# Coping and stress: Unqualified direct-care staff working with challenging behaviour clients in learning disability residential settings

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## ABSTRACT

Coping strategies employed by unqualified direct-care staff working in both hospital and community units for clients with challenging behaviours were investigated in relation to experienced stress. A 40-item Coping Questionnaire (developed and previously used in a psychiatric setting), adapted from the work of Lazarus and his co-workers, which claims to delineate problem-focused and emotion-focused strategies, was used to examine the coping strategies employed. The GHQ-12 was used to measure reported stress levels. As there was no reported assessment of the psychometric properties of the 40-item Coping Questionnaire the construct validity, and both the internal and external reliability were analysed. The findings demonstrated adequate validity and reliability. The 105 respondents were found to use both emotion-focused and problem-focused coping strategies when dealing with the demands of the workplace.

A significant association was found between use of predominantly problem-focused coping strategies and lower levels of stress and incidence of stress caseness. Also, a significant association was found between use of predominantly emotion-focused coping strategies and higher levels of stress and incidence of stress caseness. This finding is discussed with particular reference to recent research that did not demonstrate an association between a scale based on problem-focused coping and distress. The potential differentiating factors of: work setting (i.e. hospital or community unit), level of contact with clients and the number of colleagues on duty were shown to differentiate between persons reporting higher or lower levels of stress. Respondents who were based in the community, those who spent higher proportions of their working day with challenging behaviour clients and those who worked with fewer colleagues reported significantly higher levels of stress.

The overall findings are discussed in relation to broader issues of service provision with particular reference to staff turnover and quality of care. A model of stress and coping is provided and is compared with a model developed from research based on informal carers.

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## The changing face of residential provision

The organisation of services for people with learning disabilities has been undergoing a period of major change resulting from the implementation of the 1990 NHS and Community Care Act. Over the period 1980 to 1993 the capacity of learning disability hospitals in Britain reduced by over 26,000 places (Emerson & Hatton, 1994). This change in the pattern of service provision of residential services has resulted in many thousands of people with learning disabilities moving from hospital based services to those based in the community.

The initial period of hospital closures involved the movement of clients with the least severe disabilities to a range of pre-existing services (Korman & Glennerster, 1990 ; Malin, 1987). The extension of community based residential services to include clients with more severe learning disabilities, including those with 'challenging behaviours', began in the 1980's. However, the vulnerability of this client group in the community has been shown as they are known to be most at risk of re-admission to hospital (Sutter et al, 1980). The size of the task and the significance of this client group can be seen in that it has been reported that up to half of the clients in residential facilities engage in challenging behaviour (Hill & Bruininks, 1984).

### Challenging behaviour

The use of the term 'challenging behaviour' became widely used after it was adopted in the document 'Facing The Challenge' (Blunden & Allen, 1987). Challenging behaviours have been broadly defined as 'culturally unusual or unacceptable behaviours such as self-injury or aggression which place the health or safety of the person, or others, in jeopardy or are likely to lead to

the person being excluded from or denied access to ordinary community settings' (Emerson & Hatton, 1994). This reflects current thinking that in order to further our understanding, the difficulties associated with challenging behaviours need to be considered not only as a problem for the individual concerned but also for the social context in which they take place.

## Hospital and community settings

An important consequence for an individual presenting with challenging behaviours is the residential provision that is made available. The movement to community services has not, of itself, brought about a diminution in challenging behaviours. This can be seen in research that has shown that no change in the level of challenging behaviour resulted in a move from hospital to community settings (Conroy et al, 1982). It has indeed also been shown that increases in the rates of challenging behaviour may occur (de Paiva & Lowe, 1990). The consequences for the clients can be seen in that it has been reported that where placement in the community has taken place, hospitalisation following breakdown in the community commonly occurred (Hemming et al, 1981). This has lead to the view that some form of institutional provision for people with complex needs is still required (Segal, 1990). Support for this can be seen in that services with a number of successful outcomes in placing people with challenging behaviour in community settings have still sought hospital based provision when placement has broken down (McGill & Toogood, 1993).

Whether residential services are based in hospital or community settings the type of service provided has been a focus for research. In terms of interaction with staff low rates have been reported and such interaction which does occur has been shown to disproportionately favour clients who are more independent and perceived by staff as likeable, attractive and intellectually more competent (Dailey et al, 1974 ; Grant & Moores, 1977).

Where challenging behaviour has been elicited by staff contact or staff demands it has been shown that staff may then be deterred from approaching the person in the future (Carr et al, 1991). This can lead to clients with challenging behaviours being avoided by staff and disengaged from their environment (Emerson et al, 1992 ; Felce et al, 1985). The contact provided by staff has been shown to be poor in terms of promoting participation in activities and the development of adaptive behaviour to the extent that maladaptive behaviour may be rarely discouraged (Felce et al, 1986).

Within community settings initial research found that increased staff attention took place (Felce & Repp, 1992). However, some recent research has failed to show significant differences in levels of interaction between hospital and community settings suggesting that movement into the community does not necessarily mean a major improvement in quality of life (Emerson & Hatton, 1994 ; Felce et al, 1995). This can be seen particularly where residents in both hospital and some community services have been shown to spend only approximately 25% of their time engaged in constructive activities (Felce et al, 1995).

It should be noted that the interaction of staff and clients can also be harmful. The importance of this relates to a basic duty of care in that the physical well-being of people with challenging behaviour can be put at risk as a result of ways in which carers respond to clients (Emerson et al, 1994). Inappropriate carer responses cover a broad spectrum, and includes the high use of restraints and protective devices to manage challenging behaviour (Griffin et al, 1986), the use of psychoactive medication despite little evidence that it has a specific effect in reducing challenging behaviour (Gadow & Powling, 1988) and even physical abuse as challenging behaviour has been shown to be one of the best predictors of who will be physically abused in institutional settings (Rusch et al, 1986).

# The significance of staff

It is clear from the preceding sections that the quality of life for individuals with challenging behaviours can depend heavily on the help they receive from paid staff . This has lead to a small but growing body of research that has sought to evaluate the role played by staff in client care (e.g. Allen et al, 1990 ; Causby & York, 1991; Mansell, 1995).

Why care staff should be of importance can be seen from a behavioural perspective which has been the most influential theoretical approach to the understanding of challenging behaviour (Hastings & Remington, 1994). This approach is derived from the influential review of approaches to understanding challenging behaviour undertaken by Carr (1977). Within this framework, challenging behaviour relates to learned behaviour which can be understood by assessing the relationship between the observed behaviour, its antecedents and its consequences. Therefore, challenging behaviours may occur because of the positively reinforcing nature of the event that follows, such as the access to materials or activities (Durand & Crimmins, 1988). The significance of the presence of others in the environment in which the challenging behaviour takes place can be seen as positive reinforcement can be achieved in the form of the attention of other people (e.g. Iwata et al, 1982 ; Oliver, 1991). This can even be seen in that challenging behaviour may occur less just by staff being present (Felce et al, 1991). The presence of others, notably staff members, can also elicit challenging behaviours. This can be seen when challenging behaviours are a function of social avoidance, imposed tasks and general escape from carer demands (Carr et al, 1980 ; Emerson, 1990).

The utility of understanding challenging behaviour as serving a social function that seeks to communicate with and control the environment both in terms of its positive or negative reinforcement can be seen by research undertaken by Derby et al (1992). They reported that for clients attending an

out-patient clinic, 72% of the challenging behaviour was maintained by attention or escape. This shifts the emphasis away from the problem behaviour alone and includes the relationship between individuals and their social environment.

Common to the social environment is the regular contact individuals with learning disabilities have with paid workers (Hastings & Remington, 1994). For clients who also display challenging behaviours, contact with paid carers can be restricted further to those staff in residential settings as they are likely to be excluded from general community services (Schalock et al, 1981), from day services within learning disability services (Qureshi, 1990) and indeed some restrictions have been reported from services within institutional settings (Oliver et al, 1987).

It has been recognised that direct care staff are a neglected priority in the development of general learning disability services (Rice & Rosen, 1991). This is also reflected in services for clients with challenging behaviours (Bromley & Emerson, 1995). An area of study that has been examined relates to the emotional reactions of direct care staff working with challenging behaviour clients. Within this area it has been shown that staff may experience a number of emotional reactions, such as fear and anger (Hastings & Remington, 1994). One such reaction that has been identified as particularly important is stress (Sherrard, 1992).

The significance of staff stress can be seen in that it has been reported that increases in stress levels can reduce the ability to perform duties adequately (Quick et al, 1992). Also, significant associations between work stress and employee health have been reported (Burke & Richardson, 1996 ; Fletcher, 1991). It would therefore seem that absenteeism will be higher for individuals experiencing higher levels of stress. Within learning disability settings this

has been supported by findings associating 'burnout' with increased rates of staff absenteeism (Harvey & Burns, 1994).

High rates of turnover in learning disability residential services have also been recognised (Felce et al, 1993). The role of stress in contributing to this has been reported as being significant (Firth & Britton, 1989 ; Hatton & Emerson, 1993). The importance of turnover on service provision has been noted in both financial terms, as staff costs can account for 75% of expenditure (Davies et al, 1991), and possible implications for quality of service in terms of lack of continuity of care and personal development of clients (Baumeister & Zaharia, 1986).

## Staff stress

It has long been acknowledged that stress is a major occupational hazard for all people engaged in the human services, especially the delivery of health care (Bailey & Clarke, 1989 ; Chernis, 1980).

Most of the initial studies of staff stress in the area of learning disability took their sample from a range of staff working in hospital based services (e.g. Browner, 1987 ; Caton et al, 1988). These studies found that a range of factors were important in producing stress for workers. With the changing nature of residential service provision and its increased focus on community based services comparisons between both hospital and community services have been called for (Malin, 1987). However, in a review of the literature, Rose (1995) noted that it was still the case that fewer studies of staff stress have been undertaken in community settings than in hospital settings. High levels of stress have been reported in both settings, though whilst the comparison between hospital and group homes has shown similar findings, significantly lower levels of stress were found by staff members working in

community units (Rose, 1993). However, in a community based follow-up study no significant difference was found in stress levels between community unit staff and group home staff (Rose et al, 1994).

In relation to the particular client group and stress it has been reported that client characteristics contribute significantly to levels of stress for members of staff (Bersani & Heifetz, 1985 ; George & Baumeister, 1981 ; Quine & Pahl, 1985). In a recent study of staff working with challenging behaviour clients the most common source of stress was found to be that, over time, client behaviour became wearing (Bromley & Emerson,1995).

