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Teresa Elliott

Service organisation, Staff performance and Client Outcomes in Services for People with Learning Disabilities

Submitted for the Degree of PhD in Applied Psychology

University of Kent at Canterbury

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Teresa Elliott

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Abstract

Research into direct-care staff performance in residential services for persons with a learning disability has led to a number of explanatory findings. Variables such as client ability, maladaptive behaviour, the employment status of staff, staff stress, facility size, staffing ratios, training and management strategies have all been found, by different authors, to variously affect levels of staff/client interaction. The influence of an informal social system within a residential service on staff behaviour has not, however, been fully examined. The aim of the study presented in this thesis was to uncover which features of a residential service, its organisation and delivery are responsible for levels of support offered by staff and also for the extent to which clients are engaged in activities. A wide range of variables including those previously found to be significant and others that represented the informal aspects of a service, such as the expectations of others, were included in the study. The main findings were that quality of care in the facilities studied was generally poor. Few significant differences were found between the provision of care offered by the two organisations included in the study although many were expected. Although staff responses revealed that the expectations of others in the workplace might have an influence over the ways in which they work with clients, multiple regression analysis did not find these informal variables to be significant. Only the adaptive behaviour of clients was found to be predictive of the levels of staff support offered. None of the variables included in the analysis was found to be predictive of the levels of client engagement found. The reasons for this are discussed and the proposition that staff behaviour in this study was perhaps contingent on arbitrary, haphazard and unpredictable circumstances was introduced.

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Appendix 5 : Results of Ordinal Logistic Regression

Chapter 1 : Introduction

Provision of services for persons with a learning disability in Britain and many other Western Societies has moved away from institutional care and towards community living, even for those with profound disabilities and high levels of dependency. Researchers have demonstrated a great deal of interest in the nature of this change beginning in the 1950's and 1960's with works such as Goffman's sociological study of institutional life (1961). This continued with researchers such as Tizard (1964) who chronicled and studied the experiences of persons with a learning disability and Morris (1969) who exposed the reality of institutional care for persons with a learning disability. The study of both institutional and community living was furthered by authors such as King and Raynes (1968) and King, Raynes and Tizard (1971) and by researchers involved in the provision of alternative residential services in the community (Kushlick, 1970; Felce, Kushlick and Smith, 1980 and Felce, 1987). More recent research has concentrated on the quality of community services and found that for some persons with a learning disability standards fall far short of what might be expected (Raynes and Sumpton, 1987; Bratt and Johnson, 1998; Landesman, 1988; Abraham, Lindsey and Lawrenson, 1991; Conneally, Boyle and Smyth, 1992; Emerson, Beasley, Offord and Mansell, 1992; Hewson and Walker, 1992; Felce, Lowe and Blackman, 1995; Felce and Perry, 1995; Mansell, 1996; Cooper and Picton, 2000, Emerson et. al., 2000, Felce et. al., 2000). This may be more so in the case of persons with more complex needs and profound disabilities who are now being placed in community residences.

The observation that some community services are poor has meant that a particular research interest has developed alongside the move to community living. This interest is a concern with the quality of care that persons with a learning disability receive. Quality of care is viewed not just in terms of standards of physical care, but also the value of the day-to-day life of a person receiving services. In other words what clients actually do? A wide range of literature has developed which deals with notions of autonomy, participation and the treatment of persons with a learning disability. (Nirje, 1969;Wolfensberger, 1972; Kings Fund, 1980; O'Brien, 1987; Towell, 1988). Thus persons with a learning disability should be viewed as active participants in their own lives and as such it is argued that their involvement in individual care should be increased.

Studies of staff/client interaction have looked at both the extent to which staff in services involve persons with a learning disability and the outcomes for clients in terms of levels of engagement. These studies can be roughly divided into three groups.

Group 1) Early studies often look at staff and client behaviour from within a hospital setting although some more recent studies also concentrate on the evaluation of institutional care as it is today. These studies tend to focus on actual levels of staff/client interaction rather than trying to explain them.

Haramatz (1973) found that staff on a school ward engaged in activities without the clients for more than half the observations undertaken. The author commented that activities such as housework and paperwork, which were performed without client involvement, were those that managers were more likely to value and reward. Viet, Allen and Chinsky (1976) compared the results of their study with those of earlier researchers such as Thormahlen (1965) Klaber (1970) and Warren and Mondy (1971). They found that staff in institutional settings spent little time either training residents, providing non-custodial interactions or responding positively to client initiatives although levels of interaction were higher than the earlier comparative studies. Other studies such as those by Cullen, Barton, Watts and Thomas (1983), Dailey, Allen, Chinsky and Veit. (1974) and Montegar, Reid, Madsen and Ewell (1977) also found low levels of appropriate staff/client interaction.

Moores and Grant (1976, 1977) studied two hospitals for persons with learning disabilities. They observed differences between the two institutions in terms of the type and levels of interactions. Certain clients were the recipients of greater levels of staff interaction. More able persons who displayed less maladaptive behaviour received more positive verbal attention from staff.

Wright, Abbas and Meredith (1974) found low levels of poor quality staff/client interaction within a hospital setting and few attempts were made by children with a learning disability to engage with staff.

Beail (1988) found in a study of nurse performance on a ward for children with profound disabilities that the behaviour staff most engaged in was interaction with each other

followed by activities where there was no contact with a child. Also staff were often absent from the ward.

Wood (1988) studied two wards in a 'Mental Handicap' hospital and found similar levels of poor quality interaction between staff and clients despite differences in ward organisation and environment.

Hile and Walbran (1991) in a study of staff behaviour in institutional settings examined staff/client interactions and also attempted to explain the levels found. They felt that the ability of clients, the ratio of staff to clients, the presence of 'professional staff' and the environment where interactions occurred were all likely to effect both what staff did and how clients were engaged.

Thus these studies of institutions generally found low levels of staff/client interaction and poor staff performance.

Group 2) The second group of studies compare institutional care with that provided by smaller 'homes' in the community. These studies have, like the research of Hile and Walbran (1991), attempted to uncover variables that might explain differing levels of interaction found between the two types of provision.

King and Raynes (1968) in an early comparison of institutional care and group homes found that in the latter quality of care was more favourably oriented towards clients.

Felce, Kushlick and Mansell (1980) and Felce, Mansell and Kushlick (1980) found client engagement levels to be higher in small units as compared to traditional hospital settings. 'Junior' staff also had more contact with clients in a community setting although some variability was observed between units.

Landesman-Dwyer, Sackett and Kleinman (1980) found that regardless of the size of an establishment for persons with a learning disability the behaviour of staff was 'homogenous' (p15) and was not tailored to meet the needs of the individual client, rather staff/client interaction was fairly similar throughout.

Felce, de Kock and Repp (1986) and Felce, Saxby, deKock, Repp, Ager and Blunden (1987) found that staff performance was enhanced in small group homes and that client engagement was also increased, as was social interaction between staff and clients. In institutional settings appropriate staff behaviour was more limited and both levels of engagement and the quality of activity were more restricted. Staff behaviour was more appropriate in smaller community units as compared to that in institutional or large community facilities. The authors do not believe that a simple increase in staff/client ratios explains this result – rather the organisation of a home, its policies and staff training may also be significant factors. The number of clients was also thought to be more important than the number of staff.

Thomas, Felce, de Kock, Saxby and Repp (1986) compared matched residents of small community homes with those in institutional and large community units. They found levels of interaction greater and more positive in small group homes compared with institutions or larger community units. Client engagement was also highest in small community homes. The authors felt that staff behaviour and levels of client engagement were related and appropriate training might account for improved staff performance.

Repp, Felce and de Kock (1987) reviewed observational studies of staff and their interactions with persons with a learning disability. They concluded that rates of interaction were generally low and those interactions which do occur tend to be with certain groups of clients and within settings which are organised and structured to promote interaction such as small teaching groups. They also found in their review of the literature that increasing involvement of staff in decision-making increases rates of interaction, the effects of training on levels of staff/client interactions are patchy and variable and that the management of staff behaviour using techniques such as feedback can improve staff performance.

Raynes and Sumpton (1987) compared four types of residence for persons with a learning disability and found differences in both the characteristics of residents and the type of care given. Interestingly they found that the quality of care in non-hospital settings was not remarkably different to that provided in institutions.

Felce, Repp, Thomas Ager and Blunden (1991) compared institutions, large community facilities and group homes so as to ascertain the relationship between the ratio of staff to clients and the impact that this may have on subsequent levels of interaction. They found that when smaller numbers of clients were found with one or two members of staff, interactions increased. The authors surmised that the practice of adding a member of staff did not appear to affect either performance or client behaviour.

Mansell (1995) studied 18 persons with severe or profound learning disabilities and challenging behaviour some of whom had moved to residential placements in the community. Momentary time-sampling observations were carried out so as to ascertain the extent and type of staff contact that these persons received. The findings were that community units had higher staff ratios, greater levels of staff assistance and client engagement and no real increases in challenging behaviour.

Thus, this group of studies indicate that certain variables found within an establishment such as size, staff/client ratio and staff management techniques may affect staff behaviour.

Group 3) The most recent studies tend to concentrate on staff/client interaction and client engagement occurring within community settings in order to determine the quality of care provided. Some of these studies examine client groups who have previously been confined to institutional research, such as those with challenging behaviour. The recent thrust to provide community living for more diverse populations of persons with a learning difficulty has prompted a greater examination of both active support by staff and client engagement. Many of the early community studies found greater levels of support by staff and improved client activity. Recent studies including those that examine issues of care for more disabled clients have recorded poorer outcomes.

Mansell, Jenkins, Felce and de Kock (1983) used direct observation to study the activity of six adults in an 'ordinary' community house. They found that staff supported client engagement in household and domestic activities even for those persons deemed to be more severely disabled. Earlier studies of community settings (Bjames and Butler, 1974; Landesman-Dwyer, Stein and Sackett, 1978) had recorded far lower levels of everyday client engagement.

Slater and Bunyard (1983) in a study of community facilities found that many direct-care staff reported that they saw their role as providers of domestic and basic care rather than training and enabling clients.

Saxby, Felce, Haman and Repp (1988) revisited community homes that had previously recorded higher levels of client engagement than those found in institutional and larger settings. They found that although for some clients' engagement levels remained stable, for others there had been a slight decline along with a decrease in the quality of instruction from staff although as a caveat the number of overall clients had increased. The authors felt that there might be a relationship between less staff support and decreases in appropriate engagement. The authors also felt that it may not be appropriate to say, however, that staff/client ratios account for this result.

Emerson, Beasley, Offord and Mansell (1992) in a study of staff/client interaction in units for persons with severe challenging behaviour found that staff support and client engagement levels were low. The authors felt that competing expectations and the consequences contingent on those expectations might account for this result.

Felce, Lowe and Blackman (1995) evaluated staff interaction with clients with severe challenging behaviour in the community and compared it with that found in hospitals. They found generally low levels of staff/client interactions and client engagement. Although staff/client interactions and client engagement levels were slightly improved in community facilities the differences were not significant. The authors concluded that for persons with challenging behaviour 'a transformed quality of life and experience is not an automatic consequence of living in the community rather than in hospital' (p293).

There is a growing body or recent research that has also highlighted the poor quality of some community services for persons with a learning disability (Cooper and Picton, 2000; Emerson et. al., 2000, Felce et. al., 2000)

Thus, this group of studies that have concentrated on community living for people with learning disabilities have demonstrated varying results in terms of staff/client interaction and engagement.

It would appear overall from the findings of this body of research that levels of staff/client interaction in residential care, be it in an institution or the community, are the product of many factors. It is also apparent from a review of the literature that outcomes for clients with a learning disability in terms of engagement are often poor even in some community services. It is important, therefore to explain why this is so.

If we summarise the research reviewed thus far it appears that the provision of new patterns of services has led to an interest in the quality of care that persons with a learning disability receive. The notion of quality is related to client experiences and in particular the degree of active involvement they have in everyday life. The ways in which direct-care staff interact with clients in order to increase their involvement is one important strand of current research. The suggestion appears to be that levels of staff/client interaction may be subject to a range of influences. The study described in this thesis draws on the findings of previous research in order to examine influences on staff/client interaction from within the general context of residential environments. In particular it acknowledges the potential for many factors to affect the way staff behave towards clients and it puts forward the notion that the active support which direct-care staff offer may, along with other variables present in the residential environment, be predictive of levels of client engagement.

It may be helpful at this point to expand on why it is important to include a range of influences in a study that attempts to explain levels of staff/client interaction and client engagement. Hastings, Remington and Hatton (1995) have suggested a model in which staff performance is affected both by the organization in which staff are employed and by the clients whom they work with. Staff performance in turn feeds back into the system, as it were, and influences the organization and client behaviour. The notion is then that the residential environment is a fluid entity in which all or some of the parts are able to affect others and thus many factors can and do contribute to an outcome. This idea of the residential environment as a system is something that will be expanded on later in this chapter. Suffice it to say at this point that it is important to consider the workplace as a whole and to acknowledge that any of the many variables present has the potential to affect performance. This study chose to include a wide range of variables in an examination of the possible influences on staff interaction with clients and subsequent client activity. This is due both to the findings of previous research and because it seems important to consider

the impact of many factors and their potential to interrelate from within a theoretical context.

The study described in this thesis sets out to explain what factors are important in determining client engagement and included in these were staff/client interaction, care practices, client characteristics, staff characteristics, staff and client numbers, and the expectations of staff. The inclusion of staff expectations about their behaviour was an important one. Hastings, Remington and Hatton (1995) suggested that it is helpful to view the residential environment as a system. As such it would appear that some parts of the system, such as the formal and informal social system and their potential to influence the way staff interact with clients have been somewhat overlooked in explanations of levels of client engagement. As such the author considers that the expectations which staff have about their own behaviour might provide a useful insight into why they do what they do. Previous research does hint at the importance of this issue and hence the reason for it's inclusion in this study. Even early studies of staff/client interaction such as that by Haramatz (1973) noted that staff were more likely to perform tasks that managers valued such as housework rather than tasks involving children with learning disabilities. Haramatz noted that tasks not involving children were those most associated with positive contingencies. Later research conducted in community settings has also noted the importance of competing expectations. Emerson, Beasley, Offord and Mansell (1992), for example, in their study of staff/client interaction in units for persons with severe challenging behaviour found that despite high numbers of care staff, clients were not supported for much of the time and had low levels of engagement. The authors felt that the reasons for this were due to 'unclear performance expectations for staff regarding the forms of appropriate staff-client interactions; competing (and clearer) expectations concerning household maintenance activities; unclear or ineffective consequences operating to support appropriate staff-client interaction; and competing and more powerful contingencies operating upon competing activities (e.g. staff: staff interactions, household maintenance)' (p304).

The study described in this thesis examines, amongst other things, the extent to which different groups of people present in the work environment have influence over what direct-care staff do. Direct-care staff are the people who work on an individual level with clients in all aspects of day to day living. As such they are the persons most likely to

interpret and put into practice new ways of working with clients. Direct-care staff do not work in isolation with clients, however. They are part of a hierarchy usually with a range of senior staff and managers above them. Most direct-care staff will also come into contact with a number of other persons or *audiences*. These could include the families of persons with a learning disability, professionals such as social workers, auxiliary staff or workers from other services. Most staff will also have regular daily contact with those in a similar position to themselves, in short their co-workers. The thesis attempts to evaluate direct-care staff beliefs about whom, among of a range of audiences, has influence over tasks that they perform at work.

The thesis described in this study was planned as a comparative one. Residential facilities from two organisations were included in order to investigate whether different types of care produced different levels of active support and client engagement. The organisations selected were considered on the basis of the quality of service that they provided. Thus one organisation was thought to be among the best and the other less so. It was expected that facilities in the former case would produce higher levels of active support and client engagement. (Active support is a term used to describe the positive ways in which staff interact with clients so as to involve them in activities). This approach enabled comparisons to be made of all variables included such as client characteristics, staff characteristics, care practices and staff/client interaction and to assess whether differences in the type of provision affected outcomes for clients. Unfortunately analysis of the data revealed that the comparison made was spurious. In the event not only did both services produce poor outcomes for clients but also they differed in very few respects. It was decided therefore to treat the information collected as one sample for the purposes of further analysis.

As indicated earlier, one of the characteristics of the study was the incorporation of a measure of staff expectations and of the contingencies that they perceive to be associated with the performance of their work. The measure would allow one to examine which audience potentially has influence over the tasks that direct-care staff perform at work. In particular it would allow one to investigate whether staff perceptions about client engagement are related to a particular consequence or a particular audience. Also it would allow one to consider if other tasks, such as those not involving clients, are seen as more or less important than active support.

A further characteristic of this study is the inclusion of a wide range of measures. This allows one to investigate a variety of features, any or all of which, might contribute to levels of active support and client engagement. It also allows one to include information on staff expectations amongst these factors. It was felt that the expectations that staff have about how others in the work environment view their interaction with clients, might be one of a number of significant issues affecting how they actively support persons with a learning disability.

Prior to a presentation of the study undertaken, however, one must attempt to answer in detail why a study of staff behaviour is so important to the issue of client care. This section highlighted that there has been a move in Britain away from institutional provision for persons with a learning disability. Research findings seem to indicate that the quality of some client experience in community services is poor and that therefore the expected change in client care has not materialised. Research has developed which is concerned with client experience as an aspect of quality. One of the factors that might relate to client experience is that of the levels and type of staff support that they receive. This section reviewed literature in relation to the subject of staff/client interaction, what factors might influence it and how levels of staff/client interaction might affect client engagement? The suggestion was made that any study, which attempts to answer the questions posed above, should adopt a theoretical framework to guide research. The theory of a production system was introduced. The suggestion was that such a theory could be applied to research on residential establishments for persons with a learning disability. This section also highlighted that there are some areas of the residential system, such as the processes that occur within it, which have not been sufficiently examined so as to ascertain their influence on client outcomes. A brief description of the study undertaken was also included.

The following section expands on the points raised thus far. It focuses on changes in the role of direct-care staff associated with the shift from institutional to community services, the difficulty of defining this new role and the quality of staff performance. In short it attempts to relate what direct-care staff actually do at work and the changes that this type of employment has undergone, to the quality of care that clients receive particularly in community services.

The importance of studying staff behaviour.

This section attempts to establish why staff behaviour, or performance, is so important when we consider the issues of quality of care for persons with a learning disability. This section focuses on the fact that staff mediate access to the environment for persons with a learning disability. It considers the issue of quality versus quantity in terms of the type of care that direct-care staff deliver. This section also examines the problems of sustaining improvements for clients with a learning disability and finally it considers the impact that changes in service provision have had on the work of direct-care staff.

A study of direct-care staff behaviour in services for persons with a learning disability is important for a number of reasons :

i) The first reason why a study of staff performance is important is that direct-care staff are the instruments through which most services are provided to consumers with learning disabilities and therefore they are also the persons who most often interpret and administer new policies, practices and techniques. Thus, if concern is with the quality of care that people with learning disabilities receive, then those who directly provide that care become an important component in how it is delivered. As Hatton and Emerson (1993) have said,

'Staff provide the interface through which national, regional and organisational philosophies and policies are translated into practical action directly affecting the quality of life of people with learning disabilities (p215)'.

Studies of the effect of staff performance on client outcomes reviewed later in this chapter (King et. al. 1971, Schnike and Wong, 1977, Felce de Kock and Repp 1986) suggest the importance of staff behaviour to the quality of client experiences. As Landesman-Dwyer and Knowles (1987) comment,

'because staff members assume the primary responsibility for managing the programmes and activities with a residence, and because they often set the tone and level for social interactions and opportunities, they exert a powerful effect on the everyday life of residents.' (p14). Landesmann-Dwyer, Sackett and Kleinman (1980) comment, however, that little research has considered what direct-care staff actually do and whether performance is related to differences in residents behaviours.

ii) If the suggestion is that direct-care staff are important as mediators between the client and their experiences of the environment around them, then a further reason why a study of direct-care staff and their performance is important relates to issues of competence. In other words how do we judge the effect of staff behaviour on the experiences of clients? It may appear reasonable to suppose that any organisation should develop systems to evaluate efficiency if only for economic reasons. This applies even if the organisation offers services rather than providing a product. Assessing performance is also important for reasons of ease of operation. Poor performance by an employee may have repercussions for the whole organisation. Staff turnover is also an issue. With rates of turnover estimated to be high (Zaharia and Baumeister, 1979a and 1979b; Lakin, Bruninks, Hill and Hauber, 1982) and the effects detrimental (Felce, Kushlick and Mansell, 1980) it is important for an organisation to study and retain capable staff. If a service requires trained and competent staff then it needs to know what deficits currently exist among its employees and also what the affects of existing training methods are. Any competent organisation will have opportunities for promotion amongst its employees and therefore in order to assess the most suitable candidate an appraisal of their job performance is essential. The problem in human care settings is whether evaluations of staff performance are measuring issues of quality or quantity. Confusion can easily occur as to whether good performance equals the number of objectives achieved or whether it is related to the characteristics of the relationship between staff and the service user.

A service for people with learning disabilities that intends to evaluate the performance of its direct-care staff faces certain difficulties. The most obvious of these is that of attempting to put a value on the relationship between a staff member and their client. This is an objective that does not easily lend itself to measurement. As Hatton and Emerson (1993) point out, there has been little attempt to relate the performance of staff in services for people with learning disabilities with those of employees in other non-related organisations (p394). One needs to be aware that evaluating the performance of direct-care staff in a particular setting, for example, a unit for people with challenging behaviour, may have little validity for another service, for example, a community housing project for people with profound learning and physical disabilities. Also there may have been developed an objective measure of competent performance, but this may tell us very little about how that performance contributes to a good quality service as a whole (Thousand et. al., 1986, p265). For example, employee 'X' submits a large number of written

observations about a client-training programme. This is considered as an indication of good job performance, but it tells one very little about how the employee is actually conducting that programme. It would seem, therefore, that *quality* rather than *quantity* is an important constituent of the performance of direct-care staff. The example given also suggests that performance is a measure of the process by which care is administered and the outcomes achieved, whether for the individual client or the service as a whole. Performance in services for persons with a learning disability, therefore, can be defined as what direct-care staff actually do, how they do it and what results from their actions.

