms. These pressures may provide the necessary stimulus to bring the work of researchers and clinicians to a more collaborative position. To examine this further, it is necessary to review the literature regarding measurements of anxiety.

Himadi et al. (1985) suggest that assessment procedures should include the three response modes of behavioural, cognitive and physiological. The Triple Response Measurement (TRM) would be in accordance with such aims. Support for the use of TRM is provided by the reported consensus that sound analysis must be multitrait-multimethod and represent all three response modes (Cone, 1979). The multiplicity of TRM provides increased reliability while additionally permitting the distinction of response patterns that may predict treatment responsiveness and promote treatment effectiveness. Focus on TRM will also aid the standardisation of assessments of anxiety. The advantages of standardisation include the prospect of a package of minimally necessary assessments in work with those presenting with anxiety difficulties, of providing mutually comparable reports across formats and a greater economy and humanity overall (Barlow and Wolfe, 1981).

Himadi et al. (1985) suggest two main factors which have influenced resistance to TRM. Firstly, the behavioural tradition of single, peripheral measurement and secondly, the difficulties of making multiple measurements with often complex results. Lang (1968, 1971) attempted to reduce the resistance against TRM by specifying ways in which psychophysiological methods are both essential and illuminating. He claimed that the emotional response is best considered a complex of three measurable systems: verbal-cognitive, overt motor and physiological systems. Applications of Lang's proposals began when Leitenberg et al. (1971) included psychophysiological measures with their overt behavioural measures. They found that some patients functioned well despite the maintenance of high heart rates. From such finds, Leitenberg et al. made two main suggestions; firstly, there may have been too much emphasis on reducing anxiety and not enough on training patients to function well regardless of anxiety. Secondly, that there should be a reconsideration of Wolpe's (1958) proposals that anxiety must be inhibited before avoidance behaviour could be reduced. These suggestions confirm the Lang's emphasis that despite the value of examining the separate response modes in understanding anxiety, the response modes will not necessarily correspond in expected ways.

The acknowledgement of the need for multi-response measurement led to the inclusion of the assumption that effective therapy must produce concordant changes across response systems (Mathews et al., 1981). Evidence of this extension of Lang's (1971) proposals has been provided by Rachman (Rachman and Hodgson, 1974; Hodgson and Rachman, 1974). They appeared to promote the view that acknowledged that fear and avoidance can co-vary, vary inversely, or vary independently, while also emphasising ways of producing 'parallel co-effects'. Further assumptions included that where lack of correlation persisted, correction and concordance were only a matter of time. The slower response mode "catching up" with faster modes during and following treatment. The general message being that, effective treatment should produce convergence on TRM. The evidence to support this does not appear to be available and the necessary scientific approach to testing of this theoretical approach is also absent.

The difficulties with the use of TRM reflect both philosophical and methodological issues. On philosophical grounds TRM has been criticised for placing too much emphasis on responses as scientific units and some radical behaviourists such as Hugdahl (1981) suggest that the TRM model discourages the search for distinctions between stimuli and responses. In order words, TRM may influence the neglect of controlling stimulus functions while over-emphasising response patterns. Again, reflecting the necessity of testable hypotheses. Another significant methodological difficulty is the problem of identifying what the TRM researchers are referring to in each of the modes.

The apparent quest for convergence has influenced the lack of enthusiasm for TRM. However, this appears to ignore the acknowledgement that responses in the three modes may represent somewhat independent phenomena. This is despite Lang (1971) drawing attention to two main conclusions about physiology. One, different systems have different functions; and two, that there are enormous individual differences in the degrees and pattern of these effects. Lang (1977) also emphasised the way in which the incorporation of TRM into treatment studies of agoraphobia could be seen in three stages. Initially the exploratory phase dominated by expectancies of convergent measures. Followed by a stage of confusing result and disillusionment. The third stage, where more subtle and idiosyncratic patterns emerge that may prove useful as prognostic indicators. Although such stages were identified specifically in relation to agoraphobia there would not seem to be evidence that such a view may not be usefully applied to more generalised anxiety disorders. Indeed, the application of a staged-model to the understanding of the treatment of addiction as well as the readiness to change has been evident and beneficial (Prochaska and Di Clemente, 1986; Prochaska et al., 1992).

Schwartz (1978) agreed with Lang's claim for the need to separate the concept of anxiety into three separate modes. He also agreed that goal of using TRM to facilitate the understanding of treatment mechanisms was appropriate for research. However, he criticised the narrowness of most of the results. He suggested that clinical researchers did not seem to be aware of psychobiological concepts suggesting that some, but not necessarily all, kinds of desynchrony can lead to predictable kinds of instability and to pathological disorders. This asserts the importance of the concept of physiological measures and their status as "correlates" rather than considering their potential contribution to the investigation of emotion. Schwartz (1978) accuses treatment researchers of being neglectfully unaware of efforts outside Clinical Psychology where more sophisticated and comprehensive approaches to the assessment of emotion already exist. Examples of such work being that of Ekman and Friesen (1974) who investigated relationships, particularly facial expressions and bodily movements. Their approach includes exacting indices of overt and covert behaviours and correlations with clear environmental signals. Izard et al.'s (1972) system, which may be even more relevant, shows that states such as anxiety and depression reflect complex underlying patterns of emotions. Anxiety being most closely related to fear and depression to sadness.

In addition to the problems of co-variation and lack of convergence among the three response systems, there are difficulties of obtaining accurate and reliable measurement in each of the systems. With physiological measures, there is a great deal of inconsistency with some, such as Smith et al. (1984) support the use of Finger Pulse Volume (FPV) as a suitable index. Others such as Casali, Wierwille and Lourdes (1983) detail instrumentation which measures respiration frequency and approximate respiration amplitude which they claim is suitable for use in that it is both small and unobtrusive. However, there does appear to be general agreement (Fahrenberg, 1992) that there is little evidence to support the view that patterns in measures of peripheral autonomic nervous system indices can reliably distinguish emotions and changes in levels of such states. Some positive results continue to be published (Levenson et al., 1990) and while such cases are not common, their existence confirms the sustained interest in this complex area.

Measurements of the cognitive system in anxiety have been advocated for some time by authors such as Chambliss et al. (1984). However these aspects will not be considered further in the present context.

The behavioural manifestations of anxiety include avoidance of situations as well as cognitive avoidance. Standardised behavioural tests have been used to examine the level of anxiety experienced. Mavissakalian and Michelson (1982) reviewed assessments made using such a test. This involved a behavioural course (0.4 mls) from the doors of the hospital to a crowded urban centre and ending at a congested bus stop. Subjects were required to walk alone as far as possible and return when the level of anxiety could not be tolerated. The course was divided into twenty steps and the performance was scored by assigning the number of last step completed. Subjects also rated their level of anxiety on a nine-point scale of Subjective Discomfort. Difficulties with the use of such standardised behavioural tests involve the differing baselines and situations found difficult. Consequently, it is possible to see how such a measure could be useful with a homogeneous group like agoraphobics but with a more generalised anxiety population this method of assessment would seem inappropriate. Also, within a clinical setting, each individual is likely to have highly specific patterns of anxiety producing stimuli, either of behavioural or cognitive origin (Menzies, 1996), that would make the likelihood of the use of these approaches unlikely in routine practice.

2.5 CONCLUSIONS

From the review of various measurement approaches, it is clear that within each of the three response systems, there is a variety of difficulties. It would also seem that there have been various trends within measurement in that during the 1960s, there may have been more focus on single subject behavioural tasks. This was later replaced by pursuit of physiological measures in the 1970s and early 1980s, as technical advances enlarged the scope of physical measurement. Developments in the area of cognitive theory may have then contributed to the change of focus to more cognitive-based assessments. These changes and developments within the measurement arena have been taking place alongside, although not necessarily in association with, the various revisions and developments of the theoretical proposals of anxiety and related disorders. It is also reasonable to appreciate that any reliable measurements will be made significantly more difficult, if at all possible, by the proliferation of meanings of anxiety and its related disorders. From this review, it is proposed that the further development of the safety-signal theory research into work with human subjects may present a means of unification of both understanding and measurement. It was previously proposed that self-efficacy theory (Bandura, 1977) in which the conviction of one's ability to perform particular tasks mediates subjective, autonomic and behavioural anxiety, is closely linked with perceived control. However, the perceived does not always result in the individual being able to perform a controlling response.

Miller (1979) demonstrated that those who believe they can affect noxious stimulation will be less anxious than those who believe they cannot, even when both groups experience identical aversive events. Seligman (1975) also concluded that perceived control has benefits, irrespective of the individual effecting a controlling response. Sanderson et al. (1989) acknowledge the increasing emphasis on perceived control within theories of anxiety-related problems and Foa et al. (1992) regard this as consistent with self-efficacy theory. In addition, safety-signal theory accommodates the inability of the self-efficacy theory to explain the responses when control is perceived in the presence of self-efficacy beliefs but the individual is unable to affect the appropriate response. In this situation the assumed control does not equate with being able to exercise it, unlike the self-efficacy theory position which assumes that perceived control with self-efficacy results in a positive response.

This review concludes by proposing that safety-signal theory links the and self-efficacy components within a theoretical framework which has been shown to be amenable to investigation from hypotheses directly derived from the theory. Unfortunately this work has yet to be developed significantly with human subjects. One important exception is Rainey (1996) in which not only were human subjects investigated but further developments were made of the apparatus described by Badia et al. (1971, 1979). The measures taken were time spent in changeover (time spent in the presence of the safety-signal) and the avoidance latencies.

With the extension of this work in routine clinical practice across anxiety groups an indirect, objective means of measuring anxiety may be provided. If so, the missing experimental evidence to support the application of safety-signal theory to treatment, as conducted by Rachman (1984) will be made available. Such results would also be useful as reliable measures of outcomes of treatment effectiveness that can accommodate individual differences without interfering with the therapeutic process. Such a development also serves to acknowledge the validity of the views reported by Menzies (1996) regarding the lack of collaboration and integration of clinical and research findings. The necessity for changes regarding this position has been exacerbated by health service reforms and it is proposed that these recommendations will accommodate many of these aims. It is also likely to produce additional questions but the evidence reviewed demonstrates the likelihood that pursuit of this work within the anxiety disorders will yield significant and important findings.

2.6 REFERENCES

Agras, W. and Jacob, R. (1981). Phobia: nature and measurement. In M. Mavissakalian, and D. H. Barlow (Eds.). *Phobia. Psychological and Pharmacological Treatment*. New York: Guilford Press.

American Psychiatric Association, (1980). *Diagnostic and statistical manual of mental disorders (DSM-III)*. Washington DC: American Psychiatric Association.

American Psychiatric Association, (1987). *Diagnostic and statistical manual of mental disorders (DSM-IIIR)*. Washington DC: American Psychiatric Association.

American Psychiatric Association, (1994). *Diagnostic and statistical manual of mental disorders (DSM-IV)*. Washington DC: American Psychiatric Association.

Andrews, G. (1991). Anxiety personality and anxiety disorder. *International Review of Psychiatry*, 3, 293-302.

Averill, J. and Rosenn, M. (1972). Vigilant and non-vigilant coping strategies and psychophysiological stress reactions during the anticipation of electric shock. *Journal of Personality and Social Psychology*, 23, 128-141.

Badia, P., Culbertson, S. and Lewis, P. (1971). The relative aversiveness of signalled versus unsignalled avoidance. *Journal of Experimental Analysis of Behaviour*, 16, 113-121.

Badia, P., Harsh, J., Coker, C. and Abbott, B. (1976). Choice and the dependability of stimuli that predict shock and safety. *Journal of the Experimental Analysis of Behaviour*, 26, 95-111.

Badia, P., Harsh, J. and Abbott, B. (1979). Choosing between predictable and unpredictable shock conditions: data and theory. Psychological Bulletin, 86(5), 1107-1131.

Bandura, A. (1977). Self efficacy: toward a unifying theory of behavioural change. Psychological Review, 84, 191-215.

Bandura, A. (1989). Self-agency in social cognitive theory. American Psychologist, 44, 1175-1184.

Barlow, D. and Wolfe, B. (1981). Behavioural approaches to anxiety disorders: a report on the NIMH-SUNY, Albany, research conference. Journal of Consulting and Clinical Psychology, 49, 448-454.

Barlow. D, (1988). Anxiety and its Disorders: The Nature and Treatment of Anxiety and Panic. New York: Guilford Press.

Barlow, D., Brown, T. and Craske, M. (1994). Definitions of panic attacks and panic disorder in DSM-IV: Implications for research. Journal of Abnormal Psychology, 103, 553-564.

Beck, A., Emery, G. and Greenberg, R. (1985). Anxiety Disorders and Phobias - A Cognitive Perspective. New York: Basic Books.

Bekker, M. (1996). Agoraphobia and gender: a review. Clinical Psychology Review, 16(2), 129-146.

Black, A. (1974). The natural history of obsessional neurosis. In H. R. Beech (Ed.). Obsessional States. London: Methuen.

Bourden, K., Boyd, J., Rae, D., Burns, B., Thompson, J. and Locke, B. (1988). Gender differences in phobias : results of the ECA Community survey. *Journal of Anxiety Disorders*, 2, 227-241.

Byrne, A. and Byrne, D. (1993). The effect of exercise on depression, anxiety and other mood states - a review. *Journal of Psychosomatic Research*, 37(6), 565-574.

Carter, M., Hollon, S., Carson, R. and Shelton, R. (1995). Effects of a safe person on induced stress following a Biological Challenge in Panic Disorder with Agoraphobia. *Journal of Abnormal Psychology*, 104(1), 156-163.

Casali, J. and Wierwille, W. (1983). Methods and Designs. Respiratory measurement: overview and new instrumentation. *Behaviour Research Methods and Instrumentation*, 15(4), 401-405.

Chambless, D. and Mason, J. (1986). Sex, sex-role stereotyping and agoraphobia. *Behaviour Research and Therapy*, 24, 231-235.

Chambliss, D., Caputo, C., Bright, P. and Gallagher, R. (1984). Assessment of fear in agoraphobics: the Body Sensations Questionnaire and the Agoraphobia Cognitions Questionnaire. *Journal of Consulting and Clinical Psychology*, 62, 1090-1097.

Clark, D. (1986). A cognitive approach to panic. *Behaviour Research and Therapy*, 24, 461-470.

Clark, D. (1988). A cognitive model of panic attacks. In S. Rachman and J. Maser (Eds.). *Panic psychological perspectives* (pp. 71-90). New Jersey: Erlbaum.

Cone, J. (1979). Relevance of reliability and validity for behavioural assessment. *Behaviour Therapy*, 8(3), 411-426.

Craske, M., Glover, D. and De Cola, J. (1995). Predicted versus unpredicted panic attacks : acute versus general distress. Journal of Abnormal Psychology, 104(1), 214-223.

De Cola, J., Rosellini, R. and Warren, D. (1988). A dissociation of the effects of control and prediction. Learning and Motivation, 19, 269-282.

De Cola, J. and Rosellini, R. (1990). Unpredictable/uncontrollable stress proactively interferes with appetitive Pavlovian conditioning. Learning and Motivation, 21, 137-152.

De Moor, W. (1983). The topography of agoraphobia. American Journal of Psychotherapy, 36, 371-388.

Ekman, P. and Friesen, W. V. (1974). Non-verbal behaviour and psychopathology. In R. J. Friedman and M. M. Katz (Eds.). The Psychology of Depression: Contemporary Theory and Research. Washington: Winston and Sons.

Eysenck, H. and Rachman, S. (1965). The Causes And Cures Of Neurosis. London: Routledge and Kegan Paul.

Eysenck, M. (1992). The Nature of Anxiety. In A. Gale and M. Eysenck. Handbook of Individual Differences: Biological Perspectives. Chichester: John Wiley and Sons.

Fahrenberg, J. (1992). Psychophysiology of Neuroticism and Anxiety. In A. Gale and M. Eysenck. Handbook of Individual Differences: Biological Perspectives. Chichester: John Wiley and Sons.

Foa, E. and Steketee, G. (1979). Obsessive-Compulsives : Conceptual Issues and Treatment Interventions. Progress in Behaviour Modification, 8, 1-53.

Foa, E., Steketee, G. and Young, M. (1984). Agoraphobia : Phenomenological aspects, associated characteristics and theoretical considerations. *Clinical Psychology Review*, 4, 431-457.

Foa, E. and Kozak, M. (1986). Emotional processing and fear : Exposure to Corrective Information. *Psychological Bulletin*, 99, 20-35.

Foa, E., Zinbarg, R. and Rothbaum, B. (1992). Uncontrollability and unpredictability in post-traumatic stress disorder - An Animal Model. *Psychological Bulletin*, 112(2), 218-238.

Freeston, M., Rhéaume, J. and Ladouceur, R. (1996). Correcting faulty appraisals of obsessional thoughts. *Behaviour Research and Therapy*, 34, 423-432.

Gray, J. (1971). *The Psychology of Fear and Stress*. London: Weidenfield and Nicholson.

Gray, J. (1982). *The Neuropsychology of Anxiety*. Oxford: Clarendon.

Hallam, R. and Rachman, S. (1976). Current status of aversion therapy. In M. Hersen, R. Eisler and P. Miller (Eds.). *Progress in Behavior Modification, Vol. II*. New York: Academic Press.

Himadi, W., Boice, R. and Barlow, D. (1985). Assessment of agoraphobia : triple response measurement. *Behaviour Research and Therapy*, 23(3), 311-323.

Hiss, H., Foa, E. and Kozak, M. (1994). Relapse prevention program for the treatment of obsessive-compulsive disorder. *Journal of Consultant and Clinical Psychology*, 62(4), 801-808.

Hodgson, R. and Rachman, S. (1974). Desynchrony in measures of fear. *Behaviour Research and Therapy*, 19, 109-115.

Hugdahl, K. (1981). The 3-systems model of fear and emotion. Critical Examination. *Behaviour Research and Therapy*, 19(1), 75-85.

Izard, C., Ekman, P., Friesen, V. and Ellsworth, P. (1972). Emotion in the Human Face. Guidelines for Research and an integration of findings. *Contemporary Psychology*, 28, 519.

Keller, M. and Hanks, D. (1993). Course and outcome in panic disorder. *Progress Neuro-Psychopharmacological and Biological Psychiatry*, 17, 551-570.

Klerman, G. (1991). Panic Disorder - Strategies for long-term treatment. *Journal of Clinical Psychiatry*, 52(s), 33.

Kyrios, M., Bhar, S. and Wade, D. (1996). The assessment of obsessive-compulsive phenomena : psychometric and normative data on the Padua Inventory from an Australian non-clinical student sample. *Behaviour Research and Therapy*, 34(1), 85-95.

Lang, P. (1968). Fear reduction and fear behaviour. In J. Shlein (Ed.). *Research in Psychotherapy*. Washington DC: APA.

Lang, P. (1971). The application of psychophysiological methods to the study of psychotherapy and behaviour modification. In A. Bergin and S. Garfield (Eds.). *Handbook of Psychotherapy and Behaviour Change*. Chichester: Wiley.

Lang, P. (1977). Imagery in therapy: an information processing analysis of fear. *Behaviour Therapy*, 8, 862-886.

Leitenberg, H., Agras, S., Butz, R. and Wincze, J. (1971). The relationship between heart rate and behavioural change during treatment of phobias. *Journal of Abnormal Psychology*, 78(1), 59-68.

Levenson, R., Ekman, P. and Friesen, W. (1990). Voluntary facial action generates emotional-specific autonomic nervous system activity. *Psychophysiology*, 27, 363-384.

Mathews, A., Gelder, M. and Johnston, D. (1981). *Agoraphobia : nature and treatment*. New York: Guilford Press.

Mavissakalian, M. and Michelson, L. (1982). Patterns of psychophysiological change in the treatment of agoraphobia. *Behaviour Research and Therapy*, 20, 347-356.

Menzies, R. (1996). Individual response patterns and treatment matching in the phobic disorders : a review. *British Journal of Clinical Psychology*, 35, 1-10.

Michelson, L. (1987). Cognitive-behavioural assessment and treatment in agoraphobia. In L. Michelson and M. Asher (Eds.). *Anxiety and Stress Disorders : Cognitive Behavioural Assessment and Treatment*. New York: Guilford Press.

Michelson, L., Mavissakalian, M. and Marchione, K. (1988). Cognitive, Behavioural and Psychophysiological Treatments of Agoraphobia : a Comparative Outcome Investigation. *Behaviour Therapy*, 19, 97-120.

Miller, S. (1979). Controllability and human stress : method, evidence and theory. *Behaviour Research and Therapy*, 17, 287-304.

Miller, R. and Berman, J. (1983). The efficacy of cognitive behavior therapies : a quantitative review of the research evidence. *Psychological Bulletin*, 94, 39-53.

Minor, T., Trauner, M., Lee, C. and Dess, N. (1990). Modelling the signal features of an escape response : effects of cessation conditioning in the "learned helplessness" paradigm. *Journal of Experimental Psychology : Animal Behaviour Processes*, 16, 123-136.

Minor, T., Wilkins, J. and Insel, T. (1991). Experimental - analysis of the Ost and pituitary - dependent opiate analgesia in the learned helplessness paradigm. Meeting abstract. *International Journal of Psychiatry*, 11(1), 57.

Mowrer, O. (1939). A stimulus response analysis of anxiety and its role as a reinforcing agent. *Psychological Review*, 46, 553-565.

Mowrer, O. (1960). *Learning Theory and the Symbolic Process*. Chichester: John Wiley and Sons.

McNally, R. (1989). Is anxiety sensitivity distinguishable from trait anxiety? Reply to Lilienfield, Jacob and Turner. *Journal of Abnormal Psychology*, 98, 193-194.

Ost, L. (1987). Age of onset in different phobias. *Journal of Abnormal Psychology*, 96(3), 223-229.

Overmeier, J. and Murison, R. (1989). Post-stress effects of danger and safety signals on gastric ulceration. *Behavioral Neuroscience*, 103, 1296-1301.

Prochaska, J. and Di Clemente, C. (1986). Toward a comprehensive model of change. In W. R. Miller and N. Heather (Eds.). *Treating Addictive Behaviours: Processes of Change*. New York: Plenum.

Prochaska, J., Norcross, J. and Fowler, J. (1992). In search of how people change: Applications to addictive behaviours. *American Psychologist*, 7, 1102-1114.

Rachman, S. and Hodgson, R. (1974). Synchrony and desynchrony in fear and avoidance. *Behaviour Research and Therapy*, 12, 311-318.

Rachman, S. (1976). The passing of the two-stage theory of fear and avoidance : fresh possibilities. *Behaviour Research and Therapy*, 14, 125-131.

Rachman, S. (1983a). The modification of agoraphobic avoidance behaviour : some fresh possibilities. *Behaviour Research and Therapy*; 21, 567-574.

Rachman, S. (1983). Fear and courage in military bomb-disposal operations. *Advances in Behaviour Response Therapy*, 4, 97-175.

Rachman, S. (1984). Agoraphobia : a safety-signal perspective. *Behaviour Research and Therapy*, 22, 59-70.

Rachman, S. (1991). Neo-conditioning and the classical theory of fear acquisition. *Clinical Psychology Review*, 11, 155-173.

Rainey, S. (1996). Safety signal adherence among a psychiatric population. *Unpublished Masters' thesis*, University of Ulster, Jordanstown.

Rapee, R. (1985). Distinctions between panic disorder and generalised anxiety disorder : clinical presentation. *Australian and New Zealand Journal of Psychiatry*, 19, 227-232.

Rapee, R. (1991). Generalised Anxiety Disorder : A review of clinical features and theoretical concepts. *Clinical Psychology Review*, 11, 419-440.

Regier, D., Narrow, W. and Rae, D. (1990). The epidemiology of anxiety disorders : The Epidemiologic Catchment Area (ECA) experience. *Journal of Psychiatric Research*, 24, 3-14.

Robins, L., Helzer, J. and Weissman, M. (1984); Lifetime prevalence of specific psychiatric disorders at three sites. *Archives of General Psychiatry*, 143, 317-322.

Sanavio, E. (1988). Obsessions and compulsions : The Padua Inventory. *Behaviour Research and Therapy*, 26, 169-177.

Sanderson, W., Rapee, R. and Barlow, D. (1989). The influence of an illusion of control on panic attacks induced via inhalation of 5.5 per cent carbon dioxide enriched air. *Archives General Psychiatry*, 46(2), 157-162.

Schwartz, G. (1978). Psycho-biological foundations of psychotherapy and behaviour change. Review. New Haven: Yale University.

Seligman, M., Maier, S. and Solomon, R. (1971). Unpredictable and uncontrollable events. In F R Brush (Ed), *Aversive Conditioning and Learning*, 317-400. New York: Academic Press.

Seligman, M. (1975). *Helplessness*. San Francisco: Freeman.

Smith, T., Houston, B. and Zurawski, R. (1984). Finger Pulse Volume as a measure of anxiety in response to evaluative threat. *Psychophysiology*, 21(3), 260-264.

Solomon, R. and Wynne, L. (1954). Traumatic avoidance learning : acquisition in normal dogs. *Psychological Monographs*, 67, 354.

Solomon, R. and Wynne, L. (1953). Traumatic avoidance learning : the principle of anxiety conservation and partial irreversibility. *Psychological Review*, 61, 353-385.

Stahl, S. and Soefje, S. (1995). Panic attacks and panic disorder : The Great Neurologic Imposters. *Seminars in Neurology*, 15(2), 126-132.

Steketee, G. (1990). Personality trait and disorders in obsessive-compulsives. *Journal of Anxiety Disorders*, 4, 351-364.

Street, I., Craske, M. and Barlow, D. (1989). Sensations, cognitions and the perception of cues associated with expected and unexpected panic attacks. *Behaviour Research and Therapy*, 27(2), 189-198.

Tallis, F., Rosen, K. and Shafran, R. (1996). Investigation into the relationship between personality traits and OCD : a replication employing a clinical population. *Behaviour Research and Therapy*, 34(8), 649-653.

Weinberg, J. and Levine, S. (1980). Psychobiology of coping in animals : The effect of predictability. In S Levine and H Ursin (Eds), *Coping and Health*, (pp. 39-59). New York: Plenum Press.

Wells, A., Clark, D., Salkovskis, P., Ludgate, J., Hackman, A. and Gelder, M. (1995). Social Phobia : the role of in-situation safety behaviours in maintaining anxiety and negative beliefs. *Behaviour Therapy*, 26, 153-161.

Wolpe, J. (1958). *Psychotherapy by Reciprocal Inhibition*. Stanford: Stanford University Press.

RESEARCH

An outcomes survey and investigation of effectiveness in a Community Clinical Psychology Service in Northern Ireland

Chapter 3 :

STUDY I

A survey of Community Clinical Psychology adult out-patients in Northern Ireland : demographic and psychometric aspects

CONTENTS

3.1 ABSTRACT

This study examined the demographic and psychometric characteristics of Clinical Psychology adult out-patients. The aim of the study was to investigate the demographic and psychometric correlates of those attending out-patient clinics in the North Down and Ards Trust in an aim to investigate those accessing services and factors affecting this. The effect of the area of domicile was considered an important influence. Three previously standardized psychometric scales were used as well as information about age, sex, marital status, domicile, referral source, diagnosis and waiting list duration. The participants were patients referred to the Clinical Psychology Department by their General Practitioners or Consultant Psychiatrists. Results show that there was a higher representation of younger and female patients. Most were from urban locations and were married or single rather than divorced, widowed or separated. Almost all had been referred by their General Practitioners and many were diagnosed as having an anxiety disorder. Females were more depressed than males and younger patients were more anxious. Scores on the Beck Depression Inventory were significantly affected by marital status and diagnostic category. Those who scored higher on the General Health Questionnaire were seen more quickly. Correlations were found between the scales. The implications of these findings are discussed within the context of the North Down and Ards population. Recommendations for service delivery, planning and future research are presented.

3.2 INTRODUCTION

This study focuses on measurement of symptomatology in the clinical practice of psychology. Results will be used to further the theoretical understanding of outcome approaches in psychological therapies. The approach adopted is that of systematically assessing, evaluating and reviewing. This has been clearly evident within psychological approaches and had become more pertinent within other professions over the last number of years (Sainsbury et al., 1995). Reasons for the application of a scientific approach will also be presented, as will historic trends in terms of changes in the National Health Service. Factors influencing the presentation of illness and subsequent pathways to referral for psychological therapy will be examined and the subsequent assessment of need and problems of measurement in clinical practice.

3.2.1 **Historical Background**

The evaluation of health care services does not represent a recent concept and, as identified by Koch (1979), the increase in the need within adult mental health treatment is clear in terms of the demand for services particularly for those with minor affective disorders of anxiety and depression. There has also been an increased awareness of psychological influences on individuals and their well-being. Subsequently this has led to a considerable increase in the demand for better access, especially to primary care-led services. Such an increase in demand, when one considers the history of psychiatric care, would appear to have been a noticeable trend almost since the introduction of the Health Service in 1948. At this time, significant changes in the spending policies and the expansion of psychiatric services took place. Resources in terms of finance, manpower and buildings were more readily available compared with previous provision. Therapeutic communities were developed (Jones, 1952) which had initially been there for soldiers after both World Wars and the models in use in such communities became the model for continuing care clients. The 'open door' policy (Ramon, 1988), which was evident by the lack of focus of services or reasons for admissions, at the end of the war led to large numbers of patients being discharged from hospital after a relatively short period of time. A trend then appeared which indicated that the rates of re-admission were increased as the average length of stay decreased and this was seen as an attempt to try and reduce over-crowding within large psychiatric hospitals. By providing shorter admissions it would seem that further treatment was necessary, thus increasing re-admission rates. Unfortunately this process indicated the demand for services being greater than the supply, even at such an early stage (Ramon, 1988).

Rehabilitation wards were created and little attention was paid to the possible harmful effects of discharge of patients from these wards to the type of supportive services needed or indeed, a more fundamental issue would have been to consider the type of services needed to prevent admission of such patients in the first place. Day care at this stage took the form of social clubs, and out-patient services began to develop (Farndale, 1964). With the introduction of the anti-psychotic drug, Chlorpromazine, in Britain in 1954 and

Imipramine, an anti-depressant, in 1957, treatment of psychiatric patients in the 1960s (Lancet, 1954 and Scull, 1975) developed accordingly. Also in the early 1960s, an anti-institutional stance grew (Brown, 1959), which indicated a better tolerance of communities for the mentally ill and this approach was supported by politicians across political parties for a variety of reasons. Some were attracted by the humanistic message of providing care for this vulnerable group and others by the belief that care for this vulnerable group in the community was going to be cheaper.

The first calculations of the cost of day hospital places demonstrated that they were considerably cheaper than hospital beds (Farndale, 1964). In the 1960s the declaration of the then Minister of Health, Enoch Powell, that the primary objective for psychiatric services was a cut of 20,000 beds over the next 20 years indicated that in this time there was a clear awareness that demand was greater than potential supply and that in-patient care was not seen as a feasible, long-term option in the way that services had initially developed.

In the 1970s one of the most significant developments was the "Better Services for the Mentally Ill" paper (Department of Health, 1975, Cmnd 6233) which reinforced the commitment to community care combined with the acknowledgement that little had been achieved since the late 1950s and that at this stage insufficient resources were allocated to move community care forward. The implicit messages within this paper were the provision of services at a local level with a very minor role for psychiatric hospitals and there did not appear to be any indication for any need to significantly change the range of interventions available.

3.2.2 More Recent Influences

Until the 1980s, the pace of change in relation to psychiatric services within the community had been relatively slow but the 1980s saw a huge acceleration. There was a variety of reasons for this, both professional and political. The political reasons are possibly more significant insofar as the Government appeared to be committed to cutting down the public sector expenditure and to privatising services. These included the increasing emphasis on market - based principles, delegation of financial control, competitive tendering for services and the introduction of contracting (Stewart and Walsh, 1992). In line with this approach, the Department of Health and Social Services was pursuing the closure of large psychiatric hospitals. This made financial logic given the high cost of keeping old, Victorian hospitals in good order and particularly as the number of patients was decreasing and the unit costs were rising. Consequently the Department of Health and Social Services was receptive to the professional message that the majority of in-patients could live outside the hospital if the right services were provided. This led to an arrangement where the Department of Health and Social Services committed itself to providing necessary bridging resources to transfer patients from the hospital to the community.

At one level this may appear to be relatively straightforward although the collaboration between the two major services is very complex and presents many problems and conflicts (Glennester and Korman, 1986). The need for the providers of both hospital and community services to work together cannot be over-stated. The most important aspect of this is at the level of providing patients with continuous care as those who are in the transition between the hospital and the community. Another source of concern was that there were no national guidelines concerning the preparation of staff to move out of the hospitals and each health authority was left to its own devices. A significant factor in the 1980s was that another new management staff group emerged - these individuals were predominantly from an administrative background although some were from clinical backgrounds. Their agenda was to focus on planning objectives and methods and this provided them with a different perspective on service development overall.

In addition to this, the power that was then given to such managers within the National Health Service, with improved flexibility, enabled managers who wished to develop community-based psychiatric services to be more effective than they had been in the past. Also at this time there had been encouragement to develop greater liaison and collaboration with the voluntary and private sectors than there had been at any other time in the history of the National Health Service. By directing resources to the private sector to provide services for health care, the flexibility that had become available was being restricted to some extent.

During the 1980s there was also an increase in the involvement of patients in a user movement which had been influenced by the dissatisfaction with mental health provision prior to this (Campbell, 1990). The focus also became directed on the unmet need for services and Brewin et al. (1988) estimated that among people attending psychiatric services there was at least one unmet need for every five that were met and that over half the individuals had at least on unmet need for assessment or for clinical intervention. There were however some areas that were frequently over-provided but these tended to be in the areas of neuroleptic, anti-cholinergic, anti-depressant or anxiolytic drugs. Under-provision was much more evident in psychological and educational interventions. Another significant feature of the 1980s was the continuation of the pattern for high rates of re-admissions. Three-quarters of all psychiatric hospital admissions were re-admissions (Office of Health Economics, 1989) thus indicating a continuing trend.