Lack of contact with colleagues has also been widely recognised as a significant source of staff stress (Stenfert Kroese & Fleming, 1992). The importance of supportive relationships with colleagues has been widely acknowledged as important in terms of maintaining staff morale and alleviating staff stress (Crawford, 1990 ; Harris & Thomson, 1993 ; Thomson, 1987).

Wider organisational factors have also been recognised as contributing to stress. Such aspects as exclusion from decision making, role ambiguity and a generalised sense of having a high workload have all been reported (Allen et al, 1990 ; Harris, 1989 ; Rose, 1993).

It has been recognised that there have often been difficulties in interpreting current research (Rose, 1993). Many studies have taken a staff sample that includes both qualified and unqualified staff (e.g. Harvey & Burns,1994; Thomson, 1987). However, other researchers have surveyed unqualified direct care staff only, arguing that different occupational roles would have different particular stressors especially relating to staff management and medication dispensing (e.g. Rose, 1993 ; Rose et al, 1994).

## Summary

Rose (1994), reviewing previous research into factors that relate to stress in staff working with clients with learning disabilities noted that unifying themes have been difficult to find. What has been offered is that working with people with learning disabilities is generally moderately stressful and that a large number of factors such as type of work, management practices and the type of resident can influence stress levels.

As the disparate nature of the sources of staff stress has been recognised research into how staff cope with these demands may further contribute to the understanding of staff stress. The significance of how individuals cope with combinations of stressors has been recognised (Cox, 1978). However, within organisational psychology literature it has been reported that more evaluative research into coping strategies and stress is required to build on the limited knowledge currently in this area (Cooper & Payne, 1988 ; Latack & Havlovic, 1992).

In order that the study of approaches to coping can be investigated thoroughly the need for theoretical frameworks has been called for (Edwards & Cooper, 1988).

## Theoretical approaches to coping

Early thinking about coping centred on a psychoanalytical approach in which the emphasis was placed on coping as a personality style, usually in the form of defensive strategies, of which a particular style was thought to characterise the person (e.g. Shapiro, 1965). Such styles of coping were regarded hierarchically as ranging from healthy (termed coping) to progressively more unhealthy (called defences). Thus, certain forms of coping (e.g. denial) were automatically considered to be pathological whilst others were considered to be more healthy.

In the late 1970's a major development in coping theory and research occurred in which the hierarchical view of coping, with its trait or style emphasis, was abandoned in favour of a contrasting approach which treated coping as a process related to particular events. Within the psychoanalytical framework the forms of coping which were considered healthy or pathological were put forward in advance and therefore the coping process was not considered. This was seen as a significant limitation as it did not consider the conditions under which coping or defence might have positive as well as negative value for the individual (Lazarus, 1983).

It has been recognised that recent work in the study of coping maintains as its focus how individuals cope in specific stressful situations (Perez & Reicherts, 1992). However, beyond emphasising situational factors there is less agreement. Endler and Parker (1990), in a review of coping literature, reported that one of the few areas of consensus in current research was the distinction between 'emotion-focused' coping and 'problem-focused' coping originally proposed by Lazarus (Lazarus, 1966).

## The Lazarus theory

It has been noted that many of the definitions of coping utilise the definition provided by Lazarus and his colleagues (Latack & Havlovic, 1992). They define coping as 'constantly changing cognitive and behavioural efforts to manage specific internal and external demands that are appraised as taxing or exceeding the resources of an individual' (p.141; Lazarus & Folkman, 1984).

Lazarus' coping theory identifies two processes, cognitive appraisal and coping, as critical mediators of stressful person-environment situations (Lazarus & Folkman, 1984). Stress is understood in terms of targets towards which coping is directed (Latack & Havlovic, 1992). In most cases the targets

that are defined are the stressful situation or the attendant negative emotions (Aldwin & Revenson, 1987).

Cognitive appraisal is a process through which the person evaluates whether a particular encounter with the environment is relevant to his or her well-being and, if so, in what ways. The appraisal process consists of two components. Primary appraisal involves the person evaluating whether an encounter is irrelevant, benign or harmful. If the encounter is perceived as stressful, coping options are then evaluated in a process referred to as secondary appraisal.

The coping options are seen to fall within two categories, problem-focused (related to the target of the stressful situation) and emotion-focused (related to the attendant negative emotions). The function of problem-focused coping is to alter the person-environment relationship causing the distress by acting on the environment or oneself. The function of emotion-focused coping is to regulate distressing emotions (Lazarus & Folkman, 1984). Strong support for the use of both of these coping functions in stressful situations has been provided. Folkman & Lazarus (1980) reported that of a sample of middle-aged men and women, 98% used both forms of coping. It has also been found that 96% of college students used both strategies when dealing with stressful events (Folkman & Lazarus, 1985).

## Coping in health care settings

Studies undertaken in general and psychiatric nursing have highlighted the possible influence approaches to coping can have on levels of stress and burnout. Ceslowitz (1989) investigated the relationship between the use of coping strategies and the presence of burnout in a variety of hospital specialities. It was found that emotion-focused coping was correlated with

high levels of burnout. Tyler & Cushway (1992) surveyed nursing staff in a large general hospital and found coping strategies such as seeking out help, reorganising work or engaging in exercise were found to be more successful in alleviating the effects of stress than were avoidant coping strategies such as ignoring the situation. Wykes and Whittington (1991) studied coping strategies adopted by psychiatric nursing staff. They found that avoidant or escape coping strategies were related to high anxiety and active-cognitive / behavioural coping styles (e.g. facing the situation) were related to lower levels of anxiety. Sullivan (1993), surveying psychiatric nurses found that problem-focused coping was negatively correlated with the experience of stress, whilst emotion-focused coping was positively correlated with emotional exhaustion.

These findings indicate the benefits of mediating workplace demands in health settings by the use of approaches that are problem-focused. However, it has been argued that problem-focused coping strategies can be counter-productive in conditions when nothing useful can be done to change the situation (Collins et al, 1983). This was highlighted by Folkman and Lazarus (1986) who found that 'distancing', an emotion-focused coping strategy, was shown to be adaptive for students waiting to hear examination results. It has been noted that problem-focused approaches can lead to 'problem-generation' where the use of inappropriate problem-solving approaches can lead to the creation of additional problems and stress (Schonpflug & Battmen, 1988).

The emphasis placed on assessing coping as process, rather than as 'style', can be seen to require measurement in specific stressful encounters. Research in this area highlights a variety of approaches as to the extent of specificity required. Researchers have either focused on specific stressful incidents that occurred recently (e.g. Folkman & Lazarus, 1984), a specific

type of job stress such as role ambiguity (e.g. Latack, 1986) or demands made by a specific occupation (e.g. Kirkmeyer & Dougherty, 1988).

This study focuses on the occupational demands made in the work of unqualified direct-care staff, working in residential services for clients with learning disabilities who also demonstrate challenging behaviours, and the coping strategies employed in mediating the potentially stressful demands.

# Rationale for the study

The challenge of providing a service to clients with learning disabilities and who also present with challenging behaviour is a major issue within learning disability services in the 1990's. The service received in residential provision, either hospital or community based, is being seen more and more as influenced by paid care staff with whom residents have high levels of contact. The significance of concentrating on unqualified direct-care workers can be seen as they represent the majority of employees in residential services (Hogg & Mitler, 1987).

The main focus of the study is to evaluate how unqualified direct care staff mediate the recognised variety of demands of their work through the use of coping strategies. Within this framework the study sought to examine a number of issues including the utility of using a previously unvalidated 40-item coping questionnaire, how different approaches to coping were related to the experience of stress and whether previously recognised stressors differentiated the experience of stress.

## Measurement of coping

It has been argued that the length of a questionnaire can be central to eliciting a response and that this is particularly the case in the demanding environment of residential services in learning disability (Hatton & Emerson,

1995). The study sought to evaluate coping strategies based on coping strategies identified within the Ways of Coping (Folkman & Lazarus, 1985) through the use of an alternative, shorter measure of coping, the 40-item Coping Questionnaire (Sullivan, 1993). As no published research was available that had examined the psychometric properties of the questionnaire, an assessment of the construct validity and reliability was conducted.

The specific hypotheses tested were :

o An exploration of the construct validity of the measure will demonstrate that the factors reflect problem-focused and emotion-focused coping.

o Factors derived from the factor analysis of responses will correspond with the eight proposed factors (Folkman & Lazarus, 1988) which relate to problem-focused and emotion-focused coping in the measure.

o The measure will demonstrate adequate reliability.

## Outcomes of coping

The specific hypotheses tested were:

o The coping questionnaire will identify that respondents use both emotion-focused and problem-focused strategies in mediating the demands of the workplace.

o A relationship will be found between levels of stress and whether the approach to coping is predominantly emotion-focused or problem-focused.

## Potential differentiating factors in experienced stress

It has been recognised that a diversity of demands exist for staff working in residential learning disability services. This study elicited descriptive information relating to some areas of potential stress.

The specific hypotheses tested were :

o The following characteristics may differentiate between levels of stress reported by staff.

age

gender

level of client contact

number of co-workers

work setting (i.e. hospital or community)

The implications of the findings from this study will be discussed in relation to broader issues of service provision with particular reference to turnover, quality of care and the implementation of interventions.

# Methodology

## Settings and participants

The participants in the study were unqualified direct care staff working in residential settings for clients with learning disabilities and who also have recognised challenging behaviours. In this context 'unqualified' refers to workers who do not possess a relevant professional qualification (e.g. nursing certificate). Members of staff with nursing qualifications were excluded from the study so that the results would reflect one specific group of workers for whom additional demands relating to management responsibilities in the work place would not be relevant.

Two broad work environments were chosen to reflect current National Health Service residential provision for individuals with learning disabilities and who demonstrate challenging behaviours in North Derbyshire. In common with national trends a move to provide residential services in community settings has been undertaken in North Derbyshire. However, as noted by recent studies (e.g Felce et al, 1995; Rose, 1993) hospital provision remains an integral part of learning disability services. The learning disability service in North Derbyshire reflects this as it maintains hospital provision in the form of a hospital based in the Chesterfield locality.

The respondents in this study were drawn from the Chesterfield locality and represent the service provision in the area for individuals who present with challenging behaviours. Similarities existed within the units in that they were all managed by qualified nursing staff. This is representative of service provision in other localities within North Derbyshire. Comparabilty was enhanced in that the range of size (in relation to number of beds) of community residential service reflected that offered in other localities.

The sample selected for this study relate to hospital and community settings. Within these two settings of hospital and community participants were surveyed from two wards in one learning disability hospital (n = 38) and four units based in the community consisting of two four bed units, one five bed unit and one ten bed unit (n = 67).