Quality might be seen from a number of perspectives, for example, how closely a staff members practises accord with a philosophy or policy objective, for example, normalisation (Orlowska, 1992, p48). Such a perspective, however, may be too wide-ranging to enable an appraisal of the individual employee to be attained. Such philosophies, or policies, are often vague and do not establish concrete standards from which to undertake comparative evaluations. Qualitative performance might alternatively be assessed by the use of specific outcomes for clients, for example the reduction of stereotyped habits or the achievement of a training objective. As suggested before, however, the use of 'outcomes' fails to acknowledge the ways in which an objective was achieved. For example, stereotyped behaviours might have decreased by the use of some very custodial methods, which in most cases would not be considered as indications of good performance.

It is important to consider staff behaviour as important for the client not in terms of performance outcomes, but rather in terms of the *process* of performance, or its content. In human service settings the most important criteria would appear to be the ways in which a staff member relates to a client both attitudinally and behaviourally. Thus one needs to examine performance from within the context of a relationship between staff and clients. Contact between staff and client and the quality it attains can be measured in a number of ways. There are several papers that have attempted to measure the staff-client relationship by looking at variables such as the quantity and quality of verbal interactions between the two groups (Orlowska, McGill and Mansell 1991), and the nature of the behaviours that staff engage in with clients (Abraham, Lindsay and Lawrenson, 1991). A comprehensive review of the literature on staff/client interaction will be included in a later section, which

attempts to evaluate studies which have tried to determine which factors affect client engagement.

iii) The notion that the quality of the relationship between staff and clients is an important factor in determining outcomes for clients leads us to take account of a further issue which may be important, that of sustainability. The conjecture is that improvements in staff behaviour and the quality of the care that they administer, will necessarily lead to an increase in desired skills or behaviours amongst persons with a learning disability. Indeed various studies have indicated that even when alterations in staff behaviour have led to subsequent improvements for clients, either party may not have maintained such changes in the long-term.

Woods and Cullen (1983) in a review of a number of studies which attempted to alter or increase client skills found that 'in three cases staff behaviour was maintained in the absence of noticeable change, and in the other it was not maintained even though there was apparent change (p12). These findings tend to suggest that altering staff behaviour is perhaps difficult, but not impossible if one considers the range of factors that might be influential and the criteria by which performance is to be defined. The answer may lie, however, not simply in direct manipulations of staff behaviour but also in a consideration of the perspectives which staff adopt. In other words in order for staff to change the way they behave service providers may either have to alter the way staff think about work and the subsequent effect this has on outcomes, or attend to the ways in which work affects what staff believe. Indeed a service might need to embrace both points when attempting to alter staff performance.

Research on staff behaviour is therefore important because there is a need to determine if changes in staff performance really do lead to enhanced outcomes for clients with a learning disability. As an aside from this a further reason for examining direct-care staff and their role in services for people with learning disabilities is to attempt to question the belief present in many services. This belief is that optimum positive work conditions should be attained for staff if they are to improve the quality of care they provide for clients. Literature on the phenomenon of alienation incorporates this notion.

As defined by Pearlin (1967) the concept of alienation is,

'a feeling of powerlessness over one's own affairs – a sense that the things that importantly affect one's activities and work are outside his control' (p17). Thus, only an elimination of all the difficulties that staff face will ultimately improve their output. This belief sets a precedent such that small changes are dismissed as inadequate and staff adopt the belief that that they are not responsible for the quality of their work - rather poor working conditions and the stressful nature of the job combines to create an atmosphere of hopelessness. Seligman (1975) referred to a term that he called 'learned helplessness' in which staff believe they have no control over the work situation. Such beliefs create such distorted expectations that, in the everyday operation of services, changes are either not strived for or are deemed incapable of succeeding. Much of the literature on 'burnout' would appear to have contributed to this culture of learned failure and demoralisation (Swanson, 1987; Caton, Grossnickle, Cope and Long, 1988; Edwards and Miltenberger, 1991). This is an area of research that will be looked at in some detail later in the thesis when relevant literature is reviewed. Suffice it to say at this point that many researchers and services could be seen to be colluding in the impression that staff should not expect their work to be demanding, challenging and difficult. However, this is the nature of *direct-care.* A study of the behaviour of direct-care staff is therefore important because potentially it allows one to examine if outcomes for staff, such as stress, have an affect on the way that they work with clients.

iv) Lastly it is important to study staff behaviour if only to take account of the changes that have occurred recently in the role of staff.

Services for persons with a learning disability in many countries such as Britain have been subjected to tremendous change as a result of recent policy initiatives directed towards care in the community. (Care Standards Act 2000; Caring for People: Community Care, 1989; All Wales Strategy, Welsh Office, 1983) Initial moves from a hospital setting by more able clients are now being followed by persons with additional difficulties who are being placed in the community. Services offered to clients with a learning disability in the community are currently facing problems associated with enabling clients who may exhibit challenging behaviour, who are mentally ill or who have profound physical or learning disabilities (Mansell, 1995; Felce, 1996). Research that has focused on issues surrounding

the role of direct-care staff can sometimes fail to acknowledge the additional problems that workers encounter when implementing training or care programmes for clients with more complex handicaps. The implication is that studies concerning staff issues conducted in an institutional setting may not provide the most accurate explanation of staff performance in community services.

Moves away from an institutional model of care and towards community living arrangements have been combined with philosophies that advocate both independence and the acquisition of new skills by persons with a learning disability. The role of direct-care staff in supporting clients to achieve these new objectives becomes an important one. The expectation is that staff no longer occupy a supervisory position but must now adopt the role of trainers and teachers. Poor performance by staff may thus impact on the progress of clients towards greater independence and impede the quality of their community life. The relationship between staff performance and client progress is dealt with later in this chapter in a review of outcomes for clients.

These changes in the nature of direct care have led to a lack of definition. The notion of what constitutes direct-care appears subject to variation in the transition from hospital to community employment. This suggests that there may be no definitive definition of 'direct-care'. When comparing staff performance we may not be comparing like with like. If, for example, one considers the main thrust of direct-care to be the provision of hands-on 'nursing' then the explanation of what affects the quality of care may be very different from those who feel that direct-care is about supporting clients in achieving day-to-day skills. Subsequently, therefore, there may be no overall standard by which to measure performance. All jobs in human service settings manifest a great deal of flexibility by virtue of the fact that each situation and client will be intrinsically individual. Thus, part of the difficulty is in the very nature of the job itself. Persons within the work environment can develop such differing expectations about direct-care because it encompasses such a wide range of activities and also because there is no predominant view as to what its main constituents are. Workers in services for people with learning disabilities may, at different times and with different populations, find themselves acting as counsellor, cleaner, driver, nurse, administrator, receptionist, social worker and teacher. It is important therefore to consider what effect, if any, changes in the nature of direct-care have had on both staff behaviour and client engagement. Essentially the question is are there differences in the

way direct-care staff in more traditional services behave towards clients as opposed to those in newer more innovative settings?

This section has set out the reasons why it is important to study direct-care staff and their behaviour as a factor in quality of care for clients. The suggestion was made that direct-care staff can be seen as important mediators, or go-betweens, for the client and their relationship with the environment around them. This idea was then developed to consider the notion that the relationship between a client with a learning disability and the direct providers of care can be considered as an important component of the quality of a service. In other words the process of care, who delivers it and how, may determine outcomes for clients. This section also suggested that if the argument is that the relationship between staff and clients affects what clients ultimately do, then it seems important to take account of issues of sustainability. In other words does staff/client interaction really affect client engagement in the long term? Lastly this section set out the importance that recent changes in the provision of services for persons with a learning disability in Britain may have had on the role of direct-care. The suggestion was that there have been radical changes in direct-care and therefore an evaluation should be made as to the subsequent effect, if any, this had both on the relationship between staff and clients and on client outcomes.

The next section reviews research conducted in the area of staff/client interaction. It considers studies from within the theoretical framework of a production system as mentioned in the previous section and takes account of the factors which previous authors have uncovered as being important in explaining variations in both staff/client interaction and subsequent client engagement. In short it considers the contribution that a range of studies have made to issues of understanding staff behaviour and its relationship to client engagement.

A review of research into staff behaviour.

The previous section suggested that research into direct-care staff behaviour is important for a number of reasons. These include the notion that staff act as a go-between for the

client and their experience of the environment and as such it is important to evaluate whether staff behaviour really does affect the engagement levels of clients. It was also suggested that it is important to determine if changes in the role of direct-care itself are translated into changes in the relationship between staff and client. This section reviews studies carried out in this field and considers the findings of such research. The review of literature is undertaken from within a theoretical context. The notion of the residential system as a production system is put forward. The different parts that make up the production system (inputs, process and outputs) are considered in turn and studies that have made a contribution to our understanding of staff behaviour within that heading are reviewed. The notion behind this review is based on the reason rehearsed in the previous section as to why research is important in this area. This is namely if there a link between staff performance and outcomes then which factors have previous studies identified as influencing staff performance?

Hatton and Emerson (1995) have suggested that two conceptual frameworks have generally been used to examine staff issues in services for people with learning disabilities. The first is a 'staff stress framework'. Research that falls within this framework examines the link between staff stress and their performance. Such research focuses on outcomes for *staff*. The second research framework identified by Hatton and Emerson is a behavioural one. Such research has generally examined the level of interaction between staff and clients and has attempted to explain any findings. This research framework focuses on the outcomes for *clients* as identified earlier. Hastings, Remington and Hatton (1995) have suggested that these two approaches can be combined in a more dynamic model that attempts to explain staff behaviour. The revised framework acknowledges that staff performance can not only effect clients and the organisation, but also that it is correspondingly influenced by a range of factors. Such an approach allows one to move away from observing outcomes and towards a more multi-dimensional explanation of performance, which recognizes that different parts of a service can be interrelated. The framework as depicted by Hastings et al (1995) who see the determinants of staff performance as 'dynamic' and subject to change. It also acknowledges that associations between several factors may affect staff behaviour, that 'the dynamic relationship between service user and staff behaviour needs to be incorporated' (p335) and also that 'staff

performance may feed back to affect a number of factors that are salient variables in the determination of staff performance' (p336).

Hastings et al (1995) suggest that this new framework implies that research must consider factors hitherto ignored in explanations of staff behaviour. Also research must take account of outcome variables that affect staff, such as stress, in terms of their performance. Research must also recognise both the formal and informal culture of an organisation and their possible influence on staff behaviour and finally a wide range of measures should be used in researching this topic.

The work of Hastings et al (1995) implies that it is important for researchers to take a methodical exploratory approach to explaining staff behaviour. This must mean that rather than concentrating on one particular influence, any study that seeks to explain staff behaviour must concede that a range of influences may be in operation.

Much of the research within the field of staff behaviour and client engagement often begins with the notion of why staff fail to support clients adequately. These studies will be examined in detail in the following sections. In general, however, studies appear to ask particular questions such as when staff training or support programmes fail to result in or maintain the desired outcome, which factors are operating to produce this result? Similarly why do staff fail to implement client-training programmes even if ideal conditions exist? Why do simple increases in staff to client ratios fail to produce expected improvements in care or behaviour? It would appear that answers gained from previous research suggest the possibility, as indicated in the work of Hastings et al, that many factors combine to explain staff behaviour.

When we look in more detail in the next section at studies that seek to explain staff behaviour not only has some research tended to concentrate on a single possible cause but in other cases certain factors have been focused on to the detriment of others, such as the informal culture of a service. Often research is polarised, either examining likely *effects* on staff behaviour or investigating the way staff interact with clients rather than combining the two. A particular influence does not exist in isolation, however. The behaviour of staff is more likely to be due to a variety of factors any or all of which may be predominant. If a researcher feels they have a more likely explanation then perhaps they should examine it

from within the context of other factors and attempt to relate their findings to outcomes. In other words, research that has attempted to isolate one particular cause of poor staff performance may be guilty of ignoring other more powerful explanations or may have tended to overlook the fact that a combination of determinants may apply.

It is helpful when examining previous research in this area to utilise the ideas presented by Hastings et al (1995) and to look at studies from within a theoretical perspective that acknowledges the interplay of various factors which may combine to influence staff behaviour. The work of Felce (1988; 1991) also highlights the importance of considering the idea that several factors are likely to combine to affect an outcome. The following section draws on a theory of the residential environment as consisting of *input, process* and *output.* We can think of the work environment as a production system. Certain factors will need to enter the system to ensure its effective operation. Donabedian (1980) refers to inputs in terms of 'structure'. The structure is defined as 'the relatively stable characteristics of the providers of care, of the tools and the resources they have at their disposal, and of the physical and organizational setting in which they operate' (p81). The structure of a work environment could therefore encompass the size of an establishment, the number of staff employed, the qualifications that staff hold or the finances required to operate a service. Felce has referred to the 'structure' of the residential home as 'the relatively permanent features of the residential environment that are decided upon in the initial planning' (1988, p133). In the case of residential care for persons with a learning disability research has tended to focus on certain aspects of the work structure, or inputs. These *inputs* are the clients with a learning disability themselves, the persons who work with them and aspects of the work environment such as numbers of clients or staff present.

The system will then *process* these inputs in order to produce an *outcome.* The process refers to the way in which the inputs are fed through the system and also the way in which they are modified to produce an end product. In the case of residential care *process* can be seen to refer to the relationships between providers of care and those they care for. In the case of the residential work environment outcomes are in terms of both performance (i.e. what staff actually do with clients) and the individual products for clients and staff, for example, changes in behaviour, job satisfaction or stress.

Appendix (a) contains a depiction of the production system theory and its main components.

The assertion presented in this thesis is that staff performance might be an important factor affecting the quality of care that clients receive and therefore there is a need to examine what influences that performance. The theory of production systems put forward in this study allows one to systematically examine the findings of previous research and ask the question as to whether inputs and/or process affects the way staff interact with clients and subsequently whether the outcome of staff behaviour has an impact on the experiences of client with a learning disability? Of course one should remember that the notion of a production system is only a tool to aide understanding and as such it should not be seen as a rigid doctrine which can explain everything which occurs in the workplace or as the only means of interpreting what staff do.

The following sections review literature on the impact of inputs and process on staff interaction with clients and a further section looks at the evidence that staff behaviour has an affect on client outcomes. Appendix (b) provides a systematic display of both input and process variables that have been considered by past research in the field of learning disabilities and how such variables relate to outcomes for both staff and clients.

The Effect of Inputs on Staff Performance.

Many studies have looked at inputs into the residential work system such as the characteristics of clients with a learning disability, the characteristics of the staff who work with them or the characteristics of the work environment.

Client characteristics

The characteristics of clients with learning disabilities, the levels of ability that they possess and the behaviours they exhibit, have been the focus of certain studies that will be considered in detail in this section. Studies that have examined the characteristics of clients have produced considerable evidence of an effect on the way staff behave.

One of the more significant findings is that the functional ability of a person with a learning disability is associated with lower levels of staff contact.

Pratt, Bumstead and Raynes (1976) in a study of staff language towards clients with learning disabilities in an institutional setting found that persons with more severe disabilities were less likely to receive 'informative' complex speech from staff.

Raynes, Pratt and Roses (1979) in a study of institutional care looked at the age, sex, and functional ability of residents to see whether these variables had an effect on quality of care as measured by the 'Revised Resident Management Practices Scale' (p27) and the Informative Speech Index which is a appraisal of staff/client contact. Age and sex were not found to be statistically significant, however, functional ability was and an observation by the authors was that 'the less able get less in every way' (p95). These results were consistent with those of earlier studies such as McCormick et.al.(1975) and Grant and Moores (1977) which both found that the ability level of clients affected the type and level of care given to them by staff, however not with those of King et.al.(1971) who did not find an association. Raynes and Sumpton (1987) also found in a comparative study of living environment that type of residence was a better indicator of the level of client participation in tasks than was ability.

Repp, Felce and de Kock (1987) in a review of studies of staff behaviour found that research findings suggest that clients with less challenging behaviour and greater levels of independence and adaptive behaviour were more likely to receive positive staff interactions. Those clients with more severe disabilities who were older and had spent more time in institutionalised care were less likely to receive positive or appropriate interactions.

Hile and Walbran (1991) in an observational study of direct-care staff behaviour uncovered an association between the functioning level of clients and the activities staff engaged in with them. Clients with severe disabilities were more likely to receive supervisory actions from direct-care staff than they were more intensely interpersonal behaviours such as socialisation, or training. On the other hand, clients with higher functioning levels were more likely to be the recipients of socialisation behaviours from staff for example, chatting. Thus it would appear from this study that the behaviours of clients, who are less able to respond, might have an effect on the performance of staff that work with them. Unfortunately this study does not address the behaviours of the clients themselves therefore one can only assume that the less able clients are likely to exhibit certain behaviours that subsequently restrict the range of interactions staff engage in with them. One might suggest, however, that the consequences of interacting with an individual with severe learning disabilities, for example lack of reciprocal communication, inability to undertake tasks etc. are likely to reinforce the future behaviour of direct-care staff. If conversations with certain clients are difficult, then over time staff may be less likely to engage in them.

Buckhult et.al. (1990) investigated whether sources of stress and satisfaction for direct-care staff were related to aspects of their job such as the characteristics of the residents they worked with. Buckhult et.al. found that the features of residents that were related to staff satisfaction often reflected independence. For example, residents with learning disabilities who were co-operative, could cook, read etc., were seen as more satisfying to work with. Clients with learning disabilities who have high levels of competence may make fewer demands on direct-care staff perhaps because of their greater independence or because they have low expectations as to what a worker might provide. If someone is competent at dressing, feeding, bathing etc., then they may be less likely to expect a direct-care worker to assist them in carrying out these tasks. Although the focus of this study is really on outcomes for staff in terms of stress it does indicate that the characteristics of residents, and in particular their level of ability, may have an effect on staff stress and this may subsequently influence their behaviour.

Overall studies of the functional abilities of clients seem to indicate an association between this characteristic and the level of staff attention that they subsequently receive.

Studies that have examined the effects of client characteristics on staff performance reviewed below suggest that maladaptive behaviour exhibited by persons with a learning disability might result in more negative interactions from staff. There is also evidence, however, that appropriate behaviour may elicit a greater level of interaction from staff.

Warren and Mondy (1971) discovered that inappropriate client behaviours acted as a more powerful antecedent than appropriate behaviours in provoking staff responses. Grant and Moores (1977) in an investigation of resident characteristics and staff behaviour, discovered that those clients with learning disabilities who demonstrated a need for greater attention were more likely to receive negative responses from staff, however more independent clients received more positive interactions. This result was observed regardless of the numbers of staff available.

Cullen (1987) in an observational study of staff-resident interaction found that nurses in a mental handicap hospital paid little attention to the clients regardless of the behaviours they were engaged in although inappropriate behaviour was more likely to be ignored than appropriate behaviour. This suggests that the former may act as a negative consequence for staff (p338).

Dailey, Allen et.al. (1974) discovered that clients who were more likely to receive interaction from staff were those who were viewed as more agreeable. It may be, therefore, that the actions of clients can induce certain behaviours from direct-care staff and as such, individuals with learning disabilities themselves may be influential in the type and quality of care they receive.

Repp, Felce and de Kock (1987) in a review of studies of staff behaviour found that the results of research suggested that clients with less challenging behaviour and greater levels of independent and adaptive behaviour were more likely to receive positive staff interactions whereas those clients with more severe disabilities, who were older and had spent more time in institutionalised care were less likely to receive positive or appropriate interactions.

Duker et. al. (1989) examined the relationship between the behaviour of clients and the interactions of staff. They found that client's ability to walk, their 'state of alertness', their

'looking' behaviour and adaptive, maladaptive and stereotyped behaviours were all related to the responses from staff. They found that stereotyped behaviour was found to be strongly associated with low levels of interaction from staff.

The findings of these studies suggest that maladaptive behaviours appear to be important characteristics that may help to explain the level of interaction that clients with a learning disability receive from care staff.

There appears to be little evidence from previous research that other client characteristics such as age, gender etc. are important client variables affecting the way staff behave. The study by Raynes, Pratt and Roses (1979) mentioned earlier did not find a link between the age or sex of clients and the type of staff contact they received.

It would appear then that previous research has indicated that both the functional ability of clients and the degree of maladaptive behaviour they exhibit are important inputs that may help to explain staff performance.

Staff characteristics

Landesmann-Dwyer and Knowles (1987) felt that staff characteristics (demographic, attitudinal/motivational, informational and behavioural) are important determinants of the social environment of residential care and as such have an influence on what staff do and on subsequent outcomes for clients. Studies of direct-care staff have looked at various characteristics to explain their performance. These have included age, length of service, levels of stress or satisfaction, ability and attitudes. These are reviewed below. It has to be said, however, that such research is limited. The findings thus far appear to indicate that the age, gender, staff attitudes, experience and the length of service may have an effect on the way that direct-care staff relate to clients with a learning disability.

Raynes, Pratt and Roses (1979) conducted a study to determine whether the characteristics of staff account for differential outcomes for clients with a learning disability. The study attempted to uncover which aspects of institutional life result in individual care for residents with a learning disability. The study used two quality of care measures, which

were the 'Informative Speech Index' (p29) and the 'Revised Resident Management Practices Scale', which is a measure of the quality of daily life in a facility. Information was collected on staff variables for age, sex, training and length of service and correlations were calculated in order to ascertain if an association existed. They found a relationship between the age of staff (controlling for the affect of IQ) and the two measures used. The more staff present that were 30 or under, the more resident oriented the care found in that facility. There was also a significant result for the variable of 'sex' (gender) with the finding that a facility that had more female staff, exhibited higher levels of 'informative speech' towards residents. The authors do counter these findings by indicating that analysis at the individual rather than the facility level revealed inconclusive results. The suggestion is that characteristics of the facility may have influenced the significant results rather than the actual characteristics of staff themselves. There were no significant results for the effect of staff training on quality of care, however, they did find that for the variable 'length of service' the greater the number of staff who had worked at a facility for less than a year the more resident oriented the care observed was.