In the 1990s, the Community Care Act (Department of Health and Social Services, 1990) was put in place which provided a framework for both organising and financing services within the National Health Service. The victory of the Conservative Party in the General Election in April 1992 has meant that this framework will remain in place for the rest of the century and certainly the influences of which will be around for longer. One of the central principles of the Community Care Act (Department of Health and Social Services, 1990) is that ‘money follows the patient’. The interaction of the principles laid out in the Community Care Act has led to the market-like form of organisation in which there are two distinct roles, of ‘purchaser’ and ‘provider’. Purchasers and their organisations are those who have the authority to spend money on services for patients and clients. Providers are people and organisations who make their living by providing the required services. Among the assumptions within this system is that the purchasers will use better quality and value for money as selection criteria. As a consequence, the patient will be provided with the best possible service and that the money used to fund the service will demonstrably have been used to the best effect. The framework of purchasing has formalised the purchasing power of General Practitioners and this has been done by the introduction of fundholding practices which facilitates the selection at a very local level by the General Practitioners. They can choose the services that they feel are best for their patients.

The development of Trust status in the National Health Service is a means by which greater flexibility has been given to the organisation, again at a more local level. Trusts function as both purchasers and providers of services (Carroll and Wilson, 1993). In Northern Ireland the budget for mental health services has not been transferred to General Practitioner fundholding. However, from April 1997 there will be a number of total purchasing pilot schemes which will be in operation, mental health services will be included in these. This is significant for the North Down and Ards Trust given that one of the projects will be sited within our own Trust.

It is important to clarify the distinction between Trusts in Great Britain and those in Northern Ireland. Generally it would appear that Trusts in Great Britain have ceased to function solely in relation to geographic boundaries. The implementation of Trust status has given accessibility of service provision from other sources and increased the flexibility of service provision. This has subsequently increased the flexibility of purchasing. This is less so the case in Northern Ireland given the size and the geographic structure. Consequently while Trust status has been in place for several years, service contracts are largely maintained in the historical pattern in terms of services provided by the community Trust. This is not necessarily the case for the hospital Trusts but is an important distinction to draw in relation to the North Down and Ards Trust.

Such changes, particularly more recently, have led to a great increase in terms of the amount of measurement that is carried out within the service, the requirement of service providers is to demonstrate measurably the effectiveness with which their service can be provided and increasingly this can present a difficulty at a clinical level. Other effects have been that the re-organising of services and the increased competition for a limited number of contracts, combined with the growing demand to meet the consumer needs, has increased the pressure on clinical practice to be more accountable for the actual outcome of their care. In the 1990s also, the quality of care initiatives tended to focus largely on 'structure' and 'process' of care with less attention being paid to the evaluation of outcomes.

It is against this background that there is a clear demand to establish better understanding of influences on demands for services. It is proposed that in order to provide meaningful explanation of this demand cognisance must be taken of variables affecting the 'illness presenting behaviour' of individuals.

3.2.3 Illness Behaviour

Disease is regarded as some form of deviation from normal functioning as a result of an organic disorder of known-pathology. Illness, however, is regarded as the result of the altered state of perception an individual has of their functioning (Coe, 1970). A disease may be associated with illness, ie a disease may be present and the illness manifests itself, or an individual may feel 'ill' and be aware of the symptoms in the absence of the disease. This would be the case with Tuberculosis where, after the disease is treated, illness continues to the very long convalescence period. There are a variety of potential influences on an individual suffering from a detectable pathological abnormality. Mechanic (1968) suggested that illness behaviour refers to any behaviour which is relevant to a condition that leads an individual to be concerned with their symptoms and subsequently seek help.

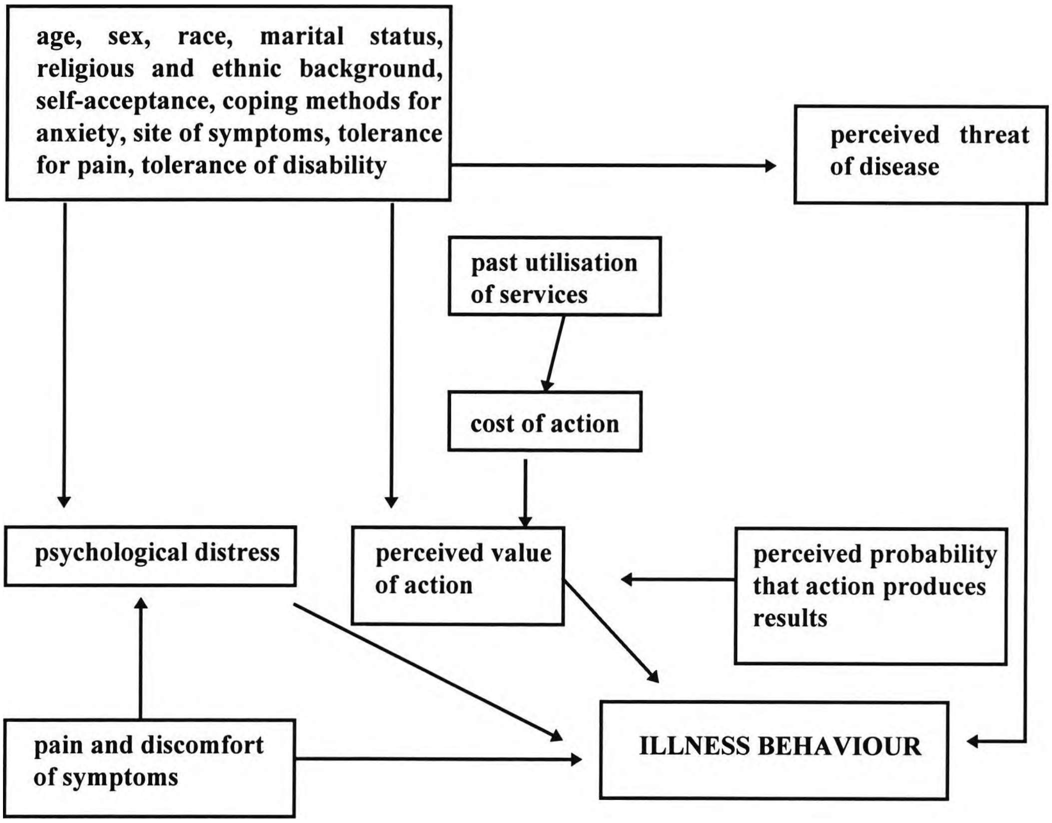
In 1980, Mechanic proposed that 'Neurosis' or 'distress syndrome' is part of a learned pattern of illness behaviour. He proposed that this involves a concentrated focus on the internal feeling states with highly sensitive monitoring of the sensations and a high level of self awareness. Mechanic proposed that illness behaviour is usually a summary measure which includes several psychological and attitudinal components. This proposal would not seem to be significantly removed from the conceptual scheme proposed by Kasl and Cobb (1966) (Fig 3-1), which shows a scheme that focuses on two related but independent events:

1. The perception by the individual of the symptoms as a threat to the continued well-being or their normal adaptive functioning. This is affected by various factors like age, sex, history, as well as concepts of normal functioning.
2. The decision to seek a socially accepted means of legitimisation behaviour which is perceived by others as abnormal. The Figure overleaf shows the factors which can contribute to this process.

It is acknowledged that the perception and the decision may not be influenced solely by the individual. It may be influenced by significant others. Consequently illness behaviour, as Mechanic (1980) suggests, is possibly not only a summary measure of individuals but also of their interaction with significant others and their subsequent influence on the individual's behaviour. The relevance of other factors on presentation will be discussed in 3.2.4.

Fig 3-1 The postulated relationship between symptoms and illness behaviour

(derived from Kasl and Cobb, 1966)



The model is useful insofar as it identifies various influences but unfortunately it does not provide any indication regarding which components may have greater or lesser effects. Further consideration of these proposed influences will not be examined here but factors such as domicile will be reviewed in 3.2.8.

3.2.4 Factors Affecting Illness Behaviour

Cultural variables have been demonstrated as influential (Pilowsky 1978) in the identified ethnic patterns of illness behaviour in an Australian medical setting. The importance of the individual assessment of the cost of the perceived value of any action has also been highlighted by Robinson (1973). He draws attention to the need to understand the illness behaviour within the social context of the individual. While also evaluating the meaning of the situation for the participants whose behaviour is influenced by the perceived advantages and disadvantages of various courses of action. These relationships have been presented by Kasl and Cobb (1966) (Fig 3-1). Given the importance of individual evaluation of the perceived benefits and costs of action in relation to illness behaviour, it is clear that it could not be assumed that those diagnosed as having mental health problems represent all those suffering from identifiable disorders. Goldberg and Huxley (1980) acknowledge that even major mental disorders are more frequent than the numbers attending specialist services. The model proposed by Kasl and Cobb (1966) could consequently be considered as providing an understanding of the processes affecting those passing through the first filter from the community to Level Two as those who attend primary care services. The Goldberg and Huxley (1992) filter model is presented on page 67 and discussed in 3.2.5.

Goldberg and Huxley (1992) provide an extensive review of illness behaviour in relation to mental illness and conclude that major surveys have identified the importance of distress as a significant determinant of help seeking. Williams et al. (1990) conclude their review of illness behaviour by identifying four main factors which influence an individual's decision to seek care. These are; the severity of the problem, the individual's proposity to seek help, the accessibility of the services and the availability of alternative resources. Help seeking for mental disorders and primary care may reflect patients' help seeking behaviour history as much as their current clinical need. It could be hypothesised that accessibility of the services and availability of alternative resources perhaps have become a more significant component of this equation over the last decade.

Although it is clear from the Kasl and Cobb (1966) model that account of accessibility was taken prior to recent reforms. It could be argued that the changes within the Health Service have adjusted the balance of these components, with more emphasis now on constraints on aspects like accessibility. Organisational changes do not necessarily seem to have introduced any new components to the model but may have increased the influence of some more than others. Consequently, while the model presented is thirty years old, the continued suitability supports the importance of investigating the components.

Hotopf and Wessely (1994) reviewed the evidence for viral infections as a cause of anxiety, depression and fatigue. They proposed complex influences between psychosocial factors on immunity, convalescence and illness behaviour. They concluded that the research evidence is not yet sufficient to clarify these relationships and whether viral infections cause psychological disorders or psychological factors increase the vulnerability to infection. Thus indicating the complexity of the physical and psychological aspects of illness and the problems of attempting to make direct statements regarding causality.

Evidence of the importance of accepting or rejecting a psychological viewpoint has been provided. The subsequent effect of this decision influences whether psychological symptoms are reported and also affects the awareness of life problems association with physical problems. An example of this is provided by Pilowsky and Katsikitis (1994) in their comparison of groups of pain clinic patients over a ten-year period. They identified two classes and found differences in the reporting of psychological symptoms and their awareness of the relationship of life problems with physical problems. Such work provides further reinforcement of the link between psychosocial factors and medical conditions but again highlights the difficulty with attributing casual effects.

3.2.5 The Filter Approach to Service Access

The interaction of illness behaviour and its effect on referral to more specialised services has been reviewed by Goldberg and Huxley (1980 and 1992). This provides the framework for understanding epidemiological data about mental illness and the prevalence at each level. Their work supports the view that there is a filtering process through which patients must pass to become psychiatric in-patients (Level 5). The model is presented overleaf (Fig 3-2).

Fig 3-2 The Goldberg and Huxley Filter Model with estimates of annual period prevalence rates at each level (Goldberg and Huxley, 1992)

Level 1	The community 260-315/1000/year	1st filter (illness behaviour)
Level 2	Total mental morbidity - attenders in primary care 230/1000/year	2nd filter (ability to detect disorder)
Level 3	Mental disorders identified by doctors ('Conspicuous Psychiatric Morbidity') 101.5/1000/year	3rd filter (referral to mental illness services)
Level 4	Total Morbidity - mental illness services 23.5/1000/year	4th filter (admission to psychiatric beds)
Level 5	Psychiatric in-patients 5.71/1000/year	

The above Figure (Fig 3-2) shows the annual period prevalence rates of mental illness at each level. This is calculated as the estimated number of individuals who will suffer an episode of mental illness lasting at least two weeks during a calendar year, expressed as a rate per thousand population at risk.

Some of the more recent work has led to revisions of their previous conclusions (Goldberg and Huxley, 1980). In relation to gender effects they had previously concluded that females were more likely than males to pass through Level 1. This is based on the observations that high GHQ scorers at Level 2 (attenders in primary care) were more likely to be female. They now draw attention to the difference between confirmed cases and high scores on paper and pencil tests. Confirmation of an earlier conclusion (Goldberg and Huxley, 1980) regarding the direct relationship between the degree of psychological distress and the probability of consulting is provided. However there is no evidence on interaction among sex, psychological distress and probability of consulting a doctor. Williams et al. (1986) suggests that the excess of female presenters at Level 1 may be largely accounted for by consultations undertaken on behalf of the others.

Other influencing variables include social problems (Corney and Williams 1987), diagnosis and detection (Goldberg and Gater, 1991, Marks et al. 1979). The extent of the literature available on illness behaviour, compared with that on the clarity of conclusions regarding the phenomenon, is indicative of the overall complexity of interactions among the influencing variables. Estimates of the one year prevalence (1989) of minor disorders was estimated at 26% in general practice attendees (Gater and Goldberg, 1991). Three-quarters of conditions (20%) recognised by the GP and 18% treated without referral to specialists.

3.2.6 Detection of Mental Health Problems

To establish prevalence rates it is important to consider factors which make a significant impact on detection of mental health problems. Goldberg (1981) asserted that there is considerable variation among General Practitioners in both their reporting levels of psychiatric morbidity and their accuracy of assessing psychological distress. The latter being influenced by the level of interest in psychiatric illness and certain characteristics of clinical practice. The personality of both the doctor and the patient also play an influential role.

In more recent reviews of this field Golberg et al. (1993) confirm much of the previous literature and conclude that those with good detection accuracy in clinical interviews share the following features: maintain more eye contact during the interview, have more relaxed posture, make facilitatory noises while listening, show less urgency and hurry initially and do not provide information early.

There is also a proposed relationship between the characteristics of the doctor and cue emission by the patient. Those with less accurate detection inhibit the patient cues by asking closed questions, make less empathic statements, and tend not to ask questions with a psychological content. Overall the timing of the interaction is not as facilitative to the emotional aspect of the patient's presentation. Goldberg and Huxley (1992) also mention a collusive phenomenon between the doctor and patient when emotional distress is not detected. This situation may well have advantages for both participants.

It has been demonstrated that the provision of appropriate training on specific skills will improve detection rates (Gask et al., 1988). A skills sharing model is proposed (Gath and Mynors-Wallis, 1991; Goldberg and Huxley, 1992) to improve the service access and provision for those presenting with mental health problems in primary care. Goldberg and Huxley (1992) make recommendations for public health issues in light of findings about detection given the significance of improved accuracy to allow entry to the next level.

Having considered influences on presenting behaviour and detection the route followed to specialised services appears to be subject to a wide range of intervening variables. Now consideration must be given to the ways in which needs are assessed in order to understand how service delivery can aim to match identified need with the service provided. Consequently it is critical to explore further the issue of 'Needs Assessment'.

3.2.7 Needs Assessment

Within the context of the more recent Health Service changes purchasers of health and social services are required to conduct Needs Assessments. In the late eighties, the National Health Service review recommended that purchaser-provider contracts should initially involve the assessment of health needs (Department of Health, 1989, Cmnd 555). Consequently the priority of needs assessments has risen for both purchasers and providers. This increased priority has not always been accompanied by increased knowledge or direction and as a result it is necessary to examine the definition of 'need'.

Stevens and Gabbay (1991) talk of 'needology' and quote Bradshaw's (1972) taxonomy of normative need, felt need, expressed need and comparative need. Terms such as supply, demand and need have also been identified and the importance of differentiating between them. The additional variable in the equation of the nineties is clearly that of 'available resources'. Historically this variable was possibly less predominant. Needs assessment is thus considered to be significant with regard to prioritisation of resource allocation as well as more specifically service planning and contract setting. The latter two aspects requiring precise, specific information to facilitate appropriately detailed service provision.

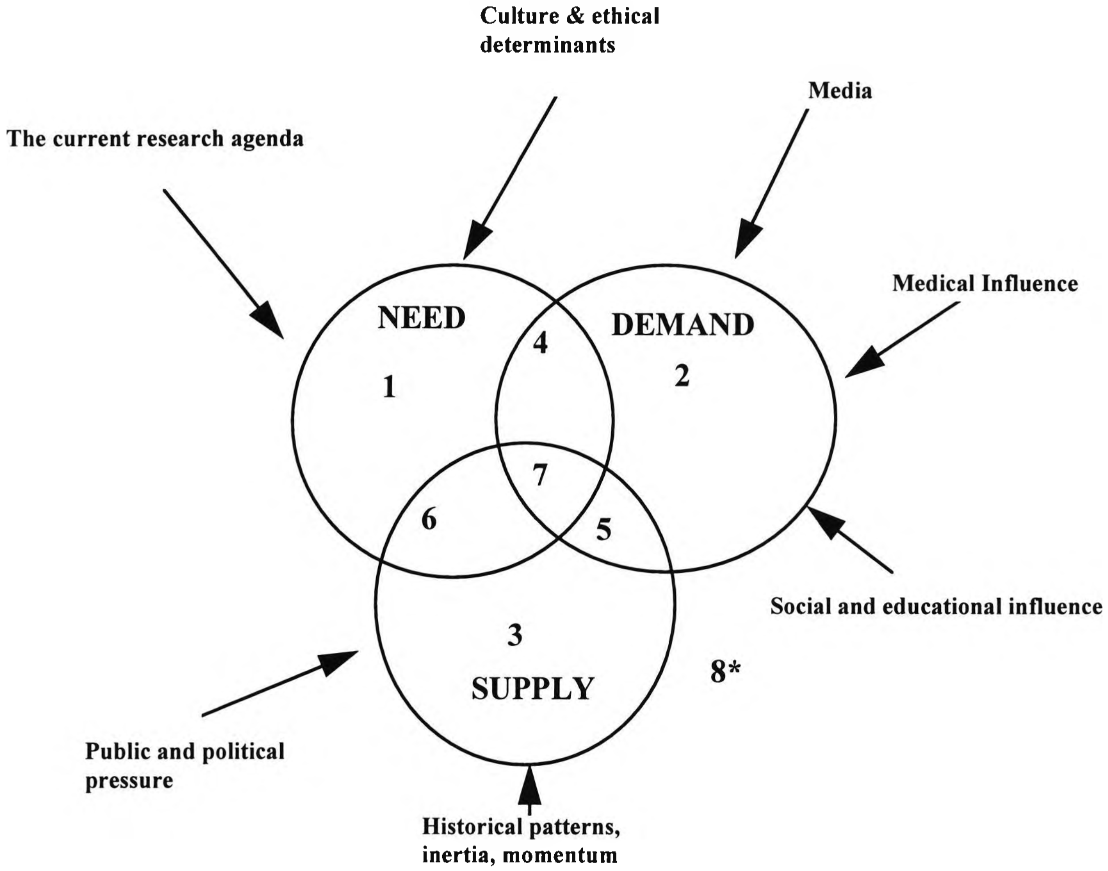
Deprivation indices, such as that of Jarman (1983), have been used to provide global estimates of need for health care but possible confusion of this with actual health care needs is highlighted by Stevens and Gabbay (1991). The strategy for a healthier nation (Smith and Jaccobson, 1988) can serve an overall aim while the need for provision of health care is the appropriate focus if 'needs assessment' is to improve the effectiveness of the National Health Service. It is with this view foremost that the current study has been designed to identify the current need for psychological services and the effectiveness of such a service will be examined in Study II (4.0).

In order to adequately investigate current needs within any service the term 'need' must be operationalised and the relationships between demand and supply clarified as shown in Fig 3-3. 'Need' is defined as the ability to benefit in some way from the provision of health care. Benefit being dependent upon incidence and prevalence of the condition and the effectiveness of available services. Therefore in any attempt to assess needs there is a requirement to have detailed information about the aspects of each condition and all aspects of care to be provided. Conditions require clear definition and the aspects of care require delineation - diagnostic, therapeutic, rehabilitative and/or continuing as well as preventable. Factors affecting those who present as well as those who subsequently pass through the necessary filters have already been reviewed (3.2.3 - 3.2.6).

What began as an apparently straightforward task of measuring the symptomatology of those referred to Clinical Psychology Services has already become significantly more complex. As a result of the appreciation of this the current study aims to identify what is demanded and supplied for Clinical Psychology out-patients at present. Needs are not fixed and are influenced by interpretations and variables such as illness behaviour and perceptions. All of which are related to current ethical and cultural pressures. Demand is defined as what is asked for is even more susceptible to change and can be affected by social, educational influences, media, patient charters and so forth. Supply being what is actually provided will be shaped by politics and the subsequent effect on resources.

Fig 3-3 The relationships between need, supply and demand

(Stevens and Gabbay, 1991)



KEY:

NEED:	**What people benefit from**
DEMAND:	**What people ask for**
SUPPLY:	**What is provided**
*	**The external field where a potential service is not needed, demanded or supplied**

1.	**Needed, not supplied nor demanded**
2.	**Demanded, not needed or supplied**
3.	**Supplied, not demanded nor needed**
4.	**Needed and demanded not supplied**
5.	**Supplied and demanded not needed**
6.	**Needed and supplied but not demanded**
7.	**All 3 closer - needed, supplied and in demand**
8.	**Potential service not needed, demanded or supplied**

In terms of the Figure demonstrating the relationships between need, supply and demand (Fig 3-3), the areas being investigated are shown as 5 and 7. The inclusion of some of the area denoted by 5 acknowledges that there may be some patients who have been referred who have demanded a service which has subsequently been supplied, but for whom it is not “needed”. It can only be assumed that while such patients may be initially assessed that the lack of need would be identified at the initial appointment and subsequently would influence the decision regarding the provision of further service. It would be inappropriate to suggest that current provision is likely to be as efficient as only including those who fulfil the three requirements of need, supply and demand. This is the area denoted as 7 (Fig 3-3). The aim in this study is to gain information regarding the service supplied in relation to the demand and factors which can be identified as influencing this relationship. The focus of Study II (4.0) will develop the knowledge of 'need' in terms of benefits derived from the service.

The current availability of information that would accurately inform the needs of health service provision in relation to supply, demand and need is found in a range of areas. Demographic data emanate from consideration of census surveys, patient views, waiting lists, morbidity rates and effectiveness states. One major contribution of current reforms has been the necessity to collect routine data. This may facilitate an improvement on the ability to be accurate about needs and service requirements. However the evolutionary stage of the process must be acknowledged and there is concern regarding the requirement for information upon which to base prioritisation for resources and the current 'state of the art'. The consequence of inaccuracy will be experienced by those least able to tolerate the shortfall, those in need and possibly unable to articulate the demand.

The theoretical components, research knowledge, service statistics and consumer views all combine to provide the service delivery in the form of clinical contact. While most clinicians will maintain this aim as their primary focus it would be naive to suggest that the 'contractors' are not required to widen the angle of study. It is important to therefore reduce the risk of losing some clarity at the various levels of assessment. It is possibly the attitudinal shift required by National Health Service staff that has been one of most significant uncontrollable variables that has influenced some for the implementation of the reforms, the advantages and disadvantages of which would require at least a thesis in themselves and will not be developed further within the present context.

The establishment of the significance of the role of accurate and relevant data collection and analysis draws attention to the need for a debate concerning the use of qualitative and quantitative methods in psychological research. Barker et al. (1994) recommended 'methodological pluralism' in so far as different research methods are appropriate for different types of research question. Within the current context experimental design, quantitative measurement and statistical analysis were considered to be appropriate in relation to the issues being investigated.

While it is necessary to consider the aspects already reviewed in terms of how influences affect relationships generally it is critical to attend to variables which may affect the immediate context within which the study is to be conducted.

One of the most important factors is that of the topography of the North Down and Ards Trust area which includes a rural component. The relevance of rural aspects and mental health will now be reviewed, with particular attention to the area where the patients reside.

3.2.8 Rural Influences on Mental Health

Given the accessibility of community services is acknowledged as being not yet adequately established (Department of Health and Social Services, 1990). The gaps in service provision and unequal access are not directly related to recent changes in the National Health Service as evidenced by earlier reports (Gurin, Veroff and Field, 1960). The connection between unequal access and under-utilisation has been made more recently (Greenley and Mullen, 1990). Sherlock (1994) claims that the planning approach is biased towards urban provision. Consequently rural inhabitants do not receive equality of services, in either quantity or quality. However, while this report makes a number of important and valid recommendations it is worthwhile noting that only 33 responses were received. There was no indication of whether these were representative of the general population or not. The lack of information concerning the methodology of the Sherlock report is one potential area of concern regarding the generalisation of the findings. This does not detract from the importance of such rural initiatives and their recommendations but does highlight the need for attention to methodology. This work is not necessarily a complete picture of rural needs and may not be reflective of rural needs within North Down and

Ards. Greenley and Mullen (1990) also report lower usage of speciality mental health services by rural inhabitants in America.

The Sherlock (1994) report was aimed at identifying key issues associated with mental health in rural areas regarded limited access as the result of four main factors: these are information, transport, stigma and choice. The factor of stigma has been consistently seen as a reason for not accessing services (Burvill et al. 1984). Within a rural community the stigma effects may be greater as it would be more likely that the service provider would be known, in other contexts to the patient. This can create difficulties for the professionals as well as the patients.

Literature relating to rural community attitudes to mental illness have shown stigma associated with mental illness, particularly among those of lower socio-economic status and older (Barry 1991). The findings of Moran (1977) and Keatinge (1987) found the stigma greater for rural than urban dwellers. Brockington et al. (1993) reported that those with experience of mental illness and better education were less negative in their attitudes towards mental illness. Connolly (1995), in a survey of the North Down and Ards Community Health and Social Services Trust population, found positive attitudes towards the mentally ill. More negative attitudes were associated with older, less-educated, rural and single or urban and widowed subjects. Generally attitudes toward seeking professional help for psychological problems were not so positive. Again age, educational status, divorced, widowed and being unemployed were associated with the most negative attitudes. Connolly (1995) acknowledges that the survey sample was obtained from waiting rooms in General Practitioners' surgeries and consequently are not representative of the total population. However, given the access route to mental health services is via the General Practitioners, it would seem appropriate to consider the attitudes of this population.

The work of Lawson et al. (1996) within the North Down and Ards Community Health and Social Services Trust found that only 11% of respondents reported that they would contact someone for help rather than keeping a mental health problem to themselves. The results also indicated that females from rural areas feel more stigma about mental health issues than their urban counterparts. The results for males are also supportive of more stigmatisation for rural compared with urban dwellers. The most significant feature identified by Lawson et al. (1996), was the lack of information about available services. Gilmour (1992), who looked at information needs in Cumbria, found that expectations were lower as a result of lack of information and facilities. If these results are applied to North Down and Ards, the current demand may be influenced by both a lack of information and a reluctance to use services - both producing a much lower demand than may be needed. While the Trust has implemented an information strategy regarding mental health issues since the findings of Lawson et al. (1996), it is unlikely that the current demand is an accurate reflection of real need.

3.2.9 Purpose and Aims of the Present Study

In summary, the literature reviewed highlights factors which influence accessing mental health services. These include the complexity of illness behaviour as a summary measure of individuals and their interactions with significant others (Mechanic, 1980), cultural variables (Pilowsky, 1978), level of distress (Goldberg and Huxley, 1992), detection skills of General Practitioners (Goldberg, 1991) and the existence of social problems (Corney and Williams, 1987). The effect of the area of domicile in relation to attitudes towards both mental illness and help seeking is also an important consideration (Sherlock, 1994, Brockington et al. 1993). The local results having even greater significance as the population sample within this study is reflective of those investigated by both Connolly (1995) and Lawson et al. (1996). Factors of age, gender and domicile will therefore be operationalised within the hypotheses of this study.

The aim of the current study is to conduct a rigorous investigation of Needs Assessment in the North Down and Ards Community Health and Social Services Trust. It is important to consider how patients access services and factors which affect this. It is also essential to appreciate the interactions among 'needs', 'demand' and 'supply' when making decisions about the relevance of information obtained. It is within this context that the present study aims do provide a demographic and psychometric profile of patients attending Clinical Psychology out-patient clinics in North Down and Ards Community Health and Social Services Trust.

The demographic profile of Psychology out-patients will include details of age, sex, marital status and domicile, as well as details of referral agent, diagnosis and waiting list duration. The psychometric profile of out-patients will involve the administration of three commonly used measures: Beck Anxiety Inventory (Beck and Steer, 1987) (BAI); Beck Depression Inventory (Beck, Rush, Shaw and Emery, 1979) (BDI); and the General Health Questionnaire (Goldberg, 1978) (GHQ 28). While such measures have been demonstrated to be of utility in other studies, it does not necessarily follow that their use with the current patient sample will be appropriate. Consequently a further aim of this study is to establish the suitability of these three psychometric measures in future work regarding outcome assessment.

Within these general aims the following hypotheses will be investigated:

1. There will be a higher representation of females than males, and these females will tend to be in the younger age categories.
2. Rural patients will have higher scores on all scales and this will be influenced by age and marital status.

These hypotheses have been formulated in light of the work reviewed in relation to sex, rural-urban differences, age and marital status and their effect on presenting behaviour (Connolly, 1995; Lawson et al., 1996; and detailed in 3.2.8).

The patients are diagnosed by the referral agents and if these are indicative of separate categories and the tests are measuring what they purport to measure the following hypotheses will be examined:

3. The scores on the BAI will be higher for the 'anxiety' diagnostic category.
4. The scores on the BDI will be higher for the depression and problematic grief diagnostic categories.

The BAI was developed to distinguish between anxiety and depression and consequently it could be expected that the following hypothesis would be appropriate:

5. A correlation would be predicted between scores on the GHQ and either the BAI or the BDI, with no correlation between the BAI and BDI.

Referrals are mainly received from General Practitioners and, considering the filter model presented by Goldberg and Huxley (1992), it would be reasonable to hypothesise:

6. Patients referred by Psychiatrists will score higher on all scales than GP referred patients.

The Adult Mental Health Clinical Psychology Department in North Down and Ards Trust has an overall waiting list of approximately twenty weeks. At an anecdotal level it is suggested by some General Practitioners that they are highly selective about making referrals to Psychology. They suggest that they particularly select patients whom they feel are likely to respond well to psychological intervention and will be motivated to work collaboratively with the therapist. This would support the view that General Practitioners are less likely to place patients on the waiting list inappropriately. Consequently the following hypothesis will be examined:

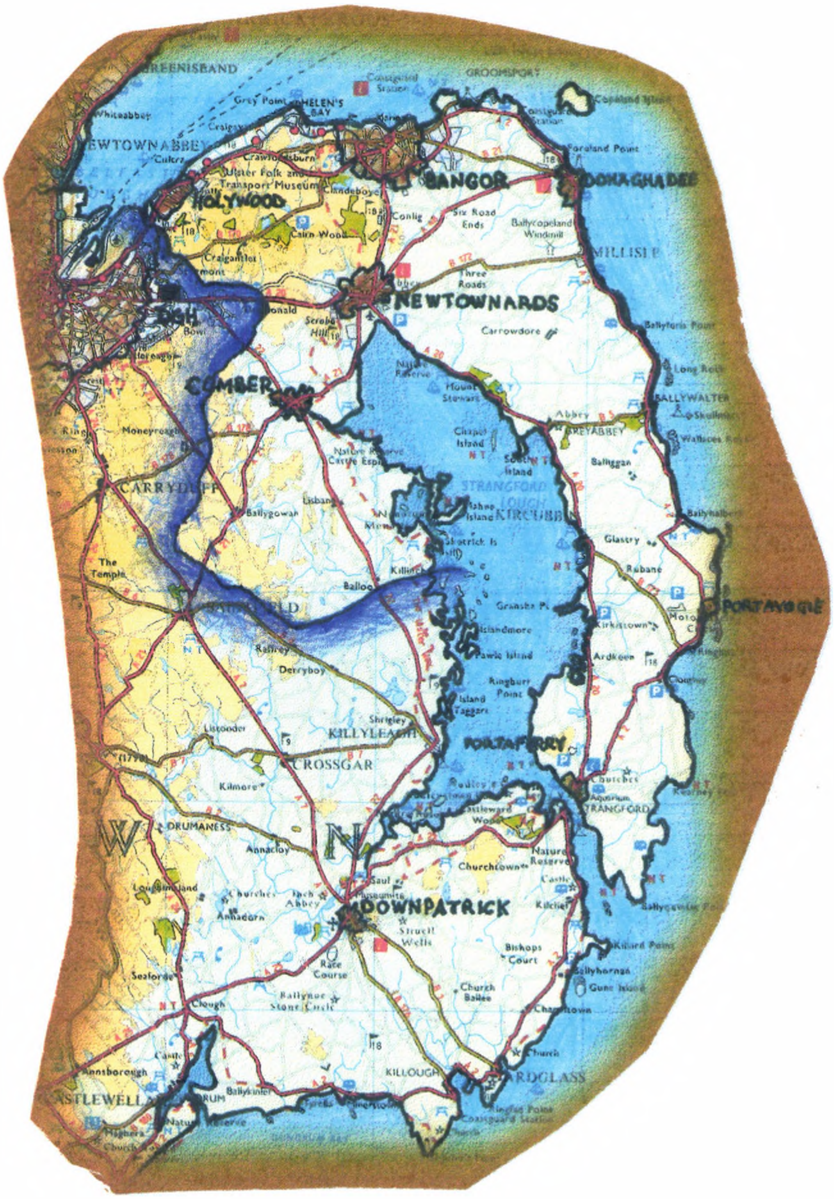
7. There will be a correlation between the length of the waiting list and the severity of distress as measured by the three scales.

It is felt that by examining the above hypothesis within the context of the previous review of relevant literature that appropriate, meaningful and relevant information will be gathered for the North Down and Ards Clinical Psychology service. The results and analysis will be used to make recommendations for both service delivery, planning and future service research.