## Materials

A package of questionnaires was distributed to participants. It was designed to be self-completed without assistance and included the following:

### A demographic questionnaire

The demographic questionnaire (appendix 1) used in this study sought to elicit whether the respondent was an unqualified direct-care worker and that they worked with clients who demonstrated challenging behaviour. This latter issue was achieved by asking whether respondents worked with clients demonstrating challenging behaviour that met any of the three criteria set out by Qureshi & Alborz (1992) :-

o the behaviour has at some time caused injury to the person themselves or others that has required immediate medical treatment, or destroyed their immediate living or working environment;

o the behaviour occurs at least once a week and requires the intervention of more than one member of staff to control, or places them in danger, or causes damage which could not be rectified by care staff, or causes more than one hour of disruption; or

o the behaviour occurs at least daily and causes more than a few minutes disruption.

Additional questions were asked relating to :

○ personal characteristics :  gender and age of respondents.

○ work setting : whether respondents worked in a community or hospital residential setting.

○ human resources :  the number of colleagues on a shift.

○ client contact : the duration of the working day spent working with clients who demonstrate challenging behaviours.

## The General Health Questionnaire Version 12 (GHQ-12)

The General Health Questionnaire (GHQ) was used as a measure of stress-related mental health. It is regarded as a state (rather than a trait ) measure, responding to how much a subject feels that their present state is unlike their usual state (Goldberg & Williams, 1988).

The GHQ has frequently been used as a mental health measure in occupational studies (Bank et al, 1980). Many versions of the original 60-item questionnaire have been derived. This study used the 12-item version (appendix 2) as opposed to the often used 28-item version. Studies of the 12-item version have shown it to demonstrate adequate reliability and validity (Goldberg & Williams, 1987 ; Bank, 1983):

The GHQ measure has been used in other studies of stress in health care staff (Firth-Cozens, 1987 ; Cushway, 1992). In a study of staff working in residential settings for clients with challenging behaviour it was found that the GHQ-28 produced lower than expected response rates (Harris et al, 1992). Central to this was that the respondents found the information too personal to divulge, despite the study being completely anonymous. The

GHQ-12 version was recommended as it was considered to omit these questions, and had the additional advantage of being quicker to complete. The GHQ-12 version has also been cited as the most relevant measure to use in occupational studies (Bank et al, 1980).

The GHQ was scored using the 'GHQ method' which produces a symptom count. The most accurate threshold to identify 'caseness' relating to a psychological disorder is considered to be 4 or greater (Goldberg & Williams, 1988).

This study uses the term caseness (Goldberg & Williams, 1988) to identify respondents who are experiencing stress at the level of psychological disorder.

## The 40-item Coping Questionnaire

The coping questionnaire used in this study (appendix 3) was one that had previously been designed for a study of coping strategies used by psychiatric nursing staff in acute adult in-patient wards (Sullivan, 1993).

The measure is an adaptation of the 67 item 'Ways Of Coping Questionnaire' developed by Lazarus and his co-workers (Folkman & Lazarus, 1985). The measure used in this study consisted of 40 items, rated on a 5 point Likert scale, that relate to the eight forms of coping identified by Lazarus. These are shown in Table 1. These are further delineated in terms of whether they are predominantly problem-focused or emotion-focused coping strategies, as shown in Table 2.

**Table 1 Classification of coping strategies (Folkman & Lazarus, 1988)**

| | |
|---|---|
| 1 : Confrontative coping | Describes aggressive efforts to alter the situation and suggests some degree of hostility and risk taking |
| 2 : Distancing | Describes cognitive efforts to detach oneself and to minimise the significance of the situation |
| 3 : Self-controlling | Describes efforts to regulate one's feelings and actions |
| 4:Accepting Responsibility | Acknowledges one's own role in the problem with a concomitant theme of trying to put things right |
| 5 : Escape-avoidance | Describes wishful thinking and behavioural efforts to escape or avoid the problem |
| 6 : Planful problem-solving | Describes deliberate problem-focused efforts to alter the situation, coupled with an analytical approach to solving the problem |
| 7 : Positive re-appraisal | Describes ways to create positive meaning by focusing on personal growth. |
| 8: Seeking social support | Describes efforts to seek informational support, tangible support and emotional support |

**Table 2 The eight coping subscales classified as**
**emotion-focused or problem-focused coping strategies**

| Problem-focused coping | Emotion-focused coping |
|---|---|
| Confrontative coping | Distancing |
| Positive reappraisal | Escape avoidance |
| Planful problem solving | Self control |
| Seeking social support | Accepting responsibility |

# Procedure

## Piloting

Initial meetings were held with managers of each participating service to describe the nature of the study and to discuss the questionnaire package which was to be distributed to individual direct-care staff.

These meetings were followed by planned discussions with direct-care staff in each unit. It was not possible to meet all possible respondents. At the staff meetings a basic assessment of content validity was undertaken. This was done by providing individuals with the questionnaire package in order that they could comment. Particular emphasis was placed on clarity of instructions for each section of the questionnaire package, as it was designed to be self-completed. Alterations were made to the demographic questionnaire in response to these comments. In order that an approximate time could be provided for completion, some subjects completed the questionnaire package whilst being observed. These responses were included in the total analysed.

## Strategy for Questionnaire Distribution

Each participating service was provided with the questionnaires by hand. Distribution was carried out by senior staff members. Participation was on a voluntary basis.

In response to concerns raised by possible respondents regarding anonymity none of the questionnaires could be identified in terms of the individual respondent or the unit that they worked for. Each respondent was

provided with a stamped addressed envelope in which to return their questionnaire package.

## Data processing

A coding frame was developed and data entered manually into SPSS for windows version 6.0.

# Results

## Introduction

To allow analysis of the hypotheses stated in the rationale section the results are divided into the following sections:

- Response rates

- The psychometric properties of the 40-item Coping Questionnaire

- The relative use of coping strategies

- The relationship between coping strategies and stress

- The descriptive details of potential differentiating factors in experienced stress

- Potential differentiating factors in experienced stress and levels of stress

- Potential differentiating factors in experienced stress and stress caseness

# Response rates

One hundred and sixty nine questionnaires were delivered to the six participating units. One hundred and thirteen questionnaires were returned of which one hundred and five were suitable for analysis. The eight that were excluded were done so as they had either been completed by qualified nursing staff or they had not been completed. This was a response rate of 62%. which is comparable to the reported response rates in similar studies (e.g. Stenfert Kroese & Fleming, 1992).

# The psychometric properties of the coping questionnaire

## Factor analysis

This was undertaken to assess the construct validity of the 40-item Coping Questionnaire. It enabled an exploration of the possibility of obtaining a set of orthogonal underlying factors, ascribed as constructs, in the questionnaire. It should be noted that the findings need to be considered with a degree of caution due to the sample size of 105 being close to the accepted minimum of 100 and that the subject to item ratio in the study was 2.6 to 1 when 3 to 1 is often a preferred ratio (Kline, 1993).

Within this procedure a set of standard steps was used (Norusis, 1993). Details of the two principal steps are given overleaf:-

## Factor Extraction

This was achieved by conducting the standard eigenvalue one test (Norman and Steiner, 1994). The findings indicated that only eleven factors were necessary to adequately describe the data collection. This can be seen in the scree plot below.

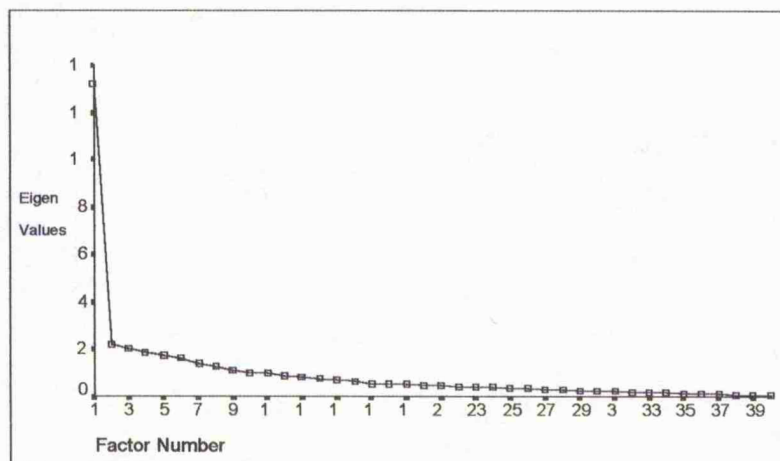Figure 1        Factor scree plot



Table 3 presents the eleven derived factors. Seventy-two percent of the accumulated variance of the scores on the questionnaire can be accounted for by these factors. It can be seen that the first factor may be particularly meaningful as it accounts for 33% of the variance.

Table 3 The significant factors from the eigenvalue
one test

| Factor | Eigenvalue | Pct of Var | Cum Pct |
|--------|-----------|-----------|---------|
| 1 | 13.21516 | 33.0 | 33.0 |
| 2 | 2.20211 | 5.5 | 38.5 |
| 3 | 2.04550 | 5.1 | 43.7 |
| 4 | 1.86551 | 4.7 | 48.3 |
| 5 | 1.78841 | 4.5 | 52.8 |
| 6 | 1.63271 | 4.1 | 56.9 |
| 7 | 1.41062 | 3.5 | 60.4 |
| 8 | 1.31825 | 3.3 | 63.7 |
| 9 | 1.13450 | 2.8 | 66.5 |
| 10 | 1.03728 | 2.6 | 69.1 |
| 11 | 1.00532 | 2.5 | 71.6 |

## Transformation and results

The standard technique of VARIMAX rotation was used to make the factors meaningful (Ferguson, 1981). Tabachnick & Fidell (1989) have argued that factors need to consist of two or more variables and as two of the factors consisted of one variable a nine factor model was considered to be appropriate.

As one of the aims of the study was to investigate the construct validity of problem-focused and emotion-focused coping, and the constituent subscales, it was decided to compare the factors derived from the factor analysis with the proposed eight factors.

Table 4 shows each of the derived factors in terms of their associated subscales, whether they are emotion or problem-focused and their loading values. The loading values for each of the items indicate the degree of association to the factor. Items with factor loadings of less than an absolute value of 0.5 were considered to be unimportant (Kinnear and Grey, 1995).

