ROLE STRESS AND JOB SATISFACTION IN N.H.S. CLINICAL PSYCHOLOGISTS WORKING IN SCOTLAND.

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1990
ABSTRACT

A postal survey of 115 Clinical Psychologists working for the National Health Service in Scotland was carried out. Scottish Clinical Psychologists were found to demonstrate a high overall mean level of job satisfaction when viewed in the context of other occupational groups. Similarly, a relatively high mean level of role ambiguity was also reported, together with a high overall mean level of role conflict. The estimated prevalence of psychological disturbance in Scottish Clinical Psychologists was not found to be at variance with comparative groups of health professionals, but has been demonstrated to be significantly lower than that found for Clinical Psychologists undergoing training (Cushway, 1988; Sampson, 1989). No significant differences in levels of job satisfaction, role ambiguity, role conflict and estimated prevalence of disturbance were found in terms of sex, grade or area/speciality.

Significant correlational relationships were found in support of the traditional model of role stress (from Bedeian and Armenakis, 1981). The limitations of this model in relation to Scottish Clinical Psychologists were discussed. Other methodological issues in relation to the present study were also discussed. Finally, some of the implications that the findings of the present study have for future research were discussed.
ACKNOWLEDGEMENTS

The author would like to thank the following people for their assistance with this study: Neil Rothwell, Ralph McGuire, David Nelson and Jane Sampson.

DECLARATION

I hereby declare that, apart from the assistance of those mentioned in the above acknowledgements, this thesis is entirely my own work.

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LITERATURE REVIEW

INTRODUCTION

The literature review of this study is written in two parts:

Part One is concerned with the role Clinical Psychologists play within the National Health Service (N.H.S.). It looks at how the role developed, what the current roles are and factors that will influence the future development of the roles of Clinical Psychologists in the N.H.S.

Part Two is concerned with the concepts investigated by the present study in relation to the role of Clinical Psychologists. An overview of role stress and job satisfaction is given, together with the relationship between these variables and other job conditions.

PART ONE: THE ROLE OF N.H.S. CLINICAL PSYCHOLOGISTS

A HISTORICAL PERSPECTIVE

The role of the Clinical Psychologist first emerged during World War 2 where tasks of personnel selection, recruitment and staff training were undertaken. The role subsequently developed to be incorporated into emergency medical services working with the psychological trauma of casualties.

At the end of the war some psychologists continued to work in hospitals. Psychologists became integrated into the N.H.S. in 1948. At this time the role was one of laboratory scientist working in an ancillary role to medical services in large psychiatric or mental handicap hospitals. Very little therapeutic practice occurred at this time. This early role is reflected in the profession's current location within Whitley Council arrangements, where Clinical
Psychologists are grouped alongside biochemists, physicists and diagnostic scientists.

The first Whitley circular relating to qualifications and conditions of service was issued in 1952 and in 1966 the Division of Clinical Psychology was formed by the British Psychological Society.

Since the 1960's there has been a substantial expansion of psychological knowledge, with new developments in techniques which have expanded the scope and value of the roles undertaken by Clinical Psychologists in the N.H.S. The application of learning theory to the treatment of behavioural and emotional disturbances, leading to the emergence of behaviour therapy, represented an important step in the development of the profession. This heralded the movement of the profession into therapy with Clinical Psychologists taking on roles of clinical practitioners as opposed to laboratory scientists.

The Trethowan Report (1977) gave formal recognition to Clinical Psychology as an independent profession. It also served to open up roles for Clinical Psychologists in the N.H.S. outside the confines of more traditional psychiatric settings. In addition, it led to an expansion in the number of Clinical Psychologists and the range of activities undertaken by them.

A further step in the establishment of Clinical Psychology as an independent profession occurred in 1984 when general management was introduced to the N.H.S. This set up dual accountability whereby Clinical Psychologists became administratively accountable, through the district psychologist, to a general manager, while remaining professionally accountable to the district psychologist.
The role of N.H.S. Clinical Psychologists can largely be seen as still developing. Clinical Psychology is one of the smallest health-care professions and has had a relatively short history with many significant changes. Since the 1960's Clinical Psychology has developed into a profession which provides, both directly and indirectly, a wide range of services to patients and staff alike, within the context of the N.H.S. The types of work undertaken include: assessment, diagnosis, treatment, evaluation, teaching and research (Parry, 1989). As well as providing services in clinical settings, Clinical Psychologists can also be involved in the planning and development of services. At a more senior level, they may also serve as agents of organisational change and managers of service delivery.

The areas of service in which Clinical Psychologists are employed are quite diverse, and new areas of service provision arise as new developments in the N.H.S. take place. While most Clinical Psychologists work in the area of Adult Mental Health, the kinds of work undertaken in this area varies greatly from post to post. For example, it may involve working in community out-patient clinics with patients with neurotic disorders or, on the other hand, it may involve work rehabilitating long-stay psychiatric patients from a large hospital.

Many of what were previously thought of as sub-specialties of the Adult area have now developed into what many would consider as being specialties in their own right, for example, Neuropsychology and Medical Psychology. Other areas of growth have occurred through changes in Government policy regarding certain patient groups. The recent Government directives promoting community care, for example, have expanded the role of Clinical Psychologists working in the field of Rehabilitation. Other areas, again, have grown through changes in the patient population, for example, there has been a recent increase in the number of Clinical Psychologists working in the area of AIDS.
As well as the area of Adult Mental Health, Clinical Psychologists work in a variety of other N.H.S. settings. These include specialist areas such as: Mental Handicap, Child, Elderly and Forensic. Some Clinical Psychologists have their roles split between specialties, for example, working half their time in Child and the other half in Mental Handicap.

The roles Clinical Psychologists take on within specialties vary according to their grade of employment and their level of professional experience. In general, less experienced Clinical Psychologists of lower grades tend to undertake more direct, face to face work with the patient population. More experienced Clinical Psychologists, on the other hand, take on roles more concerned with service development and administration, as well as responsibility for Clinical Psychology departments and the staff employed therein.

It could be considered fair to say that not all Clinical Psychologists work in the same way within given roles. Clinical Psychologists embrace a range of theoretical orientations which influence their own particular ways of working. In Sampson's (1989) study, Clinical Psychologists were asked to state what they considered their main theoretical orientations to be. While the majority considered themselves to be primarily Cognitive-Behaviourists (68%), 18% considered themselves as Eclectic, 7% as Psychodynamic and 7% as Client-Centred and others.

The M.A.S. Review of Clinical Psychology (1989) looked at how the role of a Clinical Psychologist differed from that of other health care workers. In particular they examined what was unique to the way Clinical Psychologists worked. To enable this they utilised case vignettes and asked respondents how they would formulate problems, how they would treat them and whether or not they would refer them on. The other professional groups investigated in this way in comparison to Clinical Psychologists were: Psychiatrists, Psychiatric Nurses, Mental Handicap Nurses, Nurse Behaviour Therapists, Occupational Therapists, Social Workers, Speech Therapists, Psychological Technicians and Managers. The review
concluded that, although other professionals use basic psychological skills, only Clinical Psychologists possess:

"a thorough understanding of varied and complex psychological theories and the ability to apply these to new problems to generate interventions."

This ability, the review suggests, is the factor that differentiates Clinical Psychology as a profession, and is therefore, the basis of its role in the N.H.S.

Problems arise, however, because the profession is so thinly spread. These are exacerbated by recruitment problems, with many departments being unable to fill relatively recently funded posts. Twenty per cent of posts were vacant in England in 1988 (M.A.S. Review, 1989). In addition, there is a bottleneck at the training stage with many applicants competing for the few places on clinical training courses. In 1987 there was a ratio of 8.4 applicants per place on training courses (M.A.S.Review, 1989). These courses, in turn, fail to produce enough qualified Clinical Psychologists to fill current vacancies. The M.A.S. Review of Clinical Psychology (1989) further reports that the rate at which people are leaving the profession is accelerating and that there is, therefore, the possibility of a declining, as opposed to expanding, profession. In 1987, 18% of newly qualified Clinical Psychologists did not enter the N.H.S. and 16.5% of Basic Grades left. In addition to this, while the establishment of the profession expanded from 1734 to 1769 posts between 1985 and 1988, the number of posts occupied actually fell from 1486 to 1407 (Scrivens and Charlton, 1985; Northern Region Manpower Developments Survey, 1988).

The M.A.S. Review of Clinical Psychology (1989) is the most comprehensive review of the profession that has been carried out to date. It points out that the services provided by the profession are rather patchy with many gaps in them. This was explained in terms of both the problems of recruitment, and the tendency of Clinical Psychologists to overspecialise within their own particular interests once in post.
The Review describes the current role of Clinical Psychologists as being low-profile, unclear and ambiguous. The profession is criticised for lacking quality control and for not being responsive enough to the needs of a generic N.H.S. service. In addition, problems with low salaries and morale are reported within the wider context of the N.H.S. Parry (1989) in her report on the M.A.S. Review (1989) states that:

"I believe that the Review acted as a vehicle to carry much of the anger, depression and hopelessness felt by the profession as a whole."

Clearly feelings such as these, if prevalent throughout the profession as a whole, need to be investigated further.

**FUTURE ROLES OF N.H.S. CLINICAL PSYCHOLOGISTS**

As has been illustrated above, the role Clinical Psychology has undertaken within the N.H.S. has changed greatly as the profession itself has developed and expanded. It seems likely that this role will continue to change as Clinical Psychologists adapt to new service settings and professional developments. Parry (1989) points out that a great deal of uncertainty exists within the profession as to what implications the recommendations of the M.A.S. Review (1989) will have for the future role(s) of N.H.S. Clinical Psychologists. Similar unease exists with regard to the implementation of some aspects of the second Griffiths Report (1988). In addition, the proposals outlined in the latest Government White Papers have created some confusion as to who will be responsible for decisions regarding professional training and as to what required levels and mix of staff will be. These proposals, therefore, will have a direct influence on the future development of Clinical Psychology. These, and a number of additional factors, will, therefore be discussed in more detail below, with regard to their potential influence on the future of the profession.

The M.A.S. Review of Clinical Psychology (1989) looked at how Clinical Psychology as a profession has reached its current status. In addition, it also made a number of recommendations as to how it might develop in the future. It saw Clinical Psychology's main objective as being:

"to improve, either directly or indirectly, the standard and quality of life of people who are served by and provide health services, and to alleviate disability through the application of appropriate psychological theories."

The Review suggests a 'Consultant Psychologist' led service in which the Consultant Psychologist would be responsible for co-ordinating services as a whole and within the profession of Clinical Psychology itself. The Review further suggests that the profession adopts a 'shared care' model of service provision in which Clinical Psychologists support, complement and provide alternatives to medical care. These proposals would necessitate a major restructuring of the profession and would require significant increases in staffing levels.

The Government White Papers

A number of Government White Papers and reports have recently been published with respect to the organization of the N.H.S., which have a number of implications for the development of Clinical Psychology. A number of these are discussed below.

The Griffiths Report (1988) was set up to review the use of public funds in the provision of community care. It emphasised the need to distinguish between the identification of needs and purchasing of services. The former was seen as the responsibility of the Local Authority and the latter as being provided by the N.H.S. and other organisations within what has been termed a 'mixed economy'.

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The White Paper: 'Caring for People,' (1989) accepted the general principles of the Griffiths Report (1988). Local Authorities were seen as being responsible for: assessing the needs of individuals, devising a package of care, evaluating care, and purchasing services from a 'mixed economy' including private and voluntary organisations. This would involve the transferring of funds from the N.H.S. to Local Authorities. Emphasis was placed on non-residential care in Elderly Services and the continued reduction of hospital provision in Mental Handicap Services. In Mental Illness, emphasis was placed on joint care programmes and the provision of a specific grant to develop community services. Extra funds for Mental Handicap and Elderly Services would not be provided in this way. There would also be no 'ring-fencing' of a specific Mental Health budget as was originally proposed in the Griffiths Report (1988). However, it is unclear how the transfer of N.H.S. funds to Local Authorities will occur, and on what basis Local Authorities will decide which services to provide.

The White Paper: 'Working for Patients,' (1989) supported the general proposals of the 1987 White Paper: 'Promoting Better Health,' and included specific proposals aimed at providing incentives to General Practitioners (G.P.s) and hospitals to improve services. It introduced the concept of practice budgets for practices with over 11,000 patients, allowing them to purchase services from N.H.S. or private hospitals. It also introduced the option for hospitals to become self-governing. This proposal allows hospitals the option of becoming separate legal entities within the N.H.S., who can obtain funds by entering into contracts to provide services to Health Boards, G.P.s and private organisations. It was further proposed that Health Boards could also buy and sell services to and from other Health Boards or private sector organisations.

The main aims of the Government White Papers have been to increase patient choice and to provide incentives to service providers to become more efficient, effective and responsive (McPherson, 1990). The methods employed in achieving these aims are: (a) the separate funding and provision of services; (b) the
introduction of a 'mixed economy' of public, private and voluntary services; and (c) the introduction of business methods with a greater delegation of power to local managers, allied with stricter professional and financial accountability. How the roles currently occupied by Clinical Psychologists will fit in with these new models of service provision has yet to be determined.