3.3 METHOD

All patients were from the North Down and Ards Trust area in Northern Ireland. The North Down and Ards Community Trust provides services to an area of Northern Ireland which extends from the urban boundary of Belfast down the Ards Peninsula. North Down is the coastal strip along the south shore of Belfast Lough. It is heavily populated along the entire length and the two main population centres are Bangor and Holywood. The Ards area is comprised of the peninsula which is bordered by Strangford Lough and the Irish Sea. The main population centres are Newtownards and Comber. The rural areas in the peninsula are more affected by access restrictions due to transport difficulties. A significant proportion of the population commute to Belfast.

Fig 3-4 Map of North Down and Ards Locality



Within the North Down and Ards locality there are 77 General Practitioners working in a total of 29 practices, most of which are located in Bangor and Newtownards. North Down and Ards has the highest percentage of General Practitioner fundholding practices in the Eastern Board area, with 75% of General Practitioners being fundholders. This compares with the Board total of 58%. From 1 April 1997 there will be a General Practitioner Total Purchasing Pilot scheme in North Down and Ards. This will involve four General Practitioner practices with a total patient list of 42,500. The overall population in the North Down and Ards Trust area is estimated to be 140,200, based on 1991 census data. The largest proportion of acute inpatient care for residents of North Down and Ards who have mental illness, is provided in Ards Hospital. A Day Hospital service and psychiatric out-patient service is also sited in Ards. A proportion of in-patient care is also provided by Downshire Hospital and this is where long-stay care is provided. Each of the hospital sites are within separate hospital Trusts. Recently a joint Mental Health Planning Forum has been established with representatives of the three Trusts and also with General Practitioner representation. This was established to facilitate planning of comprehensive treatment services for the area.

3.3.1 The Service

The Clinical Psychology out-patient service is for adults with mental health problems. Referrals are made by either General Practitioners or Consultant Psychiatrists. Two Clinical Psychologists (2.0 wte) provide the service within a cognitive-behavioural approach. There is no screening of the referrals and treatment is directed by clinical requirements.

3.3.2 Design

The design employed in this investigation was that of a longitudinal survey of out-patients. Each participant providing a single set of responses for analysis. The dependent variables were the patient responses made on the psychometric measures used. Other variables included diagnoses, whether patients were under treatment from a psychiatrist as well and whether or not the subjects were currently using medication.

3.3.3 Participants

The sample was comprised of 452 patients (165 males and 287 females) who had been referred by their General Practitioners or Consultant Psychiatrists to the Clinical Psychology Department for out-patient assessment and treatment. This took place from June 1993 until June 1996. The mean age for the males was 40.4 years (SD 11.84) and for the females was 37.2 years (SD 11.95). The overall mean age was 38.4 years (SD 11.99). Age is calculated at time of first appointment and assessment.

3.3.4 Materials

Three standardised psychometric measures were used: the Beck Anxiety Inventory (Beck and Steer, 1987); the Beck Depression Inventory (BDI) (Beck, Rush, Shaw and Emery, 1979); and the General Health Questionnaire (GHQ 28) (Goldberg, 1978).

3.3.4.1 *The Beck Anxiety Inventory*

The BAI (Beck Anxiety Inventory; Beck and Steer, 1987) was developed to assess symptoms of anxiety using a 21-item scale. It measures the severity of self-reported anxiety in adult psychiatric out-patients. Frequently anxiety and depression are found to co-exist (Clark, 1989) and often there is a strong correlation between instruments designed to measure the severity of both conditions. Consequently the BAI was developed to measure anxiety symptoms which are less often shared with depressive conditions. The scale is made up of 21 descriptive statements of anxiety symptoms which are then rated on a 4-point scale. This includes: 'not at all' (0); 'mildly, it did not bother me much' (1); 'moderately, it was very unpleasant but I would stand it' (2); and 'severely, I could barely stand it' (3). The maximum score is 63. The items include statements such as 'numbness or tingling', 'feeling hot', 'wobbliness in legs', 'unable to relax' and 'fear of the worst happening'.

The BAI takes about 5-10 minutes to complete and is self administered. It requires the subject to rate the level to which each symptom has bothered them for the last week, including today. Beck and Steer (1987) recommend the following guidelines for interpreting the intensity of the self-reported anxiety:-

0 - 9	normal level of anxiety
10 - 18	mild-moderate level of anxiety
19 - 29	moderate-severe level of anxiety
30 - 63	severe level of anxiety

While these recommendations have been made, the research evidence concerning the specificity and sensitivity of the ranges is not available.

The BAI total score provides an estimate of the overall severity of anxiety reported by the individual and must be seen as such. Data are available for both clinical and non-clinical samples, Beck et al. (1988a). Internal consistency has been reported as high, Beck et al. (1988b), Cronbach coefficient alpha = .92, and Fydrich et al. (1990), .94. Test-retest reliability has been statistically significant Beck et al. (1979), $r = .75$, $p < .001$. The correlations of the BAI with other self-report and clinical rating scales used to measure the severity of anxiety range from .47 with the STAI State to .58 with STAI Trait (Fydrich et al., 1990). Four subscales have been identified in the BAI: Neurophysiological, Subjective, Panic and Autonomic. The profile analyses appear promising however further research is necessary in this aspect of the scale.

3.3.4.2 *The Beck Depression Inventory*

The revised BDI (Beck Depression Inventory, Beck, Rush, Shaw and Emery, 1979) is a revision of the original 1961 instrument developed by Beck et al. (1961). This was based on both clinical observations and the self-report of depressed psychiatric patients. It was originally designed to be administered by trained examiners. A modified version was being used with improved wordings (Steer et al., 1986). The final modified version (Beck et al., 1979) was compared with the original and found to be comparable with a psychiatric population (Beck and Steer, 1984). The revised scale has been critically examined by Kearns et al. (1982) who concluded that it was an improvement from the original scale (Beck et al., 1961).

The BDI was designed to measure the severity of depression on a 21-item scale with a 0-3 grading system. 0 is the least severe to 3 the most severe. A total score can be computed between 0-63. Each item has 4 or 5 self-evaluative statements of increasing severity and is rated for feelings over the last week. The items assessed include items such as: mood; sense of failure; self-dissatisfaction; guilt; self-dislike; suicidal ideas and crying. It was developed as a self-rating instrument for use with both adults and adolescents. It takes on average 5-10 minutes to complete.

The BDI provides an estimate of the overall severity of depression and the following guidelines have been suggested for interpretation of the scores (Beck and Beamesderfer, 1974):

0 - 9	Normal range
10 - 18	Moderate - severe depression
19 - 29	Severe depression
30 - 63	Extremely severe depression

While the overall score is used to indicate the severity of the depression it is important to consider the individual responses too. For example, an overall score of 18 could be indicative of either generally lower levels of problems on a number of aspects compared with severe problems in fewer areas. The clinical significance of which might require further investigation.

The BDI has high internal consistency for both clinical and non-clinical populations with mean coefficient alphas of .86 in an analysis of nine psychiatric samples and .81 for fifteen non-clinical samples (Beck et al., 1988). The latter study also reviewed a number of studies using the BDI for detecting pre and post-test change. The range of Pearson product-moment correlations was from .48 to .86. However this is not of use when considering sensitivity to change as it would be reasonable to expect change with a patient population. Lightfoot and Oliver (1985) report high correlations of test-retest scores (r = .90) over a two-week internal with a non-patient sample. It is found by Edwards et al. (1984) to be sensitive to the effects of treatment.

It is possible to obtain two subscales within the BDI. Items 1-13 are considered as a cognitive-affective subscale for estimating depression in those with more severe vegetative and somatic symptoms, which could over-estimate the global depressive aspect. The last 8 contribute to a measure of somatic-performance complaints. Means and standard deviations for these subscales are available within the manual (Beck et al., 1979). In terms of validity a mean correlation of .73 between the BDI and the Hamilton Rating Scale for Depression (HRSD)

(Hamilton, 1960) was found. Lambert et al. (1986) and Edwards et al. (1984) both concluded that the revised BDI was less likely to over-detect changes in depression than the HRSD. The latter being more likely to over-estimate improvements.

3.3.4.3 *The General Health Questionnaire*

The GHQ 28 (General Health Questionnaire, Goldberg, 1978) was designed to detect psychiatric disorder in community settings. It focuses on breaks in normal functioning rather than more established traits. The assessment is of an individual's position on an axis from normality to illness, this is expressed as a probability estimate of that individual being considered to be a 'case' of psychiatric illness at a second stage interview. It has been produced in a number of forms, from 12 to 60 items in length (Goldberg and Williams, 1988). All versions can be used to distinguish between a case and a non-case or assess the degree of psychological distress.

The GHQ 28 was designed for use when more than a single severity score was required. A single score can be obtained by counting the responses in the third and fourth columns, with values of 0-0-1-1 assigned to the columns, producing a single score with a range of 0-28. The other method is assigning values of 0-1-2-3 to the columns so that the range is 0-84. The former is the method of scoring used in this study. With both scoring methods, the higher the score the higher the distress and consequently the greater the probability of 'caseness'. The recommended threshold score is 4/5 to provide optimum discrimination.

There are four subscales on the GHQ 28, these are A - somatic symptoms; B - anxiety and insomnia; C - social dysfunction; and D - severe depression. These subscales can be scored separately with each having a range of 0-21.

Each item requires the patient to indicate whether they have recently - 'over the past few weeks' - experienced a symptom or behaviour on a scale from 'not at all' to 'much more than usual'. There are four possible responses and there are two possible scoring methods. The questionnaire is self-administered and takes approximately five minutes to complete. Mayou and Hawton (1986) show that specificity and sensitivity are low especially in the most severely ill cases. They recommend the use of interviews following high scores. Benjamin et al. (1982) conclude the use of the GHQ as a screening instrument due to the tendency to not identify chronic symptoms. It is used for case identification - a threshold of 4/5 gives 85.6% sensitivity and a specificity of 86.8%. The overall misclassification was found to be 13.6%. The correlation between the total score and a clinical assessment by a psychiatrist was +0.76.

Reliability coefficients of test-retest scores over three groups of a clinical sample range from 0.51 to 0.90. Evidence that the GHQ correlates with other psychiatric screening tools include Goldberg et al. (1974) with a correlation of +0.78 with scores on the SCL-36. Sims and Salmon (1975) demonstrated that higher GHQ scores were obtained by new referrals to a psychiatric out-patient department than consecutive attenders at a General Practitioner's surgery. Such results would be expected as those with greater symptomatology would be referred to more specialist services. Goldberg and Hillier (1979) report validity coeffectives on subscales A, B and D with ratings at independent psychiatric interview. These range from .32 to .70.

It is recommended that the questionnaire works best when used in conjunction with professional clinical assessments. Support for the use of the GHQ as a screening device in epidemiological studies was provided by Boardman (1987). Lobo et al. (1988) also conclude that the use of the GHQ 28 is suitable as a screening tool as 91 out of 100 cases were correctly identified. They report that the four subscales provide additional information about anxiety and somatic symptoms.

3.3.5 Procedure

All subjects were patients referred to the Clinical Psychology out-patient service from March 1993 and demographic details were collected at their initial appointment (beginning June 1993). No additional information regarding socio-demographic details was sought for this study.

The subjects were categorised into rural or urban groups on the basis of their postcode (details provided in Appendix 3-1, pp.294). The diagnostic category was allocated on the content of the referral agent's description of the problem. The frequency of each of the diagnostic categories is presented in Appendix 3-2 (pp. 295).

At the end of the initial assessment appointment, each patient was asked to complete the three questionnaires. It was explained that the measures would be beneficial for the individual patient themselves in terms of aiding the identification of targets for treatment and also that the results would be used, with their permission, as part of a research project involving the identification of suitable measures to assess the levels of distress identified with patients being referred.

At the second appointment the patients were offered the opportunity to discuss the questionnaire and any difficulties they may have had with the responses. They were then thanked for their participation in the study. Data collection was carried out over a three year period (June 1993-June 1996) in the stages shown in Table 3-1.

Table 3-1* : *The Data Collection in Relation to Routine Clinical Assessment

Receipt of Referral	Initial Appointment	Second Appointment
Placed on waiting list	Clinical Assessment BAI; BDI; GHQ	Routine clinical session with opportunity to discuss questionnaire results

3.4 RESULTS AND ANALYSIS

The analysis of these results involved the use of descriptive statistics and comparisons with census data. The psychometric scores were analysed using the SPSS computer package.

In order to examine the significance of demographic variables in the sample of patients using the Clinical Psychology out-patient clinic, it is necessary to provide comparisons with the overall Trust population. The Trust population in North Down and Ards has the following age distribution: 26% population under 18 years; 60% population is between 18-64 years and 14% are over the age of 64 years (DHSS, 1992).

From Fig 3-5, it can be seen that age distribution in North Down and Ards closely reflects population age groupings in Northern Ireland overall. (Data from most recent Census Data, DHSS, 1992).

Fig 3-5 ***North Down and Ards population and Northern Ireland population in age bands***

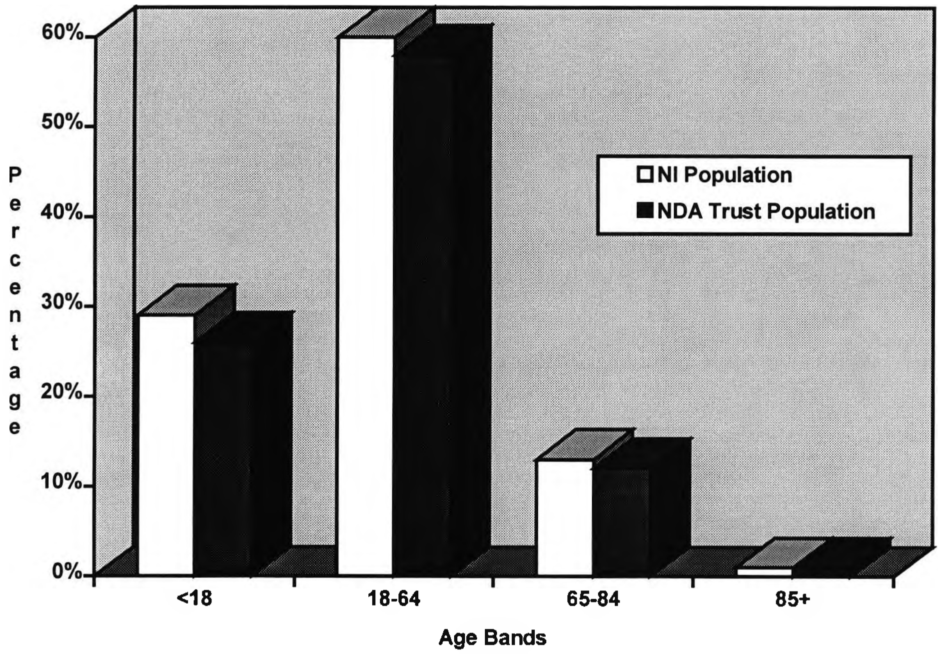
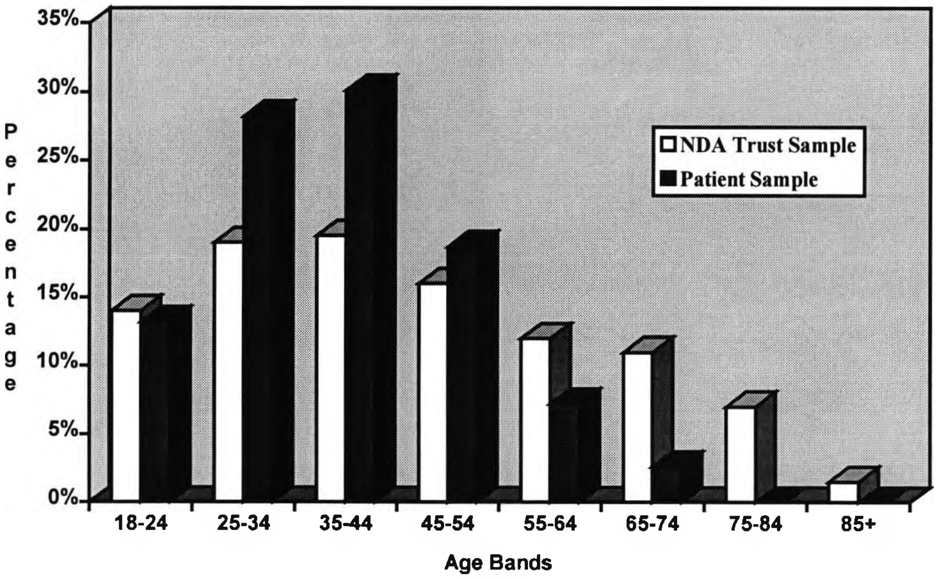


Fig 3-6 shows the percentage of the over 18 population in the different age bands in the North Down and Ards Trust and in the patient sample. It can be seen that there is a small percentage over 65 years (2.6%) and that 77% fall within the 25-54 year groups. This distribution does not reflect the pattern of the population in the North Down and Ards Trust. There is an over representation of the 25-34, 35-44 and 45-54 year age bands in the clinical sample.

Fig 3-6 The percentage in age bands in the general population in the North Down and Ards Trust and the percentage presenting to Psychology Clinics



3.4.1 Demographic Profile

Fig 3-7 shows that 63.5% of the total clinical sample (n = 452) were females and 36.5% were males. This shows a greater representation of females than % females in Trust area (53% females) and a lower representation of males 36.5% sample - 47% census data.

Fig 3-7 ***The percentage of clinical sample males and females compared with Trust census data*** (DHSS, 1992)

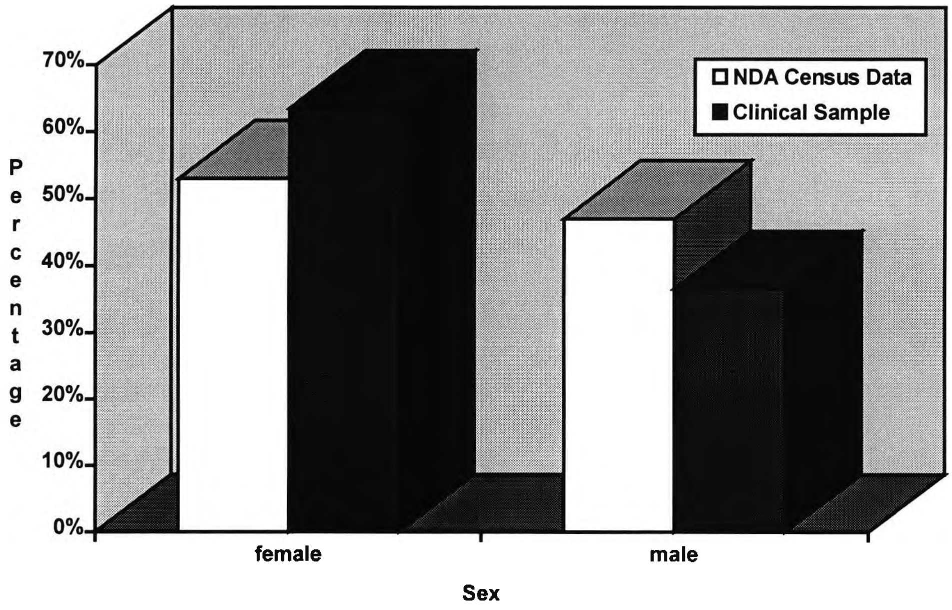


Table 3-2 shows 59% of the sample are married with 28% being single and this accounts for 87% of the overall sample. Most of the sample (94%) live in urban areas of the Trust.

Table 3-2 Frequency and percentage of the clinical sample by marital status and domicile

	Frequency	**Percentage**
Marital Status		
Single	125	27.7
Married	265	58.7
Divorced	22	4.9
Widowed	12	2.7
Separated	22	4.9
Other	5	1.1
Totals	**451**	**100**
Domicile		
Rural	33	7
Urban	416	93
Totals	**449**	**100**

3.4.2 Service Details

Until January 1989 there was no direct access for General Practitioners to Clinical Psychology Services. The source of referrals has changed considerably since direct access was made available in 1989 and the data from the survey demonstrates this demand. It was found that 97% of all the referrals received were from General Practitioners. The remaining 3% were from Consultant Psychiatrists. There are additional referrals from the Consultant Psychiatrists.

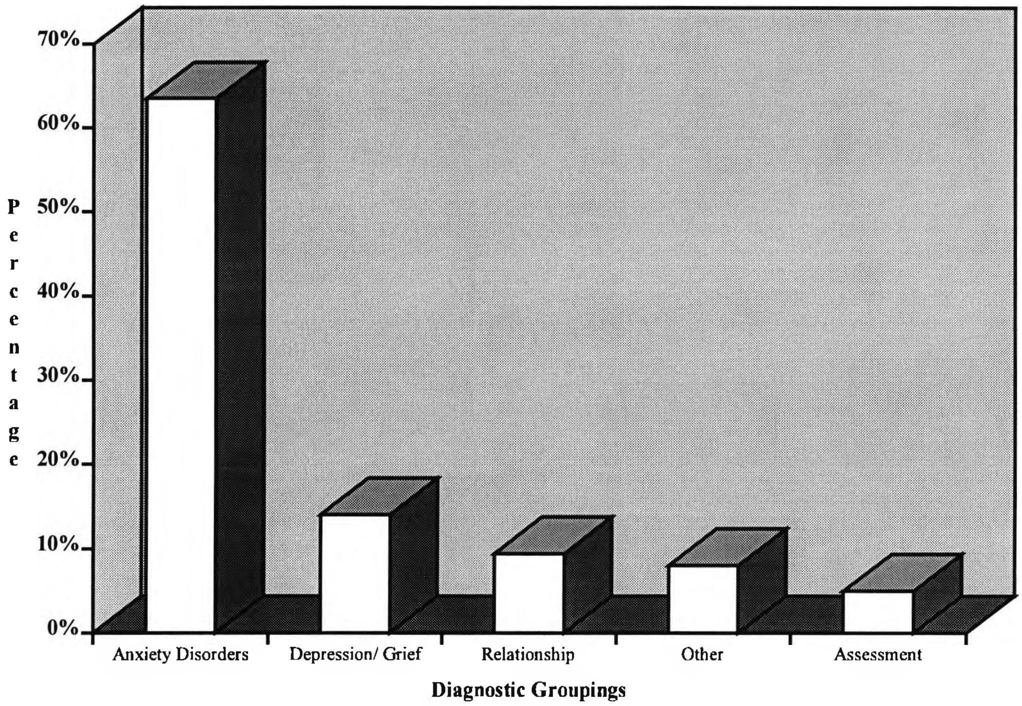
These are for cognitive assessments and would usually be for in-patients or day patients.

Diagnostic Groups

The decision regarding diagnostic groups are made upon receipt of referrals based on the information in the referral letter. Therefore, the diagnosis is based on the referral agent's view of the patient's presentation. Anxiety and related diagnoses include generalised anxiety, obsessive compulsive disorder, phobic anxiety, obsessional and situational anxiety, stress, post traumatic stress disorder, cardiac neurosis, agoraphobia and adaptational difficulties. Abnormal grief and depression were combined given the likelihood that loss is often related to depressive symptoms and the label of depression/grief is used in this study to represent this group. The 'other' diagnostic category includes: addictions, aggression, childhood sexual abuse, eating disorders, psychosexual difficulties and other disorders. Details of frequency of each diagnosis is provided in Appendix 3-2 (pp. 295).

From Fig 3-8 it can be seen that the largest diagnostic group is anxiety disorders. The next most frequent diagnosis is that of depression and abnormal grief.

Fig 3-8 The frequency of diagnostic groupings within the sample



Waiting List

From the data collected on waiting list length (raw data presented in Appendix 3-3, pp. 296), the mean waiting time was 13.4 weeks (sd 7.1 weeks, n = 449), it can be concluded that 21% are seen within 6 weeks, 41% are seen within 12 weeks and 57% are seen within 14 weeks.

The data show that one patient is recorded as having waited 33 weeks to be seen. It is important to emphasise that the waiting list length is calculated from receipt of referral date to date when first seen. This frequently may not be the first offer of an appointment. Some patients will find it more suitable to attend at one location rather than another or may be unable to attend the first appointment offered. Therefore an additional waiting time may be incurred for their convenience rather than representing an accurate reflection of the waiting list. This is also the reason why a number of patients are recorded as being on the waiting list for more than 20 weeks.

3.4.3 Psychometric Profile

From Table 3-3 overleaf, it can be seen that on the BAI higher mean scores were obtained for the single and separated groups. The females had a higher mean score on the BAI than the males. On the BDI the highest mean score was in the separated group and again in females. The GHQ was highest in the widowed and separated groups with little difference between the males and females.

Table 3-3 Means and standard deviations on the three psychometric scales for marital status, sex, domicile and age groupings

	BAI			BDI			GHQ 2		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Marital Status									
single	22.47	14.37	125	19.34	11.13	121	11.78	7.96	119
married	18.68	13.39	264	17.98	10.54	257	11.36	7.89	245
separated	22.24	14.60	21	24.16	11.38	22	13.20	8.73	19
divorced	16.00	9.58	21	18.58	9.89	19	9.09	7.10	20
widowed	18.14	10.34	12	21.95	8.48	12	14.11	6.50	11
other	28.00	15.81	5	31.00	4.08	4	17.33	3.51	3
Sex									
male	18.49	13.18	163	17.19	10.20	153	11.47	7.94	144
female	20.7	13.83	286	19.92	10.86	283	11.79	7.83	274
Domicile									
rural	23.42	16.08	33	19.03	10.94	32	11.61	7.83	31
urban	19.62	13.39	416	18.96	10.70	404	11.68	7.87	387
Age									
18 - 24	24.31	14.13	58	20.29	11.35	56	11.76	8.17	55
25 - 34	22.17	14.13	124	20.52	10.54	122	12.32	7.59	118
35 - 44	17.42	11.96	137	17.69	10.73	130	11.38	7.95	125
45 - 54	19.35	14.99	85	18.76	10.94	84	12.36	8.34	78
55 - 64	16.21	10.45	33	16.63	8.85	32	8.60	5.76	30
65 - 84	16.27	14.39	11	17.00	10.12	11	10.45	8.97	11

On all three scales the marital status category of ‘other’ was highest but the small number within this group (n = 4) would not be considered significant of further statistical analysis. Rural patients had higher mean scores on both the BAI and the BDI and similar mean scores on the GHQ.

For the age category, the highest scores on the BAI were for the 18-24 year group with the 55-64 year olds having the lowest mean scores. On the BDI the highest mean scores were for the 25-34 year group and the 55-64 year olds again had the lowest mean scores. On the GHQ the highest mean scores were in the 45-54 year old group. The 25-34 year old group was also high. The lowest mean scores were again in the 55-64 year group.

The Table 3-4 below shows a significant difference between males and females on the BDI, with females having significantly more depressed scores than males.

Table 3-4 ***'t' test on the BDI and Sex***

t - value	df	2 - tail sig
-2.56	434	0.011

To examine the significance of the relationship between the scores obtained on the BAI and Age on ANOVA was carried out. The results are presented below in Table 3-4.

The ANOVA of BAI scores with age category shows that there is a significant (p = .0035) reduction of BAI scores with age. This means that the younger patients were more anxious. This is shown in Table 3-5. This is shown in Table 3-5.

Table 3-5 ANOVA of BAI Scores and Age

Source of Variance	**Sum of squares**	**df**	**mean square**	**F**	**sig**
Between groups	3225.8364	5	645.1673	3.57	.0035
Within groups	79822.4113	442	180.5937		

From Table 3-6, it can be seen that on both the BAI and the BDI patients referred by Psychiatrists had higher mean scores. This was not the case for the GHQ. For the BAI the 'depression/grief' and 'relationship' diagnostic categories had the highest mean scores. While the mean scores for assessment, anxiety and 'other' were all very similar. The highest mean scores on the BDI were for the 'depression/grief' and 'other' diagnostic categories. The mean scores for all the diagnostic groupings was very similar on the GHQ. The analysis of the GHQ results will be further examined in relation to the identification of 'cases', ie scores greater than or equal to 4.

Table 3-6 Means and standard deviations on the three psychometric scales for referral agents and diagnostic groupings

	BAI			**BDI**			**GHQ 2**		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Referral Agent									
GP	19.85	13.41	435	18.94	10.57	422	11.7	7.79	404
Psychiatrist	21.50	19.61	14	19.64	14.54	14	11.07	10.09	14
Diagnostic Group									
assessment	19.62	14.70	21	18.10	12.81	20	12.00	8.78	19
anxiety	19.90	13.60	289	17.83	10.60	279	11.23	7.88	266
depression/ grief	20.17	14.07	63	21.94	11.31	63	12.62	7.77	61
relationship	20.08	13.38	40	20.17	9.62	41	12.64	7.61	39
other	19.39	13.69	36	21.88	8.92	33	12.24	7.77	33

From Table 3-7 it can be seen that there is a significant difference ($p = 0.024$, df = 4) among the diagnostic groups, with the depression/grief category, as shown in Table 3-6, scoring the highest on the BDI.

The ‘other’ diagnoses group also scored highly but it would seem too wide a category to analyse further. There is also a significant difference ($p = 0.018$) among the marital status groups, the separated group being more depressed. The ‘other’ category was the highest group on the BDI but this will not be analysed further given the lack of available information about this small group ($n = 4$).

Table 3-7 ANOVA - scores on the BDI by Diagnostic Category and also Marital Status

SOURCE OF VARIANCE	Sum of squares	df	Mean square	F	sig
Diagnostic Group					
between groups	1271.730	4	317.93	2.82	0.024
within groups	48536.608	431	112.61		
Marital Status					
between groups	1554.110	5	310.82	2.76	0.018
within groups	48245.440	429	112.46		

Given the current difficulties with growing waiting lists it was important to investigate the relationship between waiting list time and the scores obtained. One of the aims of the current study was to identify appropriate psychometric tools for use in routine clinical practice. An important consideration is the time taken to complete the information by patients and therefore it was necessary to determine the relationship among the three scales used.

Table 3-8 Correlation Matrix among Psychometric Scales and the Waiting Time (weeks) (n = 418)

SCALES	BAI	BDI	WAITING LIST (Weeks)
GHQ 2	-0.635 p=0.000	0.757 p=0.000	-0.139 p=0.005
BAI		0.622 p=0.000	-0.034 p=0.48
BDI			-0.029 p=0.537

From the above correlation matrix (Table 3-8) it can be seen that there is not a significant correlation between either the BAI or the BDI and waiting time, indicating no relationship between the length of time waiting and scores of anxiety and depression. There is a high and significant correlation between the BDI and GHQ ($p = 0.000$) and the BAI ($p = 0.000$). This shows that higher scores on the BDI are associated with higher scores on the GHQ and the BAI. There is also a significant correlation between the BAI and the GHQ ($p = 0.000$), showing that those with higher anxiety scores are likely to be scoring high on the GHQ also.

There is a small but significant negative correlation ($p = 0.005$) between the GHQ 2 and the waiting list. Those with higher scores on the GHQ are seen more quickly.

The GHQ (General Health Questionnaire) focuses on interruptions in normal or usual functioning, rather than on traits. It provides an assessment of the patient's position on the illness - normality axis. Thus it is seen to provide a probability estimate of that individual being a psychiatric 'case' and is indicative of overall psychological distress. Goldberg (1986) suggests the use of a threshold score of 4/5 for case identification. The score of 4 or greater than was used within the current study to identify 'cases' by sex, domicile, age and marital status. The results are presented in Table 3-9 overleaf where it can be seen that consistently only three patients (0.7%), were not identified as 'cases'. From the results it would seem likely that the three cases are likely to be similar in the various categories of sex, rural/urban and marital status. It would be expected that there would be a high proportion of the sample categorised as cases. This data may also support the view that referrals are now made for a more distressed group of individuals compared with previous patterns.

Table 3-9 Number of cases identified within the sample for sex, domicile, age and marital status (n = 419)

		Non-Cases	Cases
Sex	male	0	145
	female	3	271
Domicile	rural	0	31
	urban	3	385
Age	18 - 24		55
	25 - 34		118
	35 - 44	2	124
	45 - 54	1	77
	55 - 64		30
	65 - 84		11
	85+	0	0
Marital Status	single		119
	married	3	243
	separated		19
	divorced		20
	widowed		11
	other		3

3.4.4 Summary Of Findings

The findings of this study may be summarised as follows. The patient sample included a high proportion of young (25-44) females. Most of the sample was from urban locations and were married or single rather than divorced, widowed or separated. Almost all the patients had been referred by General Practitioners and the largest diagnostic group was anxiety. The next common diagnosis was depression and abnormal grief. Females were significantly more depressed than males, while younger patients were significantly more anxious. Marital status and diagnostic category significantly affect scores on BDI. The separated category and the depression/grief group being more depressed. The waiting list did not affect anxiety or depression scores. Those more distressed, as shown by higher scores on the GHQ, are seen more quickly. 57% of all referrals are seen within 14 weeks. 99.3% of patients were identified as ‘cases’ using the GHQ. Higher scores on GHQ correlate significantly with either BAI or BDI. The BAI and BDI also correlate significantly.

3.5 DISCUSSION

The impetus for this study has been the requirement to provide accurate, reliable and timely information concerning current service provision as part of an overall ‘needs assessment’ strategy. The theoretical framework has been that presenting behaviour is a function of a number of demographic variables. There is a specific focus on sex, domicile, age and marital status differences. By using current service provision to gather relevant data, both demographic and psychometric, it is envisaged that this will inform the future planning of local services. The framework was examined by analysing the relationships that the demographic characteristics have with the level of psychological distress.

There has been much interest in the ability of all professionals to demonstrate positive outcomes of service provision and an additional aim has been the identification of psychometric tools that could be used in meaningful outcome research.

3.5.1 Demographic Profile

The demographic profile was examined in relation to age, sex, domicile, marital status, referral agents and diagnostic groupings.