**Table 4** The derived factors in relation to their subscale classification and whether emotion focused or problem-focused coping strategies.

| Items<br>(Associated subscale) | Problem-focused<br>or<br>Emotion-focused | Loading value |
|---|---|---|
| **Factor 1** | | |
| Confrontational coping | Problem-focused | .7703 |
| Planful problem solving | Problem-focused | .7445 |
| Positive reappraisal | Problem-focused | .6635 |
| Positive reappraisal | Problem-focused | .5843 |
| Confrontational coping | Problem-focused | .5689 |
| Confrontational coping | Problem-focused | .5156 |
| **Factor 2** | | |
| Seeking social support | Problem-focused | .6531 |
| Planful problem solving | Problem-focused | .6013 |
| Planful problem solving | Problem-focused | .5705 |
| Planful problem solving | Problem-focused | .5644 |
| Seeking social support | Problem-focused | .5532 |
| **Factor 3** | | |
| Seeking social support | Problem-focused | .7309 |
| Seeking social support | Problem-focused | .6918 |
| Seeking social support | Problem-focused | 5801 |
| **Factor 4** | | |
| Planful problem solving | Problem-focused | .7204 |
| Positive reappraisal | Problem-focused | .6994 |
| Positive reappraisal | Problem-focused | .5166 |
| **Factor 5** | | |
| Escape avoidance | Emotion-focused | .7704 |
| Escape avoidance | Emotion-focused | .5943 |
| Distancing | Emotion-focused | .5618 |
| **Factor 6** | | |
| Escape avoidance | Emotion-focused | .6382 |
| Escape avoidance | Emotion-focused | .6372 |
| Escape avoidance | Emotion-focused | .5957 |
| **Factor 7** | | |
| Accepting responsibility | Emotion-focused | .8072 |
| Accepting responsibility | Emotion-focused | .6785 |
| **Factor 8** | | |
| Distancing | Emotion-focused | .7686 |
| Distancing | Emotion-focused | .5865 |
| **Factor 9** | | |
| Distancing | Emotion-focused | .6724 |
| Distancing | Emotion-focused | .6507 |

The factors can be seen to reflect the construct validity of emotion and problem-focused approaches to coping. Four factors ( 1 to 4 ) relate to problem-focused coping strategies and five factors ( 5 to 9 ) relate to emotion-focused strategies. However, the nine derived factors did not fully relate to the eight proposed, as the components of four of the factors consisted of items from different subscales. The four factors that did not correspond (factors 1, 2, 4 and 5) were redesignated. Table 5, below, presents the nine derived factors, the redesignated classifications and whether emotion focused or problem-focused.

Table 5 The redesignated classification of the derived factors and whether they are emotion-focused or problem-focused

| Redesignated Construct | Emotion-focused or Problem-focused |
|---|---|
| Confrontational & positive reappraisal coping | Problem-focused |
| Supported planful problem solving | Problem-focused |
| Seeking social support | Problem-focused |
| Positive reappraisal & planful problem solving | Problem-focused |
| Escape avoidance & distancing | Emotion-focused |
| Escape avoidance | Emotion-focused |
| Accepting responsibility | Emotion-focused |
| Distancing | Emotion-focused |
| Distancing | Emotion-focused |

# Assessment of the reliability of the 40-item Coping Questionnaire

## Internal Reliability

To consider the internal consistency of both emotion-focused and problem-focused coping scores a Cronbach's alpha coefficient was computed (problem-focused coping, alpha = 0.89 ; emotion-focused coping, alpha = 0.78).

## External reliability

As mentioned in the methodology section a high level of concern was expressed regarding the ability to maintain confidentiality. In order to respond to the concerns raised none of the questionnaires were given a unique identifier. This meant that to conduct test-retest reliability a separate sample was used that shared the same core characteristics of the main sample. This sample was relatively small (12 respondents). The respondents completed the questionnaires two months apart.

Analysis of the stability of the coping questionnaire was carried out by assessing its test-retest reliability. A Spearman's rank order correlation was conducted which demonstrated a significant association between the responses given on both occasions (rho = 0.79 ; $p < 0.01$).

These results indicate that the measure demonstrated adequate reliability.

# The relative use of coping strategies by respondents

The data set was investigated in terms of the emotion-focused and problem-focused coping strategies. A maximum score for each coping strategy was 100 and a minimum of 20. For problem-focused coping scores the mean score was 65 (sd 14.34) with a minimum score of 37 and a maximum score of 91. For emotion-focused coping scores the mean score was 46 (sd 11.42) with a minimum score of 26 and a maximum score of 68.

The distribution for each of these scores is given below.

**Figure 2**      The use of Problem-focused and Emotion-focused coping
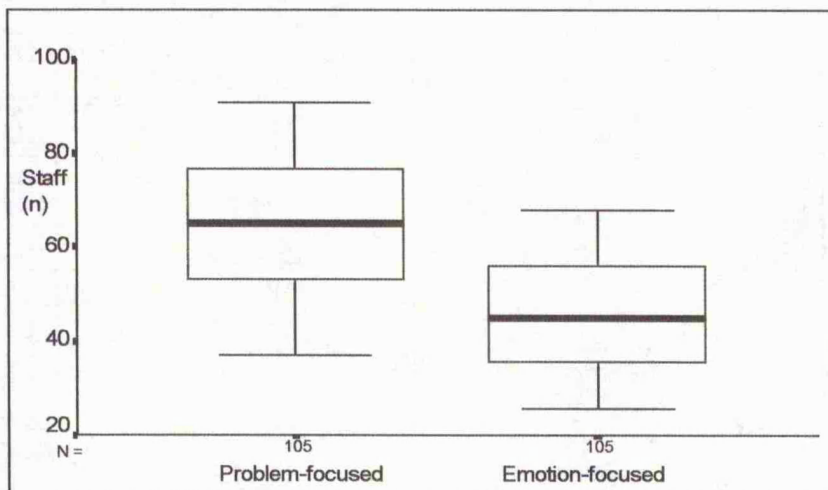


From the above box plot it can be seen that respondents use less emotion-focused coping strategies than problem-focused coping strategies. This is consistent with previous results using this instrument (Sullivan,1993).

To investigate the relative use of these at the individual level a new variable was constructed; the new variable being the problem-focused score minus the emotion-focused score for each individual respondent. A positive score indicated that the respondent used more problem-focused

coping strategies, while a negative score indicated the respondent used more emotion-focused coping strategies.

**Figure 3**          **Degree of coping strategy used**



Degree of coping : negative scores = emotion-focused
positive scores = problem-focused

Std. Dev = 24.92
Mean = 19.0
n = 105
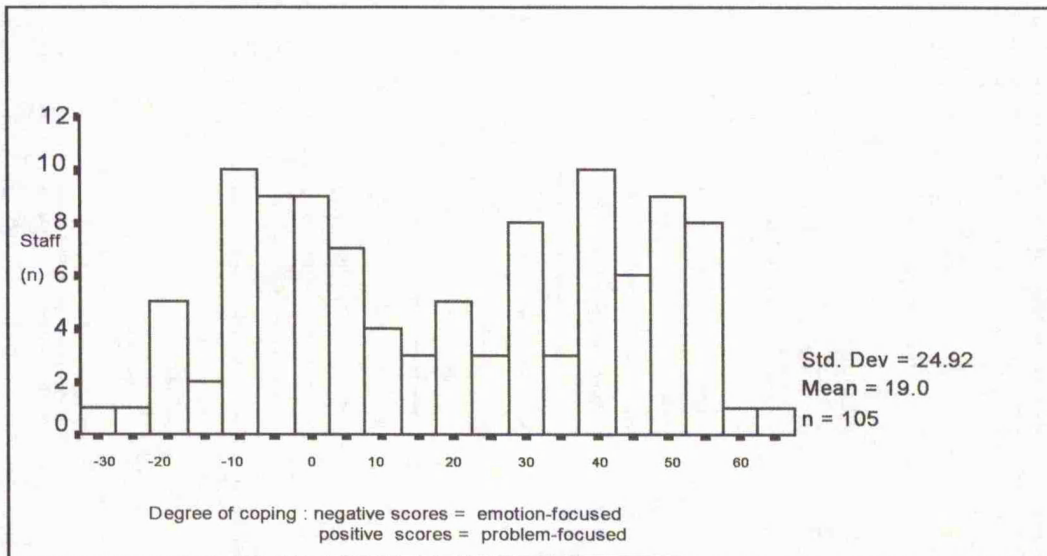
From the above there appears to be a bimodal distribution (non normal), the two modes occurring at -10 and +40. Summarising the information from the above histogram, 28% of respondents used more emotion-focused coping than problem-focused, 33% used equal amounts of coping strategy and 39% used more problem-focused than emotion-focused coping.

This demonstrates that staff use both problem-focused and emotion-focused coping when dealing with the demands of work.

# The relationship between coping strategies and stress

As the data was ordinal Spearman's correlation coefficient for ranked data was used. All significance scores were reported as two-tailed.

The possible relationship between stress and the relative use of each coping strategy used by individual respondents was investigated. A highly significant negative correlation was found between problem-focused coping and level of stress both for the total sample (rho = -0.83 ; p< 0.01) and the subsample who reported stress caseness scores (rho = - 0.69 ; p < 0.01). Emotion-focused coping and stress was found to be significantly positively correlated both for the total sample (rho = 0.74; p< 0.01) and for the subsample who reported stress caseness scores (rho = 0.71 ; p< 0.01).

The relationship between the derived factors from the factor analysis and stress and stress caseness demonstrated similar significant associations for each of the nine factors. These are presented in Table 6.

Table 6  Redesignated constructs and relationship with experienced stress

| Designated Construct | Relationship between redesignated construct and level of stress for: | |
| --- | --- | --- |
| | whole sample | Stress caseness subsample |
| Confrontational & positive reappraisal coping | rho = -0.77 p < 0.01 | rho = -0.77 p < 0.01 |
| Supported planful problem solving | rho = -0.70 p <0.01 | rho = -0.71 p < 0.01 |
| Seeking social support | rho = -0.55 p < 0.01 | rho = -0.45 p < 0.01 |
| Positive reappraisal & planful problem solving | rho = -0.57 p < 0.01 | rho = -0.46 p < 0.01 |
| Escape avoidance & distancing | rho = 0.64 p < 0.01 | rho = 0.50 p < 0.01 |
| Escape avoidance | rho = 0.42 p < 0.01 | rho = 0.19 p < 0.05 |
| Accepting responsibility | rho = 0.39 p < 0.01 | rho = 0.21 p < 0.03 |
| Distancing | rho = 0.52 p < 0.01 | rho = 0.50 p< 0.01 |
| Distancing | rho = 0.43 p <0.01 | rho = 0.41 p < 0.01 |

# Potential differentiating factors in experienced stress

The sample was non-randomised. Therefore, it was necessary to consider the typicality of the sample compared with other research carried out by way of descriptive statistics and chi-square tests which were conducted on gender, age and location of work setting.