The study also looked at the relationship between staff attitudes and quality of care. A relationship was found between staff attitudes about involvement in decision-making, formalisation of work, staff morale and the quality of care provided. No consistent relationship was found between staff attitudes about communication with others and quality of care.

These findings are interesting and do suggest that certain staff characteristics may be contributory predictors of quality of care, however, as the authors point out other variables may confuse the results making it difficult to determine what the true affect might be. One should note that this is a study of institutional care and as such must be viewed in that context.

Allen, Pahl and Quine (1990) undertook a comparative study of hospital and community residential facilities for persons with a learning disability with the intention of identifying differences in terms of outcomes for staff making the transition between working in a hospital setting to working in the community. They found differences between hospital and community staff for a range of variables many of which were a reflection of staff characteristics such as gender, hours worked, age, experience, recruitment, attitudes, role

ambiguity, job satisfaction and training. Unfortunately the study did not attempt to relate these differences to disparities in levels of active client support and thus this research can only hint at those variations in the characteristics of direct-care staff that may have an impact on the quality of care provided.

Duker et. al. (1991) attempted to ascertain the effect of type of contract (full-time/part-time) and length of duty on the type of care which staff administered. They found that qualified full-time staff were more likely to be involved in organisational non-client related activities. Part-time staff that had been on duty for several consecutive days decreased the amount of resident-oriented care and increased the amount of custodial care for clients. Although the numbers of staff involved in this study were small the results do imply that type of direct-care employment may be a variable affecting performance.

In terms of education and experience Thousand et.al. (1986) conducted a study into the competencies of managers and staff in various residential establishments for people with learning disabilities. They found a good deal of agreement between employees at all levels as to what was perceived as a prerequisite of competency needed to work with people with learning disabilities. These competencies included, for example, 'working co-operatively with others' (p277) and showing respect and understanding for clients. A more interesting finding from a follow-up study was that managers who possessed competencies which all staff deemed as important, i.e. interpersonal skills and knowledge of client needs, were more likely to orient their services toward individualised client care. Thus it would appear that certain characteristics present in staff and/or managers might affect the type of care provided.

There has been comparatively little research that has considered the effect of staff variables such as experience or education on performance. As Rice and Rosen (1991) note,

'Direct-care workers often represent the least educated, lowest paid, most poorly trained and sometimes least motivated segments of the facility's staff' (piii).

Unfortunately there is a lack of evidence which might enable us to determine if such variables have any impact on the way staff support clients.

The studies reviewed thus far do seem to indicate that differences apparent in the characteristics of direct-care staff might have an influence on the way they interact with

clients. A further area of research in this field has looked at the impact that differential staff characteristics, such as levels of stress or satisfaction, have had on their performance. Stress and satisfaction experienced by staff can be viewed as a system output but it is also an input in that it becomes a characteristic which a staff member possesses and which subsequently is processed by the system. This process produces outcomes both in terms of the way staff behave towards clients and consequently the degree to which clients are engaged in everyday activities. The studies reviewed in this section are those that have looked at the relationship between stress and/or satisfaction and direct-care staff performance.

The 'Demands, Supports, Constraints' model was derived by Payne (1979) to explain stress experienced by employees. Stress is the result of increasing demands made on an individual. It can be moderated, however, by the 'supports' available to a staff member, for example from colleagues or outside services, which enable them to cope with a demand. The degree to which 'supports' aid the worker in coping with demands is counterbalanced by any negative 'constraints' which operate within the work situation. For example, lack of training may act as a constraint, preventing the worker from coping with the demand of introducing a behavioural programme for a client. If, however, a worker is trained in behavioural techniques, this can act as a support, thus decreasing the possibility of stress resulting from the demand of following a particular behavioural schedule.

Others have developed similar theories. For example Kavasek and Theorell (1990) advocate a model of 'supports, demands, *control*'. They argue that the control that a worker has over aspects of his/her job contributes to their ability to cope with the demands of work, thus decreasing opportunities for strain to occur. Support meanwhile is of two kinds. Socio-emotional support is that which protects the worker from stress by mechanisms of incorporation into a close, cohesive staff group. As Kavasek and Theorell suggest, an amalgamation of staff and the trust and harmony that may develop between them, could result in a number of norms that may affect group members' behaviour. Instrumental social support is that which aids the worker in a more fundamental sense, in that this refers to the actual behaviour of staff as a resource in enabling the accomplishment of a task, for example helping to lift a person.

The model suggested by Kavasek and Theorell (1990) indicates, in relation to social support, that both the behaviour of others is important in the work place, and also the expectations, beliefs and attitudes of those others. Kavasek and Theorell mention colleagues as significant in this respect, however, one might also assume that others such as clients, families etc. may be equally important. Such notions are applicable not only in terms of stress but also motivation. The behaviour of others if constituting a support, is likely to enhance, not only an individual's motivation but, more importantly, their own behaviour or performance. For example, if a colleague assists a staff member in toileting a difficult client, then it is probable that employee will carry out that task more efficiently and frequently than if left alone to perform it.

Rose (1993) used the 'Demands, Supports, Constraints' model in his examination of the stress experienced by staff moving from a hospital based service for people with learning disabilities, to employment in a community setting. He identified 23 support-constraint items (i.e. factors which might act as a support if positively available, or a constraint if negative, or unavailable) and 33 demand items. Subjects then rated the items on scales of 1-5, with 5 on the demand scale signifying a large number of requirements at work. 1-2 on the support-constraint scale indicated a constraint and 4-5 a support, a score of 3 being neutral. Rose also included a measure of stress in his study.

Rose's general findings were that 'greater perceived demands' were associated with higher levels of stress, whilst 'greater perceived support' was associated with lower levels of stress (p328). Such results substantiate the possible validity of the 'Demands, Supports, Constraints' model.

Rose also found that in all situations a lack of staff and resources led to greater job demands (p328). Staff shortages in particular could lead to direct-care workers taking on responsibilities which they are inadequately prepared for and which may seriously impede their abilities in other respects. For example, a direct-care worker who is expected to undertake an administrative role may find himself or herself devoting less time to care tasks.

The findings presented above indicate the complexity involved when trying to uncover the possible relationship between staff stress and subsequent performance. It would appear

that a number of factors combine to produce stress or satisfaction as experienced by a member of staff and this subsequently affects how they behave. It is difficult to determine, however, whether the effect is that of factors in the work environment, for example shortage of staff, or whether it is purely the level of stress or satisfaction itself which influences staff behaviour.

A number of studies have tried to examine the relationship between the factors that produce differential stress levels for staff and the possible impact which stress may have on working practices. The findings suggest that there is a two-way relationship between the variables that affect the level of stress experienced by staff, including the behaviours of clients themselves, and the way stress influences performance. In other words there may not be a direct link between inputs such as client characteristics and staff behaviour. Instead it may be that inputs affect the characteristics of the staff member themselves in terms of their experience of their work. This output then becomes a characteristic that a staff member brings with them to their work and as such is an input influencing staff/client interaction.

Buckhult et.al. (1990) undertook a study into sources of job satisfaction and stress amongst direct-care staff in residential facilities. In particular they examined, using a 'resident satisfaction scale', whether the characteristics of residents would have any effect on these two variables. They found that stress and satisfaction related to the characteristics of residents warranted separate investigation from other sources of job stress and satisfaction. The factors most often related to 'resident-related stress' were aspects such as violent behaviour, non-co-operation and antisocial habits. Those factors that were likely to influence 'resident-related satisfaction' were independence, co-operation and ability. This study, therefore reiterates the finding that more able clients who constitute a greater support to workers in meeting demands, may increase motivation and performance. Less able, or more difficult clients, on the other hand, may decrease the ability of staff to cope with demands and this may subsequently result in stress and indifference towards their work.

Baumeister and Zaharia (1978; 1987) in a series of studies examining whether the behaviours of certain clients might be correlated with staff behaviours such as absenteeism and a propensity to leave a service. They found clients who exhibited challenging

behaviour were associated with a higher turnover rate amongst staff as was the severity of disability and the rate of staff turnover. Thus, it appears that clients who exhibit certain behaviours, for example aggression, or who fail to respond, may affect both direct-care staff motivation and perhaps their long-term performance. Aggressive clients in particular, or clients who engage in stereotyped behaviour, can act as both a demand and also a constraint on the ability of staff to cope with that demand. A client who hits other people demands staff attention, however the nature of that client's behaviour, if sustained, is likely to affect the staffs' ability to direct positive attention towards them. Hence a staff member may react negatively towards an act of aggression from a client thus reinforcing that behaviour and increasing the demands that that client makes.

Maslach (1973) in her work on staff stress felt that a consequence of the demands which clients place on an employee might be the subsequent dehumanisation of that client. Such detachment can affect performance, and in particular the relationship between a staff member and learning disabled persons. If staff engage in less interpersonal interaction with demanding clients then this is likely to act as an antecedent for clients who seek attention through such behaviour and the likely result may thus be an increase in these behaviours.

Sarata (1974) in a study of employees working with people with learning disabilities examined the relationships between direct contact with clients, client progress and the satisfaction of staff. The author found, in respect to the latter, that lack of client progress was an important source of dissatisfaction. One of the most difficult demands for direct-care staff working with learning disabled persons, especially in community settings, is to enable clients to acquire a range of skills. The limitations that persons with learning disabilities possess, however, may act as a constraint inhibiting the staffs' abilities to meet that demand. Also a lack of personal resources on the part of the staff member themselves, for example training skills, may further constrain their ability to achieve progress with a client. Thus performance is directly affected by the behaviours of clients and staff members themselves, and this may possibly reinforce poor motivation. Of course lack of client progress may also explain the findings of earlier studies such as Veit et.al. (1976) and Hile and Walbran (1991) which suggest that staff engage in relatively little training with clients. Poor progress may act as a negative consequence deterring staff from pursuing training objectives.

Allen, Pahl and Quine (1990) in their study of staff in community and hospital settings for people with learning disabilities found that employees in both types of establishments felt that client-related aspects of their work resulted in higher job satisfaction. This finding suggests that the behaviour of individuals with a learning disability may be an aspect of the relationship between staff and clients that influences the former's motivation. As such, however, this study does not indicate the type of client behaviours that may increase staff motivation and performance, or the ways in which that influence can operate. It does suggest, however, that clients can act as a support for staff in realising high quality care.

Studies that have attempted to examine staff stress or satisfaction have produced some interesting results particularly in respect to those research findings that indicate that clients with a learning disability can act as both a constraint and a support for a worker. It would appear that the characteristics of residents themselves might affect not only the way staff work with them, but may also have an effect on the worker themselves in respect to their own feelings of satisfaction or the level of stress which they experience. It would appear that other features of the work environment, such as the support they receive from others, could help to alleviate possible sources of stress caused by resident's behaviours. These results do suggest that aspects of the workplace are interrelated, as it would appear that inputs such as the characteristics of residents feed through the system to produce outputs for staff that are then fed back into the system to become a determinant of staff performance. As the findings of these studies have suggested, staff stress and staff satisfaction with their work can have an affect on subsequent performance. Unfortunately there is little research that appears to have investigated exactly how and to what extent staff support of clients is related to the level of stress or satisfaction that they experience (Dudley, 1989: Stoler, 1992). The link between staff stress/satisfaction is not well established.

Bahmeister and Zaharia (1987) in a review of the effects of staff withdrawal and commitment note that 'a poorly motivated employee, or one unfamiliar with the needs of a client or one unskilled in the caregiver role is not likely to be effective in implementing programmes (p246)'. Munro, Duncan and Seymour (1983) attempted to examine the effect of staff turnover (something which is a suggested result of staff dissatisfaction, see

Razza, 1993) on outcomes for clients although they failed to find a significant association between the two.

Recent research by Rose (1993;1994; 1996) has attempted to link service quality to the stress experienced by staff. He felt that 'the health of an organisation will be related to the quality of services it provides, with organisations which enhance the well-being and commitment of staff providing better services than those that do not' (19, p10) Rose found that lower levels of anxiety experienced by staff were associated with 'higher levels of positive interaction and assistance with residents' (p10). Rose, Mullen and Fletcher (1994) examined the relationship between staff stress and performance in community units and group homes. They found that lower levels of stress and greater levels of staff/resident interaction in the group homes. This does mirror earlier findings (Felce et.al. 1991) which show that small numbers of clients and staff lead to higher rates of interaction. The work of Rose et.al. (1994) does also tend to imply that small groups of clients and staff also leads to lower levels of stress which in turn may impact on staff behaviour.

Despite a lack of similar research it would appear that levels of stress or satisfaction are potentially important staff characteristics that may affect performance.

A few studies have looked at the actual behaviours of staff as an explanation of levels of client engagement. Some studies have considered how individual staff members own behaviours can act as both antecedents and consequences in terms of influencing their subsequent behaviours. Burg et.al. (1979) for example, found that when an individual staff member monitored the extent of their own interactions with clients, such interactions increased. This was particularly so in respect to social interactions with clients. Burgio, Whitman and Reid (1983) carried out an investigation in which direct-care staff supervised their interactions with clients with learning disabilities and evaluated them, administering self-praise when socialisation increased. General increases in staff-client interaction were recorded as a result of self-appraisal and supervision. These studies indicate that an individual staff member can successfully monitor and subsequently alter their own performance. Unfortunately there is a lack of similar research, that might allow us to reinforce these findings.

Overall studies reviewed in this section suggest that staff characteristics such as age, gender, length of service, type of employment contract, attitude and levels of stress are important inputs to be considered when attempting to evaluate possible influences on staff performance.

Characteristics of the work environment

The largest body of research that looks at how the work environment might affect the performance of staff has tended to concentrate on a comparison of institutional and community residential services for persons with a learning disability. Such comparisons are problematical in that it is not always easy to disentangle the effects of different components of the service, such as size and staffing ratios. The studies reviewed below are divided into those which have examined the impact of the number of clients in a facility on the quality of care provided by staff, those which have examined the effect of staff to client ratios and those studies which suggest that it is the way a situation is structured rather than the number of staff or clients present which promote staff support and client activity.

The effect of numbers of clients on staff/client interaction: A number of studies have investigated the impact that the number of clients present may have on the behaviour of staff. One of the earlier studies conducted by King and Raynes (1968) found that larger services, such as Mental Handicap Hospitals, produced care strategies for clients that were rigid, impersonal and routine, or as they called it, 'institution-oriented'. Haramatz (1973), however, in a later study of hospital wards found that the amount of clients present did not correspond proportionately to the amount of interpersonal interaction they received from staff.

Balla (1976) in a review of the literature on the relationship between the size of facilities (i.e. number of clients) and quality of care, found that in general smaller establishments based in the community were associated with greater quality of care although with the added caveat that there was a great deal of variation amongst small community-based facilities (King, Raynes and Tizard, 1971; McCormick, Balla and Zigler, 1975). Balla surmised, however, from the studies reviewed, that both the actual size of the living unit

rather than the size of the facility itself and the *type* of institution examined were related to the quality of care observed (McCormick et.al, 1975; Harris et.al, 1974).

Landesmann-Dwyer et. al. (1980) in a study of client and staff behaviour and its relationship to facility size found that it was more likely to be environmental variables such as location and social grouping which affected staff behaviour rather than size per se. The effect of size was only notable for several categories of quality of care one of which was social behaviour. Residents in larger group homes engaged in more social behaviour. Staff behaviour was similar between houses but client behaviour was not and the amount of staff/client interaction did not differ across size. In short the size of facility was not related to the level of interaction between staff and clients.

Buckhult et.al. (1990) suggested that the relationship between size and quality of care may be the result of more able clients being found in smaller establishments As we have seen in a number of studies reviewed earlier in the section on client characteristics, there appears to be a relationship between the behaviours of less disabled clients and the type of care accorded them by direct-care staff. Buckhult et.al. (1990) felt that because more able clients are more likely to be found in smaller community facilities, some studies have confused client numbers with the actual characteristics of residents (p351). This seems to suggest that size per se, i.e. the number of clients resident, may be a characteristic of the work environment whose effect on staff performance is difficult to disentangle. As such, much of the later literature on direct-care staff has subsequently ignored the amount of clients resident in a service as a factor that should be included in a study of staff performance. Recent research findings, however, have tended to suggest that this is a potential influence that should be re-visited.

Tossebro (1995) conducted a study in Norway that looked at the relationship between the number of clients in a facility and two measures of quality of care, 'deprivitization' and self-determination. The author suggests that using facility size as the focus of research is not appropriate especially as much of the research produces ambiguous results. The author argues that facility size only makes a difference when the range of clients is small. Indeed the author believes that it is the size of the living unit and not the facility itself that is important. The results of the study showed that the greatest quality of care was observed only when the number of clients was reduced below 5. Above that number very little

benefit in quality of care was noted even when client numbers were reduced from 10 to 5. Thus the results of previous research may have been influenced by the inclusion of very small units.

It appears difficult, as the research reviewed suggests, to determine the true effect that numbers of residents have on the type of care provided by staff particularly as the characteristics of clients can confuse the results. A large body of research exists which prefers to examine the ratio of staff to clients and how this impacts on quality of care. This research is reviewed below.

The effect of staff/client ratio on staff/client interaction: Several authors have preferred to examine the impact of staff to client ratios on staff performance rather than the effect of client numbers alone. Raynes, Pratt and Roses (1979) found that the larger the facility the more institutional the quality of care. This result mirrored earlier results, observed by McCormick et al (1975). The authors, however, felt that staff/client ratios were a better measure than purely the amount of staff working with a group of residents with a learning disability. They found no relationship between staff/client ratio and quality of care, which was in contrast to their earlier finding that used size of facility as the variable of measurement. The authors conclude that simply adding more staff will not result in more individualised care and this is a finding echoed in research by Tizard et.al.,1972; Harris et al., 1974 and Grant and Moores, 1977.

McCormick, Balla and Zigler (1975) found in a cross-cultural comparison that high levels of professional staff did not appear to improve the kind of practices staff engaged in with children. Meanwhile Mansell, Felce, Jenkins and de Kock (1982) found in a study of room management that the addition of staff did not lead to improvements in performance rather it actually lessened the number of interactions between staff and clients. Hile and Walbran (1991) discovered that when more staff were available to clients staff were more likely to spend time in their own personal pursuits. Studies which have examined the effect of lack of staff have found that the remaining staff present undertake more household and custodial tasks with clients when their number is fewer (Burgio, Whitman and Reid, 1983; Duker, Seys, Van Leuwe and Prins, 1991). This suggests that a decrease, as well as an increase, in staff numbers may be an important indicator of how inter-staff relationships affect the type of care given.

Felce, de Kock and Repp (1986) observed higher levels of adaptive functioning amongst clients in smaller setting and improved levels of staff behaviour. The authors felt that the simple fact of the ratio of staff to clients could not explain this but rather organisational issues and specific staff training played a part.

Felce, Repp, Thomas, Ager and Blunden (1991) examined the relationship between staff/client ratios, levels of interaction and the adaptive functioning of clients. They compared institutions, large community settings and small homes in the community. They found higher levels of interaction and client adaptive behaviour when there were small numbers of staff and a small and decreasing number of clients. Interestingly improvements were not observed when more staff were added. This results echoes the findings of Harris, Viet Allen and Chinsky (1974); Dalglish and Matthews (1981) and Seys and Duker (1988) who all found that a simple increase in staff did not lead to improvement in staff performance. Dalglish and Matthews also found higher levels of client engagement when less residents were present. Felce, Repp, Thomas, Ager and Blunden, (1991) suggest that reducing client numbers assigned to staff is more effective than increasing staff numbers.

Emerson, Beasley, Offord and Mansell (1992) looked at two hospital-based units offering residential services for persons with severe learning disabilities and the levels of both staff and client activity. They found low levels of staff/client interaction despite high staffing ratios. Infact '89% of the staff time available within the service was spent on activities which did not involve contact with service users' (p303). They felt that the reasons for this were due to vague or competing expectations and more pronounced consequences for staff resulting from the performance of competing tasks.

Mansell (1995) looked at staff contact and client engagement and found that community units for persons with severe/profound learning disabilities and serious challenging behaviour had higher staff to client ratios. The research also found that these units had higher levels of staff assistance and client engagement when compared with a hospital setting. Mansell, however, concluded that other features of the work environment, such as service goals, staff organisation and staff training were likely to be just as important in determining these variables as the actual numbers of staff present in a unit.

Emerson et. al, (2000) compared quality of care for clients living in different types of community placements. These were village communities, residential campuses, community-based group homes and supported living. They found that clients living in dispersed housing schemes that had high staffing ratios and which were less institutionalised provided better quality of care. Village communities also provided a higher quality of care than did residential campuses which were found to have low staffing ratios and poor planning. Both village communities and dispersed housing appeared to result in greater quality of care outcomes for clients although less able clients were more likely to be found in residential campuses.

McCormick, Balla and Zigler (1975) in an early examination of the effect of size observed that 'it may be that simply increasing expense and personnel does not necessarily guarantee better care for retarded residents – rather it is how these personnel are utilised' (p14). This finding appears to be generally agreed upon amongst studies that have looked at the impact of staff/client ratios on staff behaviour, quality of care and levels of client engagement. It would appear that numbers of staff or clients alone cannot explain the type and levels of support staff offer. It is more likely that the ways in which staff are organised and assigned duties within a setting may be an important determinant of the way they behave with clients. This issue is examined in the next section.

The effect of the structure of a situation on staff/client interaction: Felce (1991) suggests that the structure of a service, (i.e. how it is practically organised) rather than its size is important in understanding how staff behave although he does feel that structure can be influenced by size. Several studies have considered the impact of the organisation of staff present in a setting on the actual way in which those staff engage with clients. Mansell et.al. (1982) found that as the number of staff present in a room increased, staff members decreased the actual amount of time spent interacting with clients. Mansell et.al also demonstrated that it was the giving of specific clearly outlined tasks to staff that improved interactions and client activity. This finding replicates those of earlier studies by Cataldo and Risley (1972) and Porterfield, Blunden and Blewitt (1980). Although Mansell et. al. (1982) found higher levels of client engagement under room management manipulations there were still differential levels of client engagement which were dependent on original levels of engagement. Seys and Duker (1988) also considered the effect on staff behaviour towards clients of introducing an extra staff member and assigning that staff member

particular tasks. They found that merely bringing in an additional member of staff did not result in more resident oriented behaviour from existing employees. Assigning extra tasks to the additional staff member, however, resulted in an overall increase in the amount of staff time spent in training residents.