The hypothesis that there would be a higher representation of females was supported by the demographic data. The females scored higher on both the BAI and BDI but only slightly higher on the GHQ (Table 3-3). The only statistically significant difference was found on the BDI. These results would be in accordance with previous literature (eg Williams et al., 1986) who found a greater representation of females than males. The comparative data on males and females within the Trust Area (Fig 3-7) shows that this over-representation is not reflected in the general population. Investigations of attitudes towards the mentally ill and seeking help from professional psychological services conducted within the Trust (Connolly, 1995) does not confirm any sex differences. This appears to be in accordance with other literature (such as Brockington et al., 1993) and would seem to suggest that the higher representation of females is related to higher distress. This distress is generally of a depressive nature. There are a number of possible factors which may contribute to this finding. These include the increased probability of receiving a diagnosis of mental illness due to women's feelings, thoughts and behaviours more likely to be considered more abnormal then men's (Ussher, 1991).

Other risk factors include marriage and the subsequent effect on psychological functioning (McRae and Brody, 1989), childbirth (Nicolson, 1989) and the caring role, for children or dependent relatives when associated with isolation, low social value and a lack of resources (Smith, 1991). While these factors may explain the higher prevalence rates for females with common mental disorders, the sex ratio is reduced to almost equal rates when drug dependency and anti-social personality problems are included. These diagnoses are more prevalent among males (Regier et al., 1988). In the present study the categories of drug dependency and anti-social personality are not included as other services are available for these groups and consequently are not usually referred to Clinical Psychology. The importance of acknowledging the relevance of providing services suitable for women and in accordance with their wishes has been highlighted by Williams and Watson (1997). While services are supplied in this Trust for adults, there is currently little specialisation of services, for example in Health Promotion, to target females of particular ages. There has been involvement with a First Parent Visiting Programme and discussions have taken place regarding the need for more work to prevent post-natal depression. However, given the current level of knowledge, it may well be more appropriate to further investigate significant stressors and reasons for attending before implementing a specific policy. The co-ordination of Mental Health and Health

Promotion would be advantageous to identifying possible future direction which may be more of an outcomes approach than current Health Promotion activity.

Hypothesis two proposed that there would be more subjects in the younger age categories. This too was upheld. This may be accounted for, at least in part, by the service specification that aims to provide services for the adult population, individuals over 18 years. Within the programme of care for mental health there is a Community Mental Health Team for Old Age. Currently there is no Clinical Psychology input to this team in addition to providing occasional psychometric assessments. Although this may influence referrals to psychology by psychiatrists it would not necessarily influence the GP referrals. Given that almost all the referrals (97%) are from GPs, it may be more likely that other factors influence this lower presentation in the older age groups.

Connolly (1995) has found a highly significant negative correlation between age and attitudes toward the mentally ill. This is in accordance with previous work (eg Murphy et al., 1993). The local research (Connolly, 1995) also established that older individuals were less likely to access mental health services given their negative attitudes to help-seeking from professional psychology. When these results are considered with the current service provision it is evident that the elderly are not gaining access to Clinical Psychology Services in North Down and Ards. This could be explained by those with mental health needs in the older age categories gaining easier access to psychiatric rather than psychological services at a local level. The mental health needs of those over

65 years may be more appropriate for referral to psychiatric services given the importance of physical difficulties and disorders in old age and the consequent interaction with mental health. Meyboom and Lamberts (1993) reported on the results of a review of the functional status of 5502 people over 65 years. The first seven of the listed ten problems were physical conditions. The remaining three were psychological. While the interaction of physical and psychological factors are important (Hotopf and Wessely, 1994) it would seem unsuitable to reduce the significance of this variable, particularly in a vulnerable group such as the elderly. In addition, rates for common mental disorders reach their peak in the middle years of life while cognitive impairments are found to peak in old age (Regier et al., 1988).

Within the Trust the elderly population is increasing and therefore it would be important that this subgroup should be considered when planning service provision for the future. In terms of the needs assessment model proposed by Stevens and Gabbay (1991), it would seem that the needs of the elderly are well documented in literature but are currently not demanded, nor indeed supplied.

It was hypothesised that rural patients would have higher scores on all scales and that there would be an interaction with age and marital status. The rural patients did achieve higher anxiety and depression scores, but were similar to the urban patients on the GHQ (Table 3-3). The lack of support for this hypothesis on the GHQ could be accounted for by considering the chronicity of the problems. The GHQ considers present and recent complaints and requires a comparison with 'usual' health status and has been found to have a tendency to miss chronic cases (Benjamin et al., 1982). Therefore it may be that the threshold for presentation is higher in the rural population and therefore is more chronic by the time of first appointment. Factors which influence the decision to seek help include level of education and social isolation. Keatinge (1994) reported that the higher level of social isolation in rural areas may have resulted in a delay in the decision to seek help. Sherlock (1994) reported that rural dwellers are less likely to receive the same quality and/or quantity of mental health services as those who live in urban areas. It was suggested that this was influenced by an "urban tilt in planning".

To further examine reasons for the lack of a significant difference between rural and urban patients it might also be useful to consider the definition of "rural" used within the study. It may be that the lack of contrast between rural and urban may have reduced any possible differences. Although this is a possibility it may not be very likely given that previous literature (Sherlock, 1994) has been able to identify clear differences using similar operational definitions. The current study adopted the method used by the Rural Development Commission, who define any settlement of 10,000 people or less as rural (Clark and Woollett, 1990). The two urban areas have populations of 23,000 and 52,000. Another influence could be an English-Irish difference in the form of a regional influence. Support for the existence of regional variations in the prevalence of psychiatric morbidity in Great Britain is provided by Lewis and Booth (1992). The northern regions of England had a higher prevalence of psychiatric morbidity than the southern regions and this also reflected all cause mortality differences. Scotland was found to have low psychiatric morbidity but high all cause mortality, the reverse trend being evidence for Greater London. Given these variations it would be relevant to investigate these influences further at a later stage.

Another possible explanation for the lack of difference between rural and urban scores on the GHQ could be the high numbers of identified cases within the overall sample 99.3% (Table 3-9). The scoring method adopted in this study was selected to provide case identification rather than using the four subscales. Consequently the scoring method may have reduced the sensitivity to levels of distress in the two subgroups. Future studies could attempt to clarify any differences by examining the two methods of scoring.

On the psychometric scales it appeared that single and separated patients had higher levels of anxiety. While the separated patients were more depressed, married patients were least depressed of all the groups. On the GHQ the widowed and separated were the highest scoring groups. The results from the ANOVA of the BDI and marital status were statistically significant (Table 3-7).

3.5.2 Psychometric Profile

The hypothesis that the anxiety group would score highest on the BAI was not upheld (Table 3-6). Rather there appeared to be little variation in the scores obtained across the diagnostic groups. They ranged from 19.39 - 20.17. The highest being for the depression and grief category. This would not be in accordance with the theoretical aims for the development of the scale. These included the aim of reliably discriminating anxiety from depression while displaying convergent validity.

The correlation between the BAI and the BDI reported by Beck et al. (1988) was 0.48 (df = 158) which compares to the highly significant correlation ($r = 0.622$, $p = 0.000$, Table 3-8) found in the current study. These findings may be more suggestive of a mixed anxiety/depression diagnosis rather than being due to the psychometric properties of the scales. The diagnostic categories are allocated on the basis of the referral letter details from the medical practitioner.

It could be argued that this system is flawed in terms of the variation in diagnoses. However, a large proportion of minor mental illness is treated by GPs based on their current methods of diagnoses, therefore it does not seem inappropriate to extend this to their referrals to specialist services. A question for further investigation would be the association between referrer's diagnosis and psychologist's diagnosis at assessment.

The hypothesis that the BDI would be higher for the depression and grief group was upheld (Table 3-6). This group would seem to be the most distressed group on both the BDI and the BAI. However, there was no great variation among the groups on the GHQ. The previous comments regarding the reliability of diagnosis are also relevant to the BDI and will be discussed further in this chapter (3.5.4).

The hypothesised positive correlations between the GHQ and the BAI, and between the GHQ and the BDI, were both found (as shown in Table 3-8). There are highly significant correlations between the scales - GHQ and BAI, $r = 0.635$, $p = 0.000$; GHQ and BDI, $r = 0.757$, $p = 0.000$. These results indicate that high levels of distress were found with the GHQ for both depression and anxiety. It should also be noted that there was also a highly significant correlation between the BDI and BAI ($r = 0.622$, $p = 0.000$) which may suggest that there was considerable overlap among the three measures used.

The hypothesis that psychiatrists' referrals are more distressed as measured on all three scales was supported for the BAI and BDI but not for the GHQ. The most distressed patients may have been referred directly from GPs to the psychiatric services and then referred to Clinical Psychology for a more specialised psychotherapeutic approach. It would seem appropriate that this would be the case. Reasons why there was no difference on the GHQ may be accounted for by the chronicity of the problems and the ability of the GHQ to detect this accurately.

The remaining hypothesis predicted that the longer the waiting list the higher the levels of distress. The results do not support this hypothesis as there is no significant correlation between either the BAI or the BDI and waiting time. The small but significant negative correlation (r = -0.139, p = 0.005) between the waiting list and the GHQ indicates some tendency that the more ill patients have a shorter waiting time. This could suggest that the current categorisation of urgency by referrers works reasonably well at a practical level. There were no significant effects for domicile or referral agent.

From the ANOVA on the BDI for the diagnostic categories (Table 3-7) there was a significant difference among the groups (F = 2.82, p = 0.024). This demonstrates that the BDI does differentiate between the depression/ grief group and other diagnostic groupings. This finding would lend further support to the utility of referral agents' diagnoses.

There was also a significant difference on the BDI among the groups for marital status (Table 3-7: F = 2.76, p = 0.018). The "other" group were the most depressed.

These findings would seem reasonable given the level of distress associated with marital breakdown. It would also seem quite likely that those in the 'separated' group may well be generally more distressed than, for example the 'divorced' group, as the former may be much more uncertain about their future or more resistant to accepting the end of the relationship.

3.5.3 Overall Interpretation of Findings

The significant difference between males and females (Table 3-4) shows that females had significantly more depressed scores than males. This is not in accordance with some previous work, such as Bumberry et al. (1978), who failed to demonstrate reliable sex differences, whereas other studies like Blumenthal (1975), did find support for the view that depression is more common and/or severe in females. Knight (1984) sampled individuals who had volunteered to participate in general health survey in New Zealand ($n = 1127$). He found that women scored significantly higher than men ($F = 11.3$, $p = <0.001$).

Such variations of findings regarding sex differences could be influenced by the method of administration of the questionnaire. Bryson and Pilon (1987) found no evidence to support the relationship between the method of administration and sex differences. Their sample was of undergraduate students and they do emphasise the importance of considering the populations sampled. Another possible influence may be related to Illness Behaviour and the lower representation of males presenting with mental illness (Goldberg and Huxley, 1992). In the current study there are indeed proportionately less males attending Clinical Psychology out-patient clinics than within the general population. There is also a higher proportionate representation of females (Fig 3-7) and they have significantly higher levels of depression (Table 3-4). The current study does not provide any particular evidence that would be meaningful in providing explanations of this finding but this would clearly be important for future investigation.

Vessey and Howard (1993) reported on data from several large epidemiological surveys. They found similar results to the current study in that there are more females attending psychotherapy services. They report that about the same proportion of males and females suffer from a mental disorder, although females are consistently more likely to visit a specialist. Reasons may involve the greater likelihood that females find it more acceptable to acknowledge mental health difficulties, or perhaps if females are more likely to attend their GP with other family members then detection for this group may be easier. Vessey and Howard (1993) also consider the nature of the problem and suggest that if males are more likely to suffer from alcohol and drug abuse they are less likely to seek help from mental health services than for other disorders like anxiety, depression and so on. Being female appears to influence detection and does not seem to further influence treatment uptake. Level of education also influenced access to services in that those least educated were less likely to attend specialist services. Given that level of education is related to likelihood of having at least one DSM-III (American Psychiatric Association, 1980) disorder during their lifetime, it would seem that these results imply those most in need may be least likely to successfully gain access to the services.

These results are applicable within the North Down and Ards Trust as demonstrated by the work carried out by Connolly (1995). Age produced a curvilinear relationship with probability of visiting mental health specialists, with those between 31-40 years being the most likely to visit. Again this is reflected in the current results. Regarding the current sample it would seem that variables of age, sex, domicile and marital status reflect previous findings on the literature regarding who attends mental health services. These findings are consistent at a global level as well as at a much more local level. The local study (Connolly, 1995) investigated attitudes regarding seeking professional help within the North Down and Ards Trust and these do appear to be in accordance with the observed behaviours in the present study.

As important as identifying who is receiving help is the identification of unmet need. In other words, who is not accessing help? The work to date identifies various groups in terms of age, education and location who are less likely to access services. It would seem critical to overall service development to establish a variety of methods of investigating the needs of these vulnerable groups. It would be the intention to pursue this at local level in order to maximise service uptake by those most in need.

The psychometric data provide profiles of those attending services and it would seem by the scores that at least 99.3% are classified as 'cases' (Table 3-9). This would indicate that those attending services score sufficiently highly on the GHQ in addition to having presented themselves to their GP, who has detected some level of distress necessary to make an onward referral to a specialist service. It would seem difficult to suggest that this method of gaining access is likely to produce 'false positives', in other words, those who do not need services being referred and scoring highly. This would be supported by findings that demonstrate that GPs' estimates of morbidity alone are unreliable indicators of prevalence of emotional disorders (Boardman, 1987). Rather it is more probable that those sampled are a group in need, who are demanding a service which is subsequently supplied. The factors affecting selection are no doubt far ranging and difficult to specify and may only reflect the visible demand for services. In terms of the model proposed by Stevens and Gabbay (1991) (Fig 3-3), the area represented by those in need, demanding and being supplied with a service is shown as area 7. The results of the number of 'cases' identified within the sample showed that 99.3% of patients fulfilled the criteria of a case (Table 3-9, n = 419). This confirms the view that there are very few referrals for individuals for whom a service is not needed. However, given other influencing factors as identified by Kasl and Cobb (1966) (Fig 3-1) and Goldberg and Huxley (1992) (Fig 3-2) there is likely to be an even greater number for whom there is a need which is not being either demanded or supplied (Fig 3-3, denoted by 1). If this description is accurate then current supply of psychological services would clearly be insufficient compared with the demand. If the goal is to provide accurate 'needs assessment' then the predicted supply problems should not encourage the avoidance of the magnitude of the real demand. Rather it would be more appropriate to make reasonable attempts to estimate the need and then the questions regarding the service delivery necessary to meet the need could be considered. Equally it may then become more pertinent to examine criteria for the definition of needs that will be addressed. For example, traditional face-to-face contact services may not be a feasible option in some areas. This view is already apparent in the various opinions expressed concerning the provision of clinical psychology in the primary care setting.

With regard to the role of clinical psychology in primary care, it would seem that earlier research such as McPherson and Feldman (1977), Broadhurst (1977), Kincey (1974), in the later 1970s and early 1980s, was of a more descriptive focus regarding service provision. Kincey (1974) examined the categories of referrals from general practice. The largest category was anxiety and stress (69%), followed by marital, interpersonal and social (22%), habit disorders (7%) and others (2%). It may well be that earlier work reflected the issues considered important at that time such as, what sort of work was being undertaken in general practice? However it would seem that the focus quickly turned to the effectiveness of interventions and outcomes. The change of both pace and areas of study have no doubt been related to management influences within the health service with the emphasis on accountability. It would seem that perhaps the changes in investigation may have moved with somewhat unhelpful haste in terms of providing meaningful information for service contracts and needs assessment. This point is emphasised too by Stevens and Gabbay (1991) who recommend a more moderate pace for needs assessment. They outline the use of already available information, including epidemiological data and measures of current provision of sources for needs assessment.

It is with this in view that the current study aims to contribute to the mental health needs assessment within the North Down and Ards Trust by detailing current service provision. The questions regarding effectiveness are considered as worthy of investigation and will be examined in Study II (Chapter 4) within the background of the local provision.

A recent study by McPherson et al. (1996) presents data related to the outcomes of a Clinical Psychology Out-Patient service in Scotland. They provide details on demographic data and diagnoses. The latter showed that 51% of GP referrals were anxiety related; 11% were depressed and 10% were mixed anxiety and depression. The anxiety related group within the current study is the largest diagnostic group (64%). While such information is useful and informative regarding comparability of different services the extent to which conclusions can be drawn is limited. It would seem that in the absence of use of specified criteria or psychometric measures it is not feasible to make anything other than comments. Such issues raise the question regarding research, audit and evaluation and will not be discussed further within the present context. This approach was felt to be of more utility than attempting to identify effectiveness before investigating what is provided, to whom.

The attempt to select appropriate scales for routine use in outcome research for Clinical Psychology aimed to identify areas of overlap among the scales. While there are clearly correlations among the various scales the statistical analyses did not produce results such that it was considered suitable to recommend a reduction in the use of the three scales. The findings seem to be clearer regarding the BDI than the BAI and although this could not be attributed to the properties of the psychometric tools it may also be suggested that the diagnosis may influence these results. Consequently it may be useful to further examine the consistency between the referrer's diagnosis and that of the Clinical Psychologist at assessment. This will be considered further in future studies.

3.5.4 Sample Characteristics

From the data presented (Fig 3-5) the age distribution of the North Down and Ards Trust population closely reflects the overall NI population (census data, DHSS, 1992). The sample attending Clinical Psychology out-patient clinics is more highly represented in the 25-54 age bands. 87% of the sample are either married (59%) or single (28%). With regard to clarifying potential influence on presenting behaviour and subsequent onward referral to specialist services, the current study does not aim to specifically address these aspects. However, the awareness of models of Illness Behaviour combined with methods of filtering, as with the Goldberg and Huxley (1992) Filter Model, is essential to attempt to add relevance and meaning to the data and results obtained. A lack of awareness of the context from which the data were obtained would render the findings of little interest or more significantly it would be unclear which aspects would relate to which segment of the needs analysis diagram (Fig 3-3).

The current work has been an initial step towards examining 'where we are now' and in the light of the results there is more evidence to direct future work, particularly work related to those less likely to use services for whatever reasons. This study does not further our awareness or knowledge about individual patient motivation for attending, but this would clearly be suitable for future work.

With regard to the diagnostic groupings and the psychometric profile of the sample it is difficult to draw firm conclusions from the current study. The lack of significant differences among the diagnostic groups on the BAI and the GHQ could have at least two possible explanations. The first could be that the BAI does not in fact differentiate depression from anxiety cases. To make a confident statement supporting this view would require firm evidence of diagnostic accuracy whatever that might mean. Given the current method of diagnosis this would not be possible. The second possible explanation would be that the depression/grief group are more distressed, both in terms of anxiety and depression than any other group presenting. Consequently they score higher on the BDI and the BAI and the duration or severity of their symptoms is not adequately assessed by the GHQ. The third possible explanation may be related to the difficulty in distinguishing between anxiety and depression in the clinical setting and the potential for patients to exhibit both anxiety and depressive symptoms but at different points in time.

Clark and Watson (1991) reviewed a variety of paired scales purporting to measure anxiety or depression. They compared overall correlations between pairs and found these ranged from 0.66 to 0.70 in patient and non-patient samples. Scales from different instruments correlated slightly less (r = 0.64 and 0.62). They concluded that their data suggested the presence of a large non-specific component that is shared by both syndromes. They also reported that the Beck scales were one of two pairs of scales which appear to offer best convergent and discriminant validity patterns. This view was presented with the additional comments concerning the newness of the BDI scale and consequently was somewhat limited use in research, and that although convergent and discriminant validity patterns were best for these scales it needed to be acknowledged that their average discriminant correlation was approximately 0.56. Thus indicating the degree of overlap between the two scales. These findings were used to support the view that the overlap is a reflection of the co-occurrence of etiologically distinct syndromes. Clark and Watson (1991) suggest that another possible explanation is the existence of a non-specific distress factor that forms an inherent core component of both syndromes. They regard it as having been repeatedly identified as things like neuroticism, general maladjustment and negative emotionality. They label it ‘negative affectivity trait’ (NA). They propose the differentiation on the basis of additional distinctive factors. Feldman (1993) concluded that there is little discrimination between anxiety and depression in self-report means by clinical samples. These theoretical issues demonstrate the need for Clinical Psychologists to be able to apply current knowledge to clinical practice in a meaningful way. Consequently it may well be more important in future work to look at the similarities and differences between those diagnosed as having anxiety or depression. In terms of outcomes it will be of interest to look at treatment responses of both groups and this will be dealt with in Study II (Chapter 4).

3.5.5 Recommendations

From the analysis of the results and the conclusions drawn it would seem that a number of recommendations could be made for service provision and future research in relation to Adult Mental Health Clinical Psychology Services in North Down and Ards Trust. These are detailed below:

1. The age limit for service provision of 18-65 years, should be implemented with the increased awareness of the need for services for the elderly to be addressed separately. The importance of the vulnerability of this group should not be overlooked in consequence of their failure to access services. The data supporting the lack of access to services for this group should be used to educate purchasers about the special needs of the elderly, rather than following simply on the identification of dementia. There would appear to be many issues that would decrease motivation to access services by this needy group, such as attitudes to mental illness, anxiety and uncertainty about possible consequences of acknowledging, both to themselves and professionals, their difficulties.
2. Education regarding detection of mental illness could be more formally approached and particularly aimed towards improving the knowledge about locally relevant factors. This would include the vulnerability of the elderly, the increased vulnerability of married females, the high

levels of depression in the separated. Those less well represented might require more information on services available in order to maximise the likelihood that those who are in need do not suffer any more than is necessary. Also, by improving detection at an earlier stage, it would be more beneficial to provide intervention before the problems have deteriorated to a level requiring psychiatric admission.

3. The data also confirm the need for Clinical Psychology to operate a separate waiting list for GP referrals and for Psychiatry referrals. This was clear from the findings that the latter group are more distressed. The conclusions regarding the waiting list indicating that the more distressed patients, as measured on the GHQ, are seen more quickly would possibly add credence to the prioritisation of referrals by referrers. Although it could be argued that the most urgent may be directed towards Psychiatry if the waiting time is not acceptable.

4. Recommendations concerning the routine use of scales would seem to indicate that the results did not demonstrate sufficient overlap across the three scales to support the exclusion of any of these currently in use. Often it has been reported by the clinicians that patients find the discussion of their scores as particularly useful. It should also be clarified that while routine use of scales may be useful it would not be suggested that such tools would be seen as replacing or taking greater diagnostic influence than the clinical assessment of the therapist.

5. The use of tests should be implemented in such a way as to maintain the individual significance of a score at clinical level. For example, a score

of 15 on the BDI may well indicate mild depression if a number of items have been mainly scored 1 or 2. However, the difference between a 15 obtained in this way compared with a 15 scored with mainly scores of 3 on items like hopelessness for the future, guilt or thoughts of killing themselves would alert the clinician to the differences in severity of symptoms, despite similar psychometric totals. While this is allowed for in the psychometric characteristics of the BDI it is necessary for the clinician to be alert to this feature of the scale. Consequently it may be more appropriate to consider the clinical and individual utility of psychometric measures as more indicators of distress and certainly not always comparable across groups. This highlights the different uses to which the same data may be put in terms of clinically relevant information, service information and the assessment and evaluation of services provided.

6. For health promotion work within mental health it would seem necessary to further investigate any differences in the sorts of anxiety as presented by married females compared with the distress of those who are separated. In this way some aspects such as poor mental health associated with behaviour problems with children, could be targeted in different ways rather than waiting for the problems to be presented. One such an approach could be more collaborative work with those involved in child health issues.
7. Future research is clearly required in a number of areas and this would include detailed needs assessment more specifically aimed at those least

> likely to access services in our Trust. It is highly unlikely that such work will be straightforward and would require collaboration of providers, purchasers, carers as well as the general population. It would be hoped that the pointers identified in this current study could at least provide initial impetus for future work in an area that may well be overlooked at a time when restrictions are possibly more apparent than previously within the Health Service.

The current study has aimed at providing meaningful data about who receives services. It is no less important to examine the effects of service provision and this will be the focus in Study II (Chapter 4).

3.6 REFERENCES

American Psychiatry Association, (1980). *Diagnostic and Statistical Manual of Mental Disorders, DSM-III*. Washington DC.

Barker, C., Pistrang, N. and Elliott, R. (1994). *Research Methods in Clinical and Counselling Psychology*. Chichester: John Wiley and Sons.

Barry, M. (1991). Community perceptions of mental disorder: An Irish Perspective. *The Irish Journal of Psychology*, 15, 2/3, 418-441.

Beck, A., Steer, R., Garbin, M. (1988a). Psychometric properties of the Beck Depression Inventory - 25 years of evaluation. *Clinical Psychology Review*, 8(1), 77-100.

Beck, A. and Beamesderfer, A. (1974). Assessment of Depression: The Depression Inventory. In P. Pichot (Ed.). *Modern Problems in Pharmacopsychiatry* (pp. 15-169) Basle, Switzerland: Karger.

Beck, A., Epstein, N., Brown, G. and Steer, R. (1988b). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893-897.

Beck, A., Rush, A., Shaw, B. and Emery, G. (1979). *Cognitive Therapy of Depression*. New York: Guilford.

Beck, A. and Steer, R. (1984). Internal consistencies of the original and revised Beck Depression Inventory. *Journal of Clinical Psychology*, 40, 1365-1367.

Beck, A. and Steer, R. (1987). *Manual for the revised Beck Anxiety Inventory*. San Antonio: The Psychological Corporation.

Beck, A., Ward, C., Mendelson, M., Mock, J. and Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.

Benjamin, S., Decalmer, P. and Haran, D. (1982). Community screening for mental illness: A validity study of the General Health Questionnaire. *British Journal of Psychiatry*, 140, 174-80.

Blumenthal, M. (1975). Measuring depressive symptomatology in a general population. *Archives of General Psychiatry*, 32, 971-978.

Boardman, A. (1987). The General Health Questionnaire and the detection of emotional disorder by General Practitioners. A replicated study. *British Journal of Psychiatry*, 151, 373-381.

Bradshaw, J. (1972). A taxonomy of social need. In G McLachan (Ed), *Problems of Progress in Medical Care*. Oxford: Oxford University Press.

Brewin, C., Wing, J., Mangen, S. (1988). Needs for care among the long-term mentally ill: a report from the Camberwell High Contact Survey. *Psychological Medicine*, 18, 457-468.

Broadhurst, A. (1977). What part does general practice play in community clinical psychology? *Bulletin British Psychological Society*, 30, 305-309.

Brockington, I., Hall, P., Leving, J. and Murphy, C. (1993). The Community's Tolerance of the Mentally Ill. *British Journal of Psychiatry*, 162, 93-99.

Brown, G. (1959). *The Transfer of Care*. London: Routledge and Kegan, Paul.

Bryson, S. and Pilon, D. (1987). Sex differences in depression and the method of administering the Beck Depression Inventory. *Journal of Clinical Psychology*, 43, 529-534.

Bumberry, W., Oliver, J. and McClure, J. (1978). Validation of the Beck Depression Inventory in a university population using psychiatric estimate as the criterion. *Journal of Consulting and Clinical Psychology*, 46, 150-155.

Burvill, P., Stampher, H. and Reynolds, J. (1984). Rural psychiatric services in Western Australia. *Social Science Medicine*, 18(9), 991-996.

Campbell, P. (1990). Mental health self-advocacy. In L. Winn (Ed.). Power to the People: *The Key to Responsive Services in Health and Social Care*. London: King's Fund.

Carroll, A. and Wilson, J. (1993). National Health Service and Public Services in the 1990s. In J. Wilson and P. Hinton (Eds.). *Public Service Finance and Management*. Tudor.

Clark, L. (1989). The anxiety and depressive disorders: Descriptive psychopathology and differential diagnosis. In P. C. Kendall and D. Watson (Eds.). *Anxiety and depression: Distinctive and overlapping features* (pp. 83-129). New York: Academic Press.

Clark, L. and Watson, D. (1991). Tripartite Model of Anxiety and Depression: Psychometric Evidence and Taxonomic Implications. *Journal of Abnormal Psychology*, 100(3), 316-336.

Clark, D. and Woollett, S. (1990). *English Village Services in the Eighties*. London: Rural Development Commission.

Coe, R. (1970). *Sociology of Medicine*. London: McGraw-Hill.

Connolly, R. (1995). *Community Perceptions of the Mentally Ill and Orientations Towards Seeking Professional Psychological Help Among Rural and Urban Sub-*

Populations in Northern Ireland. Unpublished Masters' Thesis. Jordanstown: University of Ulster.

Corney, R. and Williams, P. (1987). Social and familial dysfunction, general practitioner attendance and psychiatric diagnosis. *International Journal of Family Psychiatry*, 7, 137-148.

Department of Health, (1975). *Better Services for the Mentally Ill*. London: HMSO. (Cmnd 6233).

Department of Health, (1989). *Working for Patients*. London: HMSO. (Cmnd 555).

Department of Health and Social Services, (1992). *The Northern Ireland Census 1991 Summary Report*. Belfast: HMSO.

Department of Health and Social Services, (1990). *People First: Community Care in Northern Ireland for the 1990s*. Belfast: HMSO.

Edwards, B., Lambert, M., Moran, P., McCully, T., Smith, K. and Ellington, A. (1984). A meta-analytic comparison of the Beck Depression Inventory and the Hamilton Rating Scale for Depression as measures of treatment outcome. *British Journal of Clinical Psychology*, 23, 93-99.

Farndale, W. (1964). *The Day Hospital Movement in Britain*. Oxford: Pergamon Press.

Feldman, L. (1993). Distinguishing Depression and Anxiety in Self-Report: Evidence from Confirmatory Factor Analysis on Non-clinical and Clinical Samples. *Journal of Consulting and Clinical Psychology*, 61(4), 631-638.

Fydrich, T., Dowdall, D. and Chambless, D. (1990). Aspects of reliability and validity for the Beck Anxiety Inventory. Paper presented at the National Conference on Phobias and Related Anxiety Disorders, Bethesda, MD.

Gask, L., Goldberg, D., Lesser, A. and Miller, T. (1988). Improving the psychiatric skills of the General Practice Trainee - an evaluation of a group training course. Medical Education, 22(2), 132-138.

Gater, R. and Goldberg, D. (1991). Pathways to psychiatric care in South Manchester. British Journal of Psychiatry, 159, 90-96.

Gath, D. and Mynors-Wallis, L. (1991). Brief psychological treatments for emotional disorders in primary care. In Horizons in Medicine, 3. London: Royal College of Physicians.

Gilmour, I. (1992). Summary of practical implications of PSI rural research.

Glennester, H. and Korman, N. (1986). *Closing a Hospital*: Darneth Park Project. London: Bedford Square Publications.

Goldberg, D. (1978). *Manual of the General Health Questionnaire*. Windsor: Nfer Nelson.

Goldberg, D. (1981). Estimating the prevalence of psychiatric disorder from the results of a screening test. In J. Wing, P. Bebbington and L. Robins (Eds.). *What is a Case?* London: Grant, McIntyre.

Goldberg, D. (1986). The use of the General Health Questionnaire in clinical work. British Medical Journal, 293, 1188-1189.

Goldberg, D. and Gater, R. (1991). Estimates of need. *Psychological Bulletin*, 15, 593-595.

Goldberg, D. and Hillier, V. (1979), A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139-148.

Goldberg, D. and Huxley, P. (1980). *Mental Illness in the Community*. London: Tavistock.

Goldberg, D. and Huxley, P. (1992). *Common Mental Disorders*. A bio-social model. London: Tavistock/Routledge.

Goldberg, D., Jenkins, L., Millar, T. and Faragher, B. (1993). The ability of trainee general practitioners to identify psychological distress among their patients. *Psychological Medicine*, 23(1), 185-193.

Goldberg, D., Kay, C. and Thompson, L. (1974). Psychiatric Morbidity in General Practice for the Community. *Psychological Medicine*, 6, 565-569.

Goldberg, D. and Williams, P. (1988). *A User's Guide to the General Health Questionnaire*. Windsor: Nfer Nelson.

Greenley, J. and Mullen, J. (1990). Help-seeking and the use of mental health services. *Research in community and mental health*, 6, 325-350.

Gurin, G., Veroff, J. and Field, S. (1960). *Americans view their mental health* (Joint Commission on Mental Illness and Health, Monograph Series No 4). New York: Basic Books.

Hamilton, M. (1959). The assessment of anxiety states by rating. *British Journal of Medical Psychology*, 32, 50-55.

Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery and Psychiatry*, 23, 56-62.

Hotopf, M. and Wessely, S. (1994). Viruses, neurosis and fatigue. Journal of Psychosomatic Research, 38(6), 499-514.

Jarman, B. (1983). Identification of Underprivileged Areas. British Medical Journal, 286, 1705-1708.

Jones, M. (1952). Social Psychiatry. London: Tavistock.

Kasl, S. and Cobb, S. (1966). Health behaviour, illness behaviour and sick role behaviour. Archives Environmental Health, 12, 246.

Kearns, N., Cruickshank, C., McGuigan, S., Siley, S., Shaw, S. and Snaith, R. (1982). A comparison of depression rating scales. British Journal of Psychiatry, 125, 184-185.

Keatinge, C. (1987). Community factors influencing psychiatric hospital utilization in rural and urban Ireland. Community Mental Health Journal, 23(3), 192-203.

Keatinge, C. (1994). Rural and urban differences in psychiatric admissions and attitudes to mental illness. Unpublished Masters' Thesis. Chicago: University of Illinois. Cf. Connolly (1995).

Kincey, J. (1974). General practice and clinical psychology - some arguments for a closer liaison. Journal of Royal College General Practitioners, 24, 882-888.

Knight, R. (1984). Some general population norms for the short form Beck Depression Inventory. Journal of Clinical Psychology, 40(3), 751-753.

Koch, H. (1979). Evaluation of behaviour therapy intervention in general practice. Journal of Royal College General Practitioners, 29, 337-340.

Lambert, M., Hatch, D., Kingston, M., Edwards, B. (1986). Zung, Beck and Hamilton Rating Scales as measures of treatment outcome: A meta-analytic comparison. *Journal of Consulting and Clinical Psychology*, 54, 54-59.

Lancet (1954); Editorial: Unlocked doors, *Lancet 2*, 953.

Lawson, R., Woodward, R. and McCaw, A. (1996). *Rural versus Urban attitudes towards mental health issues and services in the North Down and Ards Community Trust*. Internal Report.