The Royal Charter

As well as these changes in the service settings in which Clinical Psychologists work, there have also recently been some important developments within the profession itself. One major change has been the introduction of Chartering. Chartered status was introduced for Clinical Psychologists, along with other Psychologists, in 1988 with three main aims: (a) to protect the public; (b) to provide public information; and (c) to enhance the profession. Public protection comes from the creation of a Register of Clinical Psychologists who can be trusted to provide services competently. Only those Clinical Psychologists who are appropriately trained and experienced will be included on the register, and may be removed from it if they violate the terms of the code of conduct.

The setting up of the Register has been an important step in the development of Clinical Psychology as an established discipline. However, since its introduction, it has undergone some criticism. While the laudable aims of public protection may be achieved, the validity of the assumption that registration equals competent professionals is questionable (Howarth, 1988). There would also be a need to publicise the profession and, in the light of the proposals contained in the recent White Papers, sell the profession as a 'better buy'. Other problems arise from the fact that Registration is voluntary and not all Clinical Psychologists may choose to become Chartered. Also, Chartering does not stop others outside the profession using the term 'Psychologist'. Further problems arise as Clinical Psychologists' skills are difficult to define and criteria would need to be regularly updated as the roles
of Clinical Psychologists developed within the profession. So while
the introduction of Chartered status for Clinical Psychologists was
a major step in the development of the profession, its
implementation has not been free of problems and the full
implications of putting the Charter into practice have yet to be
realised.

Regrading

Another change that is currently being experienced by the
profession is the introduction of a new career grading structure.
The new grading structure aims to introduce a common system for pay
and grading, with the retention of existing specialist groupings and
local titles. It introduces a new pay spine including a
discretionary facility to recognise extra responsibilities or
additional skills. Assimilation to the new spine occurs for staff
in post from the 1st January, 1990 and local reviews to determine
the assignment to a point within a new four grade structure is
expected to be completed by the 1st September, 1990 (detailed in
S.H.H.D. AL(SP) 3/90). McPherson (1990) suggests that the new
structure, containing as it does an element of 'flexible grading',
should be understood as one of the methods of implementing 'Working
for Patients,' (1988) and that it seems likely that an element of
'flexible pay' will be introduced subsequently.

1992 and Changes in the Labour Market

Other factors which will effect the future of the profession
include the dissolution of barriers within the E.E.C. in 1992 and the
changes in the nature of the labour market that will occur in the
U.K. between now and the end of the century. Investigations will
need to be made of the roles and training of Clinical Psychologists
in European countries from which there is likely to be an inflow
into the U.K. (M.A.S., 1989). Recruitment policies will also need to
be examined with the forthcoming changes in the labour market.
Between 1985 and 2001 there is expected to be a 20% reduction in
the number of 16 - 29 year olds. This will be coupled with an
increase in the number of 30 year olds and above, resulting in a generally older working population by the end of this century.

The M.A.S. Review of Clinical Psychology (1989) suggests that Clinical Psychology will need to become more competitive, in the context of these changes in the labour market, if it is to continue to attract appropriately qualified individuals. This applies not only to recruiting new staff, but also to the need to introduce mechanisms to ensure that those already in service are retained. The Review also points out the need for the expanding role(s) of Clinical Psychologists to be catered for by a much broader training. In addition to this, and in the light of the recent Government White Papers, the Review states:

"If the profession is to successfully fare and flourish and attract funding in a market-driven healthcare system, it will need to demonstrate and promote clearly, unambiguously and actively its value to society."

Summary

In summary, the roles played by Clinical Psychologists in the N.H.S. have undergone many changes in the relatively short time in which the profession has been in establishment. It seems likely that with, for example, the implementation of the recent Government White Papers, and other factors influencing the future of Clinical Psychology, as discussed above, that the profession will continue to develop and change. This study aims to go some way to examining how Clinical Psychologists experience their current roles. In particular, this study looks at the experience of job satisfaction and role stress in Clinical Psychologists working for the N.H.S. in Scotland. The next section of this study examines the concepts of job satisfaction and role stress and the relationship between these two variables and other job conditions.
Interest in concepts such as job satisfaction arose in the years following the second World War. At this time Western industrialised societies were experiencing increasing prosperity and relatively full employment. The rising expectations of people in post-war society were both reflected in, and fostered by developments in housing, welfare and educational policies. This produced a context in which employers were faced with a workforce which could, if dissatisfied, change jobs fairly easily. This in turn led to a need to create an environment which was encouraging of a stable, well motivated and satisfied workforce.

Job satisfaction, perhaps more than any other concept, has attracted a great deal of interest from the applied behavioural sciences. The work performed by a large proportion of the working population has come under increasing criticism by both popular and academic writers, and the workplace has become viewed as a part of society which has neither kept pace with improvements in the quality of life experienced by people, nor come close to meeting the rising expectations of the post-war period. Factories were often criticised for being dirty, noisy, dangerous places which did not meet the personal work needs of employees and offered them little satisfaction. Clerical work, with its routine nature and declining status and pay, rather than poor conditions, too often lacked any intrinsic satisfaction. This left managers facing the behavioural consequences of this central problem in the experience of work: costly levels of staff turnover, absenteeism and poor industrial relations.

There has been quite an extensive discussion by writers about the actual meaning of the concept of job satisfaction. The main theme of these discussions has been about what people actually mean when they report job satisfaction at work. It is generally considered to be more an expression of feeling as opposed to
thoughts. This affective nature is incorporated in Locke's (1976) definition in which he describes job satisfaction as being:

"A pleasurable positive emotional state resulting from the appraisal of one's job or job experiences."

A dichotomy is often drawn between two types of feelings people have about their work: Global job satisfaction and Facet-Specific job satisfaction. Global job satisfaction reflects an individual's overall feelings towards his/her job, whereas, in addition to this, facet-specific job satisfaction relates to particular aspects of a job, for example, pay, supervision, colleagues etc. Global concepts can be broken into their constituent facets. This can be done either conceptually or statistically. In conceptual approaches researchers either use their own hunches and investigations about what the significant facets in a job are, or they adopt a particular theoretical framework which specifies a set of facets in advance. Sometimes the specific nature of an organisation or occupation in which research is being conducted means that the former is preferable. Vallis and Cope (1980), in an attempt to identify the causes of low job satisfaction in nurses, for example, found that the relevant facets of job satisfaction for nurses included: the feeling of being needed by patients, the ways hours of work were organised, the adequacy of in-service training received and the pay, as compared with others working outside the hospital. Statistical methods of deriving facets involves using techniques, such as factor analysis, to reduce large quantities of questionnaire data to a few general dimensions. Many questionnaires available to researchers in the area of job satisfaction have been developed in this way.

Some researchers combine the facet-specific measures to produce a global measure. This raises the question of whether the predictive validity of a global job satisfaction measure can be improved by weighting facets which subjects have indicated as being important to them. Whilst in some cases there may be justification for doing this, in practice weighting tends not to improve the ability of a global measure of job satisfaction to predict behaviour (Mikes and Hulin, 1968). This appears to be because people already
implicitly weight the importance of a facet when they give a rating of their satisfaction of that aspect of their job. Asking a person to weight the importance of a facet adds little new information and, therefore, does not improve the predictive validity of global job satisfaction measures.

THEORIES OF JOB SATISFACTION

Two widely used theories in contemporary job satisfaction research are examined below. The first stresses the individual, subjective nature of job satisfaction and the second proposes that there are important objective features of the jobs people do which gives rise to job satisfaction. Both provide useful insights into the nature of job satisfaction.

1. Variance Theory

This theory is based on the relatively simple idea that the extent to which you are satisfied with your job depends on the extent to which it provides you with what you want from it. The main problem for variance theorists, however, is defining what people actually want from their jobs. One way in which this has been overcome is to use concepts from motivational theory, for example, by measuring the extent to which self-actualising needs can be fulfilled (Schaffer, 1953; Porter, 1962). Another approach assumes that the relevant variances depend on the nature of the work itself and thus differ from occupation to occupation. For example, Wallis and Cope (1980) did not specify the facets of job satisfaction in nursing until they had analysed data from a series of interviews with nurses. Either way, whether specifying the relevant facets of job satisfaction in advance, or identifying them through investigation, researchers are able to establish whether there are significant individual differences present in reported levels of job satisfaction, or whether there is a high degree of consensus among staff about what aspects of work relate to high levels of satisfaction and dissatisfaction.
2. Job Characteristics

While variance theory suggests that causes of job satisfaction are subjective, the job characteristics model suggests they are found in the objective characteristics of a job (Hackman and Oldham, 1975). Jobs are seen to differ in the extent to which they involve five core dimensions of: (a) skill variety; (b) task identity; (c) task significance; (d) autonomy; and (e) task feedback. If jobs are designed in such a way that the presence of these core dimensions is increased, then three critical psychological states can occur in employees, termed: (a) experienced meaningfulness of work (determined by the level of skill variety, task identity and task significance); (b) experienced responsibility for work outcomes (determined by the amount of autonomy present); and (c) knowledge of the results of work activities (determined by the amount of feedback present). Hackman and Oldham (1975) suggest that when these three critical psychological states are experienced then work motivation and job satisfaction will be high.

CORRELATES OF JOB SATISFACTION

Attempts have been made to establish whether specific variables, such as age, sex, or occupational status, are predictive of differences in job satisfaction. Weaver (1980), for example, found that occupational status correlated significantly with job satisfaction. However, status seems to be the only personal variable that does consistently correlate with job satisfaction. Sex and age differences are rarely found. Goldthorpe, Lockwood, Bechofer and Platt (1968) also point out the need to distinguish between what they term as 'in-plant' and 'out-plant' factors, in that it is important to separate out whether job satisfaction is due to the derivation of pleasure from a job or merely recognising the practicality of it. For example, a highly paid job may be seen as a means to a higher standard of living. It is important, therefore, in measuring job satisfaction to be aware of a range of contextual variables which might cause different groups of workers to
construct different meanings about what constitutes a satisfactory job.

Most research, however, has centred on the implications of job satisfaction for work behaviour, and a common-sense assumption is often made that if people are satisfied in their work, this will be reflected in behaviour favourable to the organisation. Essentially, behavioural correlates of job satisfaction should be: high work performance, low absenteeism and low staff turnover. In saying this, however, much of the research based on the practical implications of job satisfaction have failed to establish a strong direct link between this and work behaviour. Problems can also arise from other intervening variables which stand between job satisfaction and the behaviours that researchers are trying to predict. This is demonstrated clearly in Smith's (1977) study which found that absenteeism was more readily predicted by level of snowfall than by job satisfaction per se.

Studies have also looked at the relationship between job satisfaction and productivity, but again, for a number of reasons, the relationship is far from straightforward. Some researchers, working on the assumption that the most significant source of satisfaction at work is doing a job well, have suggested the relationship is better conceptualised the other way around: that is, high productivity leads to high job satisfaction (Wanous, 1974). This has considerable implications for management seeking higher productivity. A 'common-sense' view suggests that management should concern themselves with their employees' job satisfaction in order to achieve high productivity. The opposite view, that high performance leads to high job satisfaction, however, suggests that management need to reward past levels of high performance in order to increase productivity.

Much of the research carried out in this area tends to suggest that the two variables of job satisfaction and productivity are virtually independent of each other. Two possible suggestions for why this may be are: (a) lack of control over some aspects of work,
for example, in machine-paced assembly lines the production line speed is constant whatever the level of job satisfaction experienced by the workers, and (b) correlational limitations, for example, even when correlations do appear, the association may be spurious as both may be associated with other factors (Porter and Lawler, 1968). In summary, job satisfaction and productivity may have separate causal paths with different factors determining each.

So, while much of the research into job satisfaction has been of a practical nature, with increasing productivity being the goal, very few answers have been found to questions concerning the satisfaction-performance relationship. Attempts to increase performance are now seen in a more broadly based theoretical and practical context including changing the organisation and design of work.

**ROLE STRESS**

An individual's activities within an organisation can be considered to be a function of the roles he/she plays in it. A role is defined as the set of expectations others have on the role incumbents behaviour. Much research has centred on identifying ways in which roles can become stressful to employees of organisations. One area of research has looked at the stress that can result from the conflicting demands a role can make on a person. Role conflict can be further divided into *single* and *multiple* role conflicts. Single role conflict arises from various components of a given role that become difficult to reconcile, for example, the expectations of a supervisor's staff may come into conflict with the directives he/she has received from management. Multiple role conflict stems from the fact that many people may take on a variety of different roles within a given job. Here the demands of one role an individual has may clash with those of another. Also, in a wider context, conflict and stress may be experienced between work and family roles (Lewis and Cooper, 1983).
Some roles appear to carry higher levels of stress than others. For example, roles that involve relating the activities of an organisation to the outside world, such as a negotiator or a salesperson, are often viewed as carrying higher than average levels of stress. Miles (1980) discriminates between high and low stress jobs by his typology of what he terms 'boundary-spanning' roles. High stress jobs are viewed as those involving: (a) numerous novel and unanticipated problems, (b) relationships with different types of client, and (c) hard performance data available to management from which demands for individual results can be made, without taking into account the delicate processes involved in a boundary-spanning role.