## Gender

The sample consisted of significantly less males than females ($\chi^2$ (1) = 42.75, p< 0.005). Nineteen (18%) were males compared to 86 females (82%). The higher number of females to males in this area of work is consistent with reviews of service provision ( Allen et al, 1990).

## Age

There was found to be a significant difference between the number of respondents in the six age bands used in the analysis ( $\chi^2$ (5) = 23.51, p < 0.003). From the histogram below it would appear that the majority of respondents were in the middle bands (26 - 55 years old). This is similar to other studies (e.g. Hatton et al, 1995).

**Figure 4  Histogram of age of staff**
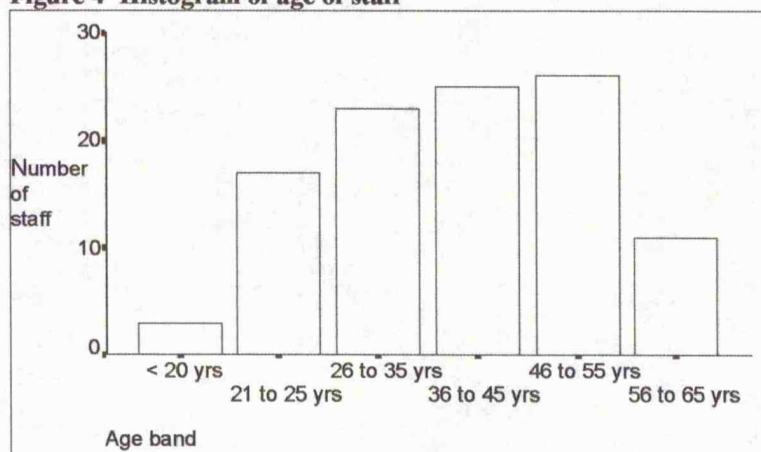


## Work Setting

### Hospital and community

Of  the respondents, 38, (36%) were based in a hospital service whilst, 67, (64%) were based in the community. This represents a significant

difference between the number of individuals within the two sample groups ($\chi^2$ (1) = 8.01, p < 0.05). This can be seen to reflect service provision (Allen et al, 1990).

This indicates that the results of this study would be most appropriately generalised to female community based workers within the mid age ranges.

## Number of staff on duty

Table 7 below shows the number of staff on duty at the units surveyed. It can be seen that the number of staff on duty, on each shift, fall into three categories of which over 50% indicated they had two to three members of staff on each shift.

Table 7    Number of staff on duty per shift

| Number of staff per shift | n(%) |
|---|---|
| two | 0 |
| two or three | 54 (51.4) |
| three | 0 |
| three or four | 0 |
| four | 0 |
| four  or five | 24 (22.9) |
| five | 0 |
| five or six | 0 |
| six | 0 |
| six or seven | 0 |
| seven | 0 |
| seven or  eight | 27(25.7) |
| Total | 105 |

## Client Contact

Respondents were asked how much of the working day was spent with clients who demonstrated challenging behaviour. It can be seen in Table 8 that the majority of respondents spent between 25% and 75% of their working day with challenging behaviour clients.

Table 8  Level of contact with clients

| % Time with clients | n(%) = number of respondents |
|---------------------|------------------------------|
| 0 - 25 | 0(0) |
| 25 - 50 | 31(30) |
| 50 - 75 | 44(42) |
| 75+ | 30(29) |

## Potential differentiating factors in experienced stress and levels of stress

As the data was ordinal non-parametric statistical tests were used. The Mann-Whitney U test was used for the analysis of two conditions and the Kruskal-Wallis one way analysis of variance was used for more than two conditions.  All significance scores were reported as two-tailed and corrected for ties.

## Gender

GHQ score and gender was investigated and failed to demonstrate any significant difference between level of stress experienced by males and females (U = 805 ; p> 0.05).

## Age

Investigating GHQ scores across age bands failed to demonstrate any significant difference ($\chi^2$ (5) = 4.65 ; p> 0.05).

## Work Setting

### Hospital and community

A significant difference was found in the GHQ scores between those respondents who worked in the hospital and those in the community (U = 742  p< 0.03). Boxplots of the data clearly show a higher median score for those respondents in the community setting (median 1 versus 3 for the community), although it can also be seen that there is a degree of overlap. This highlights that higher levels of stress are experienced by staff working in community settings.
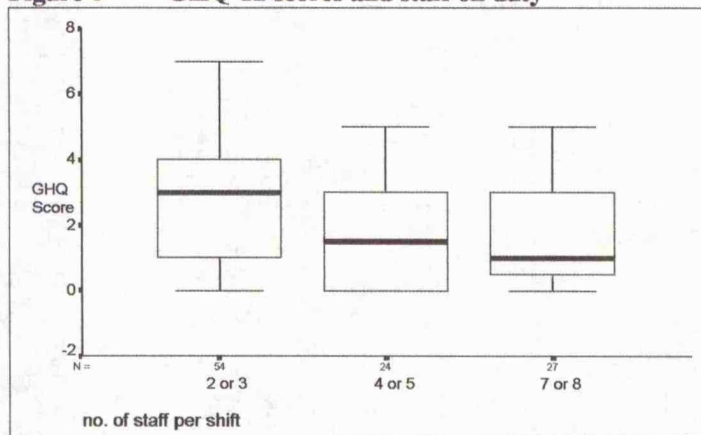
Figure 5      GHQ-12 scores and work setting
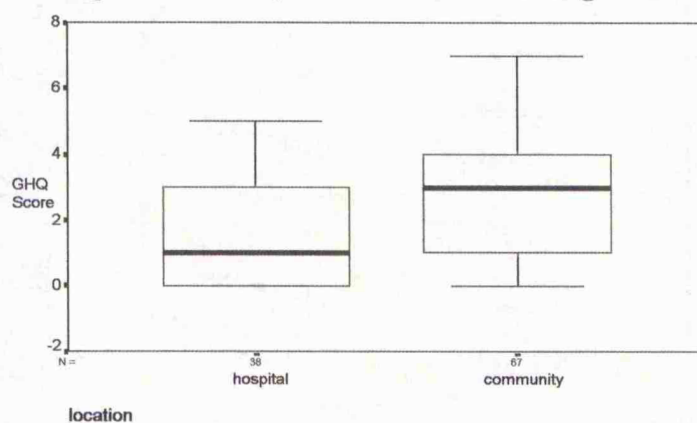
## Number of staff on duty

A significant difference between the GHQ scores across staffing levels was found ($\chi^2$ (2) = 8.71 ; p < 0.01). The boxplot below shows that higher levels of stress were reported by staff working with fewer colleagues.
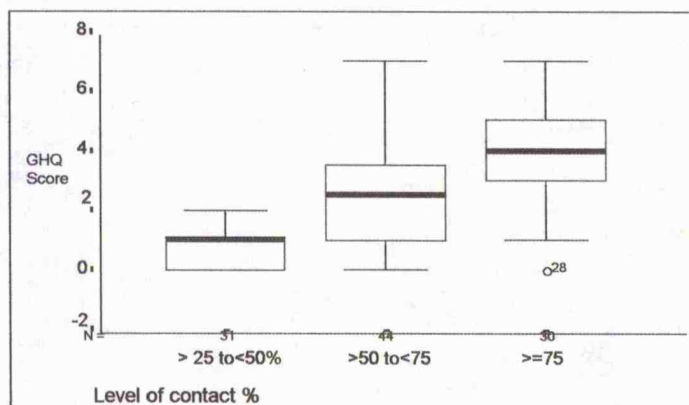
**Figure 6     GHQ-12 scores and staff on duty**



## Client Contact

A highly significant difference between GHQ scores and the amount of client contact was found ($\chi^2$ (2) = 35.65, p< 0.01). From the boxplot below it can be seen that higher levels of stress were reported by staff with greater amounts of client contact.

**Figure 7     GHQ-12 scores and level of client contact**

# Potential differentiating factors in experienced stress and stress caseness

Of the 105 respondents, 29(27.6%) reported scores consistent with stress caseness, compared with 76(72.4%) who did not. To investigate any differences in the number of respondents who reported levels of stress consistent with stress caseness chi-square tests were undertaken against potential differentiating factors.

## Gender

Gender did not appear to influence numbers of respondents who experienced stress at the level of caseness ( $\chi^2$ (1) = 0.01; p > 0.05 ).

## Age

Age did not appear to influence numbers of respondents who experienced stress at the level of caseness ( $\chi^2$ (1) = 0.20 ; p > 0.05).

## Work Setting

### Hospital or community

The result showed that significantly more staff reported levels of stress, consistent with caseness, in the community than in hospital ($\chi^2$ (1) = 11.59 ; p < 0.007). This relates to 3(8%) of the hospital staff suffering from stress at the level of a psychological disorder compared to 25(38%) of the community staff.

**Figure 8**     **Histogram showing differing levels of stress
in hospital and community settings**
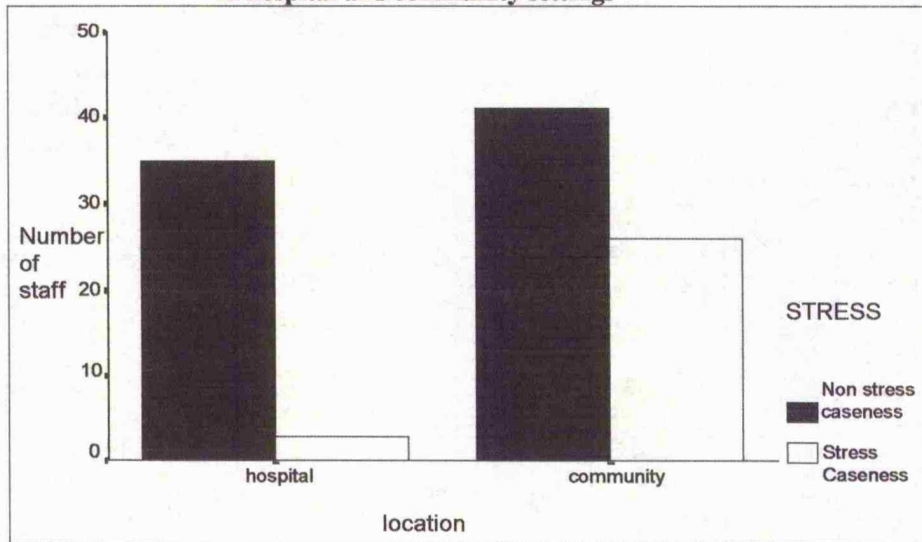