Lewis, G. and Booth, M. (1992). Regional differences in mental health in Great Britain. *Journal of Epidemiology and Community Health*, 46, 608-611.

Lightfoot, S. and Oliver, J. (1985). The Beck Inventory: Psychometric properties in university students. *Journal of Personality Assessment*, 49, 434-436.

Lobo, A., Perez-Echeverna, M-J., Jimenez-Aznarez, A. and Sancho, M-A. (1988). Validity of the Scaled Version of the General Health Questionnaire (GHQ 28). *British Journal of Psychiatry*, 152, 807-812.

Marks, J., Goldberg, D. and Hillier, V. (1979). Determinants of the Ability of General Practitioners to detect Psychiatric Illness. *Psychological Medicine*, 9, 337-353.

Mayou, R. and Hawton, K. (1986). Psychiatric disorder in the general hospital. *British Journal of Psychiatry*, 149, 172-190.

McPherson, I. and Feldman, M. (1977). A preliminary investigation of the role of the clinical psychologist in the primary care setting. *Bulletin of British Psychological Society*, 30, 342-346.

McPherson, F., Watson, P. and Taylor, V. (1996). Audit of an adult mental health out-patient clinical psychology service. *Forum*, 98, 26-28.

McRae, J. and Brody, C. (1989). The differential importance of marital experiences for the well-being of women and men: a research note. Social Science Research, 18, 3, 237-248.

Mechanic, D. (1968). Medical Sociology. New York: Free Press.

Mechanic, D. (1980). Illness behaviour, social adaptation and management of illness - comparison of educational and medical models. Journal of Nervous and Mental Disease, 165(2), 79-87.

Meyboom-de Jong, B. and Lamberts, H. (1993). The autonomy project: practical experiences with functional status indicators within the framework of ICPC. In H. Lamberts, M. Wood and I. Hofmans-Okkes (Eds.). The international classification of primary care in the European Community. Oxford: Oxford Medical Publications.

Moran, R. (1977). Conceptualisation of mental illness and attitudes to the mentally ill and ex-mental patients: structure, determinants and correlates in an Irish sample. Unpublished Masters' Thesis. University of Cork.

Murphy, B., Black, P., Duffy, M., Kieran, J. and Mallon, J. (1993). Attitudes toward the mentally ill in Ireland. Irish Journal of Psychological Medicine, 10(2), 75-79.

Nicolson, P. (1989). Counselling women with post-natal depression: implications from recent qualitative research. Counselling Psychology Quarterly, 2(2), 123-132.

Office of Health Economics, (1989). Mental Health in the 1990s. Briefing Paper No 90. London: OHE.

Pilowsky, I. (1978). A general classification of abnormal illness behaviours. British Journal of Medicine Psychology, 51, 131-137.

Pilowsky, I. and Katsikitis, M. (1994). A classification of illness behaviour in pain clinic patients. *Pain*, 57(1), 91-94.

Ramon, S. (1988). Community Care in Britain. In A. Lavender and F. Holloway (Eds.). *Community Care in Practice*. Chichester: John Wiley and Sons.

Regier, D., Boyd, J., Burke, J., Rae, D., Myers, J., Kramar, M., Robins, L., George, L., Karno, M. and Locke, B. (1988). One-month prevalence of mental disorders in the United States. *Archives of General Psychiatry*, 45, 977-985.

Robinson, D. (1973). *Patients, Practitioner and Medical Care*. London: Heinemann.

Sainsbury, R., Haward, B., Rider, L., Johnston, C. and Round, C. (1995). Influence of clinical workload and patterns of treatment on survival from breast Cancer. *Lancet*, 345, 1265-1270.

Scull, A. (1975). *Decarceration*. London: Prentice-Hall. Cf. Lavender and Holloway.

Sherlock, J. (1994). *Through the Rural Magnifying Glass*. Meeting the Mental Health Needs of Rural Inhabitants - A Challenge for Policymakers and Purchasers. London: GPMH Publications.

Sims, A. and Salmon, P. (1975). Severity of symptoms of psychiatric out-patients: use of the General Health Questionnaire in Hospital and General Practice Patients. *Psychological Medicine*, 5, 62-66.

Smith, A. and Jaccobson, B. (1988) (Ed). The nation's health : a strategy for the 1990s. London: King Edward's Hospital Fund for London.

Smith, H. (1991). Caring for everyone? The implications for women of the changes in community care services. *Feminism and Psychology*, 1(2), 279-292.

Steer, R., Beck, A., Riskind, J. and Brown, G. (1986). Differentiation of depressive disorders from generalized anxiety by the Beck Depression Inventory. *Journal of Clinical Psychology*, 42, 475-478.

Stevens, A. and Gabbay, J. (1991). Needs assessment ... needs assessment. *Health Trends*, 23(1), 20-23.

Stewart, J. and Walsh, K. (1992). Change in the management of public services. *Public Administration*, 70, 499-518.

Ussher, J. (1991). *Women's Madness: Misogyny or Mental Illness*. London: Harvester Wheatsheaf.

Vessey, J. and Howard, K. (1993). Who seeks Psychotherapy? *Psychotherapy*, 30(4), 546-553.

Williams, J. and Watson, G. (1997). Mental health services that empower women: the challenge to clinical psychology. *Clinical Psychology Forum*, 100, 11-18.

Williams, P., Tarnopolsky, A., Hard, D. and Shepherd, M. (1986). Minor psychiatric morbidity and general practice consultations: the West London Survey. *Psychological Medicine*, Monograph, Supplements 9.

Williams, P., Wilkinson, G. and Arreghini, E. (1990). The determinants of help-seeking for psychological disorders in primary care settings. In N. Sartorius, D. Goldberg, G. de Girolamo, J. Costa de Silva, Y. Le Crubier and H-U. Wittchen (Eds.). *Primary Care Settings in Psychological Disorders in General Medical Settings*. Bern: Huber-Hogrefe.

Chapter 4 :

STUDY II

An investigation of effectiveness of a Community Clinical Psychology Service as measured by standardized psychometric measures

CONTENTS

4.1 ABSTRACT

This study examined the importance of outcomes and their application in routine clinical psychology practice. The aim was to demonstrate the effectiveness of the Clinical Psychology Service for adults in the North Down and Ards Trust. Pre and post-treatment scores were taken on three previously standardized psychometric scales. Demographic information included age, sex, marital status and domicile. Service details related to diagnosis, referral source, length of time on waiting list, the number of treatment sessions and reason for discharge. The participants were patients referred to the Clinical Psychology Department by their General Practitioners or Consultant Psychiatrists between January 1995 and July 1996. Results show that those in this study are highly representative of those attending Clinical Psychology clinics in the same area over the past three years, in terms of age, domicile and sex. There were significant reductions on all scales post-treatment. Age, nor waiting list, did not affect improvements with treatment. More sessions increase improvements. The use of details regarding reason for discharge and final level of distress provided meaningful information about the agreement between therapist and patient reports of outcomes at discharge. The implications of these findings for Clinical Psychology service provision are discussed. In particular, an outcomes model is proposed which is suitable for use in routine clinical practice for psychologists and other mental health professionals.

4.2 INTRODUCTION

The provision of health care in Britain increasingly follows the American experience (Lambert, 1991; McColl et al., 1995). There is a requirement for accurate, quantitative and reliable assessment of results which is considered an integral part of health care delivery. Consequently, outcomes of care is a significant issue and cognisance of this must be taken, not only by managers and policy makers but also by clinicians. This study examines the importance of outcomes and the dimensions relevant to health care. In particular, outcomes in mental health and psychotherapy are considered as this might initially seem to be an area in which specification would be difficult.

The issue of outcome measurement and its development has been influenced to some extent by National Health Service reforms which have led to increased public accountability. This has promoted greater responsibility for budgeting control, at all levels of organisations. It is clear that much of the focus has been motivated by concern regarding the growing costs of healthcare provision (Carroll and Wilson, 1993). Fiscal constraints are not the only influence, others include attempts to standardise healthcare initiatives around best practice with a significant increase in audits. These have involved both the type and quality of care provided. Patients and carers as service users have also become more informed regarding significant issues within the National Health Service and this more informed position has increased the pressure these groups can exert in attempts to obtain suitable services for themselves and relatives.

Consequently it can be seen that in practice more questions are being asked, by more people, with the presumed aim of containing costs, improving quality and increasing satisfaction. The subsequent debate about the efficiency and suitability of means by which these aims have been pursued, or to what degree these have been successful, will not be addressed further within this context; not because such debate is not considered necessary or important but rather the evaluation of such is not central to the main emphasis of this work.

4.2.1 Outcomes

Some of the literature pertaining to outcomes has been provided from within the quality domain, while more recently reforms have emphasised the concept of 'evidence-based practice'. This is discussed in more detail in 4.2.6.

Outcomes within the mental health context can be regarded as "the assessment of any characteristics of consumer behaviour, state, or adjustment that are significantly related to the reason for seeking mental health services, during or after having received services" (Speer and Newman, 1996, pp. 107). Firstly the development of outcomes within the quality arena are examined. Donabedian (1966) identified three dimensions that were considered necessary to be measured in relation to determining the quality of care. These are:

(a) structure - the organisational aspects such as equipment, the number and qualifications of staff;

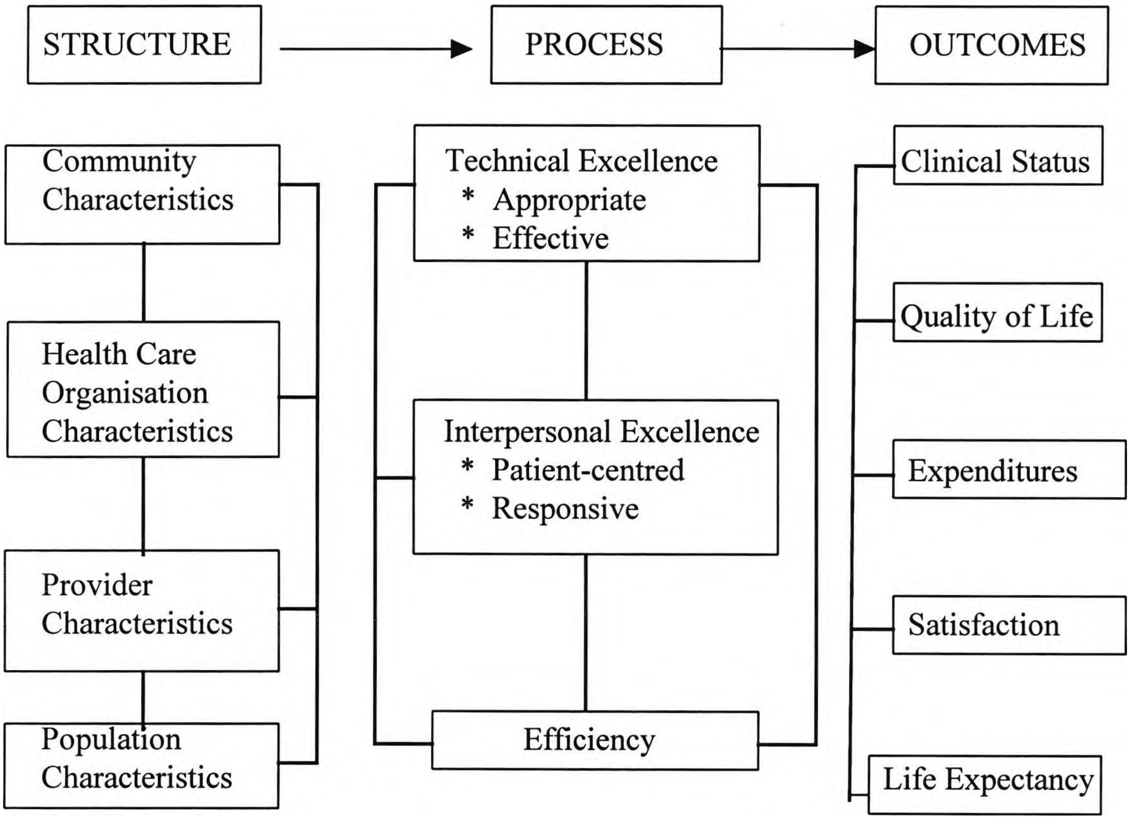
(b) process - this incorporates the services that are provided to the patient during an episode of care. This would include assessments and treatments; and

(c) outcomes, which are both short and long term. They are the results of the application of specific procedures and treatments.

The conceptual framework provided by Donabedian for understanding the context for studying quality of care is shown below.

Fig 4-1: ***The Conceptual Framework for Studying Quality of Care***

(Donabedian, 1966)



The above figure (4-1) illustrates the domains of outcomes in relation to both structure and process and provides a structure from which to conceptualise how outcomes relate to service provision. Previously, quality related work focused on both structure and process. On some occasions, outcomes were examined but at present there appears to be greater emphasis on the outcomes component when evaluating the quality of care being provided. Continuous quality improvement requires the integration of an outcomes assessment into clinical practice. This is advantageous insofar as appropriate integration can ultimately improve patient care. It will also be useful in establishing treatment value and consequently will facilitate evidence-based purchasing. It will produce data that will legitimise the treatment of various conditions and will be capable of use as a significant and powerful marketing tool.

If factors and influences on the provision of health care do alter and price becomes a little less important as a major determinant in the choice of providers, outcome data will increasingly become critical in the selection and commissioning process. In this way, outcomes can introduce accountability through assessment and offers service providers the opportunity to regain public trust. Newman and Tejeda (1996) emphasise the need to identify the specific requirements of the various stakeholders in order to conduct relevant research. They also acknowledge that policy decisions are frequently made in relation to financial constraints. It is essential to also consider therapeutic effort, level of care, as well as cost information (Newman and Howard, 1986).

While outcomes clearly offer a range of advantages to purchasers, providers and users it is important to acknowledge the potential threat for associated clinicians with questions regarding treatment benefits, costs and effectiveness. However it is unlikely that this perception would be maintained as clinicians become increasingly involved in the process.

4.2.2 Structure of Outcomes

The word 'outcomes' is used in plural in order to indicate the multi-dimensional nature of the term. It is not a single, unitary phenomenon, but is much more complex. Consequently considerable time must be taken to understand and describe their nature. The measurement of outcomes requires key variables in terms of service provision to be defined and operationalised.

The definition of health proposed by the World Health Organisation (1948) draws attention to complete well-being of physical, mental and social functioning, rather than the absence of either infirmity or disease which indicates the inclusion of both positive and negative dimensions. Specific outcomes will require consideration of the selection of the most salient dimensions depending upon the perspective of the overall evaluation.

Given the significance of outcomes assessment and the need to have a suitable framework of understanding how outcomes relate to practice consideration will now be given to the different levels at which outcomes can be assessed. A variety of variables can affect outcomes data. These include the source of the data, timing of the assessment and the patient population. There is an abundance of literature which confirms the view that depending on who is rating service outcomes will influence significantly which aspects will be considered most important. Patients rate outcomes in terms of the change experienced in their subjective feeling of well-being, carers, family or other significant others rate outcomes as changes relevant to them. Therapists regard changes resulting from therapeutic input as outcomes. Providers and purchasers regard outcomes as aspects like utilisation of offered appointments, reduced waiting lists. Clearly each perspective will view different aspects as more important and all must be considered independently when attempting to identify and measure appropriate outcomes for service delivery.

The timing of assessments and evaluations will significantly affect the overall findings. Generally measurement takes place in three phases: baseline measurement, short-term follow-up, and long-term follow-up. Whatever outcomes assessment system is used should facilitate assessment of each episode of care and possibly include regular assessments of progress during the entire episode of intervention. The latter is more likely to be appropriate for long-term intervention than for usual out-patient psychotherapy which tends to be for less than a year.

Baseline measures are generally collected during initial assessments or immediately upon entry into treatment. The exact timing of the first measurement may vary depending on policies within Departments. Some operate systems where completion of the initial questionnaire gains access to the waiting list. Others may provide a full initial assessment with measurement and then the waiting list is for access to treatment. Within the Psychology Department in North Down and Ards the baseline measures are taken after the waiting time and this also represents entry to treatment, if appropriate.

Within other settings baseline measures may not be feasible until other aspects are dealt with such as physical health problems, intoxication from alcohol, drug-induced delusions. While decisions about the timing of baseline measures are difficult the questions regarding follow-up measures are even more considerable. The aim of short-term follow-up is to assess the immediate effects of treatment. The purpose of long-term follow-up is aimed at identifying relapse rates, other service utilisation, changes in social and employment functioning and overall quality of life improvements. The use of sequential measures can be useful to demonstrate changes in effects with time. It is important to consider all dimensions when attempting to obtain as full a picture as possible of benefits derived from intervention. The establishment of a suitable time frame for follow-up is essential in any outcomes approach. This may vary depending upon different conditions and the expected course or response patterns of various disorders. Follow-up of more than twelve months may provide valuable information but present a further problem in terms of the ethics of contacting patients after discharge. Measurements of patient satisfaction also require careful consideration in order to reduce positive bias or fear of loss of confidentiality. All outcomes data should be interpreted with the context of the population sampled. It is within this arena that the use of demographic information can significantly enhance the relevance and meaning of data collected. Other important sources of data include diagnosis, admission and discharge dates, and treatment components group or individual.

4.2.3 Levels of Outcomes

By considering outcomes there is at least an implicit relationship with measurement and as with levels of measurement there are also levels of outcome. Some begin by describing and measuring at the level of the individual, others begin with the system, for example, the Health of the Nation outcomes (Department of Health, 1993) relate to the general population.

McGlynn (1996) proposes the following model of levels of outcomes (Fig 4-2):

Fig 4-2: Levels of Outcomes Assessment *(McGlynn, 1996, pp. 20)*

Efficacy	**Define optimal practice**
	↓
Effectiveness	**Compare actual with optimal practice**
	↓
Quality Assessment	**Evaluate why actual and optimal practices differ**
	↓
Quality Improvement	**Design interventions to close gap between actual and optimal practice**

In order to appreciate the different levels of outcomes it is necessary to differentiate between the terms "efficacy" and "effectiveness", Speer and Newman (1996) draw attention to this distinction and define "efficacy" as the effectiveness of psychosocial interventions under controlled laboratory conditions; ie specific group of patients treated by highly qualified practitioners in strictly controlled settings. Effectiveness research is the investigation of the effect of interventions as usually practised, in other words, for unselected patients in everyday practice settings by more general therapists. The relationship between efficacy and effectiveness studies is that the results from the former provide the benchmark for the latter.

However the relationship between efficacy and effectiveness studies is not straight-forward. Weisz et al., (1995) reviewed child therapy outcome studies. The results provided consistent positive effects of child psychotherapy but those for clinic based effectiveness studies were not as positive. From their analyses of the effect sizes of both types of studies it was concluded that there was evidence that the research studies may have produced more positive outcomes due to more behaviourally-oriented treatment methods. Various influences were investigated to identify contributions to the differences between clinic and research findings. These variables included, level of disturbance, clinical environment, therapist effects, therapy hours, special pre-treatment training, focus on one child or type of problem or recency of publication and treatment/assessment expertise. There was no support for any of these variables as relevant explanatory factors contributing to differences in treatment outcomes. The aspects identified as significant were the use of specific focused treatment approaches, the use of behavioural and cognitive-behavioural methods, and the reliance on structure and monitoring during treatment. These three factors were considered as contributing to the superior effects of research therapy compared with clinic therapy. The review by Weisz et al. (1995) emphasises a very important consideration regarding the replication of the results of effectiveness studies in routine clinical practice. It also alerts providers to the need to establish appropriate outcome research of efficacy of treatments in order to adequately inform purchasers of services. This is not to suggest that effectiveness studies do not provide useful information regarding clinical practice. As the Weisz et al. (1995) review shows it is from further investigation of the identified differences that more knowledge can be gained regarding the complex process of therapy, whether with adults or children. Hollon (1996) cites Shadish et al. (personal communication) as not supporting the results with adults as those found with childhood disorders by Weisz et al. (1995).

4.2.4 Quality Improvement

Quality improvement strategies and activities are designed and aimed towards reducing the distance between best and actual practice. Quality improvement activities are concerned with the issue of doing a better job. The other dimension of quality improvement incorporates the population aspect and assessing factors like the impact of intervention on life expectancy, mortality rates etc.. While both dimensions are related it is possible to produce quite different answers from each perspective. It might be possible to identify efficacious interventions which were not then effectively implemented. This is most clearly identified within the preventative component of many services where resources are frequently targeted towards service provision rather than prevention.

Barkham et al. (1995) provide a useful summary of a workshop held to consider the responses to purchasers requests for routine clinical outcomes ‘audit’. They emphasise the need to integrate outcomes in clinical practice and that outcomes must be considered at all levels. It is important to draw attention to the patient’s perspective within the current review. From this viewpoint a good outcome may be defined as a reduction in symptomatology, improved well-bring, or better communication skills. Treatment may have an effect on all, some or none of these.

Strauss and Carpenter (1981) demonstrated that commonly used outcome indicators like level of symptomatology, social and occupational functioning, and the need for supportive resources are only moderately correlated. Thus it is important to consider differential effects of treatment on different outcome dimensions.

Satisfaction with the service provision may not always be influenced by clinical outcome. The effective treatment may not necessarily produce satisfaction for the patient. This has been supported by Hsieh and Kagle (1991). Bowling (1992) and Williams and Calnan (1991) both conclude that while general levels of satisfaction with patients and carers can be high it is necessary to investigate specific areas too. Given the relative independence of outcomes and their measurement the multi-dimensional nature of outcomes is obvious. Patient satisfaction, symptom improvement, functional improvement, treatment utilisations, efficacy and evidence all must be considered. Much of the literature claims the importance of integrating outcomes in clinical practice and Barkham et al. (1995) encourage the development of standards and implementation. However it would seem impractical to incorporate a model of outcomes within clinical practice that would from the beginning incorporate all the necessary aspects. Rather it would seem more acceptable and reasonable to aim for the development of a system that is valid and comprehensive while measuring a range of outcome dimensions.

The current research is part of the development of such a system within a local setting and in this current context does not address the critical component of patient satisfaction. This is being developed within the Trust and will be investigated and reported on separately. Consequently this will not be considered within the present context.

Clinical Psychology services are provided for a wide variety of client populations in many diverse settings, the extent of which has become more difficult to monitor with the recent changes within the National Health Service. This has led to many organisational changes and consequently Psychology Departments have altered in size, configuration and accountability arrangements. This should not dissuade the profession from giving serious consideration to developing relevant research for use by commissioners of services. While the provision of such is important at a local level more global co-ordination would be beneficial too, especially when comparisons are appropriate.

From a variety of sources there has been, and will increasingly be, a demand for all services to demonstrate meaningful and cost-effective benefits of service provision (Harrison, 1995). In the absence of such information these services will not be commissioned. These comments are not predictions of what may happen but are directly related to statements regarding ‘evidence-based purchasing’, as outlined in National Health Service Executive literature such as Promoting Clinical Effectiveness (Department of Health, 1996). In order to appreciate the significance of such plans it is necessary to examine the concept of ‘evidence-based practice’ as this will influence purchasing of services.

4.2.5 Evidence-Based Practice

Support for evidence-based purchasing has increased and it is now regarded as being central to policy and decision-making within the Health Service. However it is acknowledged that the translation of this approach into reality is not an easy or straight-forward task. The central component of this approach indicates the view that doctors and all other clinical professionals should conduct their work on the basis of procedures which have been researched and shown to be effective. In reality there is a considerable amount of clinical practice which has not yet been evaluated in a systematic and scientific way. The emphasis on the systematic component is highlighted in the following definition of evidence-based medicine as ‘the process of systematically finding, appraising, and using contemporaneous research findings as the basis for clinical decisions’ (Rosenberg and Donald, 1995, pp. 1122). The four aspects of the process as specified by Rosenberg and Donald (1995) are identified as follows:

1. The formulation of a clear clinical question from the patient's presenting problem.
2. Identification of relevant clinical literature.
3. Evaluation of the evidence in terms of both usefulness and validity.
4. The implementation of the findings into clinical practice.

In this way it is possible to identify how the process of Evidence-Based Medicine will facilitate the closing of the gap between efficacy and effectiveness studies when considering outcomes.

The importance of Evidence-Based Medicine is critical to the requirement of health authorities to identify priority purchases and service disinvestments, based on the demonstration of either their effectiveness of lack of it. Problems associated with the implementation of this approach include the difficulty of providing clarification of outcome in relation to specific conditions with discrete interventions. In clinical psychology this is not easily achieved. The establishment of the criteria for effectiveness and outcome provides a further problem in that often these will differ depending upon the perspective adopted, for example, that of the health authority, patient, carer, General Practitioner or service manager.

In reviewing the evidence available in the literature the sophistication of available evidence must be considered. For some services it is not practical to conduct efficacy studies. The usefulness of such studies, when available for review, may be restricted by lack of evidence of generalisability. The fourth stage of implementing the findings into clinical practice can be problematic if clinicians are not aware of guidelines developed from available evidence. This knowledge must also be combined with the motivation and ability to behave in accordance with this evidence.

The advantages of Evidence-Based Medicine require clinicians to maintain professional education. This process is conducted by critically reviewing literature and should result in greater confidence that the most effective treatments are being provided. However this does not ensure that the effective treatments are carried out appropriately. Consequently achieved outcomes will continue to require monitoring. It could also be suggested that while there is a clear emphasis on the use of evidence to base clinical decisions regarding service provision, such evidence might be open to misuse. This might be most significant when cost-effectiveness is being considered. It is important to keep the reality of service delivery foremost.

The process promoted by evidence-based clinical practice improves the knowledge-base within which clinical practice occurs. It would seem quite inappropriate for this process to usurp the role of clinical judgement. It would also seem likely that there will be some fields of service provision where it will take considerable time, and resources, to conduct the necessary research to facilitate the process of evidence-based medicine and purchasing. The necessity of addressing these issues must be faced with an awareness of the limitations, combined with the continued development of outcomes. The need for application of Evidence-Based Medicine within an outcomes approach is no less appropriate to the field of psychotherapy than to other fields of healthcare. The consideration of these services will be conducted in light of the background provided.

4.2.6 Psychotherapy Outcomes

Flatt (1983) provides a definition of psychotherapy as "a complex interpersonal transaction which changes over the time of therapy" (pp. 63). This definition is useful in that there is an emphasis on the interpersonal component and the therapeutic process is considered complex and subject to change. It is possibly less useful when considering the outcomes that are due to therapy. Smith et al. (1980) define the goal of therapy as "allowing the patient to remedy some maturational deficit in personality development, thereby promoting autonomy" (pp. 447). Both definitions relate to very significant aspects within the therapeutic setting - the relationship, proposed influences on the development of the problem and an overall aim of improved functioning. How these critical components become operationalised and subsequently measured is clearly the task of clinicians, managers and commissioners, as well as researchers.

At a theoretical level it is possible to describe the necessary process to facilitate such evaluation. Andrews (1989) asserts that there are well established strategies for evaluating psychotherapy. Greenberg (1991) suggests that the focus for psychotherapy research began with 'does it work?' rather than with 'how does it work and what influences change?'

There is considerable evidence that the response to the question 'does it work?' is in the affirmative. Andrews (1991), in an evaluation of psychotherapy, reported that cognitive-behaviour therapy was preferable, in terms of both cost and effectiveness, when compared with dynamic psychotherapy. He concluded that psychoanalysis and psychoanalytically orientated psychotherapy performed no better than either clinical care or placebo, while cognitive behaviour therapy was shown to be more effective than placebo for anxiety and depression and could enhance the speed of personality maturation with come categories of neurosis and personality disorders.

Whiston and Sexton (1993) conducted an overview of major trends in psychotherapy research. They concluded that, based on major reviews, on average approximately 65% of clients make positive changes resulting from psychotherapy. They also acknowledge that changes can also be less than positive.

Within any research, consideration must be given to the methodological issues as well as the basic premises from which the work was designed. Within the area of psychotherapy outcome research there appears to be considerable debate regarding the appropriate theoretical underpinnings of any work. Greenberg (1991) asserts that researchers in the area of psychotherapy initially felt it necessary to address the question of effectiveness rather than examining the process and influences of change. A rather dramatised view of opposing methodology is presented when describing the hypothetical-deductive and empirical approach compared with phenomenology.

Barker et al. (1994) outline the three main components of the positivism approach. These are that the approach is only concerned with observable events and involves the application of the methodology of hypothesis testing. This requires the establishment of independent and dependent variables with the formulation of relationships between these variables in a lawful way. It is argued that these methods can be suitably applied to social sciences and that the approach and implementation of such scientific methods are objective. It has been argued that the pursuit of this restrictive approach will and has minimised the importance of the understanding of phenomena. Greenberg (1991) suggests that rigid adherence to a logical positivist position views the ability to refute hypotheses as the ultimate goal. He suggests that in addition to the approach of establishing general laws versus the pursuit of individual differences, a third approach should be employed which he labels 'process analytic'. It involves "change performances in specific behavioural contexts which are similar as behaviour are studied to isolate common features and processes" (pp. 7). This approach is described being applied to psychotherapy change processes and concludes that developing context specific laws or microtheories will maintain scientific rigor while advancing the knowledge of psychotherapy.

Arguments for methodological pluralism are proposed by both Greenberg (1991) and Barker et al. (1994) with emphasis on useful components of positivism while taking account of underlying phenomena. It is also important to appreciate that the remit of measurement does not mean that quantitative methods are regarded as superior to qualitative approaches. Barker et al. (1994) provide a clear overview of the advantages of qualitative and quantitative approaches.

In the present context, the adoption of a quantitative approach to the evaluation of the effectiveness of an out-patient Psychology service was considered to be more appropriate at this point in time. This was influenced by the need to make statements about the service using measurable indices that are objective and could not be viewed as indicative of biases of the providers.

Other qualitative aspects of the service are also the subjects of investigation but are not being reported at present. Rather the overall approach in the Psychology Department does not reflect a view that one study will ever be designed in such a way that all questions that could be asked about outcomes would be addressed, nor answered. This work is part of an overall approach and will form a stage in the process of outcomes orientated-practice within the Psychology Department.

There is emphasis on the need for psychotherapy research to include the empirical evaluation of psychological services (Vanden Bos, 1996). The results of such work can make available meaningful information for policy and management decisions regarding service provision. In order to facilitate this work, the apparent lack of collaboration between researchers and clinicians (Barlow et al., 1984) needs to be addressed. Goldfried and Wolfe (1996) also acknowledge the need for research to inform clinical practice while also raising caution about the direction of such work. They suggest three main sources of relevant information. Firstly, basic research on clinical problems which identifies what needs to be changed, such as with panic disorder (Barlow, 1988). Secondly, research can inform the process of change and influence theoretical perspectives. It is likely that with broad definitions of outcomes, the use of single-case methodology will increase. This will clarify with specificity the link between therapy process and patient change. While single-case study suffer in relation to the generalizability of their results they highlight the application of theoretical approaches. This subsequently improves the understanding and further development of the theoretical issues. It is this suitability to inform well developed theoretical questions which is a necessity when considering outcomes (Goldfried and Wolfe, 1996). Thirdly, psychotherapy outcome research provides information about benefits of intervention. Their caution with this area is that methodological and conceptual constraints may lead to clinical restrictions for therapists. The present study aims to examine effectiveness by the application of a systematic approach to the routine clinical practice within the Clinical Psychology Department. Hollon (1996) clarifies the differences between efficacy and effectiveness studies and suggests that while the latter are a useful source of information that they are no substitute for controlled clinical trials regarding causal inferences. This assertion seems to be continuing the desire to see the ultimate approach rather than acknowledging that both approaches have advantages and disadvantages. The critical task is to be able to correctly identify which approach is most suitable in specific circumstances. As Newman and Tejeda (1996) emphasise, the need to clarify the nature of information relevant to various stakeholders will provide appropriate details to develop strategies of complementary efficacy, effectiveness and cost-effectiveness studies.

In conclusion it would seem that there is sufficient evidence that psychotherapy is effective. This view is clearly stated by Lambert (1991), and would indicate that it is now more appropriate to consider questions of how the change occurs. The other challenge of research in this area is to conduct meaningful studies which aid the understanding of therapeutic change influences, while also providing evidence of outcomes appropriate for consideration when decisions are made about commissioning of services.

The aim of both Studies (3.0 and 4.0) is to be able to respond to questions regarding service provision in a language and terminology that is being used by purchasers and commissioners of services. In this way it is proposed that the profession can influence the context and understanding of the measurements made and required, rather than maintaining a specific philosophical position and being unable to respond to the purchasers appropriately. This is in no way to suggest a position of helplessness for service providers or psychologists particularly. Rather this is seen as an assertive approach that goes some way towards formally beginning to apply scientific rigor in a relevant and practical way to the evaluation of current service provision. This stance requires some further recognition of the labels attached to such work, whether these are service evaluation, audit or research.

4.2.7 Research, Audit and Evaluation

Attempts to specify definitions of research, audit and service evaluation appear to be more widespread than agreed definitions. Parry (1992) reports that research is not focused on services but is concerned with therapies and often with the comparisons of the different effects obtained. Research is regarded as attempting to understand the processes involved. Some aspects of research, like treatment integrity, standardised treatments, intensive measurements with heterogeneous samples, are considered to be problematic for practical application in routine practice. Aspects of intrusiveness, rigidity and cost have been regarded as making research unrepresentative and at times unrelated to clinical practice. Newman and Howard (1991) report changes within research that are aimed at improving the relevance of research methods.

Audit has been defined by a number of sources and frequently the definition provided by the United Kingdom Department of Health (1989) of medical audit is reported. This is the 'systematic, critical analysis of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources and the resulting outcome and quality of life for the patient'. Such a wide and all encompassing approach to clinical work would not encourage attempts towards the goal of audit. However audit is a requirement and as Paxton (1995) correctly acknowledges it is part of a cycle. This involves setting standards, comparing practice with the agreed standards and making the appropriate changes to reduce the discrepancy between practice and standards. More recently audit has been encouraged on a multi-professional basis which has further raised its profile.