Another form of role stress commonly investigated is role ambiguity. This occurs if an individual is uncertain about what tasks, responsibility and authority exist in the role they play in an organisation. Role ambiguity can arise in complex, flexible, non-bureaucratic organisations where, for example, an individual's responsibilities within a working group may occur in addition to their regular individual functional duties.

Stress can also occur where a person feels they have become locked into a role. This type of stress is more commonly found in large bureaucratic organisations where employees feel they are unable to change their jobs, because few job opportunities are available or because they are not sufficiently able or qualified to move into another post. This phenomenon can occur in newly created or reorganised organisations. Promotion patterns are distorted with new senior positions being filled by relatively young staff. Once posts are filled opportunities for promotion lessen and the stagnation experienced when career paths are blocked leads to frustration, apathy, and eventually to burnout, where the initial enthusiasm felt for a job is replaced by negative attitudes (Daley, 1979). Strategies for reducing burnout attempt to reduce the concern an individual has with the limitations of their current role. New career plans can be negotiated and new networks of responsibility or authority can be introduced in addition to
existing ones. Realistic career changes can also be provided by restructuring career scales within an organisation.

In summary, role theory posits that organisations can place difficult and conflicting demands on employees, which can result in the experience of role stress. Two distinct forms of role stress are represented by the concepts of role ambiguity and role conflict. Role conflict arises in situations where existing role expectations are clear but, at the same time, contradictory or mutually exclusive. Role ambiguity, on the other hand, results from unclear or vague agreements regarding role expectations (Hardy and Conway, 1978).

THE RELATIONSHIP BETWEEN ROLE STRESS AND JOB SATISFACTION

Over the last two decades there has been a growing body of literature demonstrating job satisfaction, symptoms of emotional distress and withdrawal behaviours to be correlates of role conflict and role ambiguity. The traditional view of role theory suggests that these outcomes are directly caused by these forms of role stress. The relationships suggested are demonstrated in Figure 1 below:

![Figure 1. The traditional model of the effects of role stress (from Bedeian and Armenakis, 1981)](image)

Role ambiguity is believed to increase stress as concerns about procedures relating to tasks lead to frustration, and consequently tension. Satisfaction is reduced as lack of clarity impedes the opportunity to improve performance and obtain rewards. Similar
effects on stress and satisfaction are also expected to result from role conflict. An overall uncomfortable attitude towards a job occurs as the lack of agreement between received roles diminishes perceived effectiveness in the work situation. In addition, the employee experiencing role stress will begin to actively avoid work resulting in chronic absenteeism, turnover intention and actual turnover (Kahn et al, 1964). Most studies testing hypotheses taken from the traditional model have been correlational in nature and imply that role conflict and ambiguity directly affect stress reactions, job satisfaction and turnover (Van-Sell, Brief and Schuler, 1981).

A major attempt to clarify the relationship between role stress and its outcomes was carried out by Kemery, Bedeian, Moesholder and Touliatos (1985). The traditional model was tested across four sample populations and the results supported the hypothesised relationships in all but one sample. These findings indicate direct and mediated relationships between role stressors and consequent levels of job satisfaction and turnover intention. These results supported previous findings of Bedeian and Armenakis (1981) and provide confirmation for the influences of role conflict and ambiguity on personal reactions proposed by Kahn et al. (1964).

One of the main criticisms of the traditional model, however, is that it is incomplete and does not take into account a number of job conditions that are established correlates of role conflict and ambiguity. Whilst outcomes, such as job satisfaction, can be viewed as consequences of role stress, reviews of job satisfaction (Locke, 1984) and role conflict and ambiguity (Jackson and Schuler, 1985) reveal a common set of job conditions that can be viewed as their antecedents. Therefore, the observed direct effects of role stressors on outcomes may be artifactual due to the lack of critical job conditions in the analysis. For this reason Kemery et al (1985) cautioned against drawing conclusions about causal relationships from results.
Research models are inconsistent regarding the hypothesised direct links between role stressors and job satisfaction. Models which incorporate other determinants of job satisfaction, in addition to role stressors, often challenge the proposition that role stressors directly effect job satisfaction. Several studies that control for the effects of other perceived job conditions have found that the direct effects of role stressors on job satisfaction are diminished (Hamner and Tosi, 1974; Miles and Perrault, 1976). Jackson (1983) and Gray-Toft and Anderson (1985) found that role conflict and ambiguity only affected job satisfaction indirectly through job tension after other perceived job conditions were entered into their models as antecedents. These findings, along with others, suggest that other determinant factors may overshadow the satisfaction effects of role conflict and ambiguity.

CONCLUSION

The role that Clinical Psychologists play in the N.H.S. have undergone many changes in their development over a relatively short period of time. In addition, it seems certain that further role changes will occur as the effects of the implementation of: recent Government White Papers, The Royal Charter, the new grading structure and the dissolution of E.E.C. barriers in 1992.

There is also some disagreement within the profession at the moment about how the current roles of Clinical Psychologists should be developing (M.A.S. Review, 1989). While it is felt by some that the profession should focus on direct patient care, others feel that greater efficiency can be achieved in tackling environmental, organisational and management issues within the N.H.S. The M.A.S. Review (1989) further suggest that the roles undertaken by individual practitioners are often developed by themselves according to their own particular interests. The Review calls for a definitive statement regarding the role of N.H.S. Clinical Psychologists which can be legitimised and clearly stated to service users, providers and managers.
The literature tends to suggest that there is some disquiet in the profession about the roles Clinical Psychologists currently play in the N.H.S. Indeed, Parry (1989) goes so far as to suggest that negative feelings are currently prevalent throughout the profession. The M.A.S. Review (1989) further suggests that the profession may, in fact, be declining as opposed to expanding. This view is supported by levels of staff turnover in the profession as a whole in recent years, where, despite newly qualified staff continuing to be produced by training courses, the actual numbers of Clinical Psychologists in post have been falling. Clearly if the profession is to continue to develop, then some further empirical evaluation of the roles of Clinical Psychologists in the N.H.S. would seem pertinent.

This study aims to go some way to meeting this need by examining role stress and job satisfaction in a population of Clinical Psychologists working for the N.H.S. in Scotland. An investigation of job satisfaction will help to elicit the feelings Scottish Clinical Psychologists have about their work in the current climate. In addition, investigating role stress will give an indication of how this sample perceive their role, and will hopefully help to clarify some of the problems currently being experienced by the profession. It is hoped that the findings of this study will provide information that can be used in the future planning and development of the profession.
THE PRESENT STUDY

AIMS OF THE RESEARCH

This study aims primarily to look at levels of: job satisfaction, role conflict, role ambiguity and psychological disturbance in Clinical Psychologists working for the National Health Service in Scotland. The findings will be viewed in the context of data obtained from previous studies of a variety of different occupational groups.

This study was inspired by Sampson's (1989) 'Stress survey of Clinical Psychologists in Scotland' and aims to further evaluative research on Clinical Psychology as a profession. The measures used in this study were chosen on the basis of being extensively used in past research. This provides a body of literature containing comparative data concerning various occupational groups. They were also chosen on the basis of demonstrating both high validity and reliability over a number of studies.

The findings of this study will also be related to occupational models of Role Stress using Scottish Clinical Psychologists as an experimental group. The relationships between the variables measured will be investigated in this context.

MEASURES

The Job Satisfaction Scale

The job satisfaction scale used in this study is a measure of overall satisfaction developed by Brayfield and Rothe (1951) (See Appendix 2). It was designed to be sensitive to variations in attitudes across a wide range of jobs and at different levels of employment. The scale contains eighteen items which cover a range of evaluative reactions, and were chosen by statistical and other
examinations from a pool of over a thousand statements. Responses are scored on a five-point scale (strongly agree to strongly disagree) and scores are summed to give a total scale score, such that a high score relates to a high level of job satisfaction. The final version of the scale was administered to 231 young female office employees, producing a range of scores from 35-87 with a mean of 63.8 (s.d. 9.4), and a Spearman-Brown internal reliability coefficient of 0.87. A second sample of 91 night-school students in various jobs gave a range of scores from 29-89 with a mean of 70.4 (s.d. 13.2). The scale was also found to be highly correlated ($r = 0.92$) with Hoppock's (1935) measure of job satisfaction.

A number of studies have used this measure to look at job satisfaction across a wide range of occupational groups (for example, (Brayfield, Wells and Strate, 1957; Johnson and Stinson, 1975; Rousseau, 1977) and further data is available regarding the validity and reliability of this measure. Brayfield et al. (1957) quote a Spearman-Brown internal reliability coefficients of 0.90 and 0.78 for 41 male and 52 female Civil Service office employees. A Kuder-Richardson internal reliability score of 0.99 was reported by Johnson and Stinson (1975) in their study of ninety part-time Master's degree students. Rousseau, using a modified version of The Job Diagnostic Survey (Hackman and Oldham, 1976) to measure perceived job characteristics, found a consistent pattern of significant positive correlations with overall job satisfaction. She quotes mean scores ranging between 61.59 and 71.08. Data from studies of other occupational groups using this measure are further listed in Table 6 of the results section of this study in comparison to those found for Scottish Clinical Psychologists.

The Role Conflict And Role Ambiguity Scales

The role conflict and role ambiguity scales developed by Rizzo, House and Lirtzman (1970) (See Appendix 3) are the most commonly used measures in research into role stress (Tracy and Johnson, 1981). Jackson and Schuler (1985) note that since the 1950's there has been a significant body of literature and research on role
theory with a particular emphasis on role conflict and role ambiguity, and that approximately 85 per cent of this research has incorporated the scales developed by Rizzo et al. (1970).

The scales were developed to reflect the conceptual categories developed by Kahn, Wolfe, Quinn, Snoek and Rosenthal (1964). An initial pool of thirty items was administered to 290 managerial and technical employees, and a factor analysis and item analysis led to the establishment of a six-item Role Ambiguity Scale and an eight-item Role Conflict Scale. Responses are on a seven-point scale (very false to very true) and a mean (between 1 and 7) is calculated, such that a high score relates to high ambiguity or conflict. The scale of respondents were divided into two similar sub-samples (n=199 and 91), which yielded means of 3.79 (s.d. 1.08) and 4.03 (s.d. 1.15) for role ambiguity and 4.19 (s.d. 1.21) and 3.86 (s.d. 1.17) for role conflict. These means occur close to the midpoint (4) of the response scale. The Kuder-Richardson internal reliability coefficients were 0.78 and 0.81 for role ambiguity and 0.82 and 0.82 for role conflict, and the correlation between the scales was 0.25 and 0.01 for the two sub-samples (Rizzo et al.,1970).

Murphy and Gable (1988), in a study examining the validity and reliability of these scales, suggest a three factor interpretation of the scales in which one factor reflects the conceptual definition of role ambiguity, whilst the other two reflect two separate definitions of role conflict, termed as:

1) Intra-Sender Conflict-

"a form of sent-role conflict characterised by inconsistent expectations from a single member of the role set which may be incompatible, or when the availability of resources (i.e. time, money, one's own ability) are incongruent with expectations associated with the role;"

2) Inter-Sender Conflict-

"a form of sent-role conflict which occurs when inconsistent expectations or demands are made on role occupants by one or more
role senders, or when expectations between role senders are in opposition."

Murphy and Gable's (1988) findings differ from studies by Rizzo et al. (1970) and Schuler, Aldag and Brief (1977) from which a two-factor solution emerged, but were consistent with findings of Schwab, Iwanicki and Pierson (1983) in a study of 448 Massachusetts teachers. Alpha reliability estimates were quoted by Murphy and Gable (1988) as; 0.81, 0.76, 0.66 and 0.81 for role ambiguity, intra-sender role conflict, inter-sender role conflict and overall role conflict, respectively.

Because these measures have been so widely used, a great deal of descriptive statistics is available on a number of occupational groups in the literature. For example, Szilagyi, Sims and Keller (1976) report data from seven different occupational groups within a large medical centre. Role ambiguity means ranged from 3.53 (s.d. 1.38) for 53 senior administrators to 2.78 (s.d. 0.91) for 240 service employees. Role Conflict scores demonstrated less variation across jobs with means ranging from 3.89 (s.d 1.00) to 3.95 (s.d. 1.03). Data from studies of other occupational groups using these measures are further listed in Tables 7 and 8 of the results section of this study in comparison to those found for Scottish Clinical Psychologists.

The General Health Questionnaire

The General Health Questionnaire (GHQ) was designed to be an easily administered self-report screening test aimed at detecting non-psychotic psychiatric disorders in community and non-psychiatric clinical settings. Its focus rests largely on the psychological components of ill-health, measuring breaks in normal functioning, rather than lifelong traits. The test items were selected with the aim of differentiating psychiatric patients as a class from non-patients as a class (Goldberg and Williams, 1988).
The GHQ-28 used in this study is a 'scaled' version of the 50-item GHQ and was developed using a principal components analysis (Goldberg and Hillier, 1979). There are four subscales (somatic symptoms, anxiety symptoms, social dysfunction and severe depression) each consisting of seven items which are scored and summed to give a total scale score.

Goldberg and Williams (1988) cite twelve studies which look at the validity of the GHQ-28. Sensitivity is reported to range from 44% (Mann et al., 1983) to 100% (Banks, 1983; Lindsay, 1986; Selzer and Mann, 1987) and specificity from 74% (Medina-Mora et al., 1983) to 93% (Rabins and Brooks, 1981).