Orlowska (1992) reviews several studies and summarises that the specific type of structure (Prior et al, 1979), the original level of engagement of clients (Mansell, Felce, deKock and Jenkins, 1982), the specific environment where an activity is performed and the persons present (Hile and Walbran, 1991) can all affect how staff interact with clients rather than the structure of the situation alone.

This review of research findings appear to suggest that characteristics of the work environment, such as size, staffing ratios and situational structure, are potentially important in explaining staff performance. It has proved difficult, however, to isolate one of these variables and examine its independent contribution to the level of staff interaction with clients. The findings of previous research do seem to indicate, however, despite mixed and sometimes contradictory findings, that the amount of clients and staff present in a setting may have an impact on the ways in which staff behave.

To conclude the review of inputs into the residential workplace and their impact on staff behaviour it would seem that studies that have considered the characteristics of clients, staff or the work environment, are obviously important in that they have yielded some interesting findings. The characteristics of clients, staff or indeed the workplace itself cannot be viewed in isolation from other factors that occur in the workplace. In a sense by focusing purely on inputs one is bound to ignore what actually happens to those inputs once they are integrated into a system. This means that the influence of others in the workplace, the rules and conventions that govern behaviour and the existence of rewards and punishments are not taken into account in an attempt to explain poor working practices. The specific characteristics of a client cannot be enough to describe why staff members do or do not actively involve that client in activities. A research study that seeks to explain levels of staff/client engagement must consider *what actually happens* in the workplace and how this affects outcomes. Thus the *process* by which inputs are integrated into the system is an important consideration in terms of uncovering why desired outcomes, i.e. high levels of staff/client interaction and client engagement are not achieved.

Many authors who have been concerned with the ways in which structure influences performance have also acknowledged that process may prove to be important in explaining staff behaviour (Landesman-Dwyer and Knowles, 1987; Felce, 1991; Mansell, Felce, Jenkins, deKock and Toogood, 1987).

The next section reviews those studies that have attempted to look at the *process* of what actually occurs, both formally and informally, within the residential workplace in an attempt to account for differences in staff performance.

The Effect of Process on Staff Performance

The notion of process in terms of the residential work environment can be divided into two separate but highly interrelated features. These features are the formal and informal social systems. Research on the latter is reviewed in a later section. The following section reviews research that has looked at the influence of the formal social system on staff performance. The findings are generally that certain aspects of the formal social system, particularly the existence of formal goals and rules and the application of formal contingencies, can influence what staff do. The impact of training on staff behaviour appears more difficult to interpret from the findings of research as many results point to the difficulty that staff have in applying skills they have learnt to their work with clients.

The formal social system

The formal social system has been defined as 'the institutional structure that is developed to ensure that certain goals are achieved' (Tizard, Sinclair and Clarke, 1975, p209). As such the formal system that exists within an organisation can be identified by certain elements such as how that service is organised, the formal goals or rules that are established and the roles which are formally defined for persons who operate within the system. The formal social system can determine in various ways the contingencies that specific persons can legitimately bring to bear. Thus, the formal social system in a sense

maps out the more obvious power structure present within any organisation. It also defines to a certain extent the arenas, or situations, with which particular formal contingencies are associated.

Hastings (1995) has suggested that the formal aspects of the service culture can influence staff and what they do in two main ways. The first way is via *formal policies,* which are really the *goals and rules* that an organisation establishes to guide appropriate direct-care staff behaviour and through the provision of *training experiences* which provide models for staff to use in their work. The second way that the formal aspects of a service can influence staff is through the imposition of *formal contingencies,* for example disciplinary procedures or financial rewards that can impact on appropriate or inappropriate staff actions. Using Hastings division of the formal social system as a guideline let us now turn to review research in this area and its contribution to our understanding of staff behaviour.

Goals, rules and training experiences and their influence on staff performance.

Literature relating to the influence of the formal social system on staff behaviour implies that it may be significant. Unfortunately few studies have attempted to evaluate the impact of residential goals and rules on direct-care staff and their performance. As such conjectures as to the importance of such influences are mostly speculative. In regard to the impact of training on staff behaviour research is more prevalent and many of the findings appear to suggest that the effects of staff training do not appear to be maintained once the staff member returns to the workplace. Let us turn to look firstly at the literature on the effect of goals and rules on staff behaviour.

The overall direction which a service takes is reflected in both the goals that it establishes and the rules which operate to govern both employee's and client's behaviours. A service's goals are often a reflection of the particular orientation that it has adopted and as such are often enshrined in policy and other documents. The work of Etzioni (1961) suggests that organisations can be classified according to the general goals that they hold. The difference here is that, in Etzioni's view, the goals that an organisation adopts directly influences the methods that those in the upper echelons of the service use to ensure that these goals are achieved. Etzioni defines the three compliance structures as 'coercive', 'utilitarian' and 'normative' (see Lee and Lawrence, 1991,p104). *Coercive* compliance is

associated with negative sanctions or consequences enacted by those in power, *utilitarian* with the probability that positive or negative financial contingencies will be given to those who comply or otherwise, and *normative* with a correlation between negotiating with members' values and beliefs and doing what those in power want. The respective goals related to these compliance structures are 'order', 'economic' and 'culture'. So, for example, those organisations whose goal is order will be likely to operate a 'compliance structure' that is coercive. In terms of services for people with learning disabilities, therefore, those establishments whose goals are 'normalisation', 'choice' etc., in other word's *culture based*, will attempt to persuade those within the organisation to adopt these goals by appealing to their personal beliefs. Of course this is a relatively weak method of compliance partly because it does not depend on the enactment of strong positive or negative consequences if the goals suggested are not adopted. Etzioni goes onto suggest that the compliance structure in operation also affects the extent to which 'sub-collectivities' or alternative cultures develop apart from the formal organisation. This is something that will be dealt with in greater detail when we discuss the informal social structure.

Of course most services do not fit neatly into the categorisations as inferred by Etzioni. It is often the case that not only do a wide range of conflicting goals exist in organisations, but that these goals operate at different levels, differ in their content and are perceived differently by those who advocate them. As Tizard et. al. (1975, p205-206) suggest, goals can exist which intend to preserve the service itself (i.e. recruiting new members etc.), or which intend to reach an objective such as training clients with learning disabilities in life skills. Also goals can be established which are more fundamental or *expressive*, such as cultivating a certain state of mind amongst the members of the organisation. These goals may not only conflict with each other at times but it is possible that they will be held by different persons within the organisation and will reflect their own expectations. Further even, if all the key persons in a service adopt the same goals their own perceptions of those goals and how to achieve them may differ considerably. Thus, everyone in a group home environment may agree that the goal is to encourage clients to participate in the community but there may be very little understanding as to what participation constitutes. Of course those persons whose ideas predominate as to what the definition of a goal should be are likely to have access to the most powerful contingencies. Using our example, the home manager may have a very definite idea of what participation means and will ensure that her

notion is complied with by making praise and promotion contingent upon it. Similarly disciplinary measures may be used by the manager to enforce compliance with her views by her staff. Direct-care staff and clients may not have access to these powerful contingencies.

Felce (1991) refers to the objectives or goals that a residential environment has be it via its philosophy or the focus of management as the 'orientation of a service'. He feels that

'since the absence of clear statements of client objectives and associated managerial monitoring is typical of most existing settings, it is hardly surprising that staff behaviour rarely matches that which, in the applied treatment literature had been shown to produce client gains. Also if counter philosophies exist which are counter-habilitative then this is bound to produce poor outcomes' (Felce, 1991, p291). He also says that

'most services fail to define objectives adequately, fail to define how staff must behave to meet those objectives, fail to implement ways of working needed to produce appropriate staff performances and fail to establish the managerial contingencies needed to generate such performances' (Felce, 1991, p295).

Rules also form part of the formal social structure although of course they are not always necessarily written or enshrined in documents. Many, if not all, services for people with learning disabilities be they operated by the state, private concerns or charities (or indeed a combination of all three) adopt certain bureaucratic procedures. Law will determine many of these procedures but many others will emerge as a result of a service's needs and orientation's. Such bureaucratic procedures will inevitably result in the formation of rules and regulations. As Thaw and Wolfe note 'residential facilities have evolved over many decades into heavily rule-bound organisations' (p98, 1986). Many rules will reflect a service's goals but others will be established to ensure effective operation. As such rules may provide guidelines for staff of the overall expectations that a service holds and these rules may then determine direct-care staff's behaviour. Services also develop formal organisational practices and rules, which although not always written down or governed by higher conventions are, nonetheless, important guidelines for modifying the expectations of others as to the role of the direct-care worker. For example, routines or timetables determine how an organisation operates and, as such, often describe the ways in which workers should support these directives. If clients have to be ready to catch a bus at 9 o clock every day then it is likely to structure the nature of the work that the direct-care

worker undertakes with this particular client before that time, i.e. getting them up, dressed etc. These formal rules based on custom and practice are likely to become part of the expectations of others as to what a worker should be doing and how.

Hastings and Remington (1994) in an examination of how staff respond to challenging behaviour from clients suggests that rules emanate from two sources, *externally supplied rules* (that is those suggested by people outside of the individual staff member) and *self generated rule* (that is rules which are constructed by the individual themselves to guide their behaviour). The authors suggest that various contingencies may result from following either set of rules and in the case of externally supplied rules,

'There are obvious ways in which compliance with a service's or manager's performance-related rules are those related to the formal management of service settings. Staff may be rewarded with praise from their supervisor, extra pay, promotions, or extra holidays (positive reinforcement). Staff may also behave in ways consistent with certain rules to avoid losing such rewards or to avoid punishment from their managers, such as warnings, suspensions, or even the loss of employment (negative reinforcement)...Thus the presence or absence of monitoring procedures may determine the likelihood of rule-following...(Hastings and Remington, 1994, p13).'

The process by which rules come to influence staff may be a more or less subtle procedure depending on the obviousness of both the rules themselves and the consequences for not following them. It is likely, however, that an abundance of informal and formal rules and regulations emanating from various sources may confront the direct-care worker. Thaw and Wolfe describe how organisation rules can affect staff,

'Their daily activity is regulated by multiple sets of rules. For example, beyond the expected scheduling, work assignment, and personnel rules associated with most organisations, they face rules for enforcing residential fire and safety code standards; health code standards for storage and use of clients' clothes, towels, toothbrushes, etc.; rules governing therapeutic and safety restraint of assaultive clients ; rules for repositioning bedridden and wheelchair clients ; rules for infection control and preventative health procedures ; rules for food handling ; and rules to safeguard client rights' (p99, 1986).

Formal rules and goals are thus a very obvious way in which levels of staff performance might be explained and indeed measured. If sets of rules are established that advocate the active involvement of clients in everyday tasks then this should be an influence on what staff do. As is suggested in this section, however, other influences may intervene to affect the implementation of these rules including the existence of other or informal rules, something that will be looked at in more detail later. Suffice it to say in summary that it seems important from the findings of previous literature to include the process by which formal goals and rules are applied in any examination of influences on staff performance.

The literature on the influence of training programmes on staff behaviour is more extensive and many research findings highlight the problem of sustaining changes achieved through training. Early writers such as Kazdin (1973) quoted in Anderson (1987) acknowledged that client programmes were unlikely to succeed without subsequent alterations in staff behaviour. The issues of generalisation (i.e. skills learned via training applied in a range of work situations) and maintenance (i.e. skills learned via training applied in the long-term) are prevalent in the literature on staff training. The question of training staff and maintaining changes in their behaviour is reviewed below. The effect of changes in staff behaviour on client outcomes is reviewed in a subsequent section on output studies.

An early evaluation of staff training in behavioural methods was conducted by Mansdorf, Bucich and Judd (1977). They concluded that direct-care staff saw training as merely an exercise that they routinely applied to their work with clients. This finding suggests that if staff fail to understand the basic premise of training and it's utility to their work with persons with a learning disability then this lack of understanding could compromise both the application of training skills and their success.

A number of authors have highlighted problems of how to ensure that skills learnt are transferred to the work place and maintained over time. Woods and Cullen (1983) in their review of research on staff behaviour note that several studies demonstrate little long-term effect of staff training on their performance (Quilitch, 1975; Ivancic et.al., 1981).

Ziarnik and Bernstein (1982) note in a critical review of the effect of in-service training on staff performance that the results are often 'inconclusive' (p110) and that there is little evidence purporting to demonstrate any long-term outcomes. The authors also feel that

lack of skills and staff training may only provide a partial explanation of poor performance. They suggest that reinforcement of inadequate behaviour from staff, ignoring or punishing correct behaviour and a lack of clear performance objectives might also explain why staff fail to engage with clients. The authors suggest that tackling the 'inadequately reinforcing environment with (1) clear goals and feedback, (2) consequences and (3) cues' (p112) may be more likely to improve direct-care staff performance.

Anderson (1987) reviewed studies that covered both staff training and management techniques and evaluated the impact of such training on the generalisation and maintenance of staff behaviour. Anderson found that many of the studies which looked at the effects of training (nearly 50%) did not present findings recording changes in the behaviour of persons with a learning disability. Other studies failed to measure the elements by which training was delivered. Methodological problems aside Anderson concludes that the use of instructional methods was only effective if used in conjunction with the application of consequences. Similarly in regard to modelling and role-playing their effectiveness was likely to be increased when combined with consequences or other training methods. Performance feedback, feedback with praise and self-recording appeared to be effective. Initiatives such as monetary reward and time-off had been sparsely used in studies but had demonstrated positive results. It appears that training which uses a variety of supplementary techniques may be the most successful. Many studies of staff training showed that even when staff behaviour changed it was too slow to effect resident behaviour. Indeed staff behaviour often failed to generalise and was frequently not maintained. Anderson notes that staff may have failed to 'reinforce desirable resident behaviour at an effective level' (p111). Andersons' review also revealed that the removal of consequences for appropriate behaviour of trained staff often led to deterioration in staff performance. He felt that maintenance should be an issue to be considered in the development of all training programmes. Overall findings from the studies were that training has an effect but that this effect is unlikely to be maintained once the person returns to work.

Demcheck (1987) in a review of behavioural staff training in special educational settings found results similar to those of Anderson. Studies demonstrated that instructions alone were unable to achieve sustained staff performance. Although role-play and modelling

achieved favourable results it was important for skills learned to be reinforced in the workplace and for appropriate staff behaviour to be acknowledged through feedback and supervisor approval. Training strategies that combined more than one technique were most likely to increase satisfactory staff performance. Similar to Anderson, however, Demcheck draws attention to issues arising from the studies reviewed which are related to evaluating subsequent changes in client behaviour as well as staff, examining the effects of staff training in various settings and looking at the long-term maintenance of behaviours which staff have learned.

Mittler (1987) suggests that training fails to improve direct-care staff performance for several reasons. It is often applied in an ad-hoc and random manner. Staff who receive training often elect themselves rather than training techniques being uniformly applied to all workers. Little datum is collected on how well staff perform new skills in the workplace. Also both management and colleagues fail to support newly trained workers and there is often a discrepancy between what workers have learned through their training and the differential demands made on them in the workplace.

Several other authors also highlight a range of constraints that appear to limit the effectiveness of staff training on both performance and outcomes for clients. These include poor staff to client ratios (Slama and Bannerman, 1983), a lack of clear aims and objectives to be achieved through training (Scalley and Beyer,1992), the characteristics of clients whom staff support (Cullen, 1987), the pre-existing rules and routines of staff (Cullen, 1987), the behaviours and attitudes of other staff (Reppucci, 1977) and the lack of social support offered by co-workers (Milne, 1985). Knowles and Landesman (1986) and Mansell (1988) both highlight environmental constraints such as deficient resources, lack of support and a need for reinforcers to be present in the work environment which naturally support improvements in staff behaviour.

Hastings (1995) conducted a detailed study that looked at staff training and its effect on the challenging behaviour of clients. The study specifically examined some of the possible reasons as to why behaviour changes achieved through training are unlikely to be maintained in the workplace. The study revealed that challenging behaviour training was often limited as to how to deal with the immediate situation rather than looking at the issue of challenging behaviour as a whole or its possible causes. Staff also reported that their

input was not requested in the setting up of training programmes and as such the author felt that this could lead to both their disengagement and to a sense that such training was not viable. It was also suggested that the involvement of outsiders in developing training programmes could mean that there was no one on site after training had taken place to ensure effective implementation and feedback thus leading once again to the failure of staff to apply what they had learned. The author also suggests that training may fail because staff may see the intervention suggested as 'inappropriate', there may be a history of such training failing to succeed and staff may find other aspects of the implementation of a programme aversive, such as the administration involved.

Several authors have suggested that the inconsistent results achieved through staff training programmes and the reasons for their failure should be addressed by adopting a new approach. Landesmann-Dwyer and Knowles propose that only by considering the total 'social ecology' of the workplace can effective training be maintained (1987). This belief is echoed in the work of authors such as Bernstein (1982) and Milne (1985) who point to the importance of ecological or eco-behavioural approaches when one considers the impact of training on staff. Further Landesman-Dwyer and Knowles (1987) suggest that training per se may not be the best way of altering staff behaviour. Rather the impact of the social environment and its interconnection with staff characteristics may provide the best means of understanding and improving staff performance. Modifying either of these elements rather than applying training techniques per se may be a more useful approach to changing staff behaviour.

What these studies suggest is that a range of factors may intervene to prevent the effective implementation of any training learned. This is an important point. The beliefs of staff themselves prior to training, the influence of others present in the workplace, the culture of the unit itself and the history of past training or intervention strategies can, and often do, sabotage the skills which direct-care staff learn to help them work effectively with clients with a learning disability. This points to a view common in the literature that an eco-behavioural approach should be adopted. The suggestion is that research which looks at training cannot hope to fully explain why staff performance is poor unless individual, formal and informal aspects of the work environment are considered.

It would appear from this review of studies that the simple application of training programmes is not sufficient to alter staff behaviour and that other factors present in the workplace may mediate and detract from any improvements in performance achieved through training. What this suggests is that other variables may provide more powerful explanations of staff behaviour.

Formal contingencies and their influence on staff behaviour

The previous section reviewed research on the influence of goals, rules and training programmes on staff performance and found some evidence that goals and rules in particular may shape staff behaviour. It was more difficult to determine, however, if training had any long-term effect on what staff do. The next section looks at the second aspect of the formal social system as identified by Hastings (1995) as influencing staff behaviour, that is the existence of formal contingencies.

Formal contingencies within a residential care environment refer to the opportunities that exist to monitor, admonish or formally recognise the work that direct-care staff carry out with clients. Contingencies therefore can refer to disciplinary procedures, financial rewards or formal feedback.

Studies that have carried out research in this area have found that the consequences imposed by managers on direct-care staff, positive or negative, can have an influence on what staff subsequently do.

Cherniss (1986) observed the work of supervisors and their interactions with staff and found that their behaviour could be classified as falling into a number of categories, for example, providing direction, feedback and information. Thus the behaviour of the manager might be seen to act as both antecedent and consequence in supporting and reinforcing appropriate behaviour from staff. Directives from mangers provide an antecedent by promoting standards of care and performance, whereas positive feedback from managers concerning staff member's actions can serve as a consequence, reinforcing good practices and subsequently high quality care. In respect to carrying out training programmes with clients with learning disabilities, staff may find themselves particularly

impeded by a manager who is un-supportive with his/her time or skills. As Orlowska points out (1992, p67), feedback from managers is often an important element in encouraging staff to use acquired skills appropriately with clients. Such feedback can act as a consequence, reinforcing enhanced performance. It can also act as an antecedent by instructing, or training staff exactly how to carry out a task.

The studies and research reviewed below tend to examine consequences rather than antecedents as a means of improving staff performance. The use of antecedents is an issue more fully examined in regard to the use of training strategies which was reviewed earlier in this chapter.

An early study of the effect of management contingencies on levels of staff/client interaction was conducted by Montegar, Reid, Madsen and Ewell (1981). They demonstrated that when supervisors showed approval of staff for interacting with clients the levels of staff/client interaction increased dramatically.

Miller and Lewin (1980) conducted a critical review of both training programmes (antecedent) and management procedures (consequences) for direct-care staff. They found in respect to management strategies that the use of money (Katz, Johnson and Gelford, 1972; Pommer and Streedback, 1974; Pomerleua, Bobrove and Smith, 1973) trading stamps (Hollander and Plutchik, 1972; Hollander, Plutchik and Horner, 1973) feedback (Panyan, Boozer and Morris, 1970; Quilitch; 1975) public posting (Greene, Willis, Levy and Bailey, 1978) and lottery systems (Iwata, Bailey, Brown, Foshee and Alpern; 1976) have been most successful when used to reinforce staff behaviour. The authors observed several deficiencies in the studies reviewed, however. These included the fact that alterations in staff behaviour do not necessarily lead to subsequent changes in client behaviour, something that was also noted in regard to staff training (Anderson, 1987) and the issue of maintenance of altered staff behaviour post the introduction of management strategies was insufficiently addressed.

Feldman and Dalrymple (1984) in a review of the literature appertaining to management strategies and improving staff performance found that not only were particular antecedents more influential in achieving certain desirable behaviours, but also that specific rewards, or

positive contingencies, were more likely to be effective in bringing about the desired outcome. The authors suggest that,

'Antecedent management strategies (e.g.. memos, instructions, assignments) do not usually work as well as provision of consequences' (p337).

They also found from their review of the literature, that although few studies have looked at the effectiveness of different rewards, those that have, found that 'tangible rewards' were more effective means of influencing behaviour than were feedback methods such as praise or approval (see Pomerleau et al., 1973 ; Pommer and Streedbeck, 1974 : Patterson et al., 1976).

Burdett and Milne (1985) conducted an exploratory study into what might influence staff use of behaviour therapy with clients. They found in particular that feedback from *supervisors*, the support of other staff and training received in-service were important whereas staffing levels, work routines and time constraints were not. This study indicates the possible influence that management contingencies may have for the adoption of certain client-centred work objectives by staff when compared with other strategies.