Service evaluation is considered as any activity which improves quality and/or effectiveness of a service. It involves quality assurance, operational research, audit and total quality management approaches. In America, service evaluation was developed largely due to concerns regarding cost and effectiveness. Such evaluations were often conducted by those external to the service and accreditation and financial reimbursement decisions were made accordingly. The amount of published work on evaluation has grown in America since the early 1980s. It would seem likely that, given the current influences within the National Health Service, the significance of service evaluation, particularly regarding outcomes, will also increase in importance.

From attempts to clarify the differences among research, audit and service evaluation it is clear that there are some elements common to all. These include concern with improvement, measurement, quality, effectiveness and a systematic approach. It would seem that there are some questions that will be appropriate for research investigation that will not be of particular significance for planners and providers and vice versa. However it would be somewhat naive to believe that any of these approaches could address issues relevant to all.

At a professional level there is an element of apparent resistance to the pursuit of activities other then 'pure' research. Halstead (1996) reports that while outcome measures are frequently in use within Clinical Psychology practice, these are not subject to systematic monitoring, evaluation or audit. He suggests that the absence of clinical practice guidelines and lack of agreed standards make involvement in the cyclical process of audit untenable. A variety of possible explanations are proposed for this. One involves the lack of evidence regarding clinical effectiveness and influences on it that would facilitate standard setting. Another is the concern regarding the inappropriate use of data and information by those not familiar with the complexity of the clinical setting. Others include attention rates and the fear of negative outcomes and the subsequent effect on clinical practice. Halstead (1996) also refers to the resistance of management influences within the clinical area and this would also seem to be alluded to by Cape (1995). If the latter views regarding such a defensive position towards management influences are indicative of positions of service providers in reality, the future for Clinical Psychology services will indeed be grim. It is essential for those from the purist research domain to continue to make advances in areas where work is necessary, but for those within the camp of providing services and tasked with securing funding and contracts the goal is not identical with that of the former group. Rather it is necessary that the profession, in addition to service providers, actively involve themselves in research relating to the question of effectiveness. Cape (1995) draws attention to the effect of purchasers within the overall debate of effectiveness and he also highlights the role of both the patient and other consumer views. As previously stated, the latter two aspects are considered to be of importance sufficient to recommend detailed work in these areas specifically, and will not be discussed further in the current context.

Slade (1996) reinforces the need for professional involvement in both the identification and operationalisation of appropriate measures for use in the audit of services and outcomes. He recommends this involvement while cautioning against colluding with the illusion of simplicity. Strupp (1996) is concerned about an overly simplistic approach being used to inform stakeholders about mental health outcomes. He identifies problems with variation in definitions of mental health and psychotherapy. It would seem inappropriate and unwise however to use the awareness of the complexity to excuse avoidance of issues that may well cause anxiety to providers and clinicians. The task of commissioners of services is not to provide reassurance for clinicians but to secure appropriate, effective services for patients. Our knowledge of the effect of avoidance on anxiety would not recommend a course of continued debate about shortcomings of any suggestions. Consequently the future is at least clear in terms of the need for active involvement in collaboration with interested parties (Newman and Tejeda, 1996).

In order to provide outcome data for consideration of service effectiveness it is necessary to establish a systematic method of data collection at various levels such as individual, diagnostic group and overall service. Objections to data collection may be voiced in the accusation that such approaches over-simplify the complexity of psychotherapeutic processes. However it would seem that the principles of Evidence-Based Medicine (Rosenberg and Donald, 1995) will be applied with the commissioning of all services. Consequently it may be more prudent for clinicians who have at least some understanding of therapy and its complexities to begin to introduce measurements of outcomes that will minimise the possible trivialization that might occur by the use of inappropriate measures. The responsibility for identification of outcomes as well as the interpretation of outcomes data would seem to be critical within the overall system of evaluation. It may be that the abuse of outcomes data would be as real as the abuse of any statistic and that emphasis be placed on interpretation as well as the measurement.

Marmar (1990) emphasises the importance of considering variables that influence outcomes data, these include theoretical aspects, levels of analysis, the various relationship models, information processing and time available as well as timing of measurements. These factors will not be considered further within this context but it is necessary to at least acknowledge their potential influences. When considering the complexity issue, Marmar (1990) highlights the increasing agreement about the importance of the segmentation of the therapeutic relationships, for example, and identification of meaningful patterns.

He uses this as an indication of change from the earlier tendency to view process and outcome as separate aspects. It would seem that this new conceptualisation of outcomes within the context of process will improve the understanding of both while formally establishing the measurement within a context.

In America interest in outcomes evaluation began in the early 1970s. Subsequent changes in funding arrangements took place in the 1980s and the focus returned to outcomes as reforms were introduced to control costs of service provision. The result of the renewed interest led to the increasing demand for the authoritative measurement of mental health treatments and the development of clinical practice guidelines such as those for major depressive disorders (Munoz et al., 1994). While it would not be suggested that United Kingdom trends directly follow the American lead, it would seem likely that similar pressures may well be influencing the National Health Service. As a result it is clear that consideration of changes in America may provide useful information for National Health Service providers. There is clearly a large volume of research on the efficacy of psychotherapy and out-patient therapy is proposed as a highly cost-effective alternative to much more costly in-patient care. Pallack and Cummings (1994) acknowledge the restriction of payment in relation to therapy services. While this may seem somewhat difficult to consider in practical terms Lambert (1991) reminds readers of the direct connection between reimbursement for services and outcomes and the clarity of this message within the National Health Service reforms.

4.2.8 Purpose and Aims of Present Study

Berger (1996) reports that there is a clear need to develop local outcomes studies to inform and guide commissioning behaviour. This information would be in addition to the evidence-based approach. Berger (1996) also highlights that clinical practice requires the use of outcomes data on a constant basis. However, usually the collection and use of such information may not be as systematic as would be appropriate for an overall evaluation of effectiveness. It is important to emphasise that to increase the likelihood that services will be commissioned it may be necessary to demonstrate the effectiveness of the service. This information is likely to be given increasing importance within the decision-making process regarding funding.

Consequently it is essential that Clinical Psychology Departments are able to provide appropriate information about both the outcomes and effectiveness of their activities. Berger (1996) concludes that 'the challenge is to create an objective and acceptable approach to the evaluation of psychological interventions' (pp. 20). It is with this specific aim uppermost that the current study was designed.

Stated more formally the current research aims to investigate the psychological treatment and service effectiveness of the out-patient Clinical Psychology service for adults in the North Down and Ards Trust. The need to provide relevant data has already been discussed. The implications for clinical practice will be examined within the results obtained and a system designed to demonstrate the effectiveness and quality of the service provided in this locality.

In summary, the literature reviewed highlights factors which have influenced the necessity of conducting effectiveness studies (Lambert, 1991). The demand for relevant information about treatment outcomes has been considered (Marmar, 1990). The shift in emphasis for professionals (Halstead, 1996; Cape, 1995) will empower the clinicians in the task of informing the necessary stakeholders (Newman and Tejeda, 1996).

In order to examine the effectiveness of the Psychology service, it is necessary to operationalise the term. This will be the observation of changes on the psychometric scales. In addition, the reason for discharge at the end of treatment will be considered to obtain information about therapist views and patient behaviour. The results will provide relevant information regarding the current organisation of the service in terms of the waiting list and the outcomes approach operating within the Psychology Department. Within this context, the following hypotheses will be investigated to achieve the overall aims of this study.

1. The scores on the psychometric scales will be significantly lower for post-treatment than pre-treatment. This is based on the assertion that the question of the effectiveness of therapy is less of an issue (Eysenck, 1994).

2. The changes on the psychometric scores will not be significantly influenced by diagnostic group.
3. There will be no relationship between change on the psychometric scores and demographic variables.
4. The waiting list time will not affect changes on the scales.

These hypotheses have been formulated from the literature reviewed regarding identified influences on treatment outcomes. The results of Study I (3.4) did not support differences in scores among diagnostic groups or demographic variables therefore it would be unlikely that these variables would influence treatment outcome. The findings of Study I that those scoring highest on the GHQ were seen most quickly would support the view that the probability that the more distressed could be adversely affected by waiting time led to the following hypotheses. If it is assumed that more distress requires more treatment input then the following hypotheses would seem appropriate:

5. Those seen for more sessions will show greatest change on the scores.

The correlation of effective treatment, achievement of identified goals will have demonstrated agreed discharge and therefore:

6. Greater change will be observed for those discharged with agreement and having achieved identified goals.

The investigation of these hypotheses will provide further information regarding service provision in North Down and Ards and will serve as a basis from which to make meaningful statements about the effectiveness of clinical practice.

4.3 METHOD

4.3.1 Design

The design employed in this investigation was that of repeated measures as all subjects were tested at the beginning and end of treatment. There were no measures taken before the initial clinical assessment. The dependent variables were the responses made on questionnaires. Other variables were therapist attended, duration of treatment and level of satisfaction with treatment outcome.

4.3.2 Participants

There were 93 participants who had been referred to the Clinical Psychology Department by their General Practitioner or Consultant Psychiatrist for treatment. There were 35 males and 58 females. The mean age for the males was 41.51 years, sd 11.56 and for the females was 39.67 years, sd was 14.46 years. Overall mean age was 40.37 (sd 13.4 years).

4.3.3 Materials

Three standardized psychometric measures were used: the Beck Anxiety Inventory (BAI) (Beck and Steer, 1987); the Beck Depression Inventory (BDI) (Beck, Rush, Shaw and Emery, 1979); and the General Health Questionnaire

(GHQ 28) (Goldberg, 1978). These were used in Study I (3.0) and the psychometric properties are detailed in 3.3.5-3.3.7. All participants were asked to complete the questionnaires after their initial appointment and at the end of active treatment intervention they were asked to complete the questionnaires again. This did not include follow-up appointments but when both the patient and the therapist agreed that active treatment was no longer ongoing. This could have been, but was not always, a discharge, nor did it mean that it was when the patient was last seen as follow-up appointments were not included.

4.3.4 Procedure

Each participant was given the same instructions as outlined in the Procedure for Study I regarding the use of the scales and each subject was asked to complete the questionnaires and return them to the Department as soon as possible after the last treatment session. In this way each participant contributed two scores on all the questionnaires. Upon completion of each set of measures all subjects were thanked for their co-operation and their scores were discussed. Data collection was carried out from January 1995 to July 1996 and consequently overlapped with Study I for this time. Stages in the data collection are shown below in Table 4-1.

Table 4-1: The Data Collection in Relation to Routine Clinical Practice

Receipt of Referral	**Initial Appointment**	**Second Appointment**	**Subsequent Appointment**	**Last Treatment Appointment**
Placed on waiting list.	Clinical Assessment. BAI, BDI, GHQ.	Routine clinical session with opportunity to discuss questionnaire results.	Routine clinical practice.	Repeat administration of BAI, BDI, GHQ.

4.4 RESULTS AND ANALYSIS

As with Study I, the analyses of these results used both description of demographic details and statistical analyses of psychometric scores. The latter were analysed using the SPSS computer package.

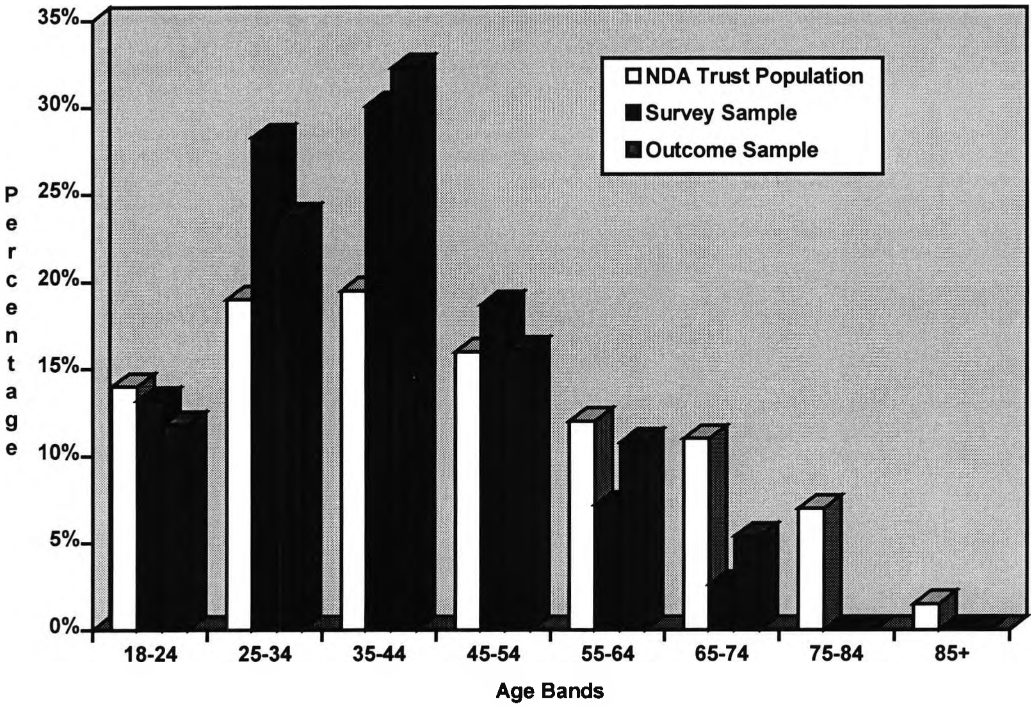
Mean differences are explored, for the most point, using Analysis of Variance. Scaling assumptions to justify the use of this test inherent in the psychometric properties of the respective instruments. Pairwise comparisons (of the Bonefiori type) are not, however, generally employed due to inequalities of cell size and to the need to draw attention to specific mean levels, pursuant to the aims of the investigation.

4.4.1 Demographic Results and Analysis

Fig 4-3 over shows the population age distributions for the survey sample and the outcome sample together, for comparative purposes with the age distribution of the population served by the Trust (DHSS, 1992).

To analyse and interpret any outcomes data it must be placed within the context of the population sampled. Consequently it is necessary to provide relevant information for the population within this study and those attending the service for whom only one set of measures were available.

Fig 4-3: ***The ages of the general population in the NDA Trust, the survey sample (Study I) and the outcomes sample (Study II)***



From Fig 4-3 it can be seen that the outcomes sample is fairly close in percentages of those in age groups for the survey sample (Study I, 3.0) and is different from the general population of the area by being over represented in the 25-54 year bands. While no selection of patients was applied for the current study it is clear that the patients are representative (by age) of those attending clinical psychology clinics.

Compared with the survey sample, the outcomes sample is also highly representative on the basis of sex. This is shown in Table 4-2 over.

Table 4-2 The percentage of males and females in the Trust, survey and outcomes samples

Sex	Trust Population (DHSS, 1992)		Survey Sample		Outcomes Sample	
	%	n	%	n	%	n
Male	47	47486	36.5	165	37.6	35
Female	53	53452	63.5	287	62.4	58
Totals	100	100938	100	452	100	93

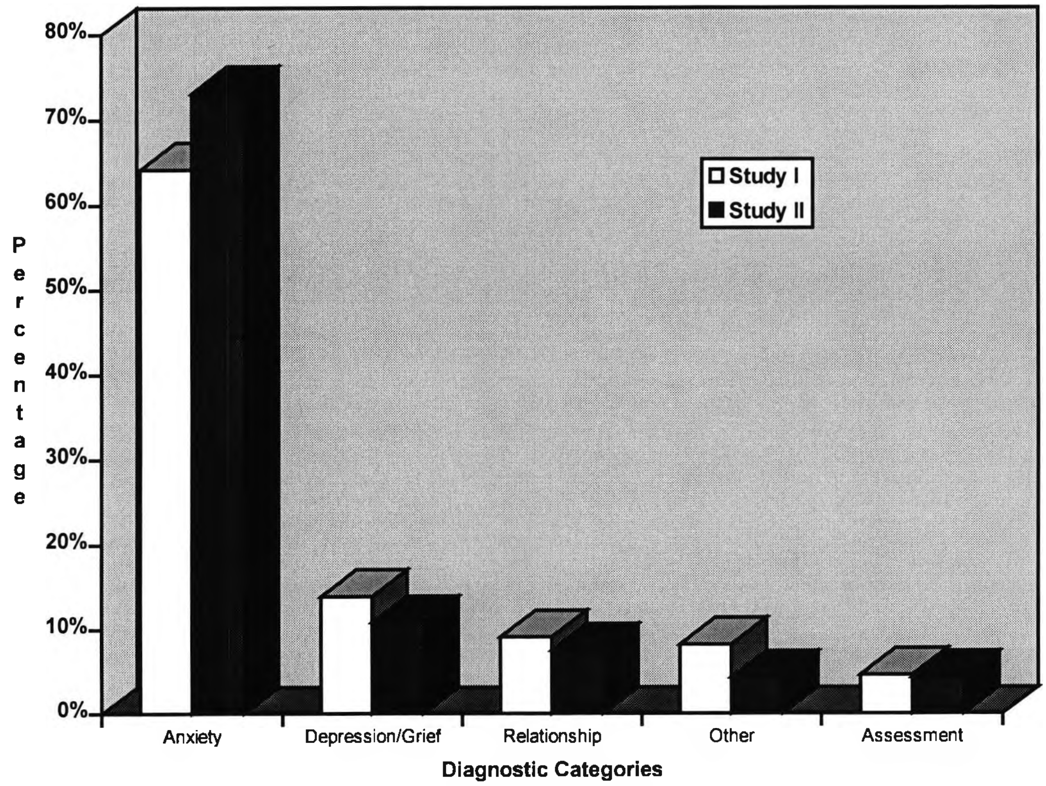
The representatives are also shown in relation to domicile with 6.5% in the outcomes sample coming from rural areas and 7% in the survey sample were rural. In the urban location there were 93.5% in the current study and 94% in the survey sample. There is some difference in the percentages in the marital status categories between the two samples and this is shown in Table 4-3.

Table 4-3 The percentage of survey and outcomes sample in each of the marital status categories

Marital Status	Survey Sample		Outcomes Sample	
	%	n	%	n
Single	27.7	125	21.5	20
Married	58.8	265	61.3	57
Divorced	4.9	22	4.3	4
Widowed	2.6	12	5.4	5
Separated	4.9	22	7.5	7
Other	1.1	5		
Totals	100	451	100	93

From Table 4-3 it can be seen that there is a higher percentage of widowed and separated in the outcomes sample (5.4% and 7.5% respectively) than in the survey sample (2.6% and 4.9%). It is difficult to be clear why this difference has been found as the sample is very representative on most other demographic variables. It is possible that these groups are more distressed and are consequently more likely to persist in treatment that other groups. The relevance and other considerations will be provided in the discussion (4.5). The other marital status categories are quite similar. Further evidence of the representatives of the outcomes sample and the overall survey sample is seen in Fig 4-4 overleaf which shows the percentage distributions of diagnostic categories.

Fig 4-4 The percentage of each of the diagnostic categories in the survey sample Study I) and the outcomes sample (Study II)



It can be seen that anxiety is the largest category in both. There are less in the 'other' category in the current study (4.3%) compared with Study I (8.2%). The assessment category was for those referred for assessment and treatment with no diagnostic category identified.

Overall it is clear that the current sample closely mirrors the survey of those patients using the Clinical Psychology Department in terms of age, sex and diagnosis. The outcomes sample does have a higher proportion of widowed and separated patients.

4.4.2 Psychometric Results and Analysis

To examine treatment effectiveness it is necessary to analyse the psychometric scales before and after treatment. 't' tests were carried out to determine the significance of any changes. The results are presented in Table 4.4 below:

Table 4-4 't' tests on reduction in post-treatment scores for the BAI, BDI and the GHQ scored in two different ways

Scale	Mean Difference	't' value	df	2 tail significance
BAI	-4.68	-3.77	92	0.000
BDI	-6.31	-6.28	85	0.000
GHQ 2 used in Study I and II	-5.53	-5.37	72	0.000
GHQ 1	-12.21	-5.64	72	0.000

From Table 4-4 it can be seen that there was a significant reduction between pre and post treatment scores on the BAI ($p = 0.00$) and the BDI ($p = 0.000$) and the GHQ 2 ($p = 0.000$). The GHQ 28 can be scored in two different ways, referred to here as GHQ 1 and GHQ 2. The first method will provide more information by providing four subscales (somatic symptoms, anxiety and insomnia, social dysfunction and severe depression) in addition to the total score.

For the purposes of this study it was felt that it would be sufficient to have an overall score on the GHQ. The scores on the GHQ 28 were scored using the more detailed method and scored (0, 1, 2, 3) (GHQ 1) and the traditional way (0, 0, 1, 1) (GHQ 2). These were highly significantly correlated between initial scores ($r = .96$, $p = .000$) and second scores, ie post-treatment ($r = .95$, $p = .000$).

This would further support the view that either method of scoring would be suitable in the current study. At a clinical level it is often useful to consider the subscale details for individual patients and this would occur in routine clinical practice, however in this study the data were not analysed using the subscales. In Table 4-4 the analysis is presented for both scoring methods as a comparison with Study I which used the second method of scoring. This was also more practical given the larger sample size in Study I (n = 452) and each subject provided total scores rather than four subscales and a total at each testing.

Table 4-4 shows that with both scoring methods there is significant (p = 0.000) improvement in GHQ scores.

Having found that there are significant differences on all the psychometric measures before and after treatment the mean improvement scores will be used to investigate other influencing variables. Initially demographic details will be examined and then the referral agent and diagnoses will be considered. The mean improvement scores on the psychometric measures are presented in Table 4-5.

Table 4-5 The mean improvements and standard deviations on the three psychometric scales for marital status, sex, domicile and age

	BAI			BDI			GHQ		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Marital Status									
Single	6.80	16.32	20	5.65	6.75	17	4.94	10.70	17
Married	3.07	10.15	57	5.87	9.39	53	5.59	8.42	46
Separated	11.71	13.76	7	15.14	9.53	7	9.5	5.74	4
Divorced	-0.25	11.27	4	-1.25	9.32	4	1.50	8.10	4
Widowed	8.6	3.65	5	7.00	10.95	5	9.5	10.61	4
Sex									
Male	4.64	14.39	35	4.64	7.7	28	4.87	11.97	23
Female	4.72	10.36	58	7.12	9.98	58	5.84	7.04	50
Domicile									
Rural	9.0	17.25	6	7.2	5.26	5	11.75	11.29	4
Urban	4.38	11.59	87	6.26	9.54	81	5.17	8.61	69
Age									
18-24	5.73	14.95	11	4.44	8.73	9	1.50	10.71	10
25-34	7.23	15.82	22	9.1	10.96	21	7.89	8.70	19
35-44	0.63	10.46	30	5.58	7.75	26	3.79	7.46	19
45-54	6.13	8.65	15	7.8	11.7	15	7.21	9.22	14
55-64	8.1	8.06	10	6.0	6.13	10	5.43	8.96	7
65-84	4.2	4.02	5	-2.0	3.16	5	7.00	8.83	4

Variance is high, showing the range of outcomes reflected in the improvement scores. This range is around an overall, significant improvement effect, as shown in Table 4-4. In some individuals, of course, improvement is not shown in the predicted direction on each of the scales. This is often associated with heightened sensitivity, consequent to intervention, to issues of a psychological nature not central to the problem at hand. Thus, for example, a patient treated for depression may appropriately show reduction in the BDI score but the self-awareness inherent in treatment might well result in increased level of reporting on the items of the BAI, increasing the anxiety score.

The results shown in Table 4-5 are discussed in relation to each test.

BAI

From Table 4-5 it can be seen that the greatest mean improvements were for the separated group. The married group had the lowest mean improvement while the divorced group increased their scores. There were similar mean improvement scores for both sexes, while the rural patients had a greater mean reduction in their anxiety scores. The age group with the highest mean reduction was for 55-64 year olds.

BDI

Table 4-5 shows that the greatest mean improvement on the BDI was again in the separated group and that the divorced group had higher post-treatment scores than pre-treatment scores. It should be noted that this results could be influenced by one or two patients given the small group size (n = 4).

GHQ

On the GHQ, as shown in Table 4-5 the greatest mean improvements were in the widowed and separated groups but again the sample size in these categories was too small (n = 4 and n = 4) to justify further consideration. The married and single groups showed similar mean improvements. The males and females made similar mean improvements on the GHQ. Those living in the urban areas showed a lower mean improvement than the rural patients. The lowest mean improvement scores on the GHQ was obtained by the youngest age category (18-24 years). The next largest mean improvement scores were in the 35-44 year old group with the greatest mean improvements in the 25-34 year olds.

There was a greater mean improvement on the BDI for females while the rural versus urban groups were similar. The 25-34 year old group showed the greatest mean improvement and the 65-84 year group got worse. Again the latter group was small in size (n = 5).

To further examine factors influencing improvement scores with treatment ANOVA were carried out with each of the scales and the variables of marital status, sex, domicile and age. The results are presented below in Table 4-6. On the BAI and GHQ, there were no significant relationships. On the BDI, marital status was found to make a significant difference to mean improvement scores (p = .043). Those in the separated category making the greatest improvement in their level of depression.

Table 4-6 The ANOVA results for the three scales with marital status, sex, domicile and age

Source of Variance	Sum of Squares	df	Mean Square	F	Significance
BDI					
Marital Status	944.45	4	236.11	3.12	.02

Table 4-7 The mean improvement scores and standard deviations for the three psychometric scales for diagnostic categories

Diagnostic Group	BAI			BDI			GHQ 2		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Assessment	-2.25	13.23	4	7.0	8.54	3	3.50	0.71	2
Anxiety	4.51	12.05	68	4.4	8.86	62	4.63	9.53	52
Depression/Grief	5.40	12.58	10	12.5	9.06	10	9.78	7.48	9
Relationship	9.71	12.91	7	11.7	10.92	7	7.00	5.90	6
Other	3.75	5.79	4	10.5	6.46	4	6.5	5.97	4

The variances in Table 4-7 show some degree of inequality and thus may prejudice the homoscedasticity assumption for the ANOVA reported in Table 4-8. The greatest variance is shown in the residual diagnostic category, as may be expected. Hay (1994) demonstrates the relative robustness of ANOVA to modest breaks of the assumption and therefore the analysis has been proceeded with.

Given the number of psychiatrist referrals compared with GP referrals, it was inappropriate to examine this relationship further. The relevance of diagnostic categories was considered relevant and the mean improvement scores were calculated (as shown in Table 4-7) for each diagnostic group. Those referred for assessment of their difficulties became more anxious but showed improvement on the BDI and GHQ while those in all other categories improved on all three measures. On the BAI those with relationship problems showed the greatest mean improvement.

On the BDI the depression and grief group, as might be expected, showed the highest mean improvements while the anxiety group showed the smallest improvement in their depression scores. On the GHQ the depression/grief category also improved the most with a much smaller improvement in the anxiety group.

These results highlight the importance of sample size and maintaining an awareness of this when considering findings of any study. For the diagnostic categories shown in Table 4-7, those categorised by the referral agent as requiring an assessment became more anxious. One explanation could be that with a psychological assessment and intervention the patients (n = 4) became more aware of their symptoms and an increased score could be indicative of more accurate self-report. Any comments regarding such a small sample must be incurred cautiously. Those presenting with relationship problems showed the greatest mean improvement on the BAI.

In order to further examine the influence of diagnostic category and improvement scores, ANOVA were carried out with each of the scales and diagnostic category. The results are presented in Table 4-8 below.

Table 4-8 The ANOVA results from the improvement scores on all scales with diagnostic category

Source of Variance	**Sum of Squares**	**df**	**Mean Square**	**F**	**Significance**
BDI					
Diagnostic Category	884.68	4	221.17	2.75	.034

From Table 4-8 it can be seen that Diagnostic category makes a significant difference (p = .038) to improvements on the BDI. On the BAI and the GHQ no significant effects on diagnostic category were identified.

Waiting List

The mean waiting list duration was 13.68 weeks (sd = 8.2 weeks). In Study I it was found that those most distressed on the GHQ were seen more quickly. It was considered important to examine any relationship between the waiting list, mean improvement scores and number of therapeutic sessions.

No significant correlations were found among mean improvement scores on any of the scales, BAI, BDI or GHQ or sessions and waiting list time of this would further support the results of Study I in that there does not appear to be evidence of negative effects of the waiting list on scores or sessions needed. This may be explained by the most distressed on the GHQ being seen most quickly (r = -0.14, p = .005).

Sessions

With increased interest in outcomes there has also been on occasions a requirement to specify treatment duration. This is particularly the case when formal service contracts are established. Consequently it is important to examine this aspect within the current study. The maximum number of sessions was nineteen.

On the three psychometric scales it was found that the following percentage of cases had eight sessions or less, on the BAI - 93.1%, on the BDI - 92.4% and on the GHQ - 92.7%.

Given the findings of Howard et al. (1986) in relation to the data were analysed in three categories of session numbers, 2 sessions, 3-8 sessions and 9-12 sessions. The mean improvements on each of the questionnaires for the three categories are presented below in Table 4-9.

Table 4-9 ***The mean improvements and standard deviations on the three psychometric scales for three groupings of session numbers***

	BAI			**BDI**			**GHQ**		
Sessions	**mean**	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
2	2.43	9.38	14	3.09	9.77	11	4.36	5.73	11
3-8	5.67	11.79	54	7.18	9.24	50	6.15	9.95	40
9-12	5.67	17.04	3	5.33	2.89	3	3.00	9.90	2

From Table 4-9 it can be seen that on all three scales most patients had up to eight sessions with 3-8 being the most common grouping. On the BAI, the mean improvement for 3-8 and 9-12 sessions is the same (5.67). There is a lower mean improvement for two sessions (2.43). On the BDI, the greatest mean improvement is in the 3-8 session group (7.18), while again the smallest mean improvement is found for two sessions (3.09). On the GHQ, the results are as for the other two scales in relation to the greatest mean improvement for the 3-8 session group (6.15). However, the lowest mean improvement on the GHQ was in the 9-12 session grouping. It is not possible to make any further interpretation regarding this finding as the sample size in this category is small (n = 2). This caution is also applicable to the 9-12 session grouping for both the BAI and the BDI (n = 3 in both cases). An ANOVA was carried out between mean improvement scores on each of the three scales and session groupings and no significant effects were found.

The relationship between the improvement scores on the scales and the number of sessions was examined using correlation coefficients. The results are presented below in Table 4-10.

Table 4-10 The Correlation Matrix among improvement scores on all scales and the number of sessions

	BDI	**GHQ 2**	**SESSIONS**
BAI	.4424 n = 86 p = .000	.633 n = 73 p = .000	.2536 n = 73 p = .03
BDI		.6993 n = 72 p = .000	.2487 n = 66 p = .04
GHQ 2			.2425 n = 55 p = .007

Table 4-10 shows low but significant correlations among the BAI and BDI scales and sessions (sessions with BAI, r = .25; BDI, r = .25; GHQ, r = .24) indicating the effect of sessions on greater improvement scores. The Table 4-10 also shows high correlations in the improvements on all measures. The improvements on the GHQ correlates with the improvements on the BAI (r = .63, p = .000) and the improvements on the BDI (r = .699, p = .000). The improvement on the BDI and the improvements on the BAI correlate significantly but not as highly as the GHQ (r = .44, p = .000).

From Table 4-10 it can be seen that there are variations in the number of patients contributing to the data for analysis. This differs for each of the scales, GHQ improvements and sessions n = 55 compared with n = 73 for the correlation between sessions and improvements on the BAI. Reasons for missing data must be considered as this aspect is critical in the design for future work.

These results provide evidence of treatment effectiveness in that improvements on the scales correlate significantly with therapeutic sessions. It could be argued that initial scores influence these correlations rather than treatment. A correlation coefficient analysis was carried out for initial scores on the BAI, BDI and GHQ and sessions. None of the correlations were significant (p ranged from .68 to .85) thus confirming the evidence for the relationship between improvement and sessions.

Discharge Codes

In the North Down and Ards Community Trust the information system for recording patient information in Clinical Psychology has included details on reasons for discharge no further contact. These discharge codes have been established to be of use when examining service outcomes but also are required for use on a practical basis. Consequently the codes are limited in number and this could restrict the information obtained. The codes are as follows: discharged without specific therapeutic goals having been established; onward referral to other part of mental health services such as Community Psychiatric Nurses or Psychiatry; unable to benefit from service; inappropriate referral; contact by patient to agree discharge; discharged having achieved agreed goals; or discharged following not attending or failing to contact the department as requested. The code of 'inappropriate referral' was included in the present study as it would be possible to see a patient on a number of occasions before being sufficiently clear that the Psychology Department could not offer a service that might be wanted by the patient. The code of being 'unable' to benefit from the service would include cases where it was identified that the patient was not considered by themselves or the therapist as being unable to benefit. This could be due to limited intellectual functioning or the desire not to pursue emotional material like childhood sexual abuse.

The positive outcome codes are considered to be, 'goals achieved' and 'contact by patient to agree discharge'. Discharge following a non-attendance could be positive or negative and is dependent upon informal communication from the referrer providing additional information or occasionally re-referral to the department. The results relating to discharge codes and scales will initially examine the mean improvements and if appropriate ANOVA will be carried out. Table 4-11 shows the means and standard deviations of final scores on each scale by discharge code.

Table 4-11 The mean and standard deviations for post-treatment scores on the three psychometric scales and discharge codes

Discharge Codes	BAI			BDI			GHQ		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Goals achieved	9.64	8.64	55	8.55	8.35	55	3.28	5.55	47
Patient contact	15.29	9.46	7	15.43	7.48	7	8.67	9.65	6
No goals	33.00	18.47	6	26.40	18.57	5	19.00	10.35	6
Discharge after DNA	18.92	14.50	12	15.75	13.16	12	8.18	9.65	11
Inappropriate referral	29.00		1	25.00		1	17.00		1
Onward referral	18.00	14.14	2	28.50	24.75	2	25.00		1
Unable to benefit	24.00		1	41.00		1			

From Table 4-11 it can be seen that the highest mean final scores on the BAI were for the group for whom no treatment goals could be established. On the BDI, this group was the highest of the groupings if single cases (inappropriate referral and unable to benefit) and groups of two (onward referral) are excluded. It would seem reasonable to exclude these categories from this description given that they represent small numbers and were only seen for a limited number of sessions (maximum three). The group for whom no goals were identified also had the highest mean final score on the GHQ. The lowest post-treatment scores on all three scales was the group discharged and had achieved their agreed therapeutic targets. This would indicate the consistency between the therapist view of discharge and the reduction of symptomatology as indicated by the scores.