## Number of staff on duty

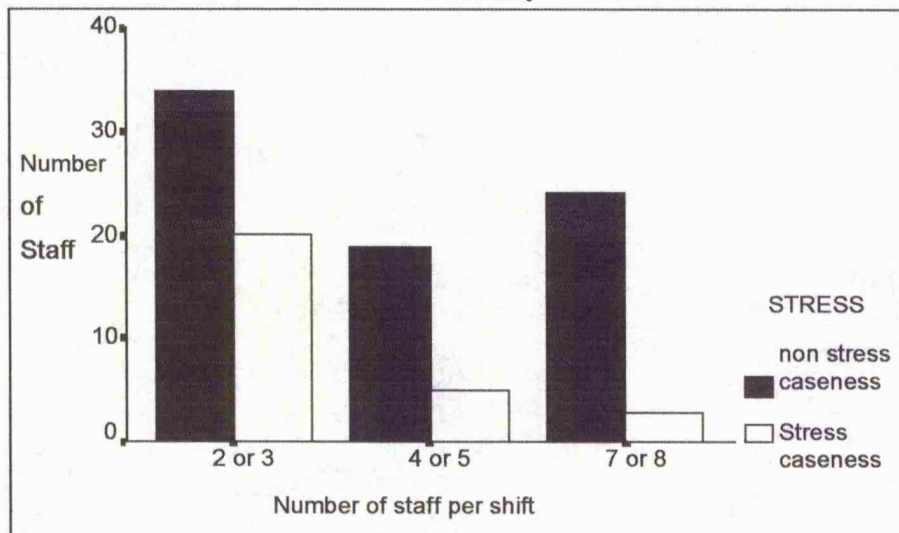From the histogram below it appears that the incidence of stress caseness decreases with the number of people working per shift. ( $\chi^2$ (2) = 7.66; $p < 0.02$ ).

**Figure 9**     **Histogram showing differing levels of stress in relation
to number of staff on duty**

# Client contact

The histogram below demonstrates a clear statistically significant increase in the incidence of stress caseness with increases in the percentages of self-reported time spent working with clients ( $\chi^2$ (2) = 17.02 ;  p < 0.002).

**Figure 10**  **Histogram showing differing levels of stress and level of contact with clients**
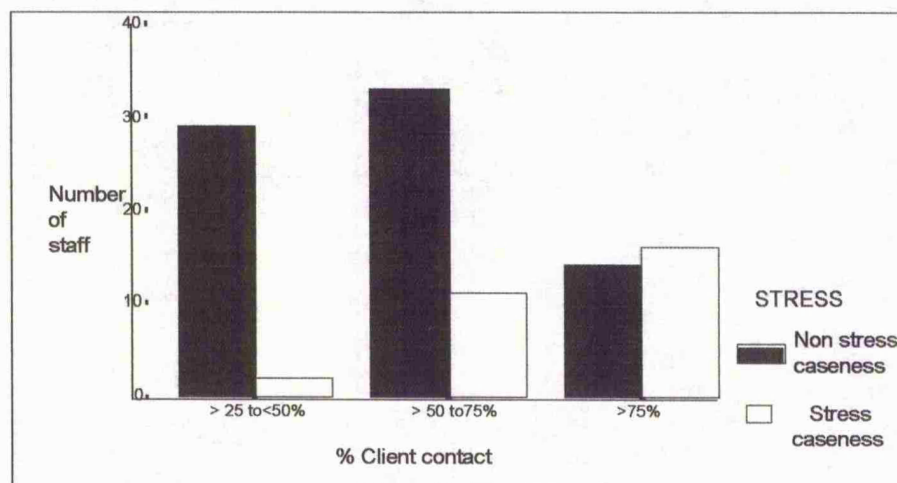


In summary, the findings as to potential differentiating factors in both overall levels of experienced stress and incidence of stress caseness indicate that whilst no differences were found in relation to age and gender three factors appeared to be influential. These related to being based in the community rather than hospital, working with fewer colleagues and where staff reported spending more of their working day with the client group i.e. challenging behaviour residents.  However, it should be noted that the data analysis in this section was univariate and as such the possible influence of covariates was not controlled for. For example, a limitation of  the finding of higher levels of stress reported by staff working with fewer colleagues can be seen as the possible influence of whether these respondents were based in hospital or community settings was not controlled for.

# Discussion

This study aimed to add to the literature on stress experienced by paid care staff by assessing the use of coping strategies employed in the workplace. It also considered factors that may differentiate the level of experienced stress. The respondents were all unqualified direct-care staff working in residential services for clients with learning disabilities who also demonstrate challenging behaviours.

The interpretation of the findings will be considered along with any limiting factors. The findings will be discussed in relation to possible implications for future research and clinical practice.

## The psychometric properties of the 40-item Coping Questionnaire

The exploratory examination of the construct validity of the 40-item Coping Questionnaire can be seen to support the hypothesis that approaches to coping reflect the broad classifications of coping strategy as either emotion-focused or problem-focused.

### Construct validity

The factor analysis carried out on the coping questionnaire used in this study found that nine categories (five emotion and four problem-focused) described the coping strategies employed by the staff members. This solution is similar in range to the eight categories proposed by Folkman & Lazarus (1986). A range of factors required to adequately describe approaches to coping has also been found in other studies of the factor structure of coping questionnaires. Vitaliano et al (1985) found six factors

and Carver at al (1989) found thirteen scales that were seen to delineate from the emotion-focused and problem-focused classification. However, support for the hypothesis that the derived factors from the factor analysis would correspond with the eight proposed cannot be provided as the components of four of the factors consisted of items from different subscales to the eight proposed.

A degree of caution should be exercised in attributing the extent of the explanatory value provided by all nine factors derived from the factor analysis conducted. Though the use of the eigenvalue one convention in the factor extraction indicated the range of factors that adequately described the data collection, it was evident from the scree plot and the 33% of the variance that the factor designated as 'confrontational and positive reappraisal coping' should be accorded the greatest explanatory importance. As such this approach to coping, within the problem-focused classification, can be seen to constitute an important approach to coping. Confrontational coping has previously been associated with negative outcomes in relation to experienced stress (Ceslowitz, 1989). However, it appears that staff members who combine efforts to actively confront situations and who also seek to reframe events in order to create positive meaning benefit by experiencing lower levels of stress.

Reliability

The hypothesis that the 40-item Coping Questionnaire would demonstrate adequate reliability can be seen to be supported from the findings for both internal and external reliability. However, the limited sample size for the test-retest reliability analysis suggests that a degree of caution should be exercised.

In summary, the findings from this study demonstrate adequate validity and reliability for 40-item Coping Questionnaire and support its further use. However, the limited number of respondents in terms of investigating both construct validity and test-retest reliability strongly suggest that further studies are required to extend and replicate these findings.

## Outcomes of coping strategies

The findings from this study demonstrated strong support for the hypothesis that the staff group used both emotion-focused and problem-focused coping in the work setting. The hypothesis that a relationship would be found between levels of stress and approach to coping was also supported. This was illustrated by the finding of a highly significant relationship between the level of stress and the incidence of stress caseness and the predominant coping strategy employed. Use of predominantly problem-focused coping strategies was associated with the reported experience of lower levels of stress and lower incidence of stress caseness, whilst emotion-focused strategies were associated with higher levels of stress and higher incidence of stress caseness.

These findings are consistent with and extend those of recent studies undertaken in learning disabilities. Sloper et al (1991), using five factored out constructs from the Ways of Coping questionnaire, found that problem-focused coping strategies used by family members of Down Syndrome children were shown to be negatively associated with distress, whilst emotion-focused strategies were positively associated with distress.

Hatton & Emerson (1995) using a Shortened Ways of Coping (Revised) questionnaire (SWC-R) in a study of residential staff found an association between distress and the use of 'wishful thinking' strategies; based on an emotion-focused coping factor, taken from the Sloper study. No association

was found between distress and the use of 'practical coping' strategies; a problem-focused factor taken from the Sloper study. However, the present study demonstrates that despite the failure of Hatton and Emerson (1995) to detect an association between problem-focused coping strategies and distress, problem-focused strategies for unqualified direct-care staff are associated with an adaptive outcome, as shown by their negative association with stress.

The SWC-R contained the two subscales, wishful thinking and practical coping, giving a 14 item measure of approaches to coping. The findings from this study suggest that the 40-item Coping Questionnaire, used in this study, may offer an alternative measure of coping based on the same model that can highlight outcomes relating to distress shown in the association found with stress. Though the brevity of the SWC-R make it an attractive instrument to use with busy staff members it may not offer the sensitivity to negative emotions such as stress. Given the factor analysis undertaken that highlighted the range of factors used in coping it can be argued that more than two scales are required in order to detect significant associations with negative emotional experiences such as stress.

Further support for this measure relates to its development within services that share similar characteristics. The 40-item Coping Questionnaire was developed for use in adult acute psychiatric units, which can be seen to share similar demands to those faced by direct-care staff working in residential services with challenging behaviour clients. This can be seen as significant as it has been reported that generalising the findings from standard coping instruments can be misleading (Somerfield & Curbow, 1992).

# Potential differentiating factors in experienced stress

Over a quarter (27%) of the staff reported scores consistent with stress caseness. This indicated that stress remains a substantial occupational hazard in the area of learning disability residential work. Although no evidence to support a direct causal relationship is presented, it is reasonable to assume that three significant factors that differentiate reported levels of stress: work setting, level of client contact and the number of staff on the shift can be regarded as important influences on staff stress levels.

The findings that stress levels were significantly higher for those direct-care staff working with fewer colleagues offers support for the role of contact with colleagues, and the possible social support that this can offer, in the alleviation of stress. The benefit of informal support has been emphasised particularly in community settings (Halliday et al, 1992; Ward, 1989). The significance of this can be seen as fewer opportunities for social contact between staff members can influence staff turnover (de Kock et al, 1987). Also, social support has been linked to the ability of staff to maintain positive relationships with clients (Bromley & Emerson,1995).

Community based studies have emphasised the demanding characteristics of residents (e.g. Stenfert Kroese & Fleming, 1992). Though other sources of stress, such as organisational issues have been reported in previous research, (Allen et al, 1990), it has also been noted that it may be more acceptable to attribute stress to factors other than to the clients (Rose, 1995). The findings from this study highlight that the impact of the characteristics of challenging behaviour clients should not be minimised as differences in levels of stress and incidence of stress caseness were found depending on the amount of contact with clients.