Repp, Felce and deKock (1987) in a review of management techniques and their effect on staff behaviour concluded that the use of money as a contingent led to desired increases in staff/client interactions although maintenance was an issue (Pommer and Streedback, 1974). Public posting of staff performance had some success especially when combined with other methods (Patterson et.al, 1976;Coles and Blunden, 1981). Verbal feedback was not always successful in terms of maintaining and generalising behaviour whereas self-recording by staff of their own behaviour showed an increase in staff/client interactions (Burg.et.al, 1979) and a decrease in staff/staff interactions (Burgio, Whitman and Reid, (1983).

Risley and Favell (1979) commented that one difficulty is that most supervisors in services receive no formal in-service training in how to supervise. Managers in short do not learn how or why to monitor staff and give feedback, or where to go for advice when problems occur. This implies that senior staff may be engaging in a practice of applying inappropriate consequences for correct or incorrect behaviour from staff. Further, many senior staff may fail to establish any system of rewards or punishments by which to define the direct-care role. Ziarnik and Bernstein (1982: p109) suggest that staff may have the

skills required but the reinforcement of poor performance may maintain low levels of desired staff behaviour. Obviously this will affect the way staff care for clients. This is demonstrated in a study by Harmatz (1973). Observations were taken of staff behaviour in a school for children with learning disabilities. The findings were that the non-child related tasks, such as housekeeping, tended to be more visible to superiors and this affected the amount of time staff spent in performing them. Harmatz suggested that child related behavioural goals should be made highly discernible for staff and staff should be rewarded for the accomplishment of those goals.

Abraham et.al. (1991) found that managers were more likely to engage in administrative behaviours than in spending time interacting with clients and staff. This suggests that in some work situations the opportunities for direct-care staff to receive feedback from supervisors may be limited. This may have repercussions on the ability of staff, therefore, to carry out their work effectively. Mansell et al. (1987) suggested that creating too many similar status management posts invariably leads to conflict between less senior staff and a consequent lack of contact with more senior management personnel who tend to over-indulge in administration at the expense of interaction with staff and clients. In a very early piece of research on mental handicap hospitals, Jones (1975) found that senior nursing staff on certain wards often avoided contact, as much as possible, both with patients with learning disabilities and with staff on the wards (p102).

Green and Reid (1991) studied directors of residential facilities for learning disabilities and their attempts to reinforce the work of their direct-care staff. All of the respondents used feedback as a means of encouraging performance and most felt it was effective to a greater or lesser extent. This finding suggests that perhaps the most significant behaviour managers engage in, and which is most likely to support staff in their work, is that of supplying information and communication about the efficacy of an individuals work. Indeed, much of the interpersonal interaction between a staff member and a manager is likely to be related to aspects of the former's work. Communication regarding how successful, or otherwise, an employee is in regard to their work with a learning disabled client is likely to affect both how they feel about the job, i.e. their motivation, and their future actions, i.e. their performance.

Managers, or supervisors, may therefore, provide a vital source of instrumental support for the worker in meeting the various demands made of him/her. The physical presence of a supervisor, or manager, and the skills they possess may also be significant for staff in achieving an outcome for a client. For example, Woods and Cullen (1983) in their review of the determinants of staff behaviour in long-term services for persons with a learning disability found that often the existence of a senior figure monitoring performance and feeding back omissions to staff, resulted in procedures such as toileting, being carried out more diligently by staff (p13). What is interesting to note is that Woods and Cullen suggest that positive encouragement from supervisors may not have been as significant in staff performance as the employees' perceptions of the consequences of non-activity. One can see, therefore, that high levels of quality performance, and perhaps a greater calibre of care, may not necessarily be the result of increased motivation on the part of direct-care staff. Rather it may be a reflection of the power that a manager exerts. Certainly some studies, e.g. Hatton and Emerson (1993), have found that high levels of job satisfaction amongst direct-care workers are related to correspondingly high levels of support from supervisors. One should be aware, however, of the type of support which supervisors offer and the fact that satisfaction with one's job does not necessarily relate to improvements in performance.

It would appear that the position of an individual within the work hierarchy correspondingly affects their access to formal contingencies.

The social status of those in positions of influence in services for people with learning disabilities may mirror wider inequalities in society and may reflect a class bias. Those at the bottom of the hierarchy are apt to wield the least influence and control not only by virtue of their occupational position, but also because of their social status. Baumeister and Zaharia (1987, p256) suggest from unpublished findings that many direct-care employees feel that their work has a 'negative prestige'. This might indicate that direct-care workers feel themselves to be under-valued. It is not unfeasible, therefore, that such employees experience low levels of occupational control and autonomy. Morris (1969) for example, in an early study found that nursing and ancillary staff were often excluded from decision-making and expected to perform tasks by their superiors that they themselves found demeaning and which they felt reduced their status relative to medical specialists. Lakin and Bruninks (1981) suggested in a study of the occupational stability of direct-care

staff in services for people with learning disabilities, that half of their basic-care respondents admitted to feelings of distrust towards administrators and were unhappy with the decision-making process. In a study of staff recruitment and retention Larson, Lakin and Bruinicks (1992) found that workers in the study felt a lack of respect for their position and the authors note that 'although direct support workers constitute a substantial majority of the developmental disabilities workforce, they do not have professional status, and they have the least power and visibility among all workers in the field' (p36).

Cherniss and Equatios (1978) found in a study that staff working in learning disabled programmes had comparatively less control over their work compared to other professionals, even though they desired more influence. Such findings do suggest that perhaps when staff lack power and authority in a service they begin to feel distanced from their work. The consequences are detrimental not only for the individual, but for the service as a whole. The concentration of power in key persons, for example, managers, can mean that employees further down the work hierarchy become frustrated, unconfident and ultimately unable to take decisions. This is bound to affect levels of motivation and ultimately performance. Pearlin (1967) has commented that,

'inherent in an hierarchical arrangement is the unequal distribution of opportunities to decide on and initiate actions, whether one's own or others. By its system of authority – that is, the distribution of rights to influence the actions of others – an organisation separates its members to varying degrees from decisions regarding their activities' (p112).

In services where decision-making and power is dispersed throughout the hierarchy there may be greater opportunity for the direct-care worker to identify with their work and to gain access to the formal contingencies that operate in a system. Several studies have shown that the decentralisation of decision-making has resulted in a positive impact on staff behaviour (Burgio, Whitman and Reid, 1983) and more client-oriented care practices (Holland, 1973: Tizard et.al. 1972). Conversely less dispersal of decision-making has been found to be associated with lower levels of job satisfaction (Cherniss and Egnatios, 1978a and 1978b). MacEachron, Zober and Fein (1985) in a study of three measures of quality of work life (job design, influence in decision-making and management leadership style) found that only influence in decision-making affected the actual performance of staff. These results may well be an indication that if staff in services have a better sense of identity with their work they may be able to administer a greater quality of care. Raynes

et.al. (1977) suggest that the less rules staff feel constrained by and the more they are involved in decision-making, the greater perhaps their overall commitment (p575).

Raynes, Pratt and Roses (1979) attempted to directly measure the relationship between managers ('building heads' p123) and quality of care. They found that the degree of centralisation of decision-making by managers was associated with differences in quality of care as measured by the Revised Resident Management Practices Scale (RRMP). They also found using the same measure that greater contact with professionals was related to more institutional types of care. Also more contact between building heads and unit managers and between building heads and shifts was associated with more individualised care. This finding is interesting as it suggests that actual contact with upper managers can have positive results in terms of the quality of care received by residents. Overall at the level of building heads organisational variables were associated with differences in scores on the RRMP but not on a measure of staff/client interaction, which was the Informative Speech Index. This was in contrast to the measurement of organisational variables at the direct-care staff level where a relationship was more likely to occur with the Informative Speech Index but not the RRMP. This result appears to suggest that upper managers have more impact on overall aspects of resident care but less influence over the more intense features of activity, which are measured by level of client engagement. This result is hardly surprising as upper managers are likely to have less actual contact with clients but are more likely to be involved in general policy-making that determines general features of the kind of care administered.

Allen, Pahl and Quine (1990) in a study of direct-care staff in community and hospital settings, questioned respondents as to the problems they faced and who was responsible for them. In the hospital setting, management were seen as creating problems such as that of requiring excessive paperwork (p73) and were largely seen as generally responsible for the difficulties that staff faced. In the community, although management were not seen as presenting a problem themselves, staff did apportion the majority of the responsibility for problems encountered in work to the management. In a breakdown of how responsibility was apportioned, however, both community and hospital staff identified more distant management structures, such as the district health authority, as accountable for low morale.

All of the above findings suggest that the ways in which managers themselves perform their job may have subsequent repercussions for those they manage. Poor leadership styles and a lack of face-to-face contact, may lead to direct-care staff feeling both isolated and lacking the necessary and proper directives to enable them to undertake the tasks demanded of them by their work. A member of staff, for example, who is experiencing problems with an aggressive client, could find themselves restricted in terms of successfully decreasing such behaviours if their manager is unavailable, refuses to observe the behaviours demonstrated by the client, or if he, or she, simply gives inappropriate advice.

The findings of studies of formal contingencies seem to suggest that these can have a pronounced impact on the ways in which direct-care staff work with clients. It would appear that managers in facilities for persons with a learning disability are important in the imposition of formal contingencies and this is particularly so in relation to the provision of feedback. It also seems that the hierarchy that exists within the residential structure is important in explaining who has access to formal contingencies and decision-making, both of which can have an impact on the ways in which direct-care staff perform.

Overall it would appear that the formal social system does have an impact on what staff do. In particular research conducted appears to indicate that the goals and rules that an establishment operates can influence performance but it appears more difficult to ascertain the effects of training. The existence of formal contingencies does seem to influence the subsequent behaviour of direct-care staff although consequences appear to be more important than antecedents. The residential hierarchy also appears to be important in understanding both who has access to formal contingencies and how the influence of staff over decision-making can affect what they do.

Although it would appear that the formal social system does affect performance many authors have suggested that the influence of the *informal social system* may be equally important. (see the work of Goffman, 1961; Morris; 1969; Jones, 1975). Several studies reviewed in the previous sections have hinted at the possibility that informal factors present in the workplace may compromise the effectiveness of formal contingencies. These include whether or not the person who can impose a formal contingency is present

or absent from the workplace, the expectations which others in the workplace have of direct-care staff, the informal contingencies which they might bring to bear and the beliefs and expectations which the staff member themselves have about their work. The latter two points indicate that formal contingencies can only be effective if staff recognise them as important and if the existence of other more influential yet informal contingencies, such as co-worker approval, are absent.

It is important to note that studies of the formal process of inputs into the residential system are important but they fail to provide adequate or sufficient explanation. Such studies cannot enlighten one as to the impact that others present within the workplace may have on the work which staff do or on the care of clients. Research into the existence of an informal social system might provide information on how staff perceive their work, how they absorb the expectations of others, be they formal or informal, into their working practices and how subtle informal rules and practices may sabotage client oriented job performance by staff. Let us now turn to examine the informal social system and research that has attempted to evaluate its impact on the residential care environment.

The informal social system.

The informal social system can be characterized as those aspects of a service that are not defined by the formal organisation. That is those areas or practices which are not written down or guided by policy but rather develop between members of a service as they undertake their work. The informal rules or norms that form part of the informal social system are apt to be conventions, although all people present in the work environment do not necessarily hold them. In being informal these rules may, at times, directly contradict the formal policies and practices of a service and indeed may even contravene legal and ethical boundaries. More likely, however, they are inclined to be a set of variable and ill-defined beliefs that have developed over time. Such beliefs are likely to include expectations as to the role of the direct care worker. Hastings (1995, p298) has suggested that there may be two levels of influence which the informal culture has on staff. Staff may obtain advice from experienced colleagues and thus learn about 'unwritten' ways of working in particular services. Secondly the above practices and other actions will be encouraged or discouraged through powerful social contingencies, for example, acceptance

in the group or assistance in difficult situations (see Cambridge, 1998, p21) For example, a group of direct-care workers could have established a norm that none of them will report minor acts of violence against them by a client. The group will probably not have sat down and decided this - more likely it will have evolved from a general desire to cut down on the cumbersome paperwork involved in reporting violence. A co-worker new to the service who begins logging every minor violent offence is inclined of be informed by other direct-care workers not to bother, even though this is directly contradictory to what has been asked of them by persons such as managers. If the individual worker persists in logging behaviours this may undermine established patterns of working and threaten to increase their own workload. Thus the new member of staff is flouting the informal expectations of others in the work environment and as a result may be subjected to punitive measures such as being ignored by colleagues. This may then encourage the worker to redefine their expectations in line with the majority.

This example provides an illustration of the two main components that constitute the informal social system - the *subculture* that exists in a workplace and the process of *socialisation* that a new employee undergoes on entering a service. These two components might affect the behaviour that a new direct-care worker displays. More importantly, however, the example demonstrates that certain *reference groups* within the workplace, such as one's colleagues, may constitute an important part of the informal social system. As such their expectations, and the contingencies associated with them, might operate apart from the formal social system and at points counteract the expectations held by others who support it, such as managers,

The reality which exists in probably any service for people with learning disabilities is that the informal and formal systems coexist and interact with each other on a daily basis and are not, as may have been implied, separate entities. Individuals with whom direct-care staff come into contact, and indeed staff themselves, inhabit both worlds at different times and in different situations and their expectations and related consequences vary accordingly. Formal aspects of an organisation such as its rules, policies or goals may be a requirement for all direct-care staff to follow, but how these rules etc. are interpreted very much depends on specific people in the workplace. Moreover it also depends on how strong the consequences are for not adopting particular behaviours as established by those

with an interest in the formal organisation of a service. If, for example, policies, goals and rules are vague with intangible consequences for staff then it may be more likely that informal standards of behaviour associated with perhaps one's colleagues predominate. In certain circumstances however informal cultures or groups can support the expectations and standards set by those people associated with the formal system.

There are of course certain difficulties associated with attempting to identify the existence of an elusive informal system and more particularly the rewards and sanctions that it offers to staff. One may also discover that many services for people with learning disabilities do not have a strong informal system with definite expected behaviour patterns for staff. Rather, relationships between those persons who constitute the informal system may be of a conflicting or antagonistic nature and staff may be more inclined to gain both positive and negative rewards from becoming part of one opposing group rather than another. A good example of this is seen where opposite shifts develop separate and contrasting loyalties. Once again, however, this situation is more likely to develop where staff have weak definitions of appropriate behaviour which are not backed up with corresponding contingencies from those in positions of power.

Let us now turn to examine the components of the informal social system and how they may affect staff interactions with clients.

Subcultures

Earlier in the chapter it was suggested that research on the formal social system did not sufficiently consider the impact which informal influences may have on the way staff work with clients. In particular, research on formal aspects of the work environment can ignore the impact that others present in residential care establishments can have on staff performance. In order to look in more detail at how informal influences operate one needs to consider the existence of a subculture.

It has been suggested that the expectations of co-workers may have a subtle effect on both the motivation and performance of other direct-care workers. Reid and Whitman (1983) for example, felt that interactions between peers could have a negative influence on direct-care employees at the same level by decreasing the amount of work they perform. As Orlowska suggests (1992, p78) a 'staff subculture' can exist which exerts a range of influences on employees. A subculture is a collection of norms and values which a group shares. In terms of a subculture that exists between employees and their peers, the important point is the position such groups adopt in relation to more formal organisational rules. The very fact that a phenomenon is referred to as a subculture indicates that norms and values established within it are often in direct conflict to those held by an organisations' authority. Thus one can presume that workers whose role becomes defined by a subculture will be liable to experience varying degrees of conflict with the expectations held by other groups within a service. Such conflict is especially likely to decrease the quality of staff performance.

The term subculture has been referred to in a negative context in which group norms, values and expectations develop independently and in conflict to those of the formal organisation. Subcultures are particularly liable to develop amongst direct-care employees who operate at the same level. Close working relationships between colleagues, however, are not necessarily detrimental and a subculture will probably only develop if the expectations of those in authority are in direct opposition to those held by workers themselves. Small-scale services can develop cohesive expectations in which workers at all levels are in agreement. Zaharia and Baumeister (1978b, p258) for example, felt that small work groups can produce interpersonal cohesiveness in which there is support between supervisors and co-workers and into which new workers are quickly assimilated. Thus, one can suggest that close working relationships may give rise to the development of shared expectations. Harmony between levels in a service as to the roles and duties which each position should adopt are likely of allow support networks to become operative with managers providing both representation, resources and socio-emotional assistance to their direct-care workers. Role harmony for the direct-care employee is an undoubted aid, therefore, in meeting the demands made of them in the course of their work.

Turner (1973) describes a subculture as 'a distinctive set of meanings shared by a group of people whose forms of behaviour differ to some extent from those of wider society'. Such

a concept is significant for an examination of how the expectations of others may affect the performance of direct-care workers. If an employee becomes aligned to a particular group and comes to share their collective norms then they become part of a subculture that to a large extent guides their beliefs and behaviours. This is particularly relevant in respect to the influence that co-workers have on each other. A new employee, and particularly one who does not hold a distinctive set of beliefs, is likely to be introduced into a peer group and will quickly be confronted with shared meanings and with accepted ways of carrying out tasks. If direct-care workers have formed a distinct subculture, their shared meanings and norms of behaviour are likely to conflict in a number of ways with those advocated by the service within which they operate. If the individual succumbs to the influence of the subculture and adopts its expectations as their own, it is likely that performance will be affected. For example, if a group norm that exists amongst colleagues at work is to sit down and have a cup of tea when coming on duty, even though clients' programmes are expected to commence at that time, then it is probable that a new employee might conform to colleagues' expectations. Subsequently these staff will not provide the quality of care expected of them by others in the service. Thus, it is important to consider the less obvious features of an interaction when enquiring into interpersonal relationships and their effect on direct-care staff. One has to uncover the differing norms that may exist in the work place and, more importantly, whose meanings and expectations an individual employee shares.

If evidence of a subculture can be found to exist research should then consider the mechanism by which that subculture comes to influence the employee and his/her subsequent behaviour. In short the ways in which a staff member is *socialised* into a certain way of thinking and acting.

Socialisation

If certain groups, such as co-workers, become an important source of reward or coercion for a member of staff then the possibility exists that by adopting the expected norms or standards of group behaviour he or she may be acting in ways that jeopardise the behaviour expected of them by others such as managers. Unless more powerful sanctions or rewards

are offered to influence the worker to act in manner that goes against the expectations of the group then it is likely that this alternative subculture will dictate the role of direct-care staff in a service. It may well be that any new staff who enter a service will then be 'socialised' into adopting these alternative forms of behaviour. Routines may well become established in a service which have emanated from the predominant group in the workplace and which then govern the behaviour of existing and potential staff members despite, in some circumstances, being against good standards of practice or resulting in poor quality of care. Thaw and Wolfe (1986) describe an example of how a new employee is socialised into established, if undesirable care practices,

'The new employee watches closely as the veteran attendant interacts with clients and runs the routines. Modelling by senior staff can be negative at times. To illustrate, the first day on the job for one new employee was filled with such modelling incidents. In the living area, he was told that no client was to sit on the staff's table. The penalty for doing so was a loud reprimand. Having watched other staff yell at clients for this trespass, the new employee understood that he had better start following the 'procedure' (p93)'.

This example demonstrates how a new staff entrant to a service can be quickly influenced, or socialised, to act in a manner acceptable to those co-workers who may have been in the job some time. It is likely that a new member of staff will adopt such procedures for a number of reasons. The first is that there may be no obvious negative consequences emanating from others, such as managers, for behaving in a manner which is detrimental to the client. The second reason is that a new and perhaps inexperienced member of staff is in a less powerful position to that of existing staff and therefore fears the consequences, such as rejection from the group, from non-compliance with their standards of behaviour. The third reason is that by following, or copying the actions of other staff the new staff member will gain their praise and maybe acceptance into the group that for many is a powerful positive reward.

Hastings (1995) interviewed staff in units for people with severe learning disabilities and challenging behaviour and found that they learned much about their work from existing staff. Respondents said that they did not begin their induction process until several weeks into their employment and that meant that they had already become practised in the ways

of established staff. This research not only indicates how potentially powerful a subculture might be but also how quickly a staff member can become socialised into alternative ways of working.

The notions of subcultures and of socialisation indicate the importance that a range of 'others' present in the workplace may have for staff and the ways in which they perform. In particular the idea of the existence of an informal social system indicates that the expectations which others have of the role of direct-care staff can be internalised by the individual staff member and come to form part of their own perception of what they should do. These subtle informal influences may undermine or in some cases even support high levels of active support with persons who have a learning disability. Let us now turn to examine the notion of reference groups in order to understand the affect that others may have on staff behaviour.

Reference Groups

The ways in which expectations influence staff's own perceptions and behaviours are an important theoretical concern. To understand how an individual interprets and acts on a situation we have to consider how a person internalises the perceptions of others. Drawing on both organisational psychology and sociological literature, the concept of 'reference groups' may provide a particularly pertinent theoretical explanation.

Cooley (1912) felt that one's self-concept is influenced by others beliefs and thoughts about him/her. Mead (1934) stressed, meanwhile, the encompassment of social processes in the forming of the self, in that when a person engages in an interpersonal interaction he, or she, takes into consideration, both the roles and the beliefs of others and adjusts their own perceptions accordingly. In short, a person is constantly re-interpreting and re-formulating their own self-perceptions as a result of their contact with others.

'Reference groups' refers to the values held by significant others with whom the individual may interact (Shibutani, 1962, p128). The individual refers to these persons as a means of re-evaluating their own expectations and behaviours. As Shibutani suggests,

'Deliberately, intuitively, or unconsciously, each person performs for some kind of audience; in the drama of life conduct is oriented toward certain people whose judgement is deemed important' (p129).