Table 4-11 also shows that the group who contacted to arrange discharge had the lowest mean final scores on the BDI and second lowest on the BAI. The next lowest mean final score on the GHQ was the group who were discharged following not attending a review appointment. Such results would support the view that although non-attendance could be viewed as a negative outcome, the psychometric results of those who returned their post-treatment questionnaires show favourable improvements in symptomatology as measured by the three scales.

ANOVAs were carried out for each of the post-treatment scores on three measures by discharge codes to determine the significance of the relationships described. The results of the ANOVA are presented in Table 4-12.

Table 4-12 ANOVA for post-treatment scores on the BAI, BDI and GHQ by discharge codes

Source of Variance	Sum of Squares	df	Mean Square	F	Significance
BAI					
Between Groups	3617.7	6	603.0	4.98	0.0003
Within Groups	7753.2	64	121.1		
BDI					
Between Groups	3167.7	6	528.0	4.50	0.0007
Within Groups	7395.6	63	117.4		
GHQ 2					
Between Groups	1836.8	5	367.4	6.39	0.0001
Within Groups	3048.6	53	57.5		

From the results in Table 4-12, it can be seen that there is a highly significant effect between the post-treatment scores and discharge code. On all three scales, those discharged having achieved their targets scored significantly lower than other categories at post-treatment scoring. These results confirm that those discharged as having achieved their agreed targets have significantly lower symptomatology as measured on the three psychometric tools. This also indicates high consistency between therapist assessment at discharge and patient reports of symptomatology.

To further investigate this consistency it was considered necessary to examine the relationship of discharge codes and mean improvement scores. This was to examine the question of whether high mean improvement scores influenced discharge category or whether discharge category was related to clinical presentation and symptomatology at time of discharge. The latter being supported by the results presented in Tables 4-11 and 4-12. The mean improvement scores for each of the diagnostic categories on each of the three scales are presented below in Table 4-13.

Table 4-13 The mean improvement scores and standard deviations for each of the discharge codes on the BAI, BDI and GHQ

Discharge Codes	**BAI**			**BDI**			**GHQ**		
	mean	**sd**	**n**	**mean**	**sd**	**n**	**mean**	**sd**	**n**
Goals achieved	7.51	11.14	55	8.85	8.90	53	15.56	15.30	43
Patient contact	3.71	9.39	7	4.17	8.59	6	9.83	15.94	6
No goals	-1.67	16.93	6	.25	15.09	4	1.25	35.27	4
Discharge after DNA	3.75	11.51	12	5.36	7.03	11	10.27	23.31	11
Inappropriate referral	-13.00		1						
Onward referral	-3.50	6.36	2	0.00	2.83	2	8.00		1
Unable to benefit	6.00		1	-2.00		1			

Table 4-13 shows that the greatest mean improvement on the BAI were made by those achieving their targets. Other categories that became more anxious at discharge were those who did not identify any goals (n = 6), an inappropriate referral (n = 1), and those referred elsewhere (n = 2). The scores of those who contacted the department to agree discharge and those who were discharged following a non-attendance were comparable (mean = 3.71 and mean = 3.75 respectively). The one case within the sample who was categorised as being unable to benefit did have a reduced level of anxiety post-intervention. This is presumably accounted for by clarification of the problems as a result of assessment and input. It could not be considered indicative of any significant overall improvement when the results of the BDI are considered. These results show that this patient scored more highly on the BDI while being less anxious.

On the BDI, those achieving their targets by discharge were again showing the largest mean improvement. Those discharged after not attending their review appointments showed the next greatest mean improvement, followed by those who contacted to agree discharge. Those patients who were unable to identify goals showed minimal improvements (mean = 0.25).

On the GHQ, the group who achieved their targets showed the greatest mean improvement and again those discharged after not attending their review appointments. Next were those who contacted to agree discharge, with those unable to identify any goals. The one patient referred elsewhere also showed improvement but again it is difficult to make inferences based on a single case within an analysis of groups.

Consistently these results show that across the three measures, greatest mean improvements are shown by those who achieve their targets. The overall results also show that non-attendance at review appointments is not indicative of a negative outcome, given the reduction in symptomatology shown on all measures. Those for whom goals have not been identified show little improvement on the BDI and GHQ and become more anxious.

ANOVAs were carried out on the mean improvement scores on all scales and discharge codes and there was no significant effect observed.

4.4.3 Summary of Findings

The outcomes sample is highly representative of those attending Clinical Psychology clinics in terms of age, domicile and sex. There are more separated and widowed within the current sample than those generally attending and it was found that there are significant reductions on all scales at the end of treatment.

Those who are divorced are more anxious and depressed post-treatment although those who are separated improved most in their anxiety and depression than any of the other marital status groups. Females showed greater improvements in their depression than males and there is no significant difference in treatment of anxiety or depression between men and women or rural and urban localities. General Practitioner-referred patients significantly reduce their anxiety levels with treatment while patients diagnosed as grief/depression become significantly less depressed with treatment. Age, nor waiting list, does not affect improvements with treatment although improvements on all scales are significantly correlated with the number of sessions - more sessions increase improvements.

The findings also showed that not attending review sessions is not indicative of a poor or negative therapeutic outcome. While discharge status is significantly related to final level of distress rather than improvements, there is high agreement between therapist rating of outcome at discharge and reported symptomatology.

4.5 DISCUSSION

The overall aim of this study was to investigate the psychological treatment and service effectiveness of the out-patient Clinical Psychology Department for adults in the North Down and Ards Trust. The theoretical framework has been to examine relationships between demographic data and psychometric measures to provide a suitable context for outcomes assessments. Using this information in combination with the findings of Study I (3.3) the aim will be to develop a model of outcomes that can be practically implemented in routine clinical practice. The psychometric tools used in the current study were identified as appropriate and useful in the result of Study I (3.0).

To provide a relevant background for the interpretation of the outcomes data it is necessary to establish the representatives of the study sample. To do this the current sample, the 'outcomes sample', was compared with the sample in the 'survey' of those attending the Clinical Psychology Department, the 'survey sample'. The results showed that for age, sex, domicile and diagnosis, the 'outcomes sample' is highly representative of those attending the service and surveyed in Study I (n = 453), (3.0). There is a small difference between the samples in terms of marital status, with Study II having a greater representation of widowed and separated patients. It is possible that this may be indicative of those who have developed a significant level of distress as a result of their losses and inability to adapt to their situations. There is no evidence to support the view that their level of distress is not significant. Rather the evidence from identified 'cases' on the GHQ (Table 3-9) showed that 99.3% of patients referred to Clinical Psychology were considered to be 'cases'.

Given the high level of representatives of the 'outcomes' sample the confidence in the generalisability of the obtained results is much greater than would be possible if a system of participant inclusion criteria had been used. Instead this study has been carried out with routine patients in a routine clinical environment in the absence of any additional resources.

One of the advantages of the duration of the overall research, three years, has been the acceptance of the approach into everyday clinical practice. Clarke (1995) acknowledges that to increase the generalisability of results it may be justifiable to increase the heterogeneity of samples. This is no doubt applicable to research for academic and theoretical advancement but in reality is a necessity given the current emphasis on evidence-based purchasing.

Under the overall aim of investigating the effectiveness of the Clinical Psychology service in North Down and Ards Trust a number of specific hypotheses were proposed and these will now be considered in relation to the results obtained. The first of these hypotheses proposed that the scores on the psychometric scales would be significantly lower at post-treatment assessment than for pre-treatment. The results (Table 4-4) show that on all three psychometric measures there was a highly significant reduction from pre-treatment scores (p = .000 on BAI, BDI and GHQ). Given the level of significance of the reduction in scores this would be seen as appropriate evidence of the effectiveness of routine clinical practice within a typical community environment. Such results would be in accordance with the positive claims regarding psychotherapy effectiveness (Eysenck, 1994). Within the requirements of evidence-based purchasing it is results of this sort that will be necessary irrespective of the level of sophistication of the process analysis. These results must also be considered in relation to work of Weisz et al. (1995) who reviewed child therapy outcome studies. They found that clinic-based effectiveness studies produced less positive results than research studies. The variables identified as influencing more positive outcomes in clinical practice were specific and focused approaches, and the use of behavioural approaches. Both of these aspects would be seen as part of the approach in the Psychology Service in North Down and Ards.

The basic theoretical orientation of the Clinical Psychology service in the Trust is that of a cognitive-behavioural approach and, since April 1993, an outcomes based approach has been developing within the service. Both the current studies are based upon this approach and further details of the present stage of implementation is provided in 4.5.5. At a general level, specific goals are agreed with each patient at the initial assessment session and an individually-tailored treatment plan is established.

This provides the basis for sessions and there is ongoing monitoring of progress towards the targets and modification when necessary. The supervision process within the department also used the same outcomes model and provides a framework within which to conceptualise difficult or problematic cases. The use of common terminology improves the communication about cases and also eases the identification of therapist issues regarding cases also. This approach works easily within a cognitive-behavioural paradigm and in the Clinical Psychology Department it is likely than an analytical psychotherapeutic approach might make integration of such an ‘outcomes’ approach more difficult. Within the Trust there are plans to extend a specific outcomes method of working across all programmes of care and issues such as generalisability and integration will be addressed at that stage.

The second hypothesis proposed that there would be no relationship between change on the psychometric scores and demographic variables. The ANOVA on the improvement scores showed no significant effects on the BAI or the GHQ with marital status, sex, domicile or age. However, on the BDI, marital status was found to be significant ($p = .043$) as shown in Table 4-6. Those in the separated category made in the greatest improvement in their depression. This finding could be explained in terms of the loss associated with marital breakdown and subsequent depression. It may be the case that this stage can be more depressing than the divorced stage. Such influences would require further investigation before more definite causal statements could be made.

The third hypothesis proposed that changes on the psychometric scores would not be significantly influenced by diagnostic group. This was based around the assumption that all patients have an individually tailored treatment plan with agreed targets or goals and consequently improvement would not be significantly affected by diagnosis. It could be suggested that some categories of disorders do less well with psychotherapeutic approaches than others but given the composition of diagnoses within the current sample this was not considered to have a high probability of affecting improvement scores There is also considerable evidence that for groups of more minor mental illness, as opposed to major psychiatric disturbance, cognitive-behavioural treatments yield improvements with a number of these diagnostic groups (Clark et al., 1988, Salkovskis and Warick, 1988, Hollon et al., 1992).

From the results obtained the hypothesis that changes on the psychometric scores would not be affected by diagnostic group was not upheld. Table 4-7 shows that the group referred for assessment (n = 4) became more anxious while those referred as suffering from depression and grief showed most reduction on depression.

The ANOVA (Table 4-8) showed that improvements on the BDI were significantly affected by diagnosis (p = 0.038). From such findings it is possible that the GPs making the diagnoses are more accurate at diagnosing depression and grief than with the other categories and consequently the psychometric scale developed to assess depression is more likely to be measuring what it purports to measure. This would be supported by the significant relationship effects between diagnosis and BDI. However the evidence of Study I showed a highly significant correlation between the BAI and BDI (Table 3-8, r = 0.622, p = 0.000) which was more suggestive of a mixed anxiety/depression diagnosis rather than being related to the psychometric properties of the scales.

Another possible explanation of the findings would be that the treatment received more effectively reduces depression, as measured by the BDI, than other symptoms. Or that the experience of depressive symptoms is indicative of a more intense level of illness than those diagnosed as anxious, if a linear view is held for anxiety/depressive illness. Consequently those who are depressed improve more as they are more removed from their usual functioning and their anxiety-type symptoms are more related to trait-like aspects of their personalities. The current results could be further evidence of the non-specific-distress factor that is purported by Clark and Watson (1991) to form an inherent core component of both anxiety and depression.

The fourth hypothesis was that the waiting list time would not affect changes on the psychometric scales. This was upheld in that no significant correlations were found among improvement scores on any of the scales or number of sessions or between these scales and the waiting list time. These results are also in accordance with the results of Study I (3.0) which did not find evidence of any relationship between waiting time on anxiety and depression. Those most distressed, as shown by high scores on the GHQ, were seen most quickly. Again this would support the maintenance of current service organisation. When referrals are received the referrer is required to prioritise the referral urgent or routine and two waiting lists operate accordingly. The psychiatric referrals are allocated to the urgent list on the assumption that those who are seen by psychiatrists are more seriously ill. They are seen to have higher mean scores on BAI and BDI. No further prioritisation of referrals takes place unless the referral agent contacts the Department either after receiving information about the waiting time or in response to the patients condition or symptoms.

The hypothesis regarding the relationship of improvement with sessions received proposed that those seen for more sessions would show greatest change. This was upheld with low but significant correlations between the scales and the number of sessions (Table 4-10). The results also demonstrated that this relationship was not due to initial scores as none of the correlations between sessions and initial scores was significant. Therefore, irrespective of initial level of symptomatology, the more sessions received the greater the improvement in symptoms as measured by the scales.

These results concur with the findings of others (Orlinsky and Howard, 1986) that the duration of treatment has a positive association with the degree of benefit. Howard et al. (1986) showed differential response rates to treatment for different diagnostic groups. Depressed patients responding to the lowest dosage with anxiety disordered patients next and then borderline psychotics requiring more. This study aimed to investigate the dose-effect relationship in psychotherapy. Probit analysis was carried out on a large number (n = 14) of studies in which the therapists were mainly psycho-dynamically or interpersonally oriented. There were no studies of primarily behavioural oriented therapists. The ratings of outcome were global and none involved psychological test data. The sessions ranged from one to one hundred and four. Thirty-eight per cent had improved by the third session irrespective of the eventual duration of treatment, while forty-eight to fifty-eight per cent had improved with four to seven sessions. Although the current study differs with regard to theoretical orientation there are interesting parallels in the findings regarding improvements in the first three sessions. However, the recommendation that those having less than six to eight sessions should be considered, for purposes of research, as appropriate to be categorised as drop-outs and refusers does not seem to be supported by the findings of either their own study or the current study. To apply this criteria for research purposes would seem to widen the discrepancy between research and clinical practice. This is particularly relevant in the current study with ninety-five per cent of patients being seen for eight sessions or less. If the scientist-practitioner model is to become more of a reality then it would seem of questionable benefit to exclude large proportions of service users.

Howard et al. (1993) proposed a phase model of psychotherapy outcome. In addition to differential response rates to treatment for different diagnostic groups (Howard et al., 1986) they regarded different aspects of patients' conditions as changing at different rates during the course of psychotherapy. The three phase model (improvement in subjective well-being, reduction in symptomatology and enhanced life functioning) presents life-functioning improvement as the final stage of effective therapeutic outcome and that improvements in this stage necessitate previous change in the other two areas. The end of the first stage (removalization), and the beginning of the middle stage, is identified by the patient's ability to have established a therapeutic relationship with an implicit contract of working alliance. The second phase relates to the resolution of the symptoms and reduction of life problems. Cognitive therapy and desensitization are recommended as suitable for inclusion at this stage. Attention is drawn to the potential for patients to terminate treatment when symptomatic reduction has occurred, before the final phase of rehabilitation. The analysis of data presented uses measures taken at sessions two, four and seventeen and show that by session seventeen, 67% had improved with regard to current life functioning. These results of self-report measures would seem to indicate a more rapid response to treatment than the previous work of Howard et al. (1986), particularly in relation to those having only six to eight sessions. Such findings emphasise the critical requirement to include self-report measures in any investigation of the effectiveness of services.

The current study has incorporated measures of self-report or standardised scales with therapist evaluation of goal achievement. It is of interest to note that the number of sessions is much lower in this study than for the psychoanalytically oriented work of Howard et al. (1986). The support for effectiveness of the current service being provided by both therapist evaluation, patient agreement and psychometric measures, irrespective of the initial level of symptomatology. The structuring of the treatment planning and discharge codes will now be considered.

In the Clinical Psychology Department in North Down and Ards Trust, it is aimed to have identified agreed therapeutic goals or targets with the patient by the end of the initial assessment or during session one. As described, the treatment is planned on the achievement of these targets. At discharge the therapist is required to record the reason for discharge in accordance with the categories described (pp. 194). This is regarded as the therapist's evaluation as well as an indication of the patient's view. The possible reasons include both positive and negative reasons for ending treatment. Positive reasons include the attainment of identified goals and contact by the patient to agree discharge. Negative reasons include no agreed goals, unable to benefit from treatment, onward referral and inappropriate referrals. The category of discharge following non-attendance of review appointments could be interpreted as negative but the results show (Table 4-11) that this group did show reductions in their symptomatology. It must be acknowledged that these results relate to those who did not attend but did return their questionnaires. It is not possible to generalise this finding to the whole group as data was not available for all of them.

The last hypothesis proposed that there would be greater change observed for those discharged with agreement and having achieved their identified goals. This hypothesis was supported by the results obtained and a highly significant relationship was found between post treatment scores on all the psychometric measures (Table 4-12). The results also confirmed that discharge code is significantly related to the post-treatment level of distress rather than the amount of improvement made.

This demonstrated the suitability of the coding system in that codes related to achieving treatment targets are significantly influenced by reductions in symptomatology, as measured by the BAI, BDI and GHQ. These results are very important when considering the design of an outcomes approach that is suitable for use in routine clinical practice and will be considered further in 4.5.5.

These methods of categorisation were developed in an attempt to avoid the difficulty of obtaining global ratings of improvement following intervention. It was felt that indicators of outcomes of treatment should be comparable across all patients without restricting the individualising of the treatment targets. In this was a system that was based on agreement initially would improve the collaboration between therapist and patient throughout treatment. Also it would facilitate joint evaluation at the end of therapeutic intervention and allow focus on the maintenance phase of progress achieved during treatment.

This system appears to overcome the problem of attributing one global rating, either by therapist or patient, to be seen to reflect the result of treatment. McPherson et al. (1996) present an audit of an adult mental health out-patient clinical psychology service and provide a six-point rating scale for the assessment of treatment outcome. There is no reference made to the criteria for different ratings. Consequently it is not possible to be clear about how a rating of 1 (very much improved), compares with 2 (much improved), or 5 (minimally worse). There appears to be a lack of specificity of what is being related. It could be overall level of functioning, which may or may not be directly related to the treatment provided. For example a patient presenting with high levels of social anxiety could have made significant improvements in relation to competence in social situations and the anxiety experienced while their overall functioning could be impaired at discharge by other events, eg death of a relative, work issues. The McPherson et al. (1996) audit does not make any reference to the patient's evaluation of outcomes. The current system in North Down and Ards would be considered to be one of which an attempt has been made to be specific about outcomes of treatment from the initial assessment. It involves collaborative working between the therapist and the patient, it is monitored on an ongoing basis and open to modification as required. Final assessment is conducted in a way that facilitates measurement and takes some account of both patient and therapist views.

The results reinforce the utility of the system used as discharge is shown to be significantly related to post-treatment scores. This demonstrates the consistency between the clinical judgement of the therapist and the patient's self-report on the questionnaires and at interview.

It can be concluded that this system of outcomes assessment with this population treated in this way be these therapists is effective at reducing symptomatology for a cost, which could be specified. Such research raises a number of other important considerations. One of the most pertinent being the effect of therapist factors within the debate of specific and non-specific effects on outcomes. These will now be considered.

4.5.1 **Therapist Effects**

While the current study provides evidence of treatment effectiveness it is important to consider these findings within the wider context of issues relevant to psychotherapy research. Whiston and Sexton (1993) provided an overview of the major trends in outcome research within psychotherapy. They examined studies designed to investigate therapeutic effects and identify factors that related to positive outcomes. They concluded that it was important to consider the factors which affect change and reviewed the following aspects, the therapeutic relationship, session factors, specific models and techniques and client experiences. These areas are frequently cited as suitable areas from which to specify the agents of change within therapy and have also been examined by others (Eysenck, 1994).

The therapeutic relationship is often regarded as one of the most significant influences as this represents the medium within which the techniques, skills, optimism are communicated, and patient experiences considered. Luborsky et al. (1988) reviewed research in this area and found that average correlations of $r = .57$ were reported between a positive therapeutic relationship and client outcome. In 88% of studies the relationship was significantly associated with positive outcomes. Whiston and Sexton (1993) draw attention to the perspective from which the therapist attributes are measured and emphasise the variability encountered from client, therapist or independent observers.

The research into the effect of the therapeutic relationship has moved to a position which acknowledges the interaction of the relationship and effects of patient involvement, level of warmth and acceptance. The literature reflects the need for contributions from both parties working in a collaborative relationship. Whiston and Sexton (1993) conclude that more than any other variable the relationship is more associated with positive outcome for the client. Orlinsky and Howard (1986) specified the joint investment, shared understanding within a very personal mutually respecting relationship was associated with effective therapeutic relationships.

The therapeutic relationship would be one of the significant non-specific aspects of treatment. 'Non-specific' aspects being those 'that produce change but are not specified in the theory of the relevant therapy (as opposed to 'specific' elements which are specified) (Oei and Shuttlewood, 1996, pp. 84). Other authors (Frank and Frank 1991) regard non-specific factors as central to any therapeutic change and there has been debate regarding the relative contributions and superiority of 'specific' versus 'non-specific' factors within therapy. Oei and Shuttlewood (1996) conclude that the continuation of this debate along the lines to date is not particularly useful in attempts to provide answers regarding change. Rather they propose examining these issues by using a specific therapy for a specific disorder. They provide an example of this model with Beck's cognitive therapy and depression. They conclude that under these circumstances both specific and non-specific aspects contribute to outcome with the former having more impact. However they cannot conclude that the specific aspects are unique to cognitive therapy. While their proposal provides an alternative method of approach to this longstanding debate it is difficult to identify significant advancement of the understanding of the contribution of this highly complex and dynamic variable of therapist-patient relationship.

The contribution of session factors to outcomes has also been widely examined and it has been reported that organisational aspects of the therapeutic session were not identified as having contributed significantly to overall outcome. The aspects considered were group or individual, frequency and method of payment (Whiston and Sexton, 1993).

The results provided by Howard et al. (1986) stress the clinical importance of patient involvement in the initial sessions. The previous review of the study, and more recent work by Howard et al. (1993), highlights the different requirements of research and clinical practice. The reasons for gaps between the two approaches are unlikely to be straightforward but the complexity should not validate avoidance. Eysenck (1994) appears to be referring to this gap when he claims that there is a tendency for those who practice Psychology to be not well informed of the scientific status of their practice. It would seem that the introduction of EBM is aimed at formally requiring service providers to address such lackings. This challenge will clearly be as demanding of psychologists as it will be for other professions competing for contracts to provide services. The comments of Flatt (1983) who concluded "the operation was a success, but the therapist is in the invidious though perhaps not-so-uncommon, position of being unable to explain precisely why" (pp. 72), would now seem to be very much out of place. While it may be unlikely that any explanations of successful treatments will ever be exact and precise, it is clearly a present-day requirement to be able to attempt to make relevant and meaningful statements linking resources, effectiveness and outcomes to secure the funding to provide services for various populations.

4.5.2 Methodological Limitations

Having considered the requirements for the future at a theoretical level the methodological issues of the study will be discussed with a view to future practical approaches for service provision in North Down and Ards Trust.

Issues regarding methodology of effectiveness studies represent studies which aim to address the question of whether treatment works in clinical practice. It is essential to differentiate this type of question from those addressing treatment effects in experimental conditions or is it working for this particular patient. The effectiveness question is examined by evaluation in naturalistic clinical settings and reports on mean group responses. The outcome is defined by changes in symptomatology, as measured by patient self-report and/or therapist rating and observations. Consequently, the methodology used by efficacy and effectiveness studies are required to be different (Howard et al., 1996). Clinical trial data does provide meaningful and useful information but does not address issues of co-morbidity, the influence of personality variables on presenting complaints and response to treatment, nor variations of a given disorder (Goldfried and Wolfe, 1996).

The current study (4.0) does not purport to be an efficacy study but rather an effectiveness study. Therefore, although Jacobson and Christensen (1996) regard the absence of a control group as a fatal flaw in effectiveness research, this conclusion cannot be applied to all studies of effectiveness in light of current trends. Elkin (1994) draws attention to the reluctance of ethical committees to permit trials considered to deprive patients of help. Also many studies are now comparisons of treatments. However, this effectiveness study is an investigation of effectiveness of treatment provided in routine clinical practice in a specific geographic area. The emphasis on demands for evidence-based practice providing the main context. Consequently the descriptive aspects are critical in relation to the demographic data and the lack of attempts to control variables is considered a reflection of the reality of clinical practice. This does not mean that the current study is without methodological limitations. These issues will now be presented.

Sample Characteristics

It would follow from the current study that the results are only applicable to those who completed post-treatment questionnaires. These patients either had achieved their treatment goals or no longer wished to pursue treatment, for whatever reason. Consequently it could be agreed that the results are limited. While this is accurate it does not mean that the results and findings do not provide useful information regarding service effectiveness for those who were included. Exclusion was only by patient choice and attrition is an effect that must be acknowledged in any service. Hughes (1995) suggests the average 'opt-out' rate from psychotherapy to be in the region of 33%. While these aspects are acknowledged it would be important to aim to obtain more information on why patients do 'drop out' of treatment. It would be useful to try to identify any relationship between stage of treatment and 'drop-out' to advance the phase-theory knowledge proposed by Howard et al. (1993). It would also be important to gain information about the level of symptomatology of treatment 'drop-out' as it could be those with greater distress who might be unable to utilise treatment as it is currently offered. The investigation of missing data is important as those who 'opt out' of treatment may represent more of the missing data and therefore future work should examine influences on those 'opting out' of treatment.

Data Collection

As with any investigation missing data is inevitable and there were attempts to minimise the effects of this in the current study. It would have been preferable for the questionnaires to have been administered by non-clinical staff to reduce influences of bias. This was not possible due to financial constraints. It could be argued that as the results indicated close correspondence between therapist assessment and questionnaire data at post-treatment assessment, if such influences are present they are likely to be part of the 'non-specific' effects of therapy. Consequently it may not be appropriate to exclude these aspects.

Howard et al. (1986) propose a model to integrate single-case studies with the traditional group comparison methodology in an attempt to maximise casual relations of treatments and outcomes. They acknowledge the lack of data as a problem for any study and consider it as indicative of a natural filtering process. When this is considered within the Needs Assessment approach the task of how to gather meaningful information for a group in need of a service, which is available but not accessed reflects a difficult situation. The reasons for the inability to access the service are unlikely to be straightforward and require further investigation within the overall needs assessment approach. At the initial stages of services being required to produce evidence of effectiveness of treatment strategies it is not likely that this evidence will be sufficient in the longer-term.

Waiting List

The results showed no significant effects of the waiting list, which had a mean of 13.68 weeks (sd 8.2 weeks). It must be acknowledged that some patients fail to attend for their assessment and this group may be one for whom the waiting list may have had some effect. Again this would require further study.

Follow-Up

The current study has only examined pre and post-intervention assessments and does not permit comment on maintenance of treatment gains or prevention of relapse. In order to do so follow-up measures are essential. Given the time that is needed for adequate data collection, waiting time, treatment time, up to one or two year follow-up, the time frame will cover up to four years. In a small service the time data collection would need to be in operation for would probably be at least twice the minimum time frame to accommodate an adequate sample size and could be approximately eight to ten years. With the pace of change and demand for timely information it is possible that some aspects of service provision will not lend themselves to all the demands of full scientific rigor. Some situations will require elements of compromise between purity of scientific methodology and management necessities for securing contracts and funding.

4.5.3 Recommendations

When considering any research findings it is important to make recommendations as a result of the investigation. In this context, from the examination of issues, it is of critical importance to facilitate the practical integration of effectiveness research into everyday practice. Given the nature of the current research it is even more significant to identify the recommendations of this work within North Down and Ards. This will be done by initially considering the measurement issues and then recommendations at the various levels of purchaser, provider and patient.

Measurement Issues

The main thrust of this work was related to the identification of appropriate, sensitive measures for use within the routine clinical practice of psychology. From the results there is adequate evidence to endorse the use of the BAI, BDI and GHQ 28 in routine clinical practice to measure the effectiveness of therapeutic intervention. It would be planned to continue this practice at pre and post-intervention, as implemented in this work. In addition these scales would be used for assessments at time of referral and various follow-ups. By looking at levels of symptomatology at time of referral more informative statements will be possible regarding the effect of the duration of the waiting time. It will also provide information regarding those who do not actually attend for their first appointment. To improve data collection it might be more useful for the questionnaires to be distributed by the GP practices and returned to the Psychology Department for scoring.

To examine maintenance of progress at follow-up, it would be necessary to formalise the outcomes approach within the overall provision of treatment. This would aim to encourage patients to agree to provide psychometric data even after discharge from treatment. While this may not be welcomed by some patients it is one of the only methods to obtain post-discharge data.

When considering data collection at discharge the current results demonstrate the effectiveness of therapeutic intervention but there are no indications of levels of achievement in terms of the discharge codes. The discharge code of "having achieved agreed goals" is useful at a very blunt or global level but does not permit any gradations of success. The refinement of this code with defined levels of success would be regarded as an important area for future development of the outcomes approach. The current categorisation has been of significance and utility in the current work but more detailed examination is necessary to provide statements of relevance to the amount of success and what possible factors may be identified in relation to this.

The further refinement or development of levels of data collection will produce a greater demand on the support required from the information technology used within clinical psychology. Consequently it will be necessary to collaborate with the Information Technology Department so that the data collection can be recorded in such a way as to be of benefit in outcomes measurement as well as in individual patient use. Collaboration will be required to facilitate this objective as well as the identification of additional funding.

Purchaser Issues

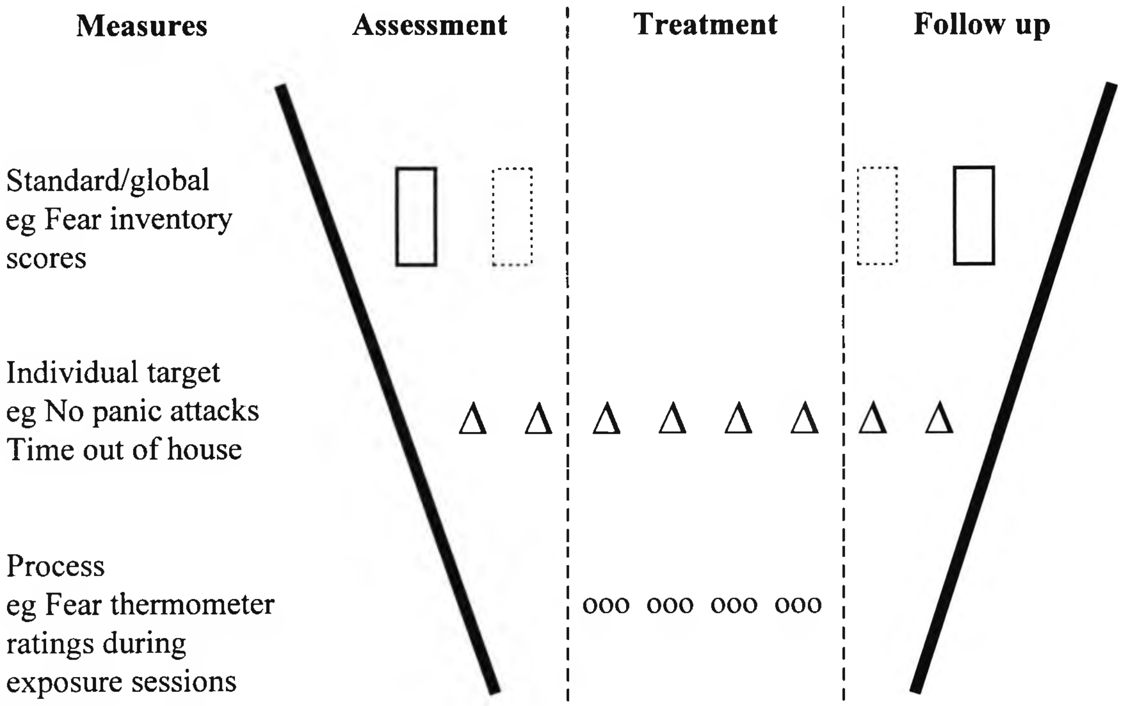
The funding of an outcomes approach is one of the most critical components to making the results and recommendations of research findings a reality. The time taken to design, implement, analyse and re-evaluate is considerable and therefore has a cost implication. One of the significant aspects is that to be meaningful an outcomes approach must be ongoing and unless appropriate funding is obtained this will not be possible if other aspects of service provision were not to be neglected. Within the current functioning of most departments, it is highly unlikely that contracts are in place with the effect that there is excess capacity from which outcomes could be facilitated. Equally if contracts are to be based on relevant evidence of effectiveness the costing of such contracts must include the necessary work to provide the evidence.

Such information will provide relevant, appropriate and timely evidence upon which to base decisions regarding contracting and the planning of services. It is essential to draw attention to a more pluralistic approach to service evaluation and improvement. While an outcomes approach is important it is not, and would not be considered, sufficient as the main or only focus for purchasers. Outcomes are one facet of service provision, with different domains having differing levels of importance for different perspectives. It is unlikely that purchasers would not be as interested in quality and cost as they may be with demonstrated effectiveness. The examination of quality within services has been of particular interest over the last ten to fifteen years and the knowledge that has been accumulated will be of benefit when considered with further work.

Provider Issues

The separation of recommendations into purchaser, provider and patient issues is somewhat artificial and also difficult to maintain when discussing the relevant areas. This is seen as being the result of a high level of inter-relationship among the contributing factors. For providers it is clearly a requirement to demonstrate effectiveness of service provision and as for purchasers the funding issue is critical. The measurement aspects also impact with the provider who is expected to be able to measure in a meaningful way without introducing excessive interference with overall provision. In practice this is a difficult balance to achieve. The provider is tasked with choosing indicators of change that are suitable for service evaluation and also relevant to each individual user of the service. The choice of level of measurement is again a complex issue but the figure below (Fig 4-5) attempts to clarify what levels might be considered.