The reliability of the GHQ-28 varies according to the sample population investigated. Goldberg and Williams (1988) point out that test-retest correlations tend to be higher for clinically defined groups with a high prevalence of disorder. For example, Robinson and Price (1982) quote a test-retest correlation as high as 0.9 in a study of stroke patients. However, there is considerably more movement between 'caseness' and 'non-caseness' in samples drawn from the general population resulting in lower coefficients. Because of these practical and conceptual problems faced in distinguishing between true change and unreliability, a definitive test-retest reliability of the GHQ remains to be carried out (Goldberg and Williams, 1988).

As Sampson (1989) points out, the GHQ is not a direct measure of stress. However, it has been used by a number of studies of occupational stress as an indicator of states of distress (for example, West and Savage, 1987; Firth-Cozens, 1987; Banks et al., 1980). The GHQ-28 was used in both Cushway's (1988) study of stress in Trainee Clinical Psychologists and Sampson's (1989) study of stress in Scottish Clinical Psychologists. The GHQ-28 has also been used in this particular study in order that results obtained can be viewed in the context of these previous studies.
Both the GHQ and Lickert scoring methods are used in this study. In the GHQ scoring method items are weighted 0-0-1-1, with a maximum score of 28, representing an estimate of psychiatric caseness. The Lickert scoring method weights items 0-1-2-3 with a maximum of 84. The GHQ method of scoring considers only symptoms and can therefore be considered an 'area' measure, whilst the Lickert scoring method is a composite measure encompassing both area and intensity. These scoring methods were used in order that the results of this study could be directly related to Cushway's (1988) and Sampson's (1989) findings. Further data from studies of other occupational groups using this measure are listed in Table of the results section of this study in comparison to those found for Scottish Clinical Psychologists.

**PROCEDURE**

All Heads of Departments or Area Psychologists working for the National Health Service in Scotland were initially contacted to explain the purposes of this research. Following this copies of the questionnaires, together with a covering letter and a stamped addressed envelope, were sent out to each Clinical Psychologist. The covering letter emphasised aspects of confidentiality and gave a brief explanation as to the aims of the present study (See Appendix 1). The questionnaires were requested to be returned by a given deadline (one month following distribution), but this was extended by one extra month in practice.

In all 195 questionnaires were sent out and 115 responses were received by the extended deadline. This gave a return rate of 59% and compares with Sampson's (1989) return rate of 67% for Scottish Clinical Psychologists and Cushway's (1988) return rate of 76% for trainees.

**Analysis of the Data**

Analysis of the data was carried out using the SPSSx programme (SPSSx User's Guide, 1983). Tests for investigating the data
included: Chi-Square, T-Tests, Pearson's Product-Moment Correlation, Analysis of Variance and Scheffe Test.

**SUBJECTS**

All subjects were fully qualified Clinical Psychologists working for the National Health Service in Scotland. Respondents' ages ranged from 26-64 with an overall mean age of 37.8 (s.d. 8.01). The distribution of ages is represented in Table 1 below:

<table>
<thead>
<tr>
<th>AGE</th>
<th>N</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>16</td>
<td>(14%)</td>
</tr>
<tr>
<td>30-39</td>
<td>56</td>
<td>(50%)</td>
</tr>
<tr>
<td>40-49</td>
<td>27</td>
<td>(24%)</td>
</tr>
<tr>
<td>50-59</td>
<td>12</td>
<td>(11%)</td>
</tr>
<tr>
<td>&gt;60</td>
<td>1</td>
<td>(1%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>N</strong></td>
<td>112</td>
</tr>
</tbody>
</table>

The length of time Clinical Psychologists had been practicing ranged from a few months to 37 years. The mean length of career was 10.8 years (s.d. 7.68). The distribution of the number of years Clinical Psychologists had been practicing is represented in Table 2 below:

<table>
<thead>
<tr>
<th>YEARS PRACTICING</th>
<th>N</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>68</td>
<td>(59%)</td>
</tr>
<tr>
<td>10-19</td>
<td>33</td>
<td>(29%)</td>
</tr>
<tr>
<td>20-29</td>
<td>13</td>
<td>(13%)</td>
</tr>
<tr>
<td>&gt;30</td>
<td>1</td>
<td>(1%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>N</strong></td>
<td>115</td>
</tr>
</tbody>
</table>

Respondents were found to have been in their current posts for between a few months to 25 years. The mean length of time in a current post was 4.49 years (s.d. 4.68). The distribution of lengths of time spent in currently occupied posts is represented in Table 3 below:
Table 3. Length of time in current post.

<table>
<thead>
<tr>
<th>YEARS IN CURRENT POST</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>73 (63%)</td>
</tr>
<tr>
<td>5-9</td>
<td>30 (26%)</td>
</tr>
<tr>
<td>10-14</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>15-19</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>&gt;20</td>
<td>3 (3%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>115</strong></td>
</tr>
</tbody>
</table>

The mean number of times posts had been changed within individual careers in Clinical Psychology was 1.85 (s.d. 1.35) with changes in post having occurred up to seven times.

Respondents reported between 0 and 25 'at least weekly' contacts with other Clinical Psychologists (mean = 4.71; s.d. = 3.65). No significant sex, grade or area/speciality differences in the number of contacts with other Clinical Psychologists were found. The mean number of clients seen each week was 19.4 (s.d. 9.80) with a range from 0-55. No significant sex, grade or area/speciality differences in the number of clients seen each week were found.

Sixty-eight percent of the respondents were female and 32% were male. Sex differences according to grade are recorded in Table 4 below:

Table 4. Sex differences according to grade.

<table>
<thead>
<tr>
<th>SEX</th>
<th>BASIC</th>
<th>SENIOR</th>
<th>PRINCIPAL</th>
<th>TOP</th>
<th>ALL GRADES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>0 (0%)</td>
<td>14 (12%)</td>
<td>10 (8.5%)</td>
<td>13 (11.5%)</td>
<td>37 (32%)</td>
</tr>
<tr>
<td>FEMALE</td>
<td>8 (7%)</td>
<td>36 (32%)</td>
<td>26 (23%)</td>
<td>7 (6%)</td>
<td>77 (68%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8 (7%)</td>
<td>50 (44%)</td>
<td>36 (31.5%)</td>
<td>20 (17.5%)</td>
<td>114</td>
</tr>
<tr>
<td><strong>M:F RATIO</strong></td>
<td>0:8</td>
<td>1:2.67</td>
<td>1:2.60</td>
<td>1:0.54</td>
<td>1:2.08</td>
</tr>
</tbody>
</table>

Significant sex differences were found between grades ($\chi^2 = 14.29; df = 3; p < 0.01$)

- 30 -
The numbers of respondents working in each area/speciality are recorded in Table 5 below:

Table 5. Number of Respondents working in each area/speciality.

<table>
<thead>
<tr>
<th>AREA/SPECIALITY</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Mental Health</td>
<td>56 (50%)</td>
</tr>
<tr>
<td>Mental Handicap</td>
<td>14 (12%)</td>
</tr>
<tr>
<td>Child</td>
<td>20 (18%)</td>
</tr>
<tr>
<td>Elderly</td>
<td>6 (5%)</td>
</tr>
<tr>
<td>Forensic</td>
<td>5 (4%)</td>
</tr>
<tr>
<td>Split-Posts</td>
<td>9 (8%)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (3%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>113</strong></td>
</tr>
</tbody>
</table>
RESULTS

The mean level of job satisfaction for Scottish Clinical Psychologists is recorded below in Table 6 in comparison to levels found for other occupational groups:

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night School Students (Brayfield + Rothe, 1951)</td>
<td>70.40</td>
<td>13.20</td>
<td>91</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (1990)</td>
<td>68.32</td>
<td>8.58</td>
<td>115</td>
</tr>
<tr>
<td>Nursing Aides (Baker + Hansen, 1975)</td>
<td>66.02</td>
<td></td>
<td>195</td>
</tr>
<tr>
<td>Hospital Staff (Kobley et al., 1978)</td>
<td>66.00</td>
<td>8.90</td>
<td>203</td>
</tr>
<tr>
<td>Kibbutz Employees (Ronen, 1978)</td>
<td>65.92</td>
<td>9.92</td>
<td>135</td>
</tr>
<tr>
<td>Female Office Staff (Brayfield et al., 1957)</td>
<td>63.81</td>
<td>8.62</td>
<td>52</td>
</tr>
<tr>
<td>Female Office Staff (Brayfield + Rothe, 1951)</td>
<td>63.80</td>
<td>9.40</td>
<td>231</td>
</tr>
<tr>
<td>Masters Degree Students (Johnson + Stinson, 1971)</td>
<td>63.78</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>Academic Staff (Lopez + Greenhaus, 1978)</td>
<td>62.30</td>
<td>10.40</td>
<td>523</td>
</tr>
<tr>
<td>Private Sector Employees (Ronen, 1978)</td>
<td>61.13</td>
<td>11.91</td>
<td>187</td>
</tr>
<tr>
<td>Male Office Staff (Brayfield et al., 1957)</td>
<td>60.54</td>
<td>14.98</td>
<td>41</td>
</tr>
<tr>
<td>Taxi Drivers (Baker + Hansen, 1975)</td>
<td>56.79</td>
<td></td>
<td>332</td>
</tr>
</tbody>
</table>

The mean levels of Role Ambiguity and Role Conflict are recorded in Tables 7 and 8 in comparison levels to found for other occupational groups:
Table 7. Mean Role Ambiguity scores for Scottish Clinical Psychologists in the context of other occupational groups.

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Administrators (Szilagyi et al., 1976)</td>
<td>3.53</td>
<td>1.38</td>
<td>53</td>
</tr>
<tr>
<td>Computer Professionals (Bartol, 1979)</td>
<td>3.44</td>
<td></td>
<td>159</td>
</tr>
<tr>
<td>Professional Employees (Morris + Koch, 1979)</td>
<td>3.24</td>
<td>1.41</td>
<td>55</td>
</tr>
<tr>
<td><strong>Scottish Clinical Psychologists (1990)</strong></td>
<td><strong>3.21</strong></td>
<td><strong>1.19</strong></td>
<td><strong>114</strong></td>
</tr>
<tr>
<td>Clerical Employees (Morris + Koch, 1979)</td>
<td>3.04</td>
<td>1.28</td>
<td>129</td>
</tr>
<tr>
<td>Managers (Szilagyi et al., 1976)</td>
<td>2.95</td>
<td>1.03</td>
<td>93</td>
</tr>
<tr>
<td>Manual Employees (Morris + Koch, 1979)</td>
<td>2.79</td>
<td>1.35</td>
<td>75</td>
</tr>
<tr>
<td>Service Employees (Szilagyi et al., 1976)</td>
<td>2.78</td>
<td>0.91</td>
<td>240</td>
</tr>
<tr>
<td>Nursing Staff (Schuler et al., 1977)</td>
<td>2.60</td>
<td>0.96</td>
<td>374</td>
</tr>
<tr>
<td>Foremen (Szylagyi et al., 1976)</td>
<td>2.37</td>
<td>0.77</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 8. Mean Role Conflict scores for Scottish Clinical Psychologists in the context of other occupational groups.

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scottish Clinical Psychologists (1990)</strong></td>
<td><strong>4.17</strong></td>
<td><strong>1.16</strong></td>
<td><strong>114</strong></td>
</tr>
<tr>
<td>Foremen (Szilagyi et al., 1976)</td>
<td>4.13</td>
<td>0.35</td>
<td>33</td>
</tr>
<tr>
<td>Computer Professionals (Bartol, 1979)</td>
<td>4.09</td>
<td></td>
<td>159</td>
</tr>
<tr>
<td>Service Employees (Szilagyi et al., 1976)</td>
<td>3.95</td>
<td>1.03</td>
<td>240</td>
</tr>
<tr>
<td>Senior Administrators (Szilagyi et al., 1976)</td>
<td>3.89</td>
<td>1.00</td>
<td>53</td>
</tr>
<tr>
<td>Professional Employees (Morris + Koch, 1979)</td>
<td>3.87</td>
<td>1.37</td>
<td>55</td>
</tr>
<tr>
<td>Managers (Szilagyi et al., 1976)</td>
<td>3.84</td>
<td>0.54</td>
<td>93</td>
</tr>
<tr>
<td>Clerical Employees (Morris + Koch, 1979)</td>
<td>3.52</td>
<td>1.44</td>
<td>129</td>
</tr>
<tr>
<td>Nursing Staff (Schuler et al., 1977)</td>
<td>3.26</td>
<td>1.05</td>
<td>374</td>
</tr>
<tr>
<td><strong>Manual Employees (Morris + Koch, 1979)</strong></td>
<td><strong>3.02</strong></td>
<td><strong>1.36</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>
The GHQ-28 was scored using the GHQ scoring method and the percentage of Scottish Clinical Psychologists scoring above the 3/4, threshold recommended by Goldberg and Williams (1988) in the manual, was calculated. This gives an estimation of prevalence of psychological disturbance. The percentage of Scottish Clinical Psychologists scoring above the threshold for both this study and for Sampson's (1989) sample are recorded in Table 9 below in comparison to other occupational groups.