Such theories as described above imply that the groups that surround the direct-care worker may provide important sources of referral. In each interaction the worker considers the values of the other and internalises significant aspects of their expectations. The worker's own perceptions, and indeed behaviours, may be altered accordingly if the group, or person, with whom he/she interacts, holds values of great importance. These values, however, will be associated correspondingly with certain consequences or contingencies that likewise may alter the person's perceptions and behaviours. The contingencies that persons can use to persuade others of the importance of their values or expectations differ in their severity, their nature and their appeal. For example, reference groups such as co-workers may be able to bring informal consequences to bear in order to persuade an individual to act in a certain manner. These consequences may include those of a positive nature such as being liked or respected or making the individual feel part of the group or those of a negative nature such as criticism, ostracism or rejection. If the person concerned values being part of a group of co-workers then the consequences associated with this group's expectations of the role of direct-care worker will have a great deal of poignancy for them. If we think of a further example, managers may form part of another reference group for the worker but the consequences that they may impose on the worker in order to persuade them to act or think in a certain way will be likely to be of a more formal nature. These are the formal contingencies mentioned in the previous section on the formal social system.

To summarise such consequences may include those of a positive nature such as access to training or promotion prospects or even an increase in pay or those of a negative nature such as disciplinary measures, demotion or threat of job loss. These consequences will be of a more powerful nature reflecting the position which managers hold in the

organisational structure but nevertheless their impact on individual members of staff may still depend on whether the values they reinforce appeal to the worker themselves. This is not only to refer to the status of the others involved, it is also to elude to the part which the individual places on the values presented to him/her. If, for example, the direct-care worker considers that social workers are insignificant and intrusive then they are unlikely to accord their values much respect. This is despite the fact that generally social workers might be considered to possess a high social status by virtue of their professional title. What is of interest in terms of performance is how the individual worker internalises the values, expectations and related contingencies of all significant reference groups in the work situation, which ones they prioritise and incorporate into their own beliefs and how they subsequently affect their behaviour.

As Shibutani (1962) suggests, sources of conflict often occur when an individuals expectations and role related behaviours are oriented towards a number of audiences (p137). Often an individual may become part of a shared set of beliefs which are contradictory to those held by other groups in the workplace, and it is probable that individuals who do not have pronounced personal opinions regarding their role are likely to gravitate towards those who are either strongest or most supportive. Powerful collective group norms may give rise to a 'subculture' as mentioned earlier.

In terms of the theory of groups one can comprehend why certain people exert a more profound influence on an employee if we acknowledge not only the status of the persons involved, but also the needs that such persons may fulfil for the individual worker. As Shaw suggests (1971) within a group there are mutual influences occurring between each member. Influence is apt to be strongest, however, when a group fulfils the needs of its constituent members (see Smith et.al., 1982, p140). If one relates this notion to the relationships that exist between co-workers, the individual employee is liable to conform to the expectations of his/her colleagues if such expectations help him/her to fulfil the demands made of them. Schutz (1966) suggests two types of compatibility that can operate between the needs of group members. Interchange compatibility is when the needs of all members of the group are similar and originator compatibility is when the needs of one member supplement the need of others. Thus, one might surmise that an individual

employee is likely to take on the expectations of a group if their needs are similar to that of the majority. Also it might be suggested that an employee will be more likely to take on the expectations of a group if the consequences that follow for doing so are either of such a positive nature to make it desirable to do so or of such a negative nature that to not meet group expectations would make working with colleagues very uncomfortable.

Group expectations may influence a worker by a variety of means. The theoretical literature on group formation provides some interesting insights into how members of a group interact and exert influence over each other. Tuckman (1965) for example, identified stages in the development of a group that commenced with its formation. Through conflict there then develops shared norms which then subsequently influence the performance of group members. More interesting is how established groups exert pressure on non-members to conform. Deutsch and Gerrard (1955) identify two types of pressure which established group members exercise on potential entrants. Informational pressure is when the individual receives communication from the group about the validity of his/her beliefs. If the expectations of the majority are significantly different to those of the individual then that employee may subsequently alter their beliefs. Normative pressure is when a member wishes to be accepted by others and therefore changes their deviant expectations in order to achieve this.

Reference groups may influence the expectations and behaviours of individuals with whom members interact by primitive measures. Willis and Hollander (1964) suggested that individuals confronted with group norms and values can conform, rebel, or choose to distance themselves from these expectations. The direction they decide to take may be the result, not of individual preference, but rather of the consequences that may result from each option. For example, conforming to group expectations could lead to significant rewards for the worker, whereas rebellion, or independence could lead to various punishments which are executed by the group (French and Raven, 1959). In a work situation these punishments might take the form of withholding information or declining communication.

Huczynski and Buchanan (1991) describe the power that a group has to influence potential members in accord with its own expectations and behaviours as having three dimensions:

'The positive and negative sanctions (rewards and punishments) the group has at its disposal. The degree to which individual members value their membership of the group and its accompanying rewards (e.g.. recognition, status, prestige, financial inducements) The member's desire to avoid negative sanctions such as social and physical punishments or expulsion from the group.' (p220)

One can surmise that in fact these dimensions of power can be applied to any relationship that a direct-care worker has with others in his/her workplace as a definition of how these others might influence an individual's behaviour by the application of consequences.

A range of persons are present in the residential workplace each of whom will have a set of beliefs as to what they expect of a direct-care worker. These persons form part of the social environment and interact with the direct-care worker to a greater or lesser extent. Landesman-Dwyer and Knowles (1987) suggest that in residential facilities interpersonal interaction occurs within a wide social environment. This social environment includes not only the immediate work base, but also those arenas which both staff and clients come into contact during the course of their day, week etc., for example, day services and leisure opportunities. Landesman-Dwyer and Knowles suggest that the degree of contact and intimacy between individuals within a social environment decreases as the network widens. Direct-care staff, therefore, can expect to have the lowest contact and least intense interactions with, for example, ordinary citizens in the community. This model is highly significant as it suggests that certain groups of persons with whom the employee comes into contact with most frequently are likely to be the basis of the closest and most intimate relationships. It could be, therefore, that these persons are likely to have the most influence on the direct-care worker in comparison with other groups, such as the relatives of clients, with whom the employee has perhaps infrequent contact. This is also probable because the persons with whom the worker has the most consistent and frequent contact are likely to produce the most obvious and powerful contingencies for the worker, whether positive or negative.

The behaviour of direct-care staff may not simply be the result of the actions of others around them, it may also relate to how the worker perceives the expectations of those others. Expectations can exert a more subtle influence as the staff member evaluates the importance of other's opinions and accords them priority in how to perform a task. It may be that an individual is more likely to accord with the expectations of a certain person, or group of persons, if they correspond with their own perceptions, or if they perceive those expectations to be of value to them. This infers a cognitive-behavioural approach to the topic of interpersonal interaction and direct-care staff. Contact between humans is not based purely on responses to each other's behaviour, it is also made up of individual interpretations by the persons involved of other's feelings, needs and expectations. In a work situation the motivation to perform a task is likely, therefore, to be influenced by our perceptions about a person and what they expect from an interaction. It is also influenced by whether such an interaction will fulfil our own expectations and needs.

Direct-care staff operate within services that are defined, not only by themselves, but also by a whole host of significant others. Various persons, including the worker, hold expectations as to what the role of the direct-care worker should be. These include co-workers, managers, clients and their families, therapists, social workers etc. Occasionally some of these expectations will coincide but more frequently various expectations associated with certain persons will be likely to conflict. Expectations held will originate from various sources and will be expressed behaviourally both through actions and verbal exchanges. These expectations may be incorporated into the worker's own beliefs and act as directives for their behaviour. The ability of persons in the work environment to *influence* the direct-care worker's behaviour is dependent on their capacity to exact *consequences*. Indeed this forms the basis of the concept of influence.

It is likely that a worker will accord with those expectations that carry the strongest contingencies (which incidentally can be either positive or negative). For example, a manager who stipulates that they want a programme conducted in a certain way might have the *power* to administer either *rewards* (e.g. praise, promotion etc.) or *punishments* (e.g. criticism, disciplinary procedures etc.) if staff fail to follow their directives. This is an area that was reviewed in the section on formal contingencies. Whether staff behave in the way the manager desires will depend on the strength of the contingencies associated with his or her expectations, the existence of more powerful contingencies or reinforcers related to

other's expectations (for example, conducting the programme may bring criticism or ostracism from colleagues) and the degree to which the manager's expectations and their related contingencies accord with the worker's own. For example, if an individual does not desire promotion then they are unlikely to be influenced by a manager's association of career enhancement with behaving in a certain way.

There is a further separate and important point that has been alluded to but which should be expanded on. This is that there may not be a direct-link between the contingencies which supposedly operate in the workplace and what effect they have on staff. For example, there may be a belief amongst staff that a manager will punish them if they fail to adopt a certain care practice. Investigation may reveal, however, that management have never imposed such consequences and may deny intention to. The important point is what staff *believe* to be the case. Staff may be working on assumptions based on myth rather than fact. Nevertheless what people believe to be the truth can be as powerful a determinant of what they subsequently do as the truth itself. Long established services for people with learning disabilities which are attempting to bring about change, particularly in the current climate, may encounter a vast folklore of beliefs held by staff about a range of persons with whom they are in contact. The attitudes of staff about a whole range of people and their expectations of direct-care may prove significant determinants of behaviour.

It is apparent from this discussion that the work environment offers a complex arena in which it is possible for a great number of contingencies to be in operation at the same time although emanating from a number of sources. It is likely that those individuals who occupy positions of power within an organisation will have the capacity to exact greater negative consequences and more positive rewards for correct behaviour. Many contingencies and reinforcers may, however, be difficult to identify as they are hidden sources of reward and punishment. If these hidden consequences are powerful they may cause the worker to act in ways that are contrary to how others think they should behave. Thus, it is not difficult to envisage a situation in which a psychologist devises a set of guidelines for dealing with a client's challenging behaviour. Staff, however, do not follow these guidelines as the client's parents disagree with them. As regular visitors to the residential unit the parents criticise and complain to the manager if they witness staff following the psychologist's guidelines. The manager fails to support the staff. The end result is that staff fear the complaints of parents more than they desire praise from the

psychologist or even the possible change in the client's behaviour. One can see, therefore, that the interplay of contingencies can act to sabotage staff behaviour that may be in the best interests of the clients and incidentally of the staff themselves in the sense that a person''s challenging behaviour might decrease. One might also suggest that contingencies are not only associated with a certain person's expectations but also with the situation in which behaviour occurs. For example, if the psychologist visited the unit staff might suddenly start following their guidelines simply because they do not wish to be reprimanded by the psychologist for non-compliance. Contingencies are also related to the sphere of influence in which legitimacy can be conferred. For example, it is appropriate for a psychologist to reprimand for non-implementation of a guideline but not perhaps for the tardiness of a staff member. Thus, the specific *persons* who hold certain expectations, the *position of power* that they hold in an organisation and the *situation* in which they wield that power all affect the nature and relevancy of contingencies related to their expectations.

It would appear from this discussion that if one is attempting to change staff behaviour then a thorough examination and understanding of the work environment and culture is imperative. The introduction of new programmes or ways of working may prove unsuccessful if there has been a neglect of the contingencies and expectations that currently operate in the workplace and which of them are most salient for staff. The best thought-out, well-constructed plans and policies could be destroyed if one hasn't considered which persons are associated with the implementation of these policies and the consequences that they can bring to bear if they are to be followed. Successful change is dependent on introducing operational contingencies which workers can recognise and which they accord greater value to than others that exist in the workplace. This is not to say that issues such as staff training, management procedures, job satisfaction and an increase in resources etc. may not be significant influences on the way staff behave. Rather the suggestion is that important explanations that contribute to our understanding of the role of direct-care staff in services for people with learning disabilities may have been somewhat overlooked.

Unfortunately there have been relatively few studies undertaken in the field of learning disabilities that have specifically attempted to ascertain either the existence of expectations in the workplace, the contingencies related to different persons expectations or how successful certain contingencies are in influencing direct-care staff's performance. Those

studies that have looked at the role of interpersonal relationships in services have often focused on a specific person or group of persons and how they particularly affect the role or behaviour of direct-care staff. Few studies have considered whether, or how, a range of persons influence or reinforce the standards of care expected of staff. Several studies have acknowledged the importance of formal contingencies related to person expectations in defining the work situation of direct-care staff and these have been reviewed in the section examining the formal social system. Very few studies have, however, considered the impact of informal contingencies or of the influence which others expectations besides those of managers might have on direct-care staff. Those studies, which have, are reviewed below.

Several studies have attempted to examine how, in particular the behaviours of co-workers, or the absence of them, act as a constraining factor inhibiting qualitative interaction with clients. Gunzburg (1989) felt that increasing direct-care staff numbers would lead to more interactions between themselves, rather than with clients, or as he saw it more opportunities for gossiping. Such a speculation may indicate that employees are likely to engage in their own pursuits if more staff are available, rather than utilising the opportunity of an increase in human resources for the benefit of their clients with learning disabilities. Indeed Hile and Walbran (1991) found in their study of staff-resident interactions that an increase in staff numbers present led to a subsequent escalation in the time spent by staff in their own leisure activities. It may be, therefore, that one cannot assume a simple correlation between staff numbers and the support that co-workers give to each other. More staff may lead to stronger inter-staff relations, which can lead to high morale, but not necessarily to an increase in the motivation to increase time spent with clients.

Orlowska et.al (1991) in a comparative study of staff-staff and staff-resident interactions, found that overall, staff were more likely to communicate with each other than with residents. When staff worked alone with a client, however, they interacted with them more frequently. Orlowska et.al, point out, however, that interaction between staff was very often of a work related nature (p16). This is a significant finding. It may well be that interpersonal interaction between staff is not necessarily detrimental to the quality of care provided, as often communication itself may serve to provide information pertinent to the job, or to the clients. This finding is, nonetheless, from an isolated piece of research and

there is a general lack of similar studies that have investigated the nature of staffs' behaviours towards each other.

One study that has hinted at the possible contingencies that co-workers might impose on other direct-care staff is that conducted by Beail (1988). In a study of staff activities the author suggested that,

'The category which accounts for the largest proportion of time was staff-staff interaction. This suggests that staff find each other more rewarding to interact with than the children. This is perhaps not surprising as the behavioural repertoires of the children living on the ward are very limited (p173)'. It would appear, therefore, that the positive rewards from working with other staff are greater than those from clients.

Thaw and Wolfe (1986) provide several examples of the contingencies that co-workers can bring to bear on an errant colleague through the system of 'blackballing'. Informal means are used against a co-worker who deviates from staff norms.

'Any violation of the units' established rules and norms is met by rejection of the offender. The blackball victim may find that his peers have seen to it that his mid-morning coffee breaks 'inadvertently' get delayed by last minute 'have to be done' tasks. Or the victim finds that her coffee break is missed entirely. Lunches may become lonely times. Less desirable work assignments may become frequent. Temporary transfers to unfamiliar units (a typically unpleasant experience) may become common.'(p109). Allen, Chinsky and Viet (1974) also detail how new members of staff are socialised into the norms of a staff group by the use of certain consequences.

Thus, one can surmise from this small range of studies that the behaviours of co-workers may act in a detrimental way by inhibiting appropriate actions on behalf of individual staff members. The behaviours, which staff engage in with each other, however, and the ways in which these behaviours support or constrain the performance and motivation of individual care workers, is by no means clear. Direct-care staff in services for people with learning disabilities, and particularly those who work with individuals with severe learning disabilities, behavioural problems or physical handicaps, are frequently part of a team and the need to rely on fellow workers as a resource is often underestimated. Few researchers have examined what affect the behaviour of co-workers have on their fellow employees,

and more particularly, what part colleagues play in motivating an individual staff member, and in improving their performance.

Very little research has considered the impact that professionals may have on the behaviour of direct-care staff. Professionals such as psychologists, social workers or occupational therapists, may wield considerable power derived from their status. As such they may have very explicit influences on the work experiences of direct-care workers. In a more fundamental sense, however, the resources, assistance and feedback they provide to those who care for clients with learning disabilities can determine the quality of support that such workers offer to clients. For example, a psychologist who meets a client only once and compiles a poor training programme based on that meeting, is unlikely to provide the very practical support that a staff member needs in dealing with the problems that a client presents. In short, professionals can act as an important resource for direct-care workers, but if their skills are unavailable or inadequately formulated they may constrain the abilities of staff to deal with client demands.

The presence of professionals, as well as managers, in an environment may provide an important behavioural cue, which may then influence direct-care staffs' actions. This may be the case particularly when a staff member engages in a training activity with a client. The individual worker does not, presumably, possess the same level of skills as the professional, and so the behaviours of the latter may not only instigate a particular performance from staff, they may also be an important resource for the less skilled worker to draw on. Hile and Walbran (1991) for example, found that training was 13 times more likely to occur with a client when a professional was present (p39). It could be, therefore, that the professional, who has developed a training programme, when on hand, is able to offer practical help and advice to those who carry it out. Praise and encouragement from a professional could act as a reinforcer, establishing certain patterns of behaviour from a direct-care staff member. Also likely, as mentioned previously, is the possibility that the presence of a professional suggests a particular consequence for a worker if a programme is not carried out in a particular way. Reprimands and negative feedback may, therefore, encourage a certain performance from direct-care staff.

Allen, Pahl and Quine (1990) found in their research that direct-care workers in the community did not experience problems with professionals per se, except in relation to a

shortage of their services. Such a point may be particularly salient in respect to the support that professionals can offer to direct-care staff. As moves towards community care have become more established, the demands for services, such as speech and occupational therapy have increased. Individual care plans for clients may identify a need for these services. The limited number of relevant professionals available, however, and their overall cost may mean that direct-care staff, and consequently their clients, may experience restricted access to these services. This may have direct repercussions for staff working with clients whose needs are great. The provision of these professional services may ease the burdens on staff and hence aid their ability in meeting the needs of clients. Professionals can, therefore, be a vital source of practical support for direct-care workers, not only in respect to their expertise, but also purely in relation to their immediate and physical availability.

Shotwell et. al. (1960) conducted a study into the attitudes and behaviours of various employees in a hospital for persons with a learning disability. They found that professionals rated client-related activities as of greater importance than did direct-care workers. This may suggest that role conflict is likely to develop from very fundamental expectational differences that exist between groups of people in a service for people with learning disabilities as to work priorities. Of course such role conflict as experienced by the direct-care worker could hinder their ability to perform a task adequately. This may particularly be the case if, for example, as Shotwell et.al. found, that the employee does not personally value the task assigned to their work role.

Rose (1993) in an investigation of the demands, supports and constraints which direct-care staff experience in their work discovered that professional input as a support for workers was negligible (p330). This may imply that the amount of interpersonal contact between direct-care staff and various professionals is actually so small as to make the latter's impact on the behaviours and motivations of workers difficult to evaluate.

Few authors have attempted to uncover what impact, if any, groups of persons outside of the formal organisation of the workplace, such as the families of persons with a learning disability may have on direct-care staff. Some of the most difficult conflicts occur when the expectations of families of people with learning disabilities and those of direct-care workers are at odds. Much of this conflict is likely to concern what parents feel the direct-

care workers role should be with their children. Harmony between the expectations of differing individuals can occur however if there is a compromise on both sides. Mittler (1979) although talking about the relationship between professionals and families, suggests a number of models in which the parent plays an important part in assisting the individual in their work with persons with a learning disability. In the first model the parents can act as an assistant, or as in the second model, the professional can shift roles to offer their expertise to the parent. These models are pertinent to the role of direct-care workers as they suggest the importance of sharing information and support. Communication and exchange is vital if the direct-care worker is to accurately learn of the expectations of others and to offer their own interpretations of their role. Mutual exchange of ideas and beliefs between key groups in the work environment can allow expectations to arise concerning the role of direct-care worker which are acceptable to all sides. Agreement between groups as to their expectations results in role harmony, which for the worker means a balanced view of their tasks in which their own beliefs are incorporated. Thus key groups, such as parents, can act as a support providing resources such as information and socio-emotional assistance during difficult periods with clients. In achieving role harmony the individual is not only likely to feel motivated but is also apt to perform to a higher standard with the backing and assistance of those around them.

Unfortunately there seems to be negligible research that has considered how the behaviour of key groups, such as professional and families, may affect the motivation and performance of direct-care staff. As such one can only suggest a number of possible ways in which interpersonal interaction between such groups and direct-care staff may influence the latter's attitudes and behaviour. Certainly the families of clients with learning disabilities can create considerable practical demands, particularly if the amount of contact they seek from a staff member is large. Also if such contact is of a negative nature, e.g. difficult requests, animosity, actual interference etc. then such behaviour by relatives of clients with learning disabilities is likely to considerably constrain a staff member from achieving an objective. Of course how much of an affect the family member is likely to have on the direct-care staffs' own behaviour and motivation is liable to be influenced by the status and power that that person can bring to bear.

There are a small number of studies that have attempted to consider the impact that a *range* of expectations present in the work environment may have on the behaviour of direct-care staff and the ways in which they work with clients with learning disabilities.

Jay's (1979) survey of residential care workers attempted to evaluate how staff viewed others in the workplace. The survey questioned respondents on the amount of contact they had with workers such as occupational centre staff, teachers and professionals. Questions were also asked about the amount of support these persons offered, the aims these persons represented and the value of the services such persons provided. Overall findings were that nursing and hostel staff desired closer working relationships with the majority of specified professional staff. Respondents indicated, however, that they were dissatisfied with the degree of contact they had with various professionals and also with the amount of influence that they, as staff, could exercise within these relationships. The survey failed, however, to analyse in any depth the expectations that staff believe others have of them. Although there is some analysis of issues of support the survey did not develop notions of how different persons' views of the direct-care role affect subsequent staff performance. The contingencies, or consequences, which persons in the work environment can bring to bear, were also not investigated.

One study that has attempted to provide a comprehensive explanation of the contingencies that exist in the workplace is that undertaken by Murphy (1983, unpublished). Murphy asked 21 staff to rank a variety of tasks for their importance relevant to a number of criteria. These criteria were - the consequences to themselves as staff if they did not perform that duty, the importance to career prospects, the importance to job satisfaction, and finally, the importance to residents. Staff were also asked why they performed each of these duties and what the consequences would be of failing to perform these duties.