Fig 4-5 *An Assessment-Evaluation Funnel* *(Morley, 1989)*



The above figure (4-5) shows the possible measures that can be selected within a single case situation, as proposed by Morley (1989). Process measures can be used within a session and could include measures like Subjective Units of Distress (SUDS) to track the level of distress with exposure to a situation or to the repeated recall of a traumatic event. In this way the measures are clearly of relevance to the patient and a particular aspect of their treatment. The Individual Target measures would be those which have been identified by the patient as goals for treatment and ratings on subjective scales. These could include the reduction of panic attacks, reduction of anxiety in social situations, increased use of appropriate social skills, reduction in the frequency of tension headaches and increased time asleep during the night. Such measures can be compared at baseline assessment, during treatment and at follow-up. The standard/global measures are psychometric tools which have standardised administration with established validity and reliability and are suitable for use with specific populations. These are usually used on a limited number of occasions and can provide information on post-treatment changes. This funnel is a representation of assessment and evaluation and demonstrates three levels at which measures may be taken that will have relevance to the individual patient. Such information can also be of interest for the clinician, the Service Manager and purchasers. However the aggregation of data is more likely to be used by purchasers for specifying service contracts.

As providers, it is necessary to reinforce the outcomes approach within the overall delivery of the service and this must also include relevant aspects for clinicians. The provision of training within the department and inclusion of all staff in the design, evaluation and modification of components of the outcomes approach is important. This would include aspects like the content of the Minimum Data Set, the design of consumer satisfaction surveys, and strategies to improve attendance at sessions. The supervision of each member of staff, which is carried out on a monthly basis, incorporates discussion of cases along the lines of the model outlined (4.5.5). In this way there are regular reviews of each case in relation to progress with treatment goals and the common model facilitates clarification and explanation with cases not showing therapeutic progress.

Within the Trust it is planned that with successful implementation of an outcomes approach in the Clinical Psychology Department that the model proposed will be used for the training of other teams in the Mental Health Programme of Care. To facilitate this it will be necessary to modify the current utilisation of some of the psychology sessions. It will involve the normalisation of the use of psychology in a consultancy approach. If this were to be taken to the contract level it could be possible for other services and Programmes of Care to contract for psychology sessions. While this may be something for the future this would not seem to be the most suitable avenue at present, given the current service delivery model of face-to-face contacts. However this does not mean that variations in current methods of working would not be used on a more informal way. This could involve providing a more skill-mix approach to service delivery by involving Nurse Therapists and Psychology Assistants within the Department. This aspect of the development of a Psychological Therapies Department will be evaluated in the same way as the current service. However the feature of cost will also be incorporated with a view to maintaining effectiveness but attempting to minimise costs per contact.

Patient Issues

The relationship of cost and clinical effectiveness has not yet been considered in North Down and Ards. Various methods are currently used to gauge and measure patient satisfaction. These include post-discharge questionnaires which are in constant use within the Department and analysed each twelve to eighteen months. The results are used to identify appropriate changes in service provision. All staff within Clinical Psychology are involved in this aspect of evaluation, the secretarial staff take responsibilities for identifying changes and implementing them also. It is not suitable to review the current work carried out in relation to patient satisfaction here but it is important to acknowledge this significant consideration within the overall strategy within the Department. With reference to the current work it is essential that the requirements for the measurement of effectiveness by purchasers and providers does not cause excessive intrusion in the therapeutic process. It would not be difficult to envisage a situation within which patients could perceive themselves as being data providers rather than distressed individuals attempting to access help and improvement of their problems. An appropriate balance must be struck and must always maintain cognisance of the patient's perspective, otherwise the measurement goal will have replaced the aim of service delivery. It is to reduce the likelihood of this occurring that the task of providing suitable measures must be influenced by the providers. This does increase the responsibility for providers to demonstrate effectiveness but also to act as an advocate for patients.

4.5.4 Conclusions

This review of recommendations of the current work has aimed to examine issues of relevance for future consideration at various levels and perspectives. It has not been the aim of this section to answer or suggest resolutions to some of the issues raised. Rather the increased awareness will hopefully inform those considering the findings of this research to place adequate emphasis on the context within which the research took place. The generalisability must also be considered to currently only extend to the population served in North Down and Ards. Future work may permit comparisons but these would be premature at this stage. The ending of this section without providing clear solutions serves to emphasise the complexity of the area of investigation. It also highlights the need for constant monitoring at all levels, combined with collaboration, as opposed to unnecessary antagonism, between purchasers and providers. This will no doubt result in the most likely achievement of the goal of securing high quality services of demonstrated effectiveness for reasonable costs.

At a practical level the results obtained would be indicative of the identified need for psychologists to reconsider their role in relation to consultancy work and the evaluation of our own and others services. It has been clear from various sources (Norcross et al., 1992) that some Clinical Psychologists feel ill-equipped to carry out these activities. In a national survey of the British Psychological Society's Clinical Division, Norcross et al. (1992) found that only 6% of psychologists used overtly non-individual approaches. They also reported that 74% of clinical time was spent in individual therapy. This would support the conclusion that, despite recommendations to move from the traditional one-to-one service delivery model (Hawks, 1981), clinicians still practice in this way. This may reflect that there is greater experience in working in this more traditional way and is directly linked to the training provided.

This apparent gap, from what may be necessary in the organisation and what is provided in training courses for Clinical Psychologists, needs to be addressed. Otherwise the disparity will increase and the likelihood of learning from each other will be reduced. It is also necessary to acknowledge that these recommendations endorse the therapeutic effectiveness of psychological treatment provided by qualified Clinical Psychologists. The questions regarding the level of expertise necessary to bring about such change have yet to be asked. To ensure that those qualifying as Clinical Psychologists are adequately equipped to address the challenges of service evaluation is a task for trainers. The necessary additional shift from regarding one-to-one therapeutic work as the mainstay of clinical practice would be enhanced by more emphasis on the use of consultancy skills rather than on therapeutic skills alone. It would seem that the profession needs to more actively embrace the model and recommendations of the MPAG report commissioned by the Department of Health to review clinical psychology services in the United Kingdom (Manpower Planning and Advisory Group, 1990). The skills and techniques that are unique to Clinical Psychologists relate to the formulation and subsequent response to complex problems. This is provided within the context of a broadly based psychological knowledge and expertise and considered to be unique to our profession. The figure over (Fig 4-6) describes the three levels of psychological skill concluded from job analysis carried out by the MPAG report (pp. 22). Almost all healthcare workers use Level 1 and Level 2 skills. Only psychologists have Level 3 skills in addition. This is their unique contribution.

Fig 4-6: ***Levels of Psychological Skill***

LEVEL 1 :	basic skills in establishing and maintaining relationships, simple and often intuitive techniques of counselling and stress management.
LEVEL 2 :	undertaking circumscribed psychological activities eg behaviour modification - may be defined by protocol.
LEVEL 3 :	a thorough understanding of varied and complex psychological theories and the ability to apply these to new problems to generate interventions.

The service delivery model proposed within the MPAG report is one within which the psychology service is consultant-psychologist led, it is recommended that the consultant should be responsible for services provided by other psychologists. In addition responsibility should be for co-ordinating the psychological services by other disciplines for a specified client group. At present this model is being developed within North Down and Ards and, with the appointment of a Nurse Therapist, the next stage of the outcomes evaluation will logically develop to incorporate the investigation of effectiveness and skill mix.

To take a long-term view of Clinical Psychology Services within the North Down and Ards Trust, it is now necessary to propose an outcomes model that will be suitable for use in routine practice and will take cognisance of the results obtained in both Study I and Study II and builds on the model in place. Kazdin (1996) regards improvement in the quality of both practice and patient care as the result of ongoing evaluation, the latter being defined as the systematic collection of relevant information. Kazdin (1996) claims that "few individuals are enchanted by evaluation (unless, of course, one is on the evaluating team) ..." (pp. 145). While this may be the case to some extent no teams have yet been formed with the specific agenda of prescribing outcomes for services or identifying the nature of suitable evidence for the purchasing of services. Consequently the opportunity to influence this very significant development is available to service providers. It could be unfortunate if psychologists permitted their better knowledge of research methodologies to discourage their involvement in policies and processes that are likely to implemented in any case.

A more assertive stance which uses our specialist knowledge which can be used to aid interpretation and lead to the more complete understanding of the reality of the situation would seem more appropriate at this stage. Otherwise our services may well be subjected to processes that have little practical foundation and are unrepresentative of the complexity of the nature of our contributions to health care. It is improbable that objections raised at the later stages will be received as positively if as a profession we remove ourselves from the initial development phase.

4.5.5 The Proposed Outcomes Model

Clement (1996) examined reasons why clinicians appear to have integrated less of research findings that might be expected. He discusses lack of experience of the scientist-practitioner model in reality and suggests a range of contributory factors. These include the large variety of clinical settings, home, clinics, school, hospitals; additional pressures of large caseloads and lengthy waiting lists. At a more fundamental level, he acknowledges that research frequently involves data collection from large samples of subjects, while the clinician is primarily focused on one individual client. This difference also highlights the need to reassert the importance of single case methodology by both researchers and clinicians. Clement (1996) concludes that by regarding the process of routine and systematic service evaluation as a form of applied research it will become a highly suitable means for integrating the methods of research with clinical practice. This integrated approach between research and clinical knowledge is reinforced by Slade (1996) and was referred to by Parry (1992). Why such integration is slow to be evidenced is no doubt influenced by a large range of factors and will not be considered further within the present context.

What appears to be necessary is conceptual revision to facilitate the merging of two approaches so that the concept of research can include service evaluation. This change would not prevent acknowledgement of the similarities and differences between the two original stances. It would seem appropriate to consider the dictum of Wittgenstein (1953, section 79), ‘say what you like, as long as it does not stop you seeing how things are’. And ‘when you have seen this there is plenty that you will not say’.

Within a background of suitable conceptual revision the aim would be to develop an approach that can link the aspects of structure, process and outcome within the service system. It would be of little value to suggest that there would be one suitable model that would be applicable in any service system or that any approach could take account of all potential variables, nor be in need of ongoing monitoring with a view to modification. With such a context provided the outcomes approach developed will be described.

The model aimed to take account of outcomes from a number of perspectives that of the purchaser, service provider and individual patient. As a consequence the levels of suitable measurements vary and have been examined in 4.5.3. The model is outlined in a flow process from referral to follow-up and indicates assessment points throughout the process. Fig 4-7 outlines the model.

Fig 4-7 ***The Outcomes Approaches within Adult Clinical Psychology Treatment***

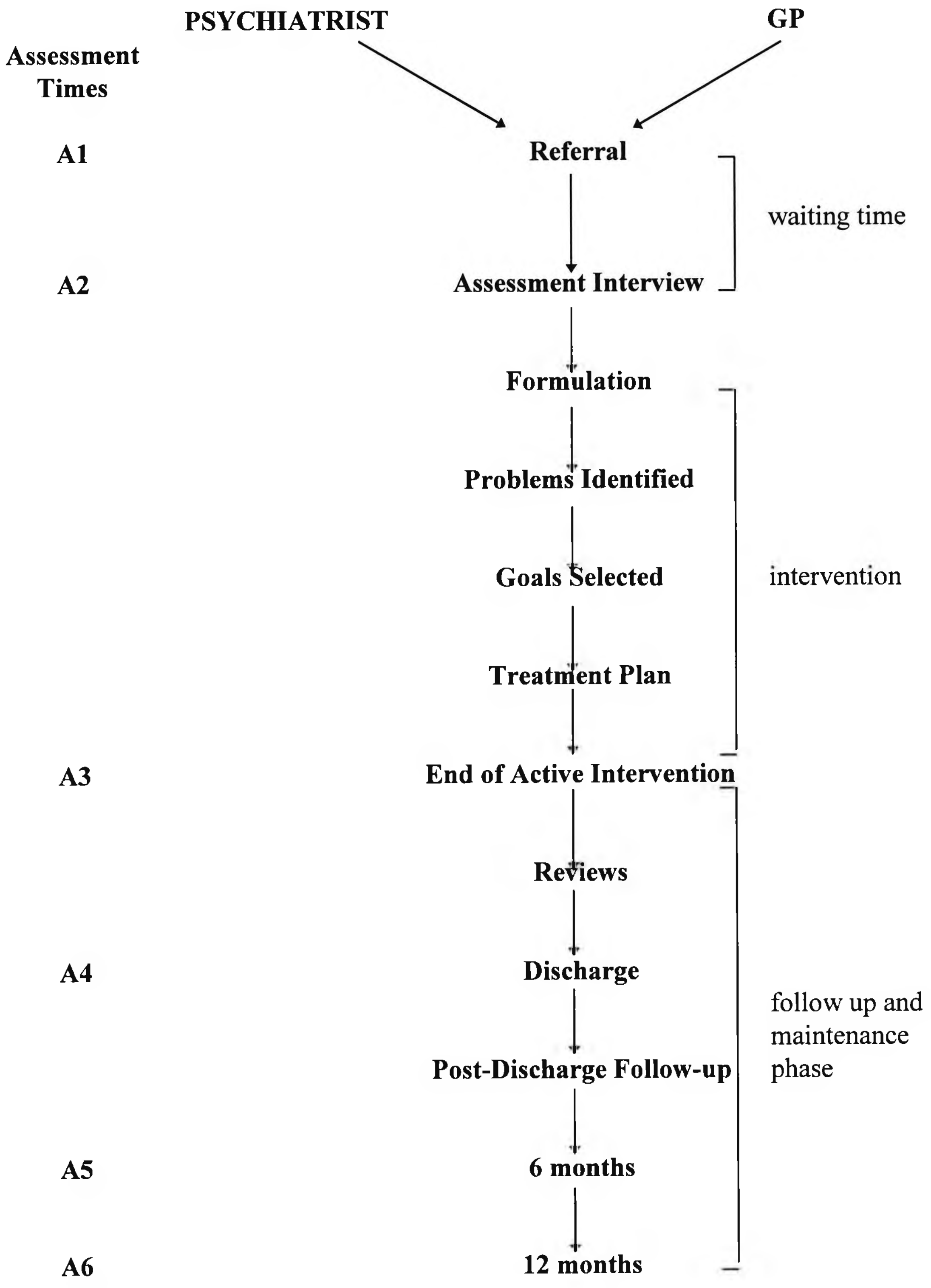


Fig 4-7 shows that each patient will be assessed on six occasions on measures that have been shown to be sensitive to the effectiveness of treatment pre and post-intervention (Study I and II, 3.0 and 4.0). The introduction of some elements essential to the full implementation of this outcomes approach have already been necessary to conduct the current research. This has involved the design of a Minimum Data Set for the initial assessment interview (A2), agreement regarding formulation, methods of problem identification and goal selection and the recording of all these elements. The staff training was carried out in 1993 and has been ongoing with reviews and up-dates in addition to the incorporation of the outcomes approach within the supervision model used within the Psychology Department. The implementation of this systematic approach to individualised treatment planning is amenable to audit from clinical records and is conducted annually.

It was agreed that for each patient the outcomes should involve between two and five goals. These are stated in a clear, measurable way and are behaviourally specific. The goals must also be considered appropriate in that even if the patient would wish to aim for a specific target, both patient and therapist must consider the likelihood of achieving the target to be reasonable. The combination of psychometric assessment and individual target-setting aims to provide idiographic measures which can be aggregated to form suitable nomethetic outcome measures.

The identification of problems and subsequent goal selection is considered an essential and integral component of the therapeutic alliance. The active involvement of the patient in selecting the goals initially, within the context of ongoing monitoring and modification during the treatment phase, has been shown to produce greater therapeutic gains (Willer and Miller, 1976). The model of therapeutic approach, the frequency, duration of sessions and criteria for end of intervention, as well as review appointments and discharge, are entirely at the discretion of the therapist's clinical judgement.

The essential elements are considered to be the identification of suitable, sensitive and appropriate standardised measures, a minimum data set, clear formulation of the presenting problems, appropriate goal selection, adequate follow-up measures, suitable availability of information technology, and funding to support data collection and analysis. The information system already in place records on a specifically designed database, The Community Information System, L-CID. It records inter alia contact time with the patient, direct therapeutic contact and intraprofessional discussions. However, there is, as yet, no facility to record quantitative (in this case, psychometric) data. Hence, in the present study, data had to be analysed on a separate system using SPSS. A service enhancement planned for implementation in the Spring of 1998 has a specification informed by the requirements of the present studies. It will capture a much greater range of variables and will afford the possibility of data analysis using SPSS. The integration of an outcomes approach within the quality improvement methodology within clinical psychology is also seen as an essential consideration and the results of any outcomes data should be interpreted within the context of other quality information. Such information would relate to details of numbers and nature of complaints, re-referral rates, non-attendance rates, lack of uptake of first appointment, satisfaction of purchasers and referrers as well as service users.

The proposed model does not make any specific requirements regarding the type of intervention provided and in this way would be suitable for use within a range of theoretical approaches. It does not make any attempt to include an analysis of the cost or any relationship between cost and effectiveness. It is planned, in light of the recommendations, that cost will be examined in future work. The appointment of a Nurse Therapist to work within the Psychology Department will provide an opportunity to assess outcomes of intervention with various aspects being held constant. These will include level of workload in terms of clinical sessions, supervision, minimum data set and assessment procedures. The cost-effectiveness model will aim to then examine the comparisons of costs of clinical psychology and nurse therapy interventions.

Yates (1995) describes models for examining and measuring both cost-benefit and cost-effectiveness in clinical research. He then applies the models in the clinical practice setting and integrates outcomes and budgets. He also draws attention to the futility of arguments that outcomes are not amenable to measurement or reducible to costs. Rather the integration of both are necessarily linked within the management of our services and will continue to be in the future. Costs, as with outcomes, can have markedly different definitions depending on which perspective is being considered, the patient, therapist, manager or purchaser. The model proposed by Yates (1995) links costs to procedures, processes, outcomes and analysis (CPPOA). The design and implementation of a study which will manipulate skill-level and cost will be the main component of the further development of the outcomes model proposed.

4.5.6 Overall Conclusions

In terms of the overall aim of this study of investigating the effectiveness of the treatment provided by the out-patient Clinical Psychology Department it is clear that there is evidence of significant reductions of symptomatology with treatment. There is no significant difference in treatment of anxiety or depression for men or women, or rural versus urban patients. Improvements are related to treatment duration and not affected by the waiting-list. Consequently this evidence would seem to be particularly timely and relevant for inclusion in any evidence-based commissioning. As such this work has a direct and meaningful contribution to make towards service planning and delivery within the North Down and Ards area. It also takes account of practical issues within the design of the outcomes approach adopted. This is described in detail in 4.5.5.

The current study is an attempt to conduct an effectiveness study within routine clinical and service delivery setting. Clarke (1995) identified a number of mediating factors in the generalizability of efficacy study results. One factor involved the degree of therapy structure and he reviews a number of methodological approaches to further the investigation of the effects of this in treatment outcomes. At a practical level it would seem likely that attempts to systematise psychotherapy to too great an extent would not be welcomed by clinicians. It would seem more appropriate to focus on the identification of suitable, sensitive and practical measures of outcomes at this stage. With an emphasis on the ability to be integrated into routine clinical practice.

Various aspects of further investigation have been identified and it is clear that these two studies represent the initial steps that are necessary to make a reality of many of the concepts used in planning and managing our services currently. Barkham et al. (1995) emphasise the need for future work to be action oriented while integrating the client perspective in a way that is practically possible. The views of Clarke (1995) will also be borne in mind when aiming to develop studies that will combine the investigation of efficacy and effectiveness by looking at the mediating effects variables like setting and type of therapist. Such clear guidance might erroneously suggest that future work will be significantly more straightforward than the current studies. However the level of complexity does not reduce the meaningfulness of information that can be obtained. Nor is it a defence against the study of the services we are tasked with providing.

The current work has gone some considerable way toward demonstrating effectiveness in routine clinical practice. It has, at the very least, shown that such measurement can be achieved and that suitable psychometric tools have been identified which are sensitive to change in a general sample of out-patients attending a Clinical Psychology Department. The changes shown on the psychometric tools corresponds with the therapist reason for no further appointments and those who achieve the agreed treatment targets have the lowest scores post-treatment. Consequently a number of very pertinent issues have been addressed but as with all useful investigations the areas that will require further work, both within North Down and Ards and within clinical practice at a more global level, have been identified and await attention.

As previously discussed, exciting opportunities present themselves for further work in these areas. The unified model presented here creates the opportunity for exploring the effectiveness of a range of professional intervention styles across the primary care and the mental health programmes. Such work would call for further exploration of the applicability of the psychometric scales used in these studies and, moreover, invite development of non-text based assessment approaches.

As discussed in Section 2.5, this could provide the development of direct measures which could obviate the literacy level assumptions inherent in psychological approaches. The most likely direction for such work would employ a safety signal paradigm.

General Practitioners are central to the service provision of the Trust. As noted in Table 3-6, they are by far the most frequent of referral agent and also provide the initial diagnostic categorisation. Indeed, such initial categorisation need not be considered as provisional since it does, in a sense, specify the problem area around which improvement is sought and against which it is evaluated. It follows from this that there is a great need to work closely with General Practitioners in developing effective communication strategies and reporting mechanisms. Of mutual benefit to Trust and General Practitioners would be further training in the use of diagnostic procedures and the evaluation of categorisations so far employed. Service specificity, inherent in much of the planning work of the 1990s, must be tempered with a degree of service integration, to ensure that patients are not caught up in a labyrinth of organisational structures. These structure, in turn, can be judged effective in their capacity to enhance services to those referred, and whose interests motivated all of this study: the patients whom we are privileged to serve.

4.6 REFERENCES

Andrews, G. (1989). Short-term structured treatment for avoidant personality disorder. *Journal of Consulting and Clinical Psychology*, 57, 756-764.

Andrews, G. (1991). The evaluation of Psychotherapy. *Current Opinion in Psychotherapy*, 4, 379-383.

Barker, C., Pistrang, N. and Elliott, R. (1994). *Research Methods in Clinical and Counselling Psychology*. Chichester: John Wiley and Sons.

Barkham, M., Firth-Cozens, J., Frankish, P. and Milne, D. (1995). How to measure clinical outcomes in a world of service contracts. *Clinical Psychology Forum*, 83, 34-36.

Barlow, D. (1988). *Anxiety and its Disorders*. New York: Guilford Press.

Barlow, D., Hayes, S. and Nelson, R. (1984). *The Scientist Practitioner : Research and Accountability in Clinical and Educational Settings*. New York: Pergamon.

Beck, A., Rush, A., Shaw, B. and Emery, G. (1979). *Cognitive Therapy of Depression*. Chichester: John Wiley and Sons.

Beck, A. and Steer, R. (1987). *Manual for the revised Beck Anxiety Inventory*. San Antonio: The Psychological Corporation.

Berger, M. (1996). *Outcomes and effectiveness in Clinical Psychology Practice*. DCP Occasional Paper No. 1.

Bowling, A. (1992). Assessing health needs and measuring patient satisfaction. *Nursing Times*, 88, 31-34.

Cape, J. (1995). Clinical audit in the NHS. Clinical Psychology Forum, 86, 12-16.

Carroll, A. and Wilson, J. (1993). National Health Service and Public Services in the 1990s. In J. Wilson and P. Hinton (Eds.). Issues in Public Service Finance and Management. London: Tudor.

Clark, D., Salkovskis, P., Gelder, M., Kochler, K., Martin, M., Arastasiades, P., Hackman, A., Middleton, H. and Jeavons, A. (1988). Tests of a cognitive theory of panic. In I. Hand and H. U. Wittchen (Eds.). Panic and Phobias II. Heidelberg: Springer-Verlag.

Clark, L. and Watson, D. (1991). Tripartite Model of Anxiety and Depression: Psychometric Evidence and Taxonomic Implications. Journal of Abnormal Psychology, 100(3), 316-336.

Clarke, G. (1995). Improving the transition from basic efficacy research and effectiveness studies : methodological issues and procedures. Journal of Consulting and Clinical Psychology, 63(5), 718-725.

Clement, P. (1996). Evaluation in private practice. Clinical Psychology Science and Practice, 3(2), 146-159.

Department of Health and Social Security, (1989). Caring for People. London: HMSO.

Department of Health and Social Services, (1992). The Northern Ireland Census 1991, Summary Report. Belfast: HMSO.

Department of Health, (1993). The Health of the Nation. Key Area Handbook. Mental Illness. London: HMSO.

Department of Health, (1996). _Promoting Clinical Effectiveness_. London: NHS Executive.

Donabedian, A. (1966). Evaluating the quality of medical care. _Milbank Q_, 44, 166-203.

Elkin, I. (1994). The NIMH treatment of depression collaborative research program : Where we began and where we are. In A. E. Bergin and S. L. Garfield (Eds.). _Handbook of psychotherapy and behaviour change_ (4th edn). Chichester: John Wiley and Sons.

Eysenck, H. (1994). The outcome problem in psychotherapy : What have we learned? _Behaviour Research and Therapy_, 32(5), 477-495.

Flatt, J. (1983). What makes therapy work? _Australian Journal of Clinical Experimental Hypnosis_, 11(2), 63-72.

Frank, J. and Frank, J. (1991). Persuasion and healing. _A Comparative Study of Psychotherapy_ (3rd edn.). Baltimore MD: John Hopkins University Press.

Goldberg, D. (1978). _Manual of the General Health Questionnaire_. Windsor: Nfer Nelson.

Goldfried, M. and Wolfe, B. (1996). Psychotherapy Practice and Research. Repairing a Strained Alliance. _American Psychologist_, 51(10), 1007-1016.

Greenberg, L. (1991). Research on the process of change. _Psychotherapy Research_, 1(1), 3-16.

Halstead, J. (1996). Psychotherapy outcome audit : what is not going on? _Clinical Psychology Forum_, 90, 5-7.

Harrison, S. (1995). A policy agenda for health - care rationing. British Medical Bulletin, 51(4), 885-899.

Hawks, D. (1981). The dilemma of clinical practice - surviving as a clinical psychologist. In I. McPherson and A. Sutton (Eds.). Reconstructing Psychological Practice. London: Croom Helm.

Hays, W. (1994). Statistics. New York: Holt, Reinhardt, Winston.

Hollon, S. (1996). The Efficacy and Effectiveness of Psychotherapy Relative to Medications. American Psychologist, 51(10), 1025-1030.

Hollon, S., De Rubeis, R., Evans, M., Wiemer, M., Garvey, M., Grove, W. and Tuason, V. (1992). Cognitive therapy and pharmacotherapy for depression. Singly and in combination. Archives of General Psychiatry, 49, 774-781.

Howard, K., Lueger, R., Maling, M. and Martinovich, Z. (1993). A phase model of psychotherapy outcome : causal mediation of change. Journal of Consulting and Clinical Psychology, 6(4), 678-685.

Howard, K., Krause, M. and Orlinsky, D. (1986). The Attrition Dilemma : Toward a new strategy for Psychotherapy Research. Journal of Consulting and Clinical Psychology, 54(1), 106-110.

Howard, K., Moras, K., Brill, P., Martinovich, Z. and Lutz, W. (1996). Evaluation of psychotherapy - efficacy, effectiveness and patient progress. American Psychologist, 51(10), 1059-1064.

Hsieh, M. and Kagle, J. (1991). Understanding patient satisfaction and dissatisfaction with health care. Health Social Work, 16, 281-290.

Hughes, I. (1995). Why do they stop coming? Reasons for therapy termination by adult clinical psychology clients. _Clinical Psychology Forum_, 81, 7-11.

Jacobson, N. and Christensen, A. (1996). Studying the effectiveness of psychotherapy. How well can clinical trials do the job? _American Psychologist_, 51(10), 1031-1039.

Kazdin, A. (1996). Evaluation in Clinical Practice. _Clinical Psychology Science and Practice_, 3(2), 144-145.

Lambert, M. (1991). Introduction to psychotherapy research. In L. E. Beutler and M. Crago (Eds.). _Psychotherapy Research : An international review of programmatic studies_ (pp. 1-11). Washington DC: American Psychological Association. Cf. Speer and Newman.

Luborsky, L., Crits-Christoph, P., Mintz, J. and Auerbach, A. (1988). _Who will benefit from Psychotherapy?_ New York: Basic Books.

Manpower Planning and Advisory Group, (1990). _Clinical Psychology Report_. London: Department of Health.

Marmar, C. (1990). Psychotherapy Process Research : Progress, Dilemmas and Future Directions. _Journal of Consulting and Clinical Psychology_, 58(3), 265-272.

Morley, S. (1989). 'Single case research'. In G. Parry and F. N. Watts (Eds.). _Behavioural and Mental Health Research : A Handbook of Skills and Methods_. Hove: Lawrence Erlbaum Associates.

Munoz, R., Hollon, S., McGrath, E., Rehn, L. and Vanden Bos, G. (1994). On the Ahcpr Depression in Primary-Care Guidelines - Further considerations for practitioners. _American Psychologist_, 49(1), 42-61.

McColl, E., Steen, I., Meadows, K., Hutchinson, A., Eccles, M., Hewison, J., Fowler, P. and Blades, S. (1995). Developing outcome measures for ambulatory care: an application to asthma and diabetes. *Social Science and Medicine*, 41(10), 1339-1348.

McGlynn, E. (1996). Domains of Study and Methodological Challenges. In L. I. Sedener and B. Dickey (Eds.). *Outcomes Assessment in Clinical Practice*. Baltimore: Williams and Wilkins.

McPherson, F., Watson, P. and Taylor, V. (1996). Audit of an adult mental health out-patient Clinical Psychology Service. *Clinical Psychology Forum*, 98, 26-28.

Newman, F. and Howard, K. (1986). Therapeutic effort, outcome and policy. *American Psychologist*, 41, 181-187.

Newman, F. and Howard, K. (1991). Seeking new clinical research methods. *Journal of Consulting and Clinical Psychology*, 59(1), 8-11.

Newman, F. and Tejeda, M. (1996). The Need for Research that is designed to support decisions in the Delivery of Mental Health Services. *American Psychologist*, 51(10), 1040-1049.

Norcross, J., Brust, A. and Dryden, W. (1992). British Clinical Psychologist: I. A National Survey of the BPS, Clinical Division. *Clinical Psychology Forum*, 40, 19-24.

Oei, T. and Shuttlewood, G. (1996). Specific and Non-specific Factors in Psychotherapy : A Case of Cognitive Therapy for Depression. *Clinical Psychology Review*, 16(2), 83-104.

Orlinsky, D. and Howard, K. (1986). Process and outcome in Psychotherapy. In S. L. Garfield and A. E. Bergin (Eds.). *Handbook of psychotherapy and behaviour change*, (3rd edn.). Chichester: John Wiley and Sons.

Pallack, M. and Cummings, N. (1994). Outcome research in managed behavioural health care : issues, strategies and trends. In S, A, Shueman, W, G, Troy and S, L, Mayhugh (Eds.). *Managed behavioural health care*. Springfield, Ill: Thomas. Cf. Speer and Newman.

Parry, G. (1992). Improving psychotherapy services : Applications of research, audit and evaluation. *British Journal of Clinical Psychology*, 31, 3-19.

Paxton, R. (1995). Audit and research : mutually supportive. *Clinical Psychology Forum*, 86, 8-11.

Rosenberg, W. and Donald, A. (1995). Evidence-based medicine : an approach to clinical problem solving. *British Medical Journal*, 310(6987), 1122-1126.

Salkovskis, P. and Warick, H. (1988). Cognitive therapy of obsessive-compulsive disorder. In C. Perris, I. M. Blackburn and H. Perris (Eds.). *The Theory and Practice of Cognitive Therapy*. Heidelberg: Springer-Verlag.

Shadish et al. (1996). Personal communication with Hollon, S. (1996). The efficacy and effectiveness of psychotherapy relative to medication. *American Psychologist*, 51(10), 1025-1030.

Slade, M. (1996). Measuring clinical outcomes : a response to Barkham and colleagues. *Clinical Psychology Forum*, 90, 25-26.

Smith, M., Glass, G. and Miller, T. (1980). *The benefits of psychotherapy*. Baltimore: John Hopkins University Press.

Speer, D. and Newman, F. (1996). Mental Health Services Outcome Evaluation. *Clinical Psychology Science and Practice*, 3(2), 105-129.

Strauss, J. and Carpenter, W. (1981). *Schizophrenia*. New York: Plenum Press.

Strupp, H. (1996). The Tripartite Model and the Consumer Reports Study. *American Psychologist*, 51(10), 1017-1024.

Vanden Bos, G. (1996). Outcome Assessment of Psychotherapy. *American Psychologist*, 51(10), 1005-1006.

Weisz, J., Donenberg, G., Han, S. and Kaurieckis, D. (1995). Child and Adolescent Psychotherapy Outcomes in experiments versus clinics : why the disparity? *Journal of Abnormal Child Psychology*, 23(1), 83-106.

Whiston, S. and Sexton, T. (1993). An overview of Psychotherapy Outcome Research : Implications for Practice. *Professional Psychology : Research and Practice*, 24(1), 43-51.

Willer, B. and Miller, G. (1976). Client involvement in goal setting and its relationship to therapeutic outcome. *Journal of Clinical Psychology*, 32, 687-690.

Williams, S. and Calnan, M. (1991). Convergence and divergence : Assessing criteria of Consumer Satisfaction across general practice, dental and hospital care settings. *Social Science Medicine*, 33(6), 707-716.

Wittgenstein, L. (1953). *Philosophical Investigations*, tr G. E. M. Anscombe. Oxford: Blackwell.

World Health Organisation, (1948). Constitution. In *Basic Documents*. Geneva, Switzerland: World Health Organisation.

Yates, B. (1995). Cost-effectiveness analysis, cost-benefit analysis and beyond : Evolving models for the Scientist-Manager-Practitioner. *Clinical Psychology Science and Practice*, 2(4), 385-398.

Chapter 5 :

CASE PRESENTATION :

COGNITIVE THERAPY FOR DEPRESSION

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

APPENDICES

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons

This content has been removed for data protection reasons