The findings from the study indicate that the location of the work setting can act as a significant factor in differential levels of stress for unqualified direct-care staff. This can be seen in as levels of stress were found to be significantly higher in the community as opposed to the hospital and that 38% of community based staff recorded stress caseness scores as opposed to 8% of hospital staff. This does not support previous comparative research where unqualified direct-care staff in community units reported lower levels of stress than their counterparts in the hospital setting (Rose, 1993).

A possible explanation for this relates to the impact of client characteristics on staff members. The impact of this may be greater in community settings. In a review of recent research, Emerson and Hatton (1994) noted that research based on staff perceptions of the extent of challenging behaviours found that 43% of the studies reported higher levels of challenging behaviours in community rather than in institutional settings.

It has been reported that many examples of challenging behaviours are considered to be a function of social avoidance and escape from demands made by carers (Emerson, 1990). In smaller community based services it would seem that opportunities for social avoidance could well be fewer. Also, with the growing importance placed on increased integration into the local community (cf.Towell & Beardshaw, 1991), carer demands in the form of greater participation in activities can result in increased levels of challenging behaviour (Emerson & Hatton, 1994).

A further possible explanation may involve organisational factors such as role ambiguity that has been shown to be more common in community settings (Allen et al,1990), and reported as a source of stress (Harris, 1989).

# Research design issues and implications for future research

The typicality of the respondents in terms of their age, gender and location of work setting can be seen to be representative of staff working in learning disability residential services. From this it can be argued that the findings may be appropriately generalised to other unqualified direct-care workers in residential challenging behaviour services. However, a degree of caution should be exercised due to possible influencing issues. These are considered in relation to broader research design issues.

The respondents in the study were drawn from a non-random sample whose participation was requested on a voluntary basis. It is therefore possible that the respondents may have characteristics that are in some way different to a random sample of unqualified direct-care workers.

The response of 63%, whilst similar to other studies, appears to be high for survey questionnaire studies (Henry, 1990). This may be a function of the attempt to maximise response rates by linking in with senior members of staff with regard to questionnaire distribution. Particular concerns as to possible compliance should be considered especially as respondents, though given addressed envelopes to forward responses, were mostly given the questionnaires to fill-in by senior members of staff. This approach has been seen to have the advantages of low cost and avoidance of researcher bias. However, where distribution is left with senior staff a distinct possible disadvantage exists in that pressure to comply may be applied that can result in higher response rates and consequent biases (Oppenheim, 1992).

The study did not include, due to limitations of availability, unqualified direct-care staff working in 'group homes' (i.e ordinary houses in ordinary streets)

for clients with challenging behaviour. This form of residential provision has grown in recent years (Mansell et al,1987). It would be inappropriate to draw direct conclusions as to the relevance of the findings from this study for staff working in group homes though it is reasonable to assume that the differential stress factors identified in this study may well be applicable.

The study did not include vocationally qualified staff members working with challenging behaviour clients, as it was felt that this staff group may have other stressors that could influence their responses e.g. responsibility for medication. It would seem appropriate for further studies to replicate this work ,and to include vocationally trained staff.

A further limitation of this study relates to its reliance on self-report measures in the study of stress.This reliance that has been noted as common in the study of stress in learning disability work (Rose, 1995). It has been noted that the measurement of stress should be based primarily on self-report measures, which focus on the emotional experience of stress (Cox, 1995). However, the need to extend these measures has been proposed so in order to go beyond asking basic questions such as whether demands are present and to include the measurement of dimensions such as demand, frequency and duration (Dewe, 1991). It has also been recognised that, in addition to self-report, measures which assess various changes in behaviour would add to the study of stress (Cox, 1990).

The research design sought to address the need, within a process approach to coping, to measure stress within specific stressful situations. This was undertaken in terms of the stressful encounters within the general workplace rather than in highly specific given encounters. This was done so that a greater breadth of approach to coping could be considered. The significance of this relates to findings that individuals may have coping preferences

across situations (Miller et al, 1988 ; Edwards & Endler, 1989). However, a limitation of the study was that it did not include the personal resources that an individual brings to situations, such as personality variables, that may account for these coping similarities. The inclusion of personality variables in coping research has recently been advocated (Costa & McCrae, 1990; Taylor & Cooper, 1989). It would therefore seem that the inclusion of measures of personality variables would enrich the study of individual coping strategies. Alternatively, it could be argued that a within-subjects design which assesses coping strategies in different stressful contexts in the workplace could go some way to identifying coping similarities.

## Measures

The combined administration of GHQ-12 and 40-item Coping Questionnaire can be seen as offering a useful set of measures to research stress and coping in staff working in residential services. However, a significant restriction for researchers in this area relates to the time limitations faced by potential respondents. To address this, further future research could explore the possibility of developing a shorter coping questionnaire containing the significant derived factors found from the factor analysis carried out in this study. This and the brevity of the GHQ-12 would offer the possibility of a significant contribution as a self-report method in the study of stress and coping that can be completed relatively quickly by a particularly busy staff group.

## Implications of findings for practice

The focus on coping as a process rather than a style or personality trait is important for ultimate application of research findings to interventions. If coping is conceptualised as a personality trait, that is relatively stable across situations, coping research would have little practical value except in staff

selection. If, on the other hand coping is amenable to behavioural intervention, as has been reported in that instruction in coping skills has been shown to reduce levels of stress (Michenbaum & Cameron, 1983 ; West et al, 1984), it may be possible to identify new approaches to stress management.

It is apparent that forms of problem-focused coping, that emphasise acting on the environment, have been found to be associated with reduced levels of stress. Previous research has found that 'getting the job done' decreased stress (Thomson, 1987), and that a strong source of stress was related to 'the absence of any effective way of dealing with the behaviour' (Bromley & Emerson, 1995). These findings highlight the utility of the predominant use of problem-focused coping and the need for services to consider the promotion of these approaches in relation to stress management.

The benefits of promoting more adaptive coping strategies can hopefully be seen in terms of reduced absenteeism and turnover. This is particularly significant with greater service provision moving to community settings as it has been reported that turnover may be higher in community-based services than in hospitals (Felce, 1989).

It has been recognised that reduced levels of stress may increase the ability of direct-care staff to perform their duties and contribute positively to the personal development of the clients. The role staff play in doing this has been emphasised in terms of their contribution in the implementation of interventions by clinical psychologists (Hill-Tout, 1992); a contribution that has not always been effective as there is some evidence that when psychological treatment programmes for clients are developed they are not always used by staff (Mansell et al, 1994).

In summary, the profound influence direct-care staff have on the clients they work with is being highlighted (Rose, 1994). In terms of challenging behaviour clients, it has been reported that the influence extends to a significant role in the classification of behaviour as challenging, and influencing decisions regarding residential placement (MacDonald & Barton, 1986). In relation to the assessment as to the vulnerability of direct-care staff, the findings from this research indicate that particular attention may need to be given to unqualified direct-care staff in community residential services, those who spend higher proportions of their working day with challenging behaviour clients and those who work with fewer colleagues.

Recent research has also highlighted the increased role of the inclusion of the assessment of coping strategies in the design of services for informal carers of individuals with learning disabilities (McConachie, 1994). The model proposed from the research is presented in figure 11.

**Figure 11    A model of stress and coping for informal carers (McConachie, 1994)**
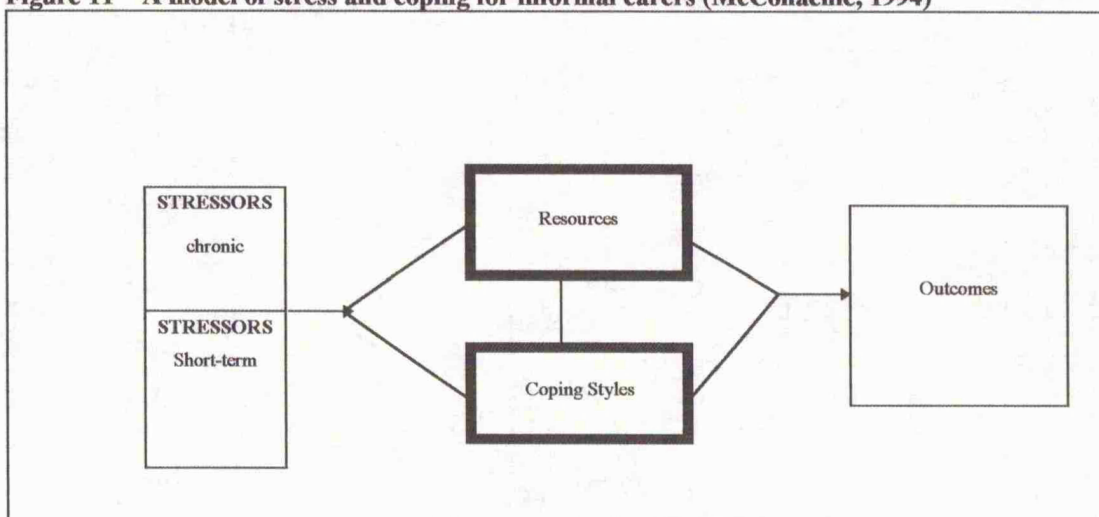


The model emphasises the importance of both material and interpersonal resources especially the positive role of social support in adaptive outcomes
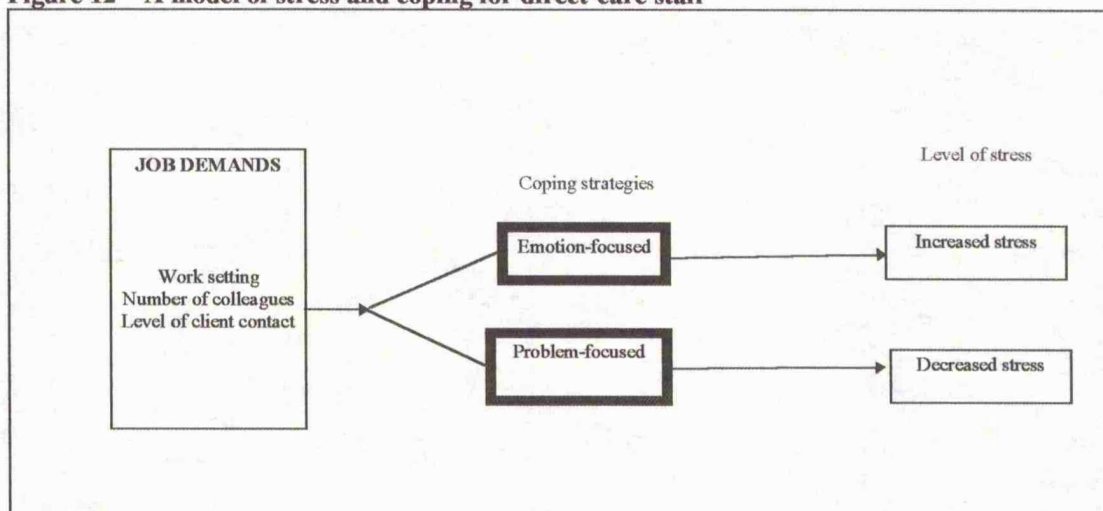
for informal carers, and sees 'coping styles' as dependent on given situations.