Murphy's findings were that in terms of the consequences for staff if they did not perform a task, nursing procedures, administrative duties and personal care tasks (whether performed by staff themselves or merely supervised by them), were ranked more highly. Tasks such as 'Staff time' and 'Domestic duties normally performed by nursing staff' were ranked as least important. In terms of career prospects staff ranked administration duties, nursing procedures, talking to visiting staff and following training programmes as most important. Once again staff time and domestic duties normally performed by nursing staff

were ranked as least important. In terms of job satisfaction talking to residents, leisure activities with residents, following client training programmes and spending time away from the workplace were all ranked as more important. Nursing procedures, administrative duties, and domestic duties normally performed by nursing staff and staff time were ranked as least important. In terms of importance to residents, staff ranked talking to residents, leisure activity with residents and training programmes as most important. Administrative duties, talking to visiting staff, domestic duties normally performed by nursing staff and staff time were ranked as of least important.

When staff were asked why they performed each of the specified duties, staff responded differently in respect to the task under consideration. For example, in the case of administrative duties' staff felt that they performed them because they were an essential duty, whereas in respect to domestic duties they were performed to aid the smooth running of the ward. When staff were asked what the consequences would be for them for failing to perform each of the tasks' answers fell into seven categories. For example, in the case of administrative duties staff feared disciplinary action for failing to perform a task, whereas in the case of talking to residents staff felt that the consequence to themselves would be loss of job satisfaction. These responses thus give an indication of the types of negative contingencies that operate in the workplace.

Murphy's conclusions were that that although establishments stated the development of clients as their primary objective, the consequences for staff for failing to follow this goal are not as severe as those for failing to perform other aspects of their work. Also the tasks that staff feel to be important to both themselves and residents are also those that are stated as of importance to the establishment but, however, these are not the duties which carry the most serious consequences for non-performance. Also the duties which staff might relate to management's perceptions of importance, that is those which would aid staff's career prospects, correspond with those for which there are the most serious consequences for non-performance, but these are not the duties which necessarily reflect the development of residents. Murphy also notes that certain duties can have an element of positive reinforcement in that staff might undertake them to avoid negative consequences. Murphy's suggestion for future research is to consider the role of management in contributing to the confusion experienced by direct-care staff (in this case nurses) when carrying out their duties.

As this section has illustrated although a lot of theoretical material exists which describes in detail the informal social system very little research has attempted to look at the possible affect that aspects of the informal social system at work may have on staff performance in services for persons with a learning disability. Research that seeks to determine why staff performance is poor may, therefore, have overlooked possibly one of the more significant explanations of behaviour. The expectations that others in the workplace have of direct-care staff and the contingencies that they might impose in accordance with those expectations, may have an affect on the performance of direct-care staff. It is not easy, however, as the previous discussion has perhaps indicated, to disentangle the formal and informal social systems which operate in the workplace. Although it is straightforward to observe the existence of formal goals or rules that are written down it is less easy to assess the impact of contingencies even when they are formal. The ways in which staff receive feedback from managers is not always easily observable. The informal contingencies and consequences that others in the workplace impose are even less likely to be readily scrutinized. Also any person who inhabits the residential environment could potentially have access to both formal and informal contingencies and impose them accordingly.

As one can see limited research has examined the impact of other persons who work or operate in learning disability services on the performance of direct-care staff. Much of the research that has been undertaken has tended to focus on the influence of particular persons, such as managers or has examined only the impact of certain aspects of that person's role rather than others such as their attitudes or experience. Also no study appears to consider the variable influence that a range of persons may have on staff. Some of the research, however, gives us important insights into how others in services behave and how this *may* affect the behaviour of direct-care staff.

A range of process studies have been reviewed including those that consider the impact of the formal social system on staff behaviour and those that undertake to examine the informal social system. In particular the notion of the influence of others expectations on direct-care staff behaviour highlights an important area that further research on staff performance should consider. Infact the deficits apparent in this area of research suggest

that the idea of others and their related expectations should form a key part of any future study which seeks to explain why staff fail to engage with clients.

The notion of process does appear to be important in explaining why staff do what they do and in particular why they fail to behave in certain ways. The influence of the informal social system and in particular the effect that the expectations and consequences, which a range of persons may have on staff performance, is an area of research that should be further explored.

Throughout the literature reviewed thus far reference has been made to the effects that staff behaviour has on outcomes for clients. It is important, therefore, in the final section on outputs to briefly review evidence of the relationship between improved staff performance and increases in client engagement or ability.

The Effect of Staff Performance on Clients with a Learning Disability: Output Studies

The notion of output forms the last part of a theoretical system, which was described earlier in this chapter (see Appendix (a)). *Output* refers to the idea that a system produces a product once it has processed the inputs that were fed into it. In a residential care system outputs can refer to outcomes for client such as changes in behaviour or ability. For staff, outcomes can also refer to changes in behaviour but often mean job satisfaction, stress, burnout or desire to leave their present employment. There are also outcomes for the service itself such as organisational problems of high staff turnover or low levels of recruitment although these are harder to define and to relate to problems of poor staff performance. Of course an output can become an input. In the case of increases in the ability of clients with a learning disability any change can be viewed as a characteristic of a client that might then affect how staff work with them. The earlier section on the influence of client characteristics on staff performance dealt with this issue and there appeared to be significant evidence that the ability of clients and the degree of maladaptive or adaptive behaviour they exhibit has an effect on the ways in which direct-care staff interact with them.

The next section looks in more detail at the relationship between what staff do and outcomes for clients. The basis of the argument contained in this thesis is that staff performance is poor and certain factors contribute to this. It is also the case, however, that staff performance is important because there is evidence of a link between staff behaviour and client outcomes. Research in this area is important not least because it raises the issue of whether improvements in what staff do leads to subsequent enhancements in client ability or decreases in undesirable behaviour. Of course a greater level of staff interaction with clients is a desirable end in itself if only for the sake of a better quality of life. Isolation and lack of human contact is not a sought-after outcome regardless of whether high levels of engagement lead to client progress. One cannot make the assumption based on this premise, however, that the more time staff spend with clients the better the outcomes for individual residents. This is a conjecture that can only be answered by appropriate research.

There is an indication in some studies that the type of care administered may produce differential effects in terms of progress for clients. King et. al. (1971) for example, found that children with learning disabilities receiving resident oriented care exhibited more advanced feeding and speech behaviours, thus suggesting that interpersonal interaction between client and staff is a two-way process. Clients who are co-operative and who progress quickly towards set objectives may be more inclined to encourage flexible, individualised care from staff. This may be due to the motivational effects that such rapid client achievements may engender in staff. This in turn may foster yet more progress and independence on the part of the client.

Studies reviewed in previous sections have demonstrated that programmes intent on changing client behaviour have failed and various reasons have been given for this, many, but not all of which, are related to the behaviours of direct-care staff. For example, clients may be unlikely to alter their behaviour because staff lack basic knowledge and understanding of client programmes (Emerson and Emerson, 1987); staff disagree with the client programmes being used and therefore do not apply them (Hastings and Remington, 1993); staff fail to follow up and maintain their own behaviour even if client behaviour has improved (Woods and Cullen, 1983) and there is both a lack of staff training and a failure to put in place consequences for staff who fail to carry out client programmes (Cullari and

Ferguson, 1981). Despite all of these indications as to the importance which staff behaviour has for alterations in client behaviour there is very little research that demonstrates the validity of this assumption (Woods and Cullen, 1983). Indeed Anderson notes in his review of staff training that nearly half of the studies failed to report the effects of staff training on outcomes for clients. Anderson also said that 'although substantial changes in staff behaviour frequently were reported, one should never assume that such changes necessarily produced desirable changes in resident behaviour' (p102). Despite this lack of research there are several studies that indicate the importance of staff performance for the levels of client activity and engagement and their behaviour adaptive or otherwise.

In regard to changes in client behaviour resulting from changes in staff behaviour the results of various studies suggest an association. Schnike and Wong (1977) examined the effects of behaviour modification training on both staff and clients with a learning disability. The results suggested that as desirable behaviour from staff increased there was also a decrease in undesirable behaviours and an increase in appropriate behaviours from clients. Page, Iwata and Reid (1982) also found that when supervisors were trained in how to improve direct-care staff performance not only did care staff behaviour improve but so did the behaviours of clients with a learning disability. Repp, Barton and Brulle (1982) looked at the effect of staff behaviour on client behaviour in several institutions. Although they found that the most prevalent situation between staff and clients was one of 'no instruction' when given instructions persons with severe and profound learning disabilities responded to nearly all of them although non-verbal instructions did yield a higher response rate. MacEachon, Zober and Fein, (1985) found in a study that there was a strong relationship between the practice of resident-oriented management practices and client behaviour prompting the authors to comment that 'staff members play a critical role in effective treatment' (p386). Brusca, Nieminen, Carter and Repp (1989) looked at the effect which staff behaviour might have on the specific behaviours of children with multiple disabilities. They found that although levels of staff-client interaction were low appropriate staff behaviour that was directed away from punishment resulted in a lowering of client stereotyped behaviour. Felce, Repp, Thomas, Ager and Blunden (1991) looked at the relationship between numbers of clients and staff and the levels of both interaction and adaptive functioning of clients. They found the highest levels of adaptive behaviour when the staff/client ratio was small. These small groups also recorded the highest levels of

interaction from staff thus suggesting a link between staff attention and adaptive functioning. All of these findings indicate that improvements in staff performance can have an effect on client behaviour.

Hastings and Remington (1994) reviewed studies which specifically looked at staff behaviour and its effect on challenging behaviours exhibited by persons with a learning disability. They found a large amount of evidence to support the view that staff behaviour can indeed affect both the types and rate of challenging behaviour. For example, the desire for staff attention can result in challenging behaviours which demand more staff time (Duker et.al.,1989; Emerson, Beasley, Offord and Mansell, 1992). Also lack of staff attention or interaction can result in behaviours which function as self-stimulation, for example stereotypy (Lovass et al., 1987). Observational studies suggest that generally staff fail to respond to either appropriate or inappropriate behaviours (Warren and Mondy, 1971; Felce et.al., 1987) although there is a disparity with the findings of staff self-report studies which show high levels of staff response (Maurice and Trudel, 1982; Intagliata, Rinck and Clakins, 1986). Studies of staff use of behaviour modification programmes with clients generally show successful outcomes (Blair, 1992). Overall the authors conclude that'

'staff's actions influence clients' challenging behaviours, which in turn may have an effect on staff behaviour. Secondly, staff behaviour in services for people with learning disabilities has been found to be generally counter-habilitative in that it is likely to contribute to the development and maintenance of challenging behaviours in clients' (p18). This review of studies highlights the ways in which staff behaviour has an impact on the variety and levels of challenging behaviour exhibited by clients.

Felce, de Kock and Repp (1986) compared institutional and community care and found that staff behaviour differed in each setting. In small homes residents received higher levels of staff interactions and more positive verbal consequences. In institutional settings not only were there less staff/client interactions but also there were very few attempts to consequate client behaviour. In terms of client behaviour those found in small-scale community care were more highly engaged in a range of activities. When comparing the same subject in both settings the authors found an association between 'staff antecedents and appropriate client engagement'. This study suggests that changes in staff performance

(i.e. a greater application of appropriate responses) may be related to increases in the quality of client experience and engagement.

Saxby, Felce, Harman and Repp (1988) in a study of staff/client interactions in community placements discovered that a decrease in client engagement was matched with a corresponding deterioration in staff assistance. The findings of more recent studies have supplied evidence to substantiate the assumption that the support of staff or lack of it has an effect on client activity (Mansell, 1994; Jones et. al. 1999; Felce et.al., 2000; Mansell et. al.2002 ; Mansell et.al., 2002).

This brief review of the research does seem to indicate that an improvement in the performance of direct-care staff does translate into enhanced outcomes for clients. Also it is apparent that actions by staff or lack of assistance can have detrimental effects on clients. It seems important based on these findings to, therefore, include a measure of client outcomes in future research on staff performance as a means of understanding the impact that staff behaviour can have on client behaviour.

What are the overall findings of previous research?

The literature review presented in this chapter attempted to use a theoretical model to examine the main influences on staff behaviour in establishments for persons with a learning disability. The main findings appear to be that certain variables can have an influence on what staff do. These variables include the functional ability of clients and the degree of maladaptive behaviour they exhibit; direct-care staff experience, length of service, attitude, age, gender and level of stress; the size of the establishment in terms of both numbers of clients and client to staff ratio; the goals and rules which an establishment adopts and the formal and informal contingencies which operate within a residential environment. A further finding supported by research is that the ways in which staff interact with clients does appear to affect outcomes for clients both in terms of engagement and adaptive behaviour.

In a review of the research on staff performance evidence suggests that the use of a theoretical model not only also allows one to review previous research so as to ascertain possible effects on behaviour but it also emphasises the importance of viewing the residential environment as a system in which each part is related to each other. Indeed Hatton and Emerson (1995) noted a bias in previous research towards an examination of outcomes for both staff and clients and suggest that the adoption of a dynamic model means an acknowledgement that each part of a service can affect each other, an acceptance that factors which affect staff performance are subject to change, an examination of areas of research previously overlooked and the consideration that 'staff performance may feed back to affect a number of factors that are salient variables in the determination of staff performance' (p336).

The study described in the remainder of this thesis builds on the findings of previous research in an attempt to provide a comprehensive examination of what affects staff performance in residential care for persons with a learning disability. The study looks at a range of factors which interrelate and which may combine to provide a more thorough explanation of why many direct-care staff fail to adequately support clients with a learning disability. Ultimately the study seeks to explain what leads to low levels of client engagement. Staff support is included as one of a number of possible variables affecting client engagement.

The study is divided into 3 sections each of which is described in chapters 3-5. Chapter 2 is a description of the method used in this study.

Chapter 3 looks at two different providers of residential services for persons with a learning disability and conducts an investigation into whether there are significant differences between them in regard to a range of variables that may help to explain differences in both client outcomes and levels of active support by staff. Expected differences between the two types of service providers were not observed, however, and the remaining two chapters use the data obtained as one sample for the purposes of further research.

Chapter 4 attempts to examine the influence that both the formal and informal social system may have on staff behaviour. It looks at the contingencies that staff believe are

related to the performance or non-performance of their work and also at who they believe enforces such contingencies in regard to which particular tasks. It is an attempt to uncover the expectations that staff believe others in the workplace have of them. The findings suggest that certain persons and tasks are considered by staff to be related to certain contingencies some of which are more important than others. This finding may help to explain why staff behave in a certain way.

Chapter 5 examines to what extent, if any, a whole range of variables including the formal and informal, might singularly or in combination help to explain firstly active support by staff and secondly levels of client engagement. The research looks at outcomes for clients and seeks to find an explanation for them. The findings presented in this chapter appear to suggest that in regard to active support only one variable, the adaptive behaviour of clients was significant in predicting variation. For client engagement none of the variables included was able to explain any variation found.

The final chapter leads a discussion into the findings of the study and considers both their contribution to this field of research and their implications for future studies.

Chapter 2: Method.

The previous chapter reviewed a range of literature that looked at issues of staff performance and client engagement in services for persons with a learning disability. It set out a theoretical perspective through which to examine direct-care staff performance in residential establishments for persons with a learning disability. Residential services can be viewed in terms of a system (see Appendix (a)). Inputs into the system are fixed features of the residential environment such as the characteristics of staff, clients and the facility itself. These inputs are then *processed* to produce *outputs*, which in the case of residential care for persons with a learning disability can be seen as outcomes for clients such as increases in ability, decreases in maladaptive behaviour or improved levels of engagement.

The general conclusions from the review of literature appeared to be that some services in the community are poor and that the quality of some client experiences are also essentially mediocre. Many of the studies reviewed examined staff/client interaction as an aspect of quality of care. The findings appeared to indicate that a range of factors influence the way staff behave towards clients. Certain areas of potential interest, such as the effect of the informal social system, were seen as important but were not thoroughly explored by previous research. The basis of the study described in this thesis is founded on those factors which previous authors have found to affect staff/client interaction and those variables that have yet to be included in a study of staff performance. The study described in this thesis also examines beliefs which direct-care staff have about other person's expectations of their work. This is an attempt to gauge whether the perceived influence of others can affect staff/client interaction.

The following chapter introduces the method used in the study.

The study described sets out to compare the provision of services for persons with a learning disability offered by two different organisations. A comparative study was chosen for a specific reason. It was felt that clear differences were likely to exist between good-quality and poor-quality providers of residential care for persons with a learning disability. These differences would then form the basis for a comparative examination of factors that contribute to staff/client interaction and ultimately client engagement.

The two organisations selected for the purposes of the study were chosen to represent different types of service provider. These were a National Health Service Trust (hereafter known as the 'Trust') and a Charitable Association (hereafter known as the 'Charity'). These two organisations were chosen for various reasons. The Charity in particular had a reputation for higher quality and would therefore provide a good basis for comparison with other poor performing services. The Trust had been the source of earlier studies, which suggested that its services were fairly typical in the sense that they were not viewed as amongst high quality providers. The two organisations involved in this study were both amenable to research being undertaken and provided access under the terms of the study described in this study. That is the theoretical and methodological issues were explained to and accepted by the relevant persons in each organisation.

It was expected that research would find that persons with a learning disability resident in services provided by the Charity would achieve better outcomes and be in receipt of higher levels of staff interaction. Unfortunately analysis revealed that not only were levels of staff/client interaction generally poor, but also very few significant differences existed between the two types of provision. Thus the differences that the study had expected to find from the outset between the two organisations were not evident. These findings and a discussion are presented in Chapter 3.

This finding led to the conclusion that a comparative study was not possible and that therefore all of the datum collected should be treated as one sample in terms of further analysis. An analysis was then undertaken of the expectations that others present in the work environment have of direct-care staff. It was argued in Chapter 1 that the informal social system within the residential home was likely to be an important influence on what staff do, and that a useful focus for further study were staff beliefs about the consequences that would follow from different courses of action they took. The opportunity to examine this issue in more detail was taken in this study. The method used in this part of the study is described in this chapter. The results obtained and discussions of the findings are contained in Chapter 4.

Chapter 5 presents the results of regression analysis which attempts to uncover which features of service organisation and delivery, including client variables, staff variables,

service variables and levels of staff/client interaction, might be responsible for client engagement in meaningful activity. In short multivariate techniques were used to explore the relationship between variables. The method used for the regression analysis is described in this chapter.

Measures

i) Settings: The two organisations and the services they provided.

The organisation known as the 'Trust' represented *all* residential services provided by a NHS Trust in South-East England for persons with a learning disability (8 institutional and 10 'ordinary' houses in the community). The organisation known as the 'Charity' represented 21 services provided by a voluntary organisation for persons with a learning disability. 16 of these services were in the South-East of England and 5 were in the North. As was indicated in the introduction to this chapter these two organisations were chosen on the basis of their suitability for the research in question. Details of the facilities included in this study are contained in Table 2a below

Table 2a: Descriptive details of the facilities included in this study

	The 'Trust'	**The 'Charity'**	**Total (Percentage)**
Length of time facility manager in post			
12 months or less	10	11	53.8%
13 to 72 months inclusive	8	9	43.6%
73 months or more	0	1	2.56%
Age of facility			
12 months or less	4	2	15.4%
13 to 72 months inclusive	3	15	46.2%
73 months or more	11	4	38.5%
Number of direct-care staff employed			
6 staff or less employed	4	5	23.1%
7-11 staff inclusive	7	13	51.3%
12 staff or more	6	12	46.2%
Number of clients resident in a facility			
3 clients or less	3	5	20.6%
4 to 6 clients inclusive	10	13	59%
7 clients or more	5	3	20.6%

The 'Trust' was an organisation that was considered to be typical of health service provision for persons with learning disabilities in England. Although over half of the

residential services were established in the community many persons with a learning disability were still resident in hospital settings. These services were institutional in nature with some centralised amenities on site such as catering, cleaning and administration. These services often followed a specific time schedule with clients. It appeared that some practices such as bathing and toileting routines had been in operation for many years. Those clients still resident in three of the hospital services were due to move on to community placements at the time of research although later correspondence revealed that in fact this did not happen for some years after the completion of research.

Persons who had previously worked in 'Trust' hospital settings often moved on alongside clients to staff community services. The hospital and community services were both managed at the house level by a registered nurse. They were also accountable to the same upper management structure, which was part of the NHS Trust, and as such was doctor led. These factors meant that even community services were perhaps more institutional in nature than comparative services offered by other providers. This was reflected in the fact that both staff and residents retained some of the practices used in the hospital settings such as medical procedures, administrative practices, and routines such as break-times for staff. Services in the community were not particularly remarkable in that clients did not appear to be especially active in the home or local community. Community houses were often pleasantly decorated and attempts at homeliness had been made. The services themselves, however, were often placed in outlying areas of a community such as at the edge of a village. This made integration by clients into the local community perhaps more difficult to achieve.

Services in the community provided by the 'Charity' were more disparate in nature. The majority of services examined in the study were in town or city centre settings, which potentially made integration easier. House managers were not required to be a registered nurse and discussion suggested that their qualifications and experience were varied.

The standard of décor in Charity houses varied greatly with some providing a very homely feel whilst others were somewhat shoddy. All of the houses were ordinary houses in well established residential areas and none had been purpose built. Some of the services did not appear to be fully operational and permanent staffing was an issue with some of the houses in large city centres. Routines in the houses seemed to be specific to the service itself and

there did not appear to be any evidence of overall 'practices' as there were in 'Trust' services. Each community house did appear to be individual in character and the way that the house was organised was different in each case.

It should be noted at this point prior to the presentation of the method used in this research that a two-stage pilot study was conducted with direct-care staff in services for persons with a learning disability provided by organisations unconnected with either the 'Trust' or the 'Charity' as described in this study. This pilot study was carried out in order to develop some of the measures used in the main study. As reference is sometimes made to the pilot study in this and subsequent chapters details of this research are contained in Appendix 1.

An ethical review was sought of the study proposed. This included issues relating to the consent of all potential participants. Documentation relating to ethical considerations are found in Appendix (c).

ii) Participants

1. Clients

106 subjects from the 'Trust' were included in the study and 102 subjects from the Charity. The sample included all clients present in a facility at the time of the study. Details of the subjects included are contained in Table 2b below.