Table 9. Estimated prevalence of Psychological Disturbance For Scottish Clinical Psychologists in the context of other occupational groups.

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>% ABOVE THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior House Officers (Firth-Cozens, 1987)</td>
<td>50</td>
</tr>
<tr>
<td>Female Executive Civil Servants (Jenkins, 1985)</td>
<td>36</td>
</tr>
<tr>
<td>Male Executive Civil Servants (Jenkins, 1985)</td>
<td>34</td>
</tr>
<tr>
<td>Psychiatric Nurses Jones et al., 1987</td>
<td>33</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (Sampson, 1989)</td>
<td>33</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (1990)</td>
<td>33</td>
</tr>
<tr>
<td>Medical Students (Firth, 1996)</td>
<td>30</td>
</tr>
<tr>
<td>2nd Year Psychology Undergraduates (Firth-Cozens, 1988)</td>
<td>11</td>
</tr>
</tbody>
</table>

A more conservative caseness threshold of 4/5 was also used so that the findings of this study could be further compared with those of Sampson (1989) and Cushway (1988). The estimated prevalences of psychological disturbance for Scottish Clinical Psychologists and Clinical Psychology Trainees are recorded in Table 10:

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>% ABOVE THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Psychology Trainees (Cushway, 1988)</td>
<td>57 (n = 285)</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (Sampson, 1989)</td>
<td>29 (n = 108)</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (1990)</td>
<td>27 (n = 115)</td>
</tr>
</tbody>
</table>

A further comparison was made between the findings of this study and the results obtained by Cushway (1988) and Sampson (1989) using Likert scores on the GHQ-28. Mean scores using this method of scoring are recorded in Table 11:

Table 11. Mean scores using the Likert scoring method on the GHQ-28 for Scottish Clinical Psychologists and Clinical Psychology Trainees.

<table>
<thead>
<tr>
<th>SAMPLE POPULATION</th>
<th>MEAN</th>
<th>S.D.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Psychology Trainees (Cushway, 1988)</td>
<td>23.00</td>
<td>10.26</td>
<td>285</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (Sampson, 1989)</td>
<td>18.34</td>
<td>9.98</td>
<td>108</td>
</tr>
<tr>
<td>Scottish Clinical Psychologists (1990)</td>
<td>16.70</td>
<td>10.82</td>
<td>115</td>
</tr>
</tbody>
</table>

The overall mean scores for: job satisfaction, role ambiguity, role conflict and GHQ scores are summarised in Table 12:

Table 12. Overall mean scores for: job satisfaction, role ambiguity, role conflict and GHQ score.

<table>
<thead>
<tr>
<th></th>
<th>MEAN</th>
<th>S.D.</th>
<th>RANGE</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOB SATISFACTION</td>
<td>68.32</td>
<td>8.58</td>
<td>35 - 87</td>
<td>115</td>
</tr>
<tr>
<td>ROLE AMBIGUITY</td>
<td>3.21</td>
<td>1.19</td>
<td>1 - 7</td>
<td>114</td>
</tr>
<tr>
<td>ROLE CONFLICT</td>
<td>4.17</td>
<td>1.16</td>
<td>1 - 6</td>
<td>114</td>
</tr>
<tr>
<td>G.H.Q.</td>
<td>2.92</td>
<td>4.13</td>
<td>0 - 24</td>
<td>115</td>
</tr>
</tbody>
</table>

- 35 -
Sex differences in job satisfaction, role ambiguity, role conflict and GHQ score are recorded in Table 13. Using a one-way analysis of variance test, no significant sex differences were found for any of these four main variables.

Table 13. Sex differences in job satisfaction (J.S.), role ambiguity (R.A.), role conflict (R.C.) and GHQ score.

<table>
<thead>
<tr>
<th></th>
<th>J.S.</th>
<th>R.A.</th>
<th>R.C.</th>
<th>GHQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>S.D.</td>
<td>MEAN</td>
<td>S.D.</td>
</tr>
<tr>
<td>MEN</td>
<td>68.00</td>
<td>7.63</td>
<td>3.24</td>
<td>1.16</td>
</tr>
<tr>
<td>WOMEN</td>
<td>68.55</td>
<td>9.05</td>
<td>3.20</td>
<td>1.21</td>
</tr>
<tr>
<td>sig.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

Grade differences in job satisfaction, role ambiguity, role conflict and GHQ score are recorded in Table 14. Using a one-way analysis of variance test, no significant grade differences were found for any of these four main variables.

Table 14. Grade differences in job satisfaction (J.S.), role ambiguity (R.A.), role conflict (R.C.) and GHQ score.

<table>
<thead>
<tr>
<th></th>
<th>J.S.</th>
<th>R.A.</th>
<th>R.C.</th>
<th>GHQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>S.D.</td>
<td>MEAN</td>
<td>S.D.</td>
</tr>
<tr>
<td>GRADE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASIC</td>
<td>63.88</td>
<td>16.86</td>
<td>8</td>
<td>3.61</td>
</tr>
<tr>
<td>SENIOR</td>
<td>68.51</td>
<td>6.71</td>
<td>49</td>
<td>3.25</td>
</tr>
<tr>
<td>PRINCIPAL</td>
<td>68.60</td>
<td>9.12</td>
<td>38</td>
<td>3.09</td>
</tr>
<tr>
<td>TOP</td>
<td>69.10</td>
<td>7.23</td>
<td>20</td>
<td>3.15</td>
</tr>
<tr>
<td>sig.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
</tbody>
</table>
Area/Speciality differences in job satisfaction, role ambiguity, role conflict and GHQ score were recorded in Table 15.

Table 15. Area/Speciality differences in job satisfaction (J.S.), role ambiguity (R.A.), role conflict (R.C.) and GHQ score.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADULT</td>
<td>68.70</td>
<td>7.74</td>
<td>56</td>
<td>3.29</td>
<td>1.28</td>
<td>56</td>
<td>3.94</td>
<td>1.24</td>
<td>56</td>
<td>2.20</td>
<td>3.21</td>
<td>56</td>
</tr>
<tr>
<td>MENTAL HANDICAP</td>
<td>67.36</td>
<td>13.14</td>
<td>14</td>
<td>3.12</td>
<td>1.20</td>
<td>14</td>
<td>4.73</td>
<td>1.02</td>
<td>14</td>
<td>3.21</td>
<td>3.53</td>
<td>14</td>
</tr>
<tr>
<td>CHILD</td>
<td>65.25</td>
<td>8.87</td>
<td>20</td>
<td>3.31</td>
<td>1.02</td>
<td>20</td>
<td>4.50</td>
<td>0.86</td>
<td>20</td>
<td>4.35</td>
<td>4.53</td>
<td>20</td>
</tr>
<tr>
<td>ELDERLY</td>
<td>73.67</td>
<td>4.59</td>
<td>6</td>
<td>2.75</td>
<td>0.90</td>
<td>6</td>
<td>3.63</td>
<td>1.37</td>
<td>6</td>
<td>4.33</td>
<td>5.65</td>
<td>6</td>
</tr>
<tr>
<td>FORENSIC</td>
<td>64.00</td>
<td>7.31</td>
<td>5</td>
<td>3.53</td>
<td>1.07</td>
<td>5</td>
<td>5.20</td>
<td>0.74</td>
<td>5</td>
<td>5.20</td>
<td>10.54</td>
<td>5</td>
</tr>
<tr>
<td>SPLIT-POSTS</td>
<td>70.78</td>
<td>7.05</td>
<td>9</td>
<td>2.98</td>
<td>1.34</td>
<td>9</td>
<td>4.24</td>
<td>0.68</td>
<td>9</td>
<td>2.11</td>
<td>2.89</td>
<td>9</td>
</tr>
<tr>
<td>OTHER</td>
<td>73.67</td>
<td>2.08</td>
<td>3</td>
<td>3.08</td>
<td>0.83</td>
<td>2</td>
<td>3.65</td>
<td>1.39</td>
<td>2</td>
<td>2.33</td>
<td>4.04</td>
<td>3</td>
</tr>
</tbody>
</table>

The data in Table 15 was analysed using a one-way analysis of variance test. No significant Area/Speciality differences were found for job satisfaction, role ambiguity, role conflict and GHQ score.

(Details of non-significant results relating to sex, grade and area/speciality differences are recorded in Appendix 4).
Pearson's Product-Moment correlations between job satisfaction, role ambiguity, role conflict and GHQ score are recorded below in Table 16:

Table 16. Pearson's Product-Moment correlations between job satisfaction, role ambiguity, role conflict and GHQ score.

<table>
<thead>
<tr>
<th>Role Satisfaction</th>
<th>Role Ambiguity</th>
<th>Role Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = -0.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;n = 114&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p = 0.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role r = -0.38</td>
<td>r = 0.32</td>
<td></td>
</tr>
<tr>
<td>&lt;n = 114&gt;</td>
<td>&lt;n = 114&gt;</td>
<td></td>
</tr>
<tr>
<td>p &lt; 0.001</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>GHQ r = -0.25</td>
<td>r = 0.09</td>
<td>r = 0.31</td>
</tr>
<tr>
<td>&lt;n = 115&gt;</td>
<td>&lt;n = 114&gt;</td>
<td>&lt;n = 114&gt;</td>
</tr>
<tr>
<td>p = 0.006</td>
<td>N.S.</td>
<td>p = 0.001</td>
</tr>
</tbody>
</table>

Pearson's Product-Moment correlations between job satisfaction, role ambiguity, role conflict and GHQ score with other topographical variables are recorded below in Table 17. As can be seen from Table 17 only one significant correlation was found among the topographical variables analysed. This was found between age and job satisfaction (r = 0.19; n = 112; p = 0.04).
Table 17. Pearson's Product-Moment correlations between job satisfaction, role ambiguity, role conflict and GHQ score, and other topographical variables.

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
<th>Role Ambiguity</th>
<th>Role Conflict</th>
<th>GHQ Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 112)</td>
<td>r = 0.19</td>
<td>r = -0.13</td>
<td>r = 0.08</td>
<td>r = -0.09</td>
</tr>
<tr>
<td>p = 0.04</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>No. of Years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 115)</td>
<td>r = 0.08</td>
<td>r = -0.10</td>
<td>r = 0.14</td>
<td>r = -0.05</td>
</tr>
<tr>
<td>Practising</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td>(n = 114)</td>
<td>r = 0.12</td>
<td>r = -0.10</td>
<td>r = 0.12</td>
<td>r = -0.13</td>
</tr>
<tr>
<td>No. of Years in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Current Post</td>
<td>(n = 114)</td>
<td>(n = 114)</td>
<td>(n = 114)</td>
<td>(n = 115)</td>
</tr>
<tr>
<td>(n = 115)</td>
<td>r = 0.08</td>
<td>r = -0.10</td>
<td>r = 0.12</td>
<td>r = -0.13</td>
</tr>
<tr>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>No. of Previous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posts in Clinical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>(n = 115)</td>
<td>(n = 114)</td>
<td>(n = 114)</td>
<td>(n = 115)</td>
</tr>
<tr>
<td>r = -0.02</td>
<td>r = -0.01</td>
<td>r = 0.07</td>
<td>r = 0.01</td>
<td>N.S.</td>
</tr>
<tr>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>No. of Weekly</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacts with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Psychs.</td>
<td>&lt;n = 115&gt;</td>
<td>&lt;n = 114&gt;</td>
<td>&lt;n = 114&gt;</td>
<td>&lt;n = 115&gt;</td>
</tr>
<tr>
<td>r = 0.12</td>
<td>r = -0.12</td>
<td>r = 0.07</td>
<td>r = 0.01</td>
<td>N.S.</td>
</tr>
<tr>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>No. of Clients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seen Each Week</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 113)</td>
<td>r = -0.09</td>
<td>r = -0.19</td>
<td>r = 0.04</td>
<td>r = -0.03</td>
</tr>
<tr>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
</tbody>
</table>
DISCUSSION

An examination will be made of the results of each section of this study, followed by a discussion of methodological issues and implications for future research.

CLINICAL PSYCHOLOGY IN SCOTLAND

Sex Differences

One of the first things that is noticeable about the respondents to this study is that there is quite a strong sex bias. Sixty-eight per cent of the respondents were female and 32% were male. However, whilst the overall sex ratio is approximately 2:1, significant differences were found according to the grade of the respondent. While there were no male Basic Grade respondents at all, there were actually twice as many male Top Grades as females. In contrast, similar sex ratios were found for Senior and Principal Grades with over two and a half times as many females as males. The overall profile is consistent with gender issues relating to the working population as a whole, with women tending to occupy lower paid jobs with fewer chances of promotion than men (Barrett, 1984). Clinical Psychology, being one of the 'caring professions,' is also more likely to attract a greater proportion of women, as the work undertaken fits in more closely with their traditional roles within society.

This sex bias is a common feature of the profession as a whole (M.A.S. Review, 1989). It further seems likely that, with fewer males being attracted at the training stage (M.A.S. Review, 1989), the existing profile will continue to change in the direction of there being an even higher proportion of women. As male Top Grades retire, their posts will be more likely to be filled by the higher proportion of women currently at Principal Grade. Alternatively, the
stratification within the profession may continue, with the minority of males currently in Principal posts being promoted to the vacant Top Grade posts. Also, as the M.A.S. Review (1989) points out, with training courses failing to attract sufficient proportions of male applicants, the majority of Basic Grade posts will continue to be filled by women.