Figure 12 illustrates the findings from this study in the form of a model of stress and coping. It would appear to be broadly similar to the model based on informal carers. An exception is that the 'resources' component is not included in this model. As noted, this study has emphasised the role of approaches to coping in specific situations i.e. the workplace *and as such did not seek to investigate the role of broader environment resources such as organisational policies or workload. This has enabled a relatively simple model to be derived that can be seen to provide clarity. It is possible that future research can build on this model to add in more complex factors that may include individual resources encompassing both intrapersonal variables, such as personality, and socio-economic variables such as income to offer a more comprehensive model.

It should be noted that the model proposed here, in keeping with other models of stress such as that given by McConachie (1994) does not account for potential reciprocal relationships between stressors and coping styles and future research may also seek to investigate this.

**Figure 12    A model of stress and coping for direct-care staff**

```
┌──────────────────────────────────────────────────────────────────────────┐
│                                                                            │
│  ┌─────────────┐           Coping strategies          Level of stress      │
│  │ JOB DEMANDS │                                                           │
│  │             │                      ┌──────────────┐    ┌──────────────┐ │
│  │             │                      │Emotion-focused│──▶│Increased stress│ │
│  │ Work setting│                      └──────────────┘    └──────────────┘ │
│  │ Number of   │────▶                                                      │
│  │ colleagues  │                      ┌──────────────┐    ┌──────────────┐ │
│  │ Level of    │                      │Problem-focused│──▶│Decreased stress│ │
│  │ client contact│                    └──────────────┘    └──────────────┘ │
│  └─────────────┘                                                           │
│                                                                            │
└──────────────────────────────────────────────────────────────────────────┘
```

# Conclusion

The findings from this study can be seen to contribute to the limited literature on approaches to coping and stress by direct-care staff in the field of learning disabilities. The positive relationship between emotion-focused coping and both levels of stress and incidence of stress caseness and the negative relationship between problem-focused coping and levels of stress and incidence of stress caseness clearly extends the work  of Hatton and Emerson (1995).

The analysis of the psychometric properties of the 40-item Coping Questionnaire can also be seen as a significant contribution as the findings validate its use in the study of coping strategies. The factor analysis also indicates the possibility of developing a shorter measure.

Though the differentiating factors in the reporting of levels of stress would suggest that being community based, having limited contact with colleagues and higher levels of contact with challenging behaviour residents is associated with higher levels of stress there is evidence that people with very severe challenging behaviour can be successfully cared for in small

community based services (e.g. Emerson & McGill, 1993 ; Felce et al, 1994). In order that this can be achieved, for appropriate clients, the findings from this study indicate that the role of research into how staff cope with the demands they face may offer a significant contribution.

# Appendix 1

## Demographic questionnaire

*Survey to Investigate the Coping Strategies Used*

*By Direct Care Staff in Relation to*

*The Demands Encountered in the Workplace*

This survey is designed to evaluate the well being of direct care staff who work with individuals who present with significantly difficult behaviour.

The emphasis will be on investigating the coping strategies that have been developed by direct care staff in response to the demands made on them at work.

The answers from the questionnaires will help identify the impact of factors considered stressful for direct care workers in this area.

The answers you give are confidential. Your name should not be supplied. The answers will be analysed by computer, only the broad pattern of results will be reported. No individual details will be published.

Please fill in the questionnaire as honestly as you can, answering all questions.

The questionnaire should then be placed in the envelopes provided and returned to:

Patrick Smithson-Sims(Psychologist in Clinical Training)

Whittington Hall Hospital,

Old Whittington,

CHESTERFIELD, S41 9LJ

Tel: 01246 552907

Thank you for taking part.

# Demographic Questionnaire

<u>**Background Information (Tick as appropriate )**</u>

**1 : What is your job title ?**

_____

**2 : Do you work with clients who engage in behaviour that fits
<u>at least one</u> of the following categories ?**

- the behaviour at some time caused injury to the person themselves or others that has required immediate medical treatment , or destroyed their immediate living or working environment .

- the behaviour occurs at least once a week and requires the intervention of one or more member of staff to control , or places them in danger , or caused damage which could not be rectified by care staff , or causes more than one hour of disruption .

- the behaviour occurs daily and causes more than a few minutes disruption

YES (    )      NO (    )

**3 : Are you male or female ?**

Male (    )      Female (    )

4 : Age ?

| | | |
|---|---|---|
| Less than 20 | ( | ) |
| 21 - 25 | ( | ) |
| 26 - 35 | ( | ) |
| 36 - 45 | ( | ) |
| 46 - 55 | ( | ) |
| 56 - 65 | ( | ) |

5 : Where do you work ?

Hospital      (      )
Community   (      )

6 : How many staff usually work on a shift ?

| | | | | | |
|---|---|---|---|---|---|
| Two | ( | ) | Six | ( | ) |
| Two or three | ( | ) | Six or seven | ( | ) |
| Three | ( | ) | Seven | ( | ) |
| Three or four | ( | ) | Seven or eight | ( | ) |
| Four or five | ( | ) | Eight | ( | ) |
| Five | ( | ) | More | ( | ) |
| Five or six | ( | ) | | | |

7 : How much of your working day is spent with clients who demonstrate challenging behaviour ?

Up to 25% of your time                          (      )
More than 25% but less than 50% of your time    (      )
More than 50% but less than 75% of your time    (      )
75% to 100% of your time                        (      )

# Appendix 2

**GHQ-12**
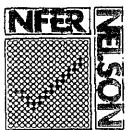
# NFER NELSON  GENERAL HEALTH QUESTIONNAIRE GHQ-12

**Please read this carefully:**

We should like to know if you have had any medical complaints, and how your health has been in general, *over the past few weeks*. Please answer ALL the questions simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those you had in the past. It is important that you try to answer ALL the questions.

Thank you very much for your co-operation.

---

**HAVE YOU RECENTLY:**

| | | | | | |
|---|---|---|---|---|---|
| 1 | been able to concentrate on whatever you're doing? | Better than usual | Same as usual | Less than usual | Much less than usual |
| 2 | lost much sleep over worry? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 3 | felt that you are playing a useful part in things? | More so than usual | Same as usual | Less useful than usual | Much less useful |
| 4 | felt capable of making decisions about things? | More so than usual | Same as usual | Less so than usual | Much less capable |
| 5 | felt constantly under strain? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 6 | felt you couldn't overcome your difficulties? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 7 | been able to enjoy your normal day-to-day activities? | More so than usual | Same as usual | Less so than usual | Much less than usual |
| 8 | been able to face up to your problems? | More so than usual | Same as usual | Less able than usual | Much less able |
| 9 | been feeling unhappy and depressed? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 10 | been losing confidence in yourself? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 11 | been thinking of yourself as a worthless person? | Not at all | No more than usual | Rather more than usual | Much more than usual |
| 12 | been feeling reasonably happy, all things considered? | More so than usual | About same as usual | Less so than usual | Much less than usual |

# Appendix 3

**The 40-item Coping Questionnaire**

## 40-ITEM COPING QUESTIONNAIRE

*Below is a list of statements that may refer to how you deal with the work situation in the Unit/Ward on which you work. Please tick as appropriate.*

| | | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1. | When I get to work on a busy day, I know what has to be done so I get on and do it. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 2. | Dealing with problems involves facing up to your responsibilities. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 3. | I feel it is important to confront problems there and then. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 4. | If the unit is very stressed, I try to be very organised so that I can keep on top of things. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 5. | I see each new problem as a challenge. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 6. | I don't let work problems bother me. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 7. | It is always important to keep your feelings under control. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 8. | After a difficult day at work, I go home and try to forget the whole thing. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 9. | When things go wrong at work it is important to accept what has happened and carry on as usual. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 10. | If I feel stressed at work, I talk to someone about how I am feeling. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 11. | I try to avoid stressful situations if I can. | [ ] | [ ] | [ ] | [ ] | [ ] |

| | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| 12. If things get too much for me at work, I would take some time off sick. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 13. If I am having a particularly difficult time at work, I talk with the people who are involved. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 14. When there are problems at work I accept my responsibilities and do something about it. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 15. At the beginning of a shift I make a plan of action and follow it. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 16. I find joking about difficult situations helps me to cope with them | [ ] | [ ] | [ ] | [ ] | [ ] |
| 17. If things began to get out of hand on the unit, I would discuss it with my Manager. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 18. I don't often show my feelings when I am at work. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 19. It is important to let people know where they stand. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 20. It is essential to look at any stressful situation in a positive way. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 21. I drink a lot more than usual if I am under pressure at work. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 22. If things are very difficult at work, I carry on as if nothing has happened. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 23. I find I eat more when I am under stress. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 24. If I have a disagreement at work and I am in the wrong, I apologise and do something to make up. | [ ] | [ ] | [ ] | [ ] | [ ] |

| | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| 25. When faced with a difficulty, it is important to find a solution, otherwise things will get on top of you. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 26. If I have a problem, I go over it again and again in my mind until I find a solution. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 27. I find that I am rarely self-critical. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 28. I never keep my feelings to myself. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 29. At work, I never stand my ground and argue for what I want. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 30. When under stress I don't blame myself for causing the problems. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 31. When faced with a problem, there is no point in blaming other people. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 32. If there is a problem on the unit I keep calm and concentrate on what I have to do next. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 33. If there is a lot of pressure at work, I don't let it get to me, I refuse to think about it much. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 34. When there are problems at work I talk to friends or family about it. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 35. I feel that dealing with stress can help people to change in a positive way. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 36. When I feel angry at work I get mad at the people who caused the problem. | [ ] | [ ] | [ ] | [ ] | [ ] |

|  | | Strongly Agree | Agree | Uncertain | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 37. | In a lot of stressful situations I realise that I have brought the problems on myself. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 38. | If there are problems at work I don't let my feelings out. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 39. | I don't get emotional if things get particularly stressful for me. | [ ] | [ ] | [ ] | [ ] | [ ] |
| 40. | When I am faced with difficult situations, I talk to someone who can do something about the problem. | [ ] | [ ] | [ ] | [ ] | [ ] |

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