These findings have a number of implications for future recruitment policies for the profession. It would be expected that a healthcare profession such as Clinical Psychology would receive an equal ratio of male and female clients. It could be argued that a profession with a more equal balance of male and female staff would be better equipped to meet the needs of the service users. Possible ways in which more men could be attracted to Clinical Psychology would be to increase the level of pay and enhance the status of the profession as a whole. However, as Barrett (1984) points out, because women are traditionally concentrated in areas of employment characterised by low status and pay, professions with a predominantly female workforce consequently experience difficulties in establishing higher status and pay levels.

Grade Differences

The low response rate by those employed at Basic Grade, if representative of low numbers of Basic Grade Clinical Psychologists actually practising, is a particularly worrying finding. With Scottish training courses turning out around twenty qualified staff each year, and Clinical Psychologists spending approximately two years in Basic Grade posts before promotion to Senior Grade, it might be expected that, on average, forty Basic Grade Clinical Psychologists would be in post at any one time. Sampson (1989) received replies from fourteen Basic Grade Clinical Psychologists and, while this is higher than the eight received by this study, this is still worryingly low. It is unlikely that, given the staff shortages within the profession as a whole that these findings are a result of a small establishment of Basic Grade posts. On the contrary, departments are often keen to downgrade posts established
at Senior level in order to attract staff. It is possible that the findings may simply be due to a low response rate from Basic Grade Clinical Psychologists as opposed to actual low numbers in practice. On the other hand, it is perhaps more likely that these findings further support the suggestion made by the M.A.S. Review (1989) of a possible decline in the profession, with, as has been demonstrated in England, staff wastage occurring at lower grades.

There does, however, appear to have been a growth in the overall size of the profession in Scotland. Sampson (1989) received requests for 161 questionnaires from Heads of Departments throughout Scotland. In contrast to this, 195 requests were received by the present study. These figures can be considered as representative of the total number of N.H.S. Clinical Psychologists in practice in Scotland. From these figures, then, there appears to have been a growth of around 21% in the size of the Scottish profession between the beginning of 1989 and the beginning of 1990. This increase in numbers, in comparison to Sampson's (1989) findings, are represented by higher response rates from Principal and Top Grade Clinical Psychologists. The number of replies received from Senior Grade Clinical Psychologists by the present study were equal to those received by Sampson (1989).

It appears, then, that while the profession in Scotland has been able to attract new staff to the more prestigious and better paid posts, growth has not occurred at lower levels, and it may even be possible that a decline in numbers is occurring at these levels. Some of the increases in the numbers of Principal and Top Grade Clinical Psychologists will have resulted from promotions from lower levels within Scotland. Others will have resulted from Clinical Psychologists being attracted to Scotland from England and Wales.

There are problems with high vacancy rates at all levels throughout the country, with up to 20% of all established posts lying vacant (Data from the Northern Regional Manpower Survey, 1988). Perhaps more worrying is the fact that 63% of these vacancies are at Senior Grade. In general, much of the routine
clinical work is carried out by Clinical Psychologists at Senior Grade level. Therefore, if high vacancy rates occur at this level, then deficiencies in the delivery of services are likely to occur. It is important that sufficient numbers of staff are maintained at all levels of the profession if a good balanced service is to be provided to the public. If such an aspiration is to be realised in Scotland, then greater incentives may be necessary to attract more staff at Senior and Basic Grade levels.

In discussing these points, however, it must be noted that the findings of the present study, together with those of Sampson (1989), are based on information provided by the limited sample of respondents to a postal survey. While both studies received quite high response rates, and hence will have lower incidences of response bias, it is not possible to assume that the findings generalise to those who did not respond. It may be possible, for example, that the apparent lack of growth in the size of the Scottish profession at Senior and Basic Grade levels discussed above, may actually be due to poorer response rates at these levels, in comparison to those experienced in Sampson's (1989) study.

Summary

An examination of the topographical variables of the sample of Scottish Clinical Psychologists investigated in the present study demonstrated a number of sex and grade differences. An overall sex bias was found with twice as many women as men in the sample population. However significant sex differences were found between grades, with males predominating at the highest professional grade and females predominating at lower grades. In addition, while the profession has apparently increased in numbers over the last year, a decline appears to have occurred at lower levels. The implications these findings have for the profession are discussed above.
JOB SATISFACTION

Essentially, Scottish Clinical Psychologists report quite a high level of job satisfaction, with a mean score on the Brayfield and Rothe (1951) measure of 68.32 (s.d. 8.58). This places them above all the other professional groups cited from the literature in Table 6 of the results section, with the exception of Night School Students (Brayfield and Rothe, 1951). Scottish Clinical Psychologists reported levels of job satisfaction higher than, for example, Nursing Aides (Baker and Hansen, 1975) and Other Hospital Staff (Mobley et al., 1978), as well as the other professional groups listed. The mean overall level of job satisfaction reported by Scottish Clinical Psychologists can be viewed in the context of other mean scores listed in Table 6, with mean scores ranging from 56.79 for taxi drivers (Baker and Hansen, 1975) to 70.40 (s.d. 13.20) for Night School Students (Brayfield and Rothe, 1951).

This finding, to a certain extent, refutes Parry's (1989) assertion that negative feelings are prevalent throughout the profession. Indeed, it may be that the opposite is so, with Clinical Psychologists, in Scotland at least, gaining quite high levels of pleasure from the work they do. In saying this, however, the measure used in this study was a global measure of job satisfaction and, hence, does not address specific facets. Many respondents reported that, while they were satisfied with the work itself, they were very dissatisfied with the level of pay they received. Comments relating to dissatisfaction with pay, while not specifically asked for, were quite commonly written in the margins of the job satisfaction questionnaire. So, while overall job satisfaction may be high in comparison to other occupational groups, some of the specific facets of job satisfaction may, indeed, be quite low and go unrecognised by this global measure. In relation to Parry's (1989) assertion, then, it is possible that Scottish Clinical Psychologists may be highly satisfied with the work they do, but have strong negative feelings about other aspects of their jobs, for example they may be dissatisfied with their pay and conditions.
Clearly, further investigations would need to be carried out to clarify this.

As well as looking at how Scottish Clinical Psychologists stand as a professional group in terms of job satisfaction, in relation to the working population as whole, the present study also examined differences within the sample population itself. It would be misleading to assume, because respondents reported relatively high levels of job satisfaction overall, that these feelings generalise to the individuals and sub-groups of individuals within the sample investigated. The data were examined to establish if any differences in respondents levels of job satisfaction according to sex, grade and area/speciality existed.

**Sex Differences**

No significant differences were found in levels of job satisfaction between male and female respondents. In fact, levels were very similar with mean job satisfaction scores of 68.00 (s.d. 7.63) and 68.55 (s.d. 9.05) for men and women respectively. The data relating to sex differences in job satisfaction are recorded in Table 13 of the results section. As Weaver (1980) noted, sex differences in job satisfaction are rarely found. The only variable found to consistently correlate with job satisfaction is status (Weaver, 1980). Given that females in the sample studied predominated in the lower levels of the profession, which presumably affords them lower status than their male colleagues in higher grades, it may have been expected that women would have lower job satisfaction scores than men. One possible reason why no differences were found, is that women may not attribute the same importance to factors relating to status as men. A number of studies would support this view, finding that women in general perceive their work differently to men, in particular, it is not seen as their central role (Pollert, 1981). In addition, the absence of significant sex differences may be attributable to a number of factors relating to difficulties experienced in job satisfaction.
research generally. Some of these are discussed in the summary below.

**Grade Differences**

Grade differences in reported levels of job satisfaction were also investigated. The mean job satisfaction scores for each grade are recorded in Table 14 of the results section. Basic Grade Clinical Psychologists reported the lowest mean level of job satisfaction (mean = 63.88; s.d. = 16.86), while levels for Seniors (mean = 68.51; s.d. = 6.71), Principals (mean = 68.60; s.d. = 9.12) and Top Grades (mean = 69.10; s.d. = 7.23) were quite similar. Overall, these grade differences were found not to be significant. As status has been demonstrated to be a correlate of job satisfaction, grade differences might have been expected. Some possible reasons for the absence of significant grade differences are discussed in the summary below.

**Area/Speciality Differences**

Area/Speciality differences in levels of job satisfaction were also investigated. These are recorded in Table 15 of the results section. Clinical Psychologists working in the Elderly area were found to report the highest mean levels of job satisfaction (mean = 73.67; s.d. = 4.59), whilst those working in the Forensic area reported the lowest (mean = 64.00; s.d. = 7.31). Mean scores for other area/specialities were between these figures. These grade differences in levels of job satisfaction were found not to be significant. Given that there are a large number of vacancies in the profession as a whole, Clinical Psychologists will have a certain degree of choice about which area they work in. It therefore seems plausible to assume that because staff are more able to work in their particular areas of interest, that more uniform levels of job satisfaction will occur across specialities. However, this non-significant result may be equally attributable to the factors discussed below in the summary.
Summary

Scottish Clinical Psychologists were found to report a high level of job satisfaction in comparison with a number of other occupational groups. The levels of job satisfaction reported were found not to be significantly different when investigated in terms of sex, grade and area. The absence of significant differences may be attributable to a number of factors, some of which are discussed below:

Response Bias: The findings may be a result of response bias with, for example, the least satisfied individuals in the profession failing to respond, thus giving a skewed picture of job satisfaction. This possibility is examined in more detail later in the discussion.

Global Measures of Satisfaction: The job satisfaction questionnaire utilised in the present study does not address specific facets of job satisfaction which might discriminate between the groups examined.

Theoretical Issues: Variance theory states that job satisfaction is related to the extent to which work provides individuals with what they want. This implies that job satisfaction is essentially subjective and individualistic, and may, therefore, not necessarily be predictive of group differences.

ROLE AMBIGUITY AND ROLE CONFLICT

Quite a high mean level of role ambiguity was found for Scottish Clinical Psychologists together with a high mean level of role conflict on the Rizzo et al. (1970) measure. An overall mean role ambiguity score of 3.21 (s.d. 1.19) was found and this can be viewed in comparison to other professional groups in Table 7 of the results section. While the overall mean score obtained for Scottish Clinical Psychologists is below the mid-point (4) of the scale, when viewed in the context of the other scores cited from the literature.
in Table 7, with scores ranging from 2.37 (s.d. 0.77) for Foremen
(Szilagyi et al., 1976) to 3.53 (s.d. 1.38) for Senior Administrators
(Szilagyi et al., 1976), it can be considered as representing quite a
high level of role ambiguity.

The overall mean role conflict score obtained by Scottish
Clinical Psychologists is quite clearly high in comparison with
other professional groups and ranks highest among the scores cited
from the literature in Table 8 of the results section. Scores cited
range from 3.02 (s.d. 1.36) for Manual Employees (Morris and Koch,
1979) to the mean score of 4.17 (s.d. 1.16) obtained for Scottish
Clinical Psychologists by the present study. While the mean score
is close to the mid-point (4) of the scale, it can be considered as
high in the context of the working population as a whole.

However, care must be taken when drawing conclusions from
findings relating to levels of role conflict and role ambiguity. The
reason for this is that low scores are not necessarily maximally
desirable. In saying this, however, much of the empirical evidence
to date has rarely considered this possibility, although the
implications for, for example, drawing conclusions about
correlational relationships are important. So, while high levels of
role conflict and role ambiguity were found for Scottish Clinical
Psychologists in the context of other professional groups, this does
not necessarily tell us how much actual psychological stress these
levels actually engender in the individuals experiencing them. It
also, therefore, does not directly tell us about what implications
these relatively high levels of role conflict and role ambiguity
have for the levels of job satisfaction experienced by the
profession as a whole. Indeed, it may even be possible, given that
a high level of job satisfaction was found for Scottish Clinical
Psychologists, that these levels of role conflict and role ambiguity
may actually be optimal in relation to motivation and satisfaction
in the type of work carried out by the profession.

As was discussed in the Literature Review of this study, Clinical
Psychology has had a relatively short history with many changes.
The relatively high levels of role conflict and role ambiguity may be a reflection of the fact that the profession is expanding and developing. High levels of role conflict and role ambiguity may be a reflection of the nature of the developing role of the profession as a whole within the N.H.S. It could be argued, that the ambiguity and conflict experienced in such circumstances might actually enhance the role of a Clinical Psychologist they are attributed as being a means to the positive end of providing a new and valued service.

As well as examining the profession in Scotland as a whole, sex, grade and area/speciality differences within the sample population were also investigated. These are discussed below.

**Sex Differences**

No significant sex differences in levels of role ambiguity and role conflict were found. In fact, levels of role ambiguity were very similar for male and female respondents, with mean scores of 3.24 (s.d. 1.16) and 3.20 (s.d. 1.21) respectively. Levels of role conflict were also very close for male and female respondents, with mean scores of 4.14 (s.d. 1.22) and 4.17 (s.d. 1.14) respectively. Mean role ambiguity and role conflict scores for men and women are recorded in Table 13 of the results section. A possible reason for the absence of a significant sex difference is discussed in the summary below.

**Grade Differences**

When grade differences were examined, Basic Grade Clinical Psychologists were found to demonstrate the highest mean level of role ambiguity (mean = 3.61; s.d. 1.30), and Principals the lowest (mean = 3.09; s.d. 1.28). However, the grade differences in levels of role ambiguity were found not to be significant. Similarly, no significant grade differences were found for role conflict. Mean role conflict scores ranged from 4.13 (s.d. 1.18) to 4.26 (s.d. 0.93) for Senior and Top Grade Clinical Psychologists respectively. The
mean role conflict scores according to grade are recorded in Table 14 of the results section. A possible reason for the absence of significant grade differences is discussed in the summary below.

Area/Speciality Differences

Area/Speciality differences in role ambiguity and role conflict were also investigated by this study. These are recorded in Table 15 of the results section. Mean role ambiguity scores ranged from 2.75 (s.d. 0.90), for Clinical Psychologists working in the Elderly area, to 3.53 (s.d. 1.07) for those working in the Forensic area. Mean role conflict scores ranged from 3.63 (s.d. 1.37), for those working in the Elderly area, to 5.20 (s.d. 0.74) for those working in the Forensic area. However, the area/speciality differences in role ambiguity and role conflict were found to be not significant. A possible explanation for the absence of significant area/speciality differences is discussed in the summary below.

Summary

High levels of role ambiguity and role conflict were found for Scottish Clinical Psychologists in comparison to a number of other occupational groups. The levels of role ambiguity and role conflict reported by Scottish Clinical Psychologists were found not to be significantly different when scores were examined in terms of sex, grade and area/speciality. The absence of significant differences in these variables may reflect the uniform effect of recent changes in the profession. Developments, such as Chartering, Regrading, Government White Papers etc., have, as was discussed in the literature review, necessitated the reappraisal and redefinition of the role of Clinical Psychology in the N.H.S. This makes it more likely that particular sex, grade or area/speciality differences will be masked by the high overall levels of role conflict and role ambiguity engendered by the above factors.
Estimated Prevalence of Psychological Disturbance

The findings obtained from the administration of the GHQ-28 to Scottish Clinical Psychologists, in comparison with other occupational groups, are recorded in Tables 9 to 11 of the results section. Using the 3/4 cut-off point on the GHQ scoring method for estimating the prevalence of 'psychiatric caseness', 33% of Scottish Clinical Psychologists scored above this threshold. This result replicated Sampson's (1989) finding in her survey of stress in Scottish Clinical Psychologists. The estimated prevalence of psychological disturbance found, is recorded in Table 9 of the results section, in comparison to other occupational groups.

The prevalence for Scottish Clinical Psychologists was lower than the 50% caseness found for Junior House Officers (Firth-Cozens, 1987). The 33% caseness was the same as that found for Psychiatric Nurses by Jones et al. (1987). Medical Students scored slightly lower with 30% over the threshold (Firth, 1986) and Psychology Undergraduates scored even lower with only 11% caseness (Firth-Cozens, 1988).

Cushway (1988), in her study of stress in Clinical Psychology Trainees, used a more conservative 4/5 cut-off point as her threshold of caseness. This threshold was also used by the present study, as it was by Sampson (1989), to enable comparisons between the studies. The estimated prevalence of psychological disturbance found by the present study for Scottish Clinical Psychologists is recorded in Table 10 of the results section, together with the findings of Sampson (1989) and Cushway (1988). Cushway (1988) found an estimated prevalence of psychological disturbance of 57% for Clinical Psychology Trainees. The estimated prevalence for Scottish Clinical Psychologists was found to be 29% by Sampson (1989) and 27% by the present study. In addition, Sampson (1989) found the estimated prevalence of psychological disturbance to be significantly higher for trainees (Cushway, 1988) than for Scottish Clinical Psychologists.
The GHQ-28 was also scored using the Likert scoring method to enable further comparisons between the present study, and those of Sampson (1989), and Cushway (1988). The mean scores obtained by Scottish Clinical Psychologists are recorded in Table 11 of the results section, in comparison to the findings of Sampson (1989) and Cushway (1988). The overall mean score obtained by the present study using the Likert scoring method for Scottish Clinical Psychologists (mean = 16.70; s.d. = 10.82) was slightly lower than that found by Sampson (1989), (mean = 18.34; s.d. = 9.98), and lower still than that found for Clinical Psychology Trainees (mean = 23.00; s.d. = 10.26), (Cushway, 1988).

Sampson (1989) suggests that these levels indicate that the process of training coincides with a peak of psychological symptoms. Cushway (1988) explains the higher estimation of psychological disturbance in trainees as being due to: constant evaluation, re-location, extensive travelling and shortages of time and money. Sampson (1989) argues that some of these are experienced by Clinical Psychologists, with the possible exceptions of constant mandatory evaluation and re-location. Sampson goes on to further suggest that the higher levels of psychological disturbance experienced by trainees may be to do with issues relating to professional maturity and the process if individuals coming to terms with increasing responsibility.

Sampson (1989) points out the need for a longitudinal study assessing individuals' GHQ scores pre, post and during training in order to clarify when changes in levels of psychological disturbance occur within the context of a career in Clinical Psychology. Sampson's (1989) study goes some way to enlightening us further in that provides some information regarding levels of stress experienced by Scottish Clinical Psychologists at different post-qualification grades. Mean stress levels were found to rise between Basic and Principal grades before falling at Top Grade. Sampson (1989) further found levels of stress experienced by Scottish Clinical Psychologists at Principal grade to be significantly higher than that experienced by those at Senior Grade.
Differences in respondents scores on the GHQ-28 using the GHQ scoring method were also investigated in terms of sex, grade and area/speciality.

**Sex Differences**

Sex differences in GHQ scores are recorded in Table 13 of the results section. Mean scores found were: 2.95 (s.d. 4.43) and 2.72 (s.d. 3.39) for men and women respectively. No significant differences in estimated prevalence of psychological disturbance were found between male and female respondents.

**Grade Differences**

When grade differences were examined, mean GHQ scores ranged from 2.45 (s.d. 3.56) to 3.75 (s.d. 3.28) for Top and Basic Grade Clinical Psychologists respectively. No significant grade differences in estimated prevalence of psychological disturbance were found. Mean GHQ scores according to grade are recorded in Table 14 of the results section.

**Area/Speciality Differences**

Area/speciality are recorded in Table 15 of the results section. Mean scores ranged from 2.11 (s.d. 2.89), for Clinical Psychologists with split-posts, to 5.20 (s.d. 10.54) for those working in the Forensic area. Area/Speciality differences in estimated prevalence of psychological disturbance were found not to be significant.

**Summary**

The estimated prevalence of psychological disturbance for Scottish Clinical Psychologists does not appear to be at variance with comparative groups of other health professionals. No significant differences in estimated prevalence of psychological disturbance were found when Scores obtained on the GHQ-28 were examined in terms of sex, grade and area/speciality. The GHQ-28 was
used in the present study to enable comparisons with Sampson's (1989) and Cushway's (1988) studies. The use of the GHQ-28 was therefore viewed in the current study as a measure of psychological distress, resulting from role conflict and role ambiguity. This, in turn, has a mediating influence on job satisfaction. A detailed discussion of the hypothesised relationship between these variables is given in the following section. Given that no significant differences were found between sex, grade and area/speciality with respect to role conflict, role ambiguity and job satisfaction, it would be predicted that no significant differences would be found with respect to GHQ scores. This, in fact, was the case. There are, however, a number of limitations with the use of the GHQ-28 in such a model and some of these will be discussed below.

THE RELATIONSHIP BETWEEN ROLE STRESS AND JOB SATISFACTION IN SCOTTISH CLINICAL PSYCHOLOGISTS

A growing body of literature over the last two decades has demonstrated job satisfaction, symptoms of emotional distress and withdrawal behaviours to be correlated with role conflict and role ambiguity. Given that there appear to be problems of staff wastage at certain levels in the profession (M.A.S. Review, 1989), it would seem pertinent to investigate the relationships between role stress and job satisfaction in the sample of Clinical Psychologists investigated in the present study. The correlations between job satisfaction, role ambiguity, role conflict and GHQ score are recorded in Table 16 of the results section. In addition, the nature of the significant correlations found are also represented diagramatically below in Figure 2:
The relationships represented in Figure 2 can be compared with those in the traditional model (from Bedeian and Armenakis, 1981) represented in Figure 1 in the literature review of the present study. As can be seen, the correlational findings of this study, with the exception of a non-significant correlation between role ambiguity and GHQ score, to a large extent, support the traditional model.

Significant positive correlations were found between role conflict and role ambiguity (i.e., the higher the level of role conflict, the higher the level of role ambiguity), and between role conflict and GHQ score (i.e., the higher the role conflict the greater the psychological disturbance). Significant negative correlations were found between job satisfaction and role conflict, role ambiguity and GHQ score (i.e., the higher the role conflict, role ambiguity and GHQ score, the lower the job satisfaction). Therefore, in terms of the traditional model, higher levels of role stress will lead to a reduction in the job satisfaction experienced by Scottish Clinical Psychologists.

We might predict, then, that staff who report high levels of role ambiguity and role conflict are likely to experience greater levels of job tension and, consequently obtain a higher GHQ score. This leads to a reduction in job satisfaction, as the lack of clarity
within a role impedes opportunities to improve performance and obtain rewards. In addition, this increase in role stress may lead to subsequent intention to turnover (Kahn et al., 1964). The findings of this study, then, can be seen in the light of the staff wastage reported by the M.A.S. Review (1989), in that, it may be that those who are leaving the profession are experiencing higher levels of role stress and, consequently lower job satisfaction, than those who remain.

However, as was discussed in the literature review, the traditional model of the effects of role stress has limitations. Kemery et al. (1985) cautioned against drawing conclusions from correlational relationships of this nature in research. One of the main criticisms of the traditional model is that it is incomplete, and does not take into account a number of job conditions that are established correlates of role conflict and role ambiguity. While levels of job satisfaction and turnover can be viewed as outcomes of role stress, other job conditions may act as antecedents. The relationships between role stress and job satisfaction found by the present study may, in fact, be artifactual. While significant relationships were found between role stress and job satisfaction, it is difficult to say what weighting these findings should be given, without a full analysis of the job conditions which may be acting as antecedents to the levels of role conflict and role ambiguity reported.

Sampson (1989) cites the most common stressors reported by Scottish Clinical Psychologists in her study. The most frequently reported stressors were too much work and low pay. Having too much work to do will certainly contain elements of role conflict and role ambiguity, in that it will necessitate prioritising the workload and create uncertainty about the mechanisms by which this will be achieved. However, the fact that low pay is highlighted demonstrates the role that antecedent conditions play in the work experiences of Scottish Clinical Psychologists.
Correlational relationships between job satisfaction, role conflict, role ambiguity and GHQ score and the topographical variables measured are recorded in Table 17 of the results section. The only significant correlation found was between age and job satisfaction (i.e., older Clinical Psychologists tended to be more satisfied with their jobs). This finding can perhaps be related to Sampson’s (1989) suggestion that work experiences change as individuals mature. No significant correlations were found between job satisfaction, role ambiguity, role conflict or GHQ score with the number of clients seen each week, as might have been expected from Sampson’s (1989) finding that too much work was the most frequently reported stressor. However, the work overload being referred may have been in relation to other aspects of the job. In general, though, the topographical variables measured in this study did not appear to be influential in the role stress-job satisfaction relationship with respect to Scottish Clinical Psychologists.

**Summary**

Given the high levels of job satisfaction reported by Scottish Clinical Psychologists in general, it would seem less likely that the high levels of role conflict and role ambiguity are major factors in the staff turnover in the profession reported by the M.A.S. Review (1989). In saying this, however, the relationships demonstrated between role stress and job satisfaction in the present study suggest that individuals who experience dissatisfaction in relation to high levels of role stress will be more likely to have intentions of leaving the profession, than those who do not. Until a comprehensive investigation of the antecedent job conditions inherent in the role of a Clinical Psychologist is undertaken, the extent to which the traditional model of role stress applies to the profession awaits verification.
METHODOLOGICAL ISSUES

Postal Surveys

As Sampson (1989) points out, there are a number of advantages and disadvantages of using postal surveys in research. One of the main advantages is that it is a quick method of investigation which can be carried out within a given time period. It is also a good way of avoiding problems of interviewer bias which occur in face to face contacts with subjects. This also makes it a good method of addressing more personal issues, in that confidentiality and anonymity can be incorporated into the questionnaire design.

Disadvantages occur if the questions being asked are unclear or not understood by the subjects. The design does not allow room for explanations regarding difficulties subjects may have in completing the questionnaire. Also, the researcher does not have any control over the order in which the questionnaire is completed.

One of the main problems with postal surveys, however, is response bias. This is considered to be the major overall factor leading to poor response rates. Response bias decreases with increasing response rates. Babbie (1979) suggests that a good response rate is 60% and that rates over 70% are excellent. Typical response rates for postal surveys are usually around 30%, so the response rate of 59% experienced in this study can be considered as being good.

However, this means that 41% did not return the questionnaire and caution must be taken when generalising findings to the population as a whole. While it is not possible to determine whether the views of those who did not reply differed from those who did, the high response rate experienced in this study suggest that the representativeness of the sample was unlikely to have been significantly affected by response bias.

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Job Satisfaction

Despite an extensive body of literature having been built up over a number of years, one of the main problems in investigating job satisfaction is that there is still some disagreement about what the concept actually means. It is generally considered to relate to feelings as opposed to thoughts, but because uncertainty persists about what job satisfaction really is, conclusions regarding the consequences of findings relating to job satisfaction are limited by problems of definition.

The measure used in this study was a measure of overall job satisfaction (Brayfield and Rothe, 1951). While an overall measure is useful for initial research into a given population, it is limited by its global nature, in that it does not address specific facets of job satisfaction. For example, as was discussed above, respondents often reported high levels of job satisfaction, while at the same time spontaneously reporting dissatisfaction with levels of pay, in the form of explanatory notes in the margins of the questionnaire. It is possible, therefore, that while Clinical Psychologists in Scotland are generally satisfied with the work they do, they may be dissatisfied with other specific aspects of their work that are not addressed in this study. The greater the weighting these other facets are given by subjects, the more the conclusions about findings relating to overall satisfaction are diminished.

Role Conflict and Role Ambiguity

One of the main problems of reporting results relating to levels of role conflict and role ambiguity is in interpreting what these levels actually mean to the sample population being investigated. While high levels of role conflict and role ambiguity were found for Scottish Clinical Psychologists in comparison to other occupational groups, it would be misleading to assume that the high levels found are necessarily detrimental. Indeed, as was discussed earlier, it may even be that the levels reported are, in fact, optimal in motivating and satisfying people who undertake work of this nature.
Problems also arise from the fact that there will be differences in how individual Clinical Psychologists perceive and attribute meaning to the levels of role conflict and role ambiguity they experience. A finding relating to a population as a whole does not necessarily generalise to individuals within that population. Care must be taken, therefore, when interpreting the consequences of role stressors, as individual differences will occur.

Further problems arise in that all Clinical Psychologists working for the N.H.S. in Scotland have been grouped together on the basis of their work role. Individual differences according to sex, grade and area/speciality have been investigated in the present study, it may be that the individual roles within the sample population as a whole differ sufficiently that to assume an overall homogeneous role for all Clinical Psychologists may be unjustified.

The General Health Questionnaire

The GHQ detects disorders of less than two weeks duration. This can create problems in that it is very sensitive to transient disorders. Respondents scoring highly on the GHQ often commented that the severity of their reported GHQ score was more because of symptoms of, for example, colds and flu than anything to do with their work. As this study was carried out in February of this year, during which a high incidence of influenza occurred throughout Scotland, it is plausible that a number of high GHQ scores were attributable to factors other than those resulting from psychological disturbance relating to work experiences.

In addition, the fact that respondents were able to draw attention to these influencing factors also raises the question of whether Clinical Psychologists are in a position to fill out a questionnaire such as the GHQ objectively. While the other two questionnaires used in this study are taken from the field of Occupational Psychology and, hence, would be unlikely to be familiar to Clinical Psychologists, the GHQ is likely to be familiar to most, if not all, respondents to this study.

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Another problem with the GHQ is that it imposes a dichotomy of caseness. A criticism often made of the GHQ is that the concept of prevalence is inappropriate when applied to minor psychiatric disorder. While it is useful to know that a certain percentage of a population has problems, it does not necessarily point researchers in the direction of a given solution.

In relation to this particular study, one could also question whether using the GHQ is valid in investigating relationships between role stress and job satisfaction. In comparing the results of this study with the traditional model of the effects of role stress, the GHQ has been used in the place of a measure of job tension. As Sampson points out, while the GHQ has been used in stress research in the past, it is not a direct measure of stress itself. In using the GHQ in the present study, in order that comparisons could be made with the findings of Sampson (1989) and Cushway (1988), the validity of its use in the context of exploring the traditional model of the effects of role stress is diminished.

Correlational Relationships between Variables

As was discussed earlier, care must be taken when drawing conclusions from significant correlations between variables. In relation to the present study, while significant relationships were found in support of the traditional model of the effects of role stress, these findings may have been spurious as other factors of equal salience may have been overlooked. While correlational designs are good at demonstrating relationships between variables, causality can not be implied. In addition, the direction in which a relationship occurs can not be assumed. For example, in the present study a significant positive correlation was found between role conflict and GHQ score, but the specific influence that one has on the other cannot be determined.

Correlational findings are also limited by the number of variables measured. For example, in the present study support was found for the traditional model of the effects of role stress, but
as measures of antecedent job conditions were not taken, it is not possible to say how much weighting these findings should be given.

**IMPLICATIONS FOR FUTURE RESEARCH**

This study was limited to Clinical Psychologists working for the N.H.S. in Scotland. This is a relatively small sample given the size of the profession in the United Kingdom as a whole. Certain factors particular to Scotland, for example the different legal system from that of the rest of the U.K., may have had some influence on the results of the present study in some areas. Also, as Sampson (1989) points out, it cannot necessarily be assumed that the findings for a Scottish population will generalise to Clinical Psychologists working in other areas of the U.K. Future research would therefore benefit from incorporating a much wider sample population involving Clinical Psychologists working in different areas.

In Sampson's (1989) discussion of her results relating to stress in Scottish Clinical Psychologists, she suggested that future research might address more positive aspects of the work undertaken by the profession. While the present study has gone some way to achieving this, in addressing issues of job satisfaction, the conclusions that can be drawn from the findings are limited by the experimental design. As a global measure of job satisfaction was used in this study, little can be said about the specific facets that are contained in an overall feeling of job satisfaction. Future research, therefore, could examine the specific facets of job satisfaction in the profession. In particular, the incidental findings of the present study regarding pay and conditions could be investigated.

As was discussed earlier, while significant correlational relationships were found by the present study, in support of the traditional model of the effects of role stress, the extent to which this model applies to Clinical Psychologists awaits verification. Future research could address this issue by incorporating a
comprehensive investigation of the antecedent job conditions inherent in the role of a Clinical Psychologist.

CONCLUSION

Scottish Clinical Psychologists were found to demonstrate a high overall mean level of job satisfaction when viewed in the context of other occupational groups. Similarly, a relatively high mean level of role ambiguity was also reported, together with a high overall mean level of role conflict. The estimated prevalence of psychological disturbance in Scottish Clinical Psychologists was not found to be at variance with comparative groups of health professionals, but has been demonstrated to be significantly lower than that found for Clinical Psychologists undergoing training (Cushway, 1988; Sampson, 1989). No significant differences in levels of job satisfaction, role ambiguity, role conflict or estimated prevalence of psychological disturbance were found in terms of sex, grade and area/speciality.

Significant correlational relationships were found in support of the traditional model of the effects of role stress (from Bedeian and Armenakis, 1981). The limitations of this model in relation to Scottish Clinical Psychologists were discussed. Other methodological issues in relation to the present study were also discussed. Finally, some of the implications that the findings of the present study have for future research were outlined.
REFERENCES


- 64 -

Caring for People (Cm 849), H.M.S.O., 1989.


Data from the Northern Regional Manpower Department's Survey, 1988.


Goldberg, D. P. and Hillier, V. F. (1979). A scaled version of the General Health Questionnaire, Psychological Medicine, 9, 139-145.


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Remuneration of Clinical Psychologists and Assistant Psychologists employed by Health Authorities, S.H.H.D. AL 3/90.


Working for Patients (Cm555), H.M.S.O., 1989.
Dear Clinical Psychologist,

Role stress and job satisfaction in clinical psychologists working for the N.H.S. in Scotland.

I am a trainee on the Edinburgh University M.Phil. Clinical Psychology course. I am writing to request your assistance with my research thesis. My study aims to assess Role Stress and Job Satisfaction in clinical psychologists employed by the National Health Service in Scotland and is a follow-up to a stress survey carried out as an M.Phil. thesis by Jane Sampson last year. I will also be investigating differences according to various topographical variables.

The scales used in this study are: Overall Job Satisfaction (Brayfield and Rothe, 1951; Role Ambiguity and Role Conflict (Rizzo, House and Lirtzman, 1970); and the G.H.Q.28 (Goldberg, 1972).

I would be grateful if you would complete the enclosed questionnaire and return it to me as soon as possible in the envelope provided, by the 28th February, 1990, if you can.

All subjects will remain anonymous and confidentiality will be guaranteed at all times. All data will be kept locked away except during analysis. All raw data will be shredded on completion of the research.

If at any time you have any questions concerning this research, I will be happy to assist. I shall be on placement at the Royal Hospital for Sick Children, Edinburgh (Tel. 031 663 2251) from February to May inclusive. Thank you very much for your help. I shall be grateful for all responses received.

Yours sincerely,

George Murray
APPENDIX 1a.

PERSONAL INFORMATION

PLEASE CIRCLE OR TICK THE APPROPRIATE RESPONSE:

SEX:   Male .... Female ....

AGE:   ..... 

GRADE:   Basic .... 
          Senior ....
          Principal ....
          Top Grade ....

NUMBER OF YEARS PRACTISING AS A CLINICAL PSYCHOLOGIST: ..... 

NUMBER OF YEARS IN CURRENT POST: ..... 

NUMBER OF PREVIOUS POSTS IN CLINICAL PSYCHOLOGY: ..... 

MAIN AREA OF WORK/SPECIALITY:   Adult Mental Health .... 
                                          Mental Handicap .... 
                                          Child ....
                                          Elderly ....
                                          Neuropsychology ....
                                          Other (please state) .... 
                                          ................................

HOW MANY OTHER CLINICAL PSYCHOLOGISTS DO YOU HAVE AT LEAST WEEKLY PROFESSIONAL CONTACT WITH? ..... 

APPROXIMATELY HOW MANY CLIENTS DO YOU SEE EACH WEEK? .....
PLEASE CIRCLE ONE NUMBER FOR EACH ITEM BELOW TO SHOW HOW MUCH YOU AGREE WITH THE FOLLOWING STATEMENTS.

<table>
<thead>
<tr>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>UNDECIDED</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. My job is like a hobby to me
2. My job is usually interesting enough to keep me from getting bored
3. It seems that my friends are more interested in their jobs
4. I consider my job rather unpleasant
5. I enjoy my work more than my leisure time
6. I am often bored with my job
7. I feel fairly well satisfied with my present job
8. Most of the time I have to force myself to go to work
9. I am satisfied with my job for the time being
10. I feel that my job is no more interesting than others I could get
11. I definitely dislike my work
12. I feel that I am happier in my work than most other people
13. Most days I am enthusiastic about my work
14. Each day of work seems like it will never end
15. I like my job better than the average worker does
16. My job is pretty uninteresting
17. I find real enjoyment in my work
18. I am disappointed that I ever took this job
HOW CLEAR DO YOU FEEL ABOUT WHAT YOU HAVE TO DO IN YOUR JOB?
PLEAS DESCRIBE HOW YOU FEEL BY CIRCLING ONE NUMBER FOR EACH ITEM
BELOW.

<table>
<thead>
<tr>
<th>Item</th>
<th>Very False</th>
<th>Moderately False</th>
<th>Slightly False</th>
<th>Neither False Nor True</th>
<th>Slightly True</th>
<th>Moderately True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2.</td>
<td>I know exactly what is expected of me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>I know what my responsibilities are</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>I feel certain about how much authority I have</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5.</td>
<td>There are clear planned goals and objectives for my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6.</td>
<td>Explanation of what has to be done is clear</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7.</td>
<td>I know that I have divided my time properly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8.</td>
<td>I have to do things that should be done differently</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9.</td>
<td>I work on unnecessary things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10.</td>
<td>I receive an assignment without adequate resources and materials to execute it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11.</td>
<td>I receive an assignment without the manpower to complete it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12.</td>
<td>I do things that are apt to be accepted by one person and not by others</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13.</td>
<td>I work with two or more groups that operate quite differently</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14.</td>
<td>I receive incompatible requests from two or more persons</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15.</td>
<td>I have to oppose a rule or a policy in order to carry out an assignment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
# Appendix 4

## Results of Analyses of Variance

### Sex Differences

<table>
<thead>
<tr>
<th>Variable</th>
<th>F(1,112)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>0.10</td>
<td>0.75</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>0.04</td>
<td>0.84</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>0.03</td>
<td>0.87</td>
</tr>
<tr>
<td>GHQ Score</td>
<td>0.07</td>
<td>0.79</td>
</tr>
</tbody>
</table>

### Grade Differences

<table>
<thead>
<tr>
<th>Variable</th>
<th>F(3,111)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>0.79</td>
<td>0.50</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>0.48</td>
<td>0.70</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>0.07</td>
<td>0.98</td>
</tr>
<tr>
<td>GHQ Score</td>
<td>0.20</td>
<td>0.90</td>
</tr>
</tbody>
</table>

### Area/Speciality Differences

<table>
<thead>
<tr>
<th>Variable</th>
<th>F(6,106)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>1.40</td>
<td>0.22</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>0.34</td>
<td>0.92</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>2.30</td>
<td>0.04</td>
</tr>
<tr>
<td>GHQ Score</td>
<td>1.13</td>
<td>0.35</td>
</tr>
</tbody>
</table>

*No two groups were found to be significantly different at the 0.05 level following post hoc multiple comparisons using the Scheffe Test.*