Table 2b: Descriptive details of the clients included in this study

	The 'Trust'	**The 'Charity'**	**Total (percentage)**
Gender			
Male	70	46	55.8%
Female	36	56	44.2%
Age (missing n=22 10.6%)			
30 years and under	19	22	19.7%
31 to 65 years inclusive	69	59	61.5%
66 years and over	10	7	8.2%

2. Staff

Datum was collected from direct-care staff employed in the two organisations. 143 staff out of a total of 340 direct-care staff were interviewed (42.06%). The sample was one of convenience in that staff included in the study were all those present during a visit by the researcher. All staff that were approached agreed to take part in the study. Numbers of staff interviewed in each organisation were 70 out of a total of 172 from the 'Trust' (40.70%) and 73 out of a total of 168 (43.45%) from the 'Charity'.

Staff interviewed were asked to provide details of their gender, the length of time they had been employed in the service, their intention to leave the service, whether they desired promotion and whether their employment status was full or part-time. These details are described in Table 2c below.

Table 2c: Descriptive details of direct-care staff included in this study

	The 'Trust'	**The 'Charity'**	**Total (percentage)**
Gender			
Male	18	18	25.2%
Female	52	55	74.8%
Length of Employment			
One year or less	39	30	48.3%
13-24 months	11	14	17.5%
25-60 months	8	22	21%
61 months or more	12	7	13.3%
Promotion			
Yes	35	39	51.8%
No	35	34	48.3%
Intention to Leave			
Yes	7	27	23.8%
No	63	46	76.2%
Employment status (full or part-time).			
Full-time	62	61	86%
Part-time	8	12	14%

Respondents were not asked for their age, ethnic origin or for details of qualifications held for a number of reasons. In the case of ethnicity it was discovered in pilot study discussions that staff were reluctant to provide these details. They felt that it would enable managers to identify them in some way and thus responses could subsequently be directly attributed to them. Similar feelings were expressed in relation to age. The nature of the interview used with staff in the main study and the questions it contained were very sensitive in that staff were being asked for their opinions of persons they worked with

including managers. It was felt, therefore, that not requiring respondents to provide details of their age or ethnicity might lead them to be more honest in their answers. Some facilities used in the study were very small and therefore to ask a respondent for their age or ethnic origin might lead them to feel that their responses could be attributed to them personally despite assurances of confidentiality (i.e. names were not requested).

The pilot study highlighted a particular difficulty in relation to requesting details from respondents as to the qualifications they hold. As there is no national qualification which direct-care workers have to hold to obtain employment in this field staff often have either a range of accredited skills, one particular skill or indeed sometimes none at all. This makes it difficult to use qualifications as a basis for comparison. It was decided for this reason to omit questions which asked staff directly about their qualifications.

iii) Measurement

1. Clients

a. Demographics

Details were requested as to the client's age and gender. The reason why these particular variables were included was based on the findings of earlier research reviewed in Chapter 1. It was felt that the results of such studies indicated which client characteristics had previously been found to prohibit active support and client engagement (Raynes, Pratt and Roses, 1979; McCormick, 1975; Grant and Moores, 1977; Hile and Walbran, 1991; Conroy and Bradley; 1985).

b. Behaviour Development Survey

The Behaviour Development Survey (Conroy, 1980; Conroy and Bradley, 1982; Conroy et.al. 1985) is a measure of the adaptive and maladaptive behaviour exhibited by clients with a learning disability. The measure is a questionnaire that asks a respondent to rate various aspects of a client's ability and challenging behaviour (see Appendix 2). The questionnaire is divided into various items, which the respondent rates according to the

scales provided. A total score for each of adaptive and maladaptive behaviour is achieved by adding individual item scores together. The range of total scores for adaptive behaviour is from a minimum of 23 to maximum174). A total score for maladaptive behaviour can range from minimum 14 to maximum 56. The BDS data was rescaled as per Conroy (1982) for use in the regression analysis (range 1-151). The measure was completed by the client's key-worker or by a member of staff who knew the client particularly well.

The BDS is derived from the most widely used measure of adaptive and maladaptive behaviour in the field of learning disabilities (Nihria, Foster, Leland and Shellness, 1974), it is easy to administer and has been widely used in other research in the United States and England. In particular several authors have used the BDS to examine issues appertaining to the transition from hospital to community living (Raynes, Wright, Sheill and Pettipher, !994, Raynes, Sumpton and Flynn, 1987, Conroy, 1980, Conroy et al, 1985)

Copies of the BDS were sent to each facility for each individual client currently living at that facility. A covering letter was also sent which described the measure and how to administer it. It was requested that the client's key-worker, or if the key-worker system was not in operation, the person who best knew the client should complete the measure. The researcher followed up difficulties of administration in regard to the BDS during subsequent visits to the facility.

Inter-interviewee reliability information was not collected for this measure. There were a number of reasons for this decision. As indicated above the staff member who best knew the client and their abilities completed each measure. In most cases the respondent was usually the client's key-worker. Measures were sent to each house prior to a visit by the researcher. The difficulty was in finding two or more staff members in a facility whose knowledge of the client was similarly comprehensive. An additional problem was that given the number of clients with learning disabilities included in the study the problem of following up uncompleted measures so as to obtain the maximum sample would be doubled if more than one respondent was involved. Obviously due to the large number of clients included in this study it was not possible for the author to observe and complete BDS measures for each client for reliability purposes. The complexity of the questions contained in the BDS would have required extensive observation over a long course of time to obtain sufficient knowledge of the client. Thus, it was decided for these reasons

not to collect reliability information. As the instrument used is an established one it was decided to compare the results with those of other surveys that have utilised the Behaviour Development Survey so as to obtain a measure of validity.

2. Staff

a. Demographics

Staff were asked to provide details relating to gender, length of time they had worked in the facility, intention to leave, hours worked (full or part-time) and desire for promotion. Earlier research reviewed in Chapter 1 suggested that these demographic variables might affect the ways in which staff work with clients (Raynes, Pratt and Roses, 1979, Allen, Pahl and Quine).

b. Malaise Inventory

This measure is a widely used indicator of stress experienced at work and was devised by Maslach and Jackson (1978; 1981)

Respondents were asked to answer 'yes' or 'no' to a series of 24 questions concerning their health. A copy of the Malaise Inventory is contained in Appendix 2. A total indication of stress experienced by a respondent is achieved by counting the number of 'yes' responses. Thus, the total score for the malaise inventory is between 0-24 with 0 indicating no stress and 24 indicating very high stress.

This measure has been widely used in the field of learning disability research and particularly by authors who have examined the role of direct-care workers (Rose, 1993; Allen, Pahl and Quine, 1990).

This measure was chosen for use in this study mainly because it was easy and quick to administer. Also, as indicated above, this measure has been employed by a number of other authors looking at issues of service quality and therefore comparisons can be made.

The Malaise Inventory was administered to respondents in an interview conducted by the author.

Inter-rater agreement reliability datum was not collected for this measure. This was because the scores recorded using this method were intended to be indicative of the stress experienced by a respondent at that particular point in time. The level of stress experienced by a respondent could vary widely on a particular day and therefore to repeat the measure at a later date was not feasible as the two scores would not be comparable. Also the information requested using this method was highly personal and therefore it was felt inadvisable for additional researchers to request the same information for reliability purposes. Pilot study discussions revealed that some respondents were apprehensive about divulging such personal information to a third party regardless of the degree of confidentiality assured. To insure the maximum number of responses the information was gathered on one occasion by the author only.

c. Contingency Questionnaire

The instrument used was one developed by the author based on the work of Murphy (1983). The contingency questionnaire measures the activities direct-care staff are involved in, how they perform these activities, the consequences for performing or not performing a task and who imposes any consequences identified.

The measure is a semi-structured questionnaire and was completed by interviewing individual staff. The contingency questionnaire was developed by informally observing staff in their work environment and identifying which tasks they actually performed. Observations also revealed the range of persons whom staff come into contact with in their daily working life.

Murphy (1983, unpublished) used a similar, though much simpler methodology, in his study of the consequences for learning disability nursing staff of performing or not performing aspects of their work. The measure developed for use in this study, although drawing on the work of Murphy, is somewhat different in that it looks at a wider range of tasks and examines whether certain consequences are seen as being related to particular

audiences. This measure is therefore original and was further developed based on the findings of the first stage of a pilot study (Appendix 1). It has not been used before in any other study although it was preliminarily tested in a pilot study to gauge its suitability for use and ease of administration.

The author felt that the methodology used by Murphy was interesting although untested. As the aim of this part of the study was to elicit the views of staff as to who or what influences what they do at work, this type of methodology appeared particularly promising. It seemed to be a possible means of determining staff beliefs about their work and the consequences for undertaking tasks in the work place.

Staff were asked if they performed an individual type of task. The questionnaire identifies 13 types of tasks that direct-care staff may or may not perform at work (see also Appendix 2 for a copy of the interview schedule). The tasks are described below:

Unit management: Tasks that involve the management and administration of a facility such as dealing with enquires or completing money orders.

Paperwork: Tasks that require written completion either on paper or computer, such as dealing with client's files, filling in daily diaries or writing reports.

Escorting: These are tasks which involve accompanying clients to various destinations as an escort, such as to the Adult Training Centre, to friends or relatives or to appointments.

Socialising: These are tasks which involve socialising with the clients or supporting them in their choice of social activities such as watching a video with them, going to the pub with them etc.

Supported personal care: These are tasks in which the direct-care workers support the client to enable them to complete personal care for themselves, for example prompting a client with advice when they are cleaning their teeth.

Personal care: These are tasks in which personal care is completed for the client without their involvement for example feeding the client or bathing them.

Supported domestic tasks: These are domestic tasks in which the direct-care worker involves the client in the domestic task, for example supporting a client to make their own meal.

Domestic tasks: These are domestic tasks that are undertaken by the direct-care worker alone rather than with the involvement of the client. These include cleaning, laundry work, cooking etc.

Advocacy: Tasks that involve representing the client and their beliefs or supporting the client to advocate their own views such as attending client reviews or reporting about the client at meetings.

Training/therapy with clients: Tasks that involve following a prescribed programme with a client for the purposes of training or therapy for example money handling, travel training or speech therapy.

Staff meetings/supervisions: Tasks that involve attending work related meetings that do not involve the client directly, for example individual supervision sessions or staff meetings.

Training: Tasks that involve the acquisition of new skills. These can be taught inside the facility but usually training is provided off-site, for example manual handling, first aid, food hygiene etc.

Non-work tasks: These are tasks which are undertaken at work but do not involve work itself, for example having a break or talking with others about non-work subjects.

If the respondent performs a task they are then asked to identify the range of specific chores that they undertake within this heading. Responses are then rated from 0-2 depending on the degree of involvement in each task. A rating of 0 indicates that the respondent is not involved in any tasks under the heading described, 1 indicates that the respondent is only involved in a limited range of tasks and 2 indicates that the respondent was involved in a great deal of this type of task. The respondent was then asked what

would occur if they failed to perform the type of task or performed it incorrectly and who imposed the consequences mentioned. Thus an example would be,

> *'Think about the kinds of domestic tasks which are undertaken with the involvement of residents – in other words when you support the residents to do it for themselves. What sort of tasks do you do like this?*
>
> *'Does anything happen to you if you don't do these tasks with residents? What would happen?'*
>
> *'Who would do this?'*

Similarly the respondent was asked what would occur if they performed the task or performed it correctly. The 14 possible categories of persons that the respondent could identify were:

Residents: persons with a learning disability living permanently in a facility.

Upper managers: Managers of a service above the level of house manager, for example regional manager or area manager.

Co-workers: Persons who are work in a service and who occupy the employment status of 'direct-care worker'.

House manager: Manager of an individual facility.

Deputy manager or senior direct-care worker: Manager who is below the rank of house manager, i.e. their deputy or a direct-care worker with management responsibilities.

Professionals: Persons employed in a professional capacity outside of the facility but who have contact with the residents via their professional status (e.g. social worker, doctor, therapist etc).

Yourself: The direct-care worker themselves

General public: Members of the public with whom the direct-care staff could come into contact at any time, for example members of the local community or shop workers.

Resident's families: Family members related to the residents in a facility and who have contact with that resident.

Workers in other services for the learning disabled: Persons who are employed in services for persons with a learning disability with whom the direct-care worker and residents have contact, for example workers in day services.

The team: This refers to all of the persons employed in a facility and thus includes co-workers, deputy managers or seniors and house managers.

Other: A person or persons not identified as belonging to any of the other categories listed.

A consequence identified but no person: This refers to when the respondent is able to distinguish a consequence but is unable to identify who might impose such a consequence.

No consequence and no person identified: This refers to when the respondent believes that no consequence would occur from anybody should they perform or fail to perform a task.

Responses were recorded free hand and later coded for analysis.

Inter-rater reliability information was collected by recording (with consent) a sample of the interviews with staff. 28 interviews out of a total of 143 were recorded (19.6%). A second researcher listened to the tapes and recorded responses freehand. The same researcher then coded these scripts for purposes of reliability.

3. Care practices and outcomes

a. Active Support

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An observational measure was adopted to obtain an overall rating of staff support given to clients. This was called the active support measure and was devised by the author and Professor J.Mansell (see Appendix 2 for a copy of this measure). This instrument was devised as an attempt to measure *overall* staff support for all clients present rather than looking at individual staff/client interaction.

The Active Support measure is divided into 15 categories. These are;

- age appropriateness of activities offered to clients
- whether activities are real or pretend
- whether a choice of activities is offered
- how demands were presented to clients
- the extent to which clients were involved in a task
- the degree of staff contact
- the level of staff assistance
- the degree to which staff speech to clients is appropriate
- the interpersonal warmth of staff to clients
- how staff react to behaviour
- staff responses to client communication
- staff management of challenging behaviour by clients
- the degree of teamwork
- whether there are opportunities for teaching
- if individual programmes are in use for each client.

An observer is asked to rate each dimension on a scale from 0-3 in accordance with descriptions provided (see Appendix 2). A total score is achieved by adding individual scores for each item. Thus, a total score could range from 0-45. Observers are also asked to rate for each item the extent to which all clients were included in the support given or withheld by staff. Observers could enter a value of ¼, ½, ¾ or 'all clients'. It was discovered, however, that observers experienced difficulty in rating the degree of active support in this way. As clients and staff were not always present for the entire observation it was difficult to accord an overall value for all clients for the entire time period. It was decided, therefore, to omit 'coverage' scores from the analysis of active support. The

Active Support measure also requests the observer to note the number of clients present during an observation period, the number of staff and the duration of the observation

The measure was devised for use in this study and had not been used prior to this other than in the small-scale pilot study where it's efficacy was tested. There appeared to be no other suitable instrument devised by another researcher that measures the specific dimensions of staff contact for a whole group of persons with a learning disability present during an observation. This measure has, however, been utilised in later studies ((Mansell, Beadle-Brown, MacDonald and Ashman, 2002 and Mansell, Elliott, Beadle-Brown, Ashman and MacDonald, 2002).

Observers were present in a facility during the course of a specific activity, which was the preparation of a meal. They were asked to observe the entirety of an activity and take notes if necessary. At the end of this activity they were then asked to complete the Active Support schedule with reference to the guidance notes provided (see Appendix 2).

Inter-rater reliability information was collected by having a second observer present who observed the same activity and coded it accordingly. Reliability datum using a second observer was collected in 7 out of the 39 facilities included in the survey (17.95%). Reliability information was also collected by observing the same activity on two separate occasions. This was so as to test the probability that observations carried out on a particular day were not typical. Reliability information using a second observation in the same facility was collected in 13 out of the 39 facilities included in the study (33.3%).

b. Client Engagement and Challenging Behaviour Schedule

This was an observational instrument devised by the author and Prof. J Mansell, which examines the individual client, their behaviour and their involvement in tasks (see Appendix 2 for a copy of the measure). The intention is to record the degree to which an individual client is engaged in a particular activity and the extent of challenging behaviour exhibited over that time-scale.

The measure is divided into 4 categories: 'engagement in meaningful activity', 'types of activities engaged in', 'the frequency of challenging behaviour' and 'the severity of challenging behaviour'. Observers were asked to rate individual client's behaviour according to the categories outlined above. Values ranged from 0 to 3 for each category.

This measure was designed for use in this study mainly to provide a quick and easy way of gauging individual engagement over the course of an activity. Although the measure had not been used previously except in a small-scale pilot study it has since been used by other researchers (Mansell, Beadle-Brown, MacDonald and Ashman, 2002 and Mansell, Elliott, Beadle-Brown, Ashman and MacDonald, 2002).

Observations were carried out during a particular activity, which was the preparation of a meal. This was the same activity as was coded by an observer for active support. Individual client behaviour was coded at the end of an observation. The observer was provided with guidelines defining each aspect of engagement (Appendix 2) to enable them to code behaviour correctly.

As with the Active Support Schedule a second observer collected reliability information in 7 out of the 39 facilities included in the survey (17.95%). Reliability information using a second observation in the same facility was collected in 13 out of the 39 facilities (33.3%).

c. Management Practices Scale and Index of Community Involvement

The Management Practices Scale and Index of Community Involvement (Pratt, Luszcz and Brown, 1980, Raynes et.al, 1979) were used to elicit a range of information about the individual facility and how it was managed on a daily basis in terms of client support. This enables analysis at the level of the facility in order to determine which management variables, if any, might affect the way direct-care staff behave towards clients with a learning disability.

The Management Practices Scale and Index of Community Involvement were administered in the form of an interview, which was completed in this study by either the manager, or the deputy manager of a facility, depending on who was responsible for it's day to day

running. The 'Management Practices Scale' asks respondents to answer questions about the daily lives of clients, for example the times of meals, facility rules, shopping etc. (see Appendix 2). The 'Management Practices Scale is further divided into 4 sub-scales. These are 'Rigidity of Routine', 'Block Treatment', 'Depersonalisation' and 'Social Distance'. Each item contained within these scales is scored from 0-2 with '0 corresponding to an exclusively "non-institutional" practice, 2 corresponding to an "institutional" practice.... and 1 corresponding to mixed or intermediate cases' (Pratt, Luszcz and Brown, 1980). A score is achieved for each sub-scale by adding item scores and a total score was obtained by adding all items. Overall scores could range from 0-74. The 'Index of Community Involvement' contains 16 items that are scored from 0-4 depending on the amount of residents who have been involved in an activity with 0 = 80-100%, 1 = 60-79%, 2 = 40-59%, 3 = 20-39% and 4=0-19%. A total score is achieved by adding the scores for all 16 items. Overall scores can range from 0-64.

The 'Management Practices Scale' and Index of Community Involvement are established measures that have been widely used to assess quality of care in residential establishments for persons with a learning disability (Raynes et al, 1994; Raynes and Sumpton, 1987; Pratt, Luszuz and Brown, 1980; Perry and Felce, 1995). These instruments were chosen because there are a standard measure that examine the practices of residential homes for persons with a learning disability. In particular they investigate the way staff support clients in their daily life. This is of particular interest to this study. The use of established instruments also enables comparison with other studies that have used the same measures.

Interviews with house managers or deputy managers were conducted during visits to each facility.

In 16 out of the 39 facilities involved in the study Management Practices and Index of Community Involvement interviews were tape-recorded for the purposes of reliability (41.03%). A second researcher was asked to listen to the tapes and code the responses according to the schedule provided (see Appendix 2 for a copy of the measure).

d. Index of Participation in Domestic Life

The 'Index of Participation in Domestic Life' or 'IPDL' (Raynes and Sumpton, 1986) is an established measure that gauges the extent to which an individual client is involved in a range of domestic activities.

The 'IPDL' contains 13 items that represent different domestic tasks (see Appendix 2 for a copy of the measure). The respondent is asked to rate an individuals involvement in each task. A rating of '2' means that the client performs a task alone or with other residents but without staff help. A rating of '1' means that a client performs a task with staff help. A rating of '0' means that a client does not perform a task. A total score is achieved by adding item scores. Item scores are summed with a range from 0-26. Scores for each facility are achieved by calculating a mean score including all individual clients scores.

The IPDL is a standard measure developed to evaluate client engagement in everyday tasks. It has been used in other studies and has been updated (Raynes et al 1994, Raynes and Sumpton, 1987, Perry and Felce, 1995). The early version of the IPDL was used in this study as a quick means of collecting datum on the everyday engagement of clients so as to compare this with information obtained by observational measures.

The IPDL was administered in an interview format and completed by the manager or deputy manager of a service. This was because they were viewed as the person with the best overall knowledge of *all* clients resident in the facility.

Inter-interviewee reliability datum was not collected for this measure. This was mainly for reasons of administration. It would have been difficult to find a person in each unit who possessed as similarly comprehensive knowledge to that of the manager or deputy manager.

e. Qualitative Observations

The author recorded general qualitative observations in each service in order to provide an overall impression of a facility that could subsequently offer detail and background to the quantitative information.

General comments as to the quality of the environment, any incidents of note and the authors overall impressions were recorded at the end of a visit to a facility.

Reliability information was not collected for this measure as the observations were confined to the author's own impression of a particular facility.

4. Facility Descriptives and Policy Schedule

a. Descriptives

Each organisation was requested to provide details of the age of a service and the length of time the current manager had been in post. The manager of a service was requested to provide details of the number of staff currently employed and the number of clients currently resident.

b. Policy

The written policy in operation in each unit was evaluated in terms of the degree to which it emphasised the active support of clients. A measure was devised by the author that coded the policy according to the dimensions of active support.

Each manager was asked to provide a copy of the facility's policy. The policy was then coded according to a rating schedule, which corresponded with the categories identified in the Active Support Schedule (see Appendix 2). There are 15 dimensions of active support ranging from age appropriateness to use of programmes (see the section above on the Active Support Measure). The policy is rated for each category from 0-3. 0 = 'The category was not mentioned', 1 = 'The category was mentioned but not in any detail', 2 = 'The category was mentioned but only in limited detail or only partially described practices to be adopted' and 3 = 'The category was mentioned in great detail and described total practices to be adopted'. A total policy score was achieved by adding individual category scores. Thus, a total score could range from 0-45.

This measure was devised for use in this study and it has not been used in any other studies except for the small-scale pilot study in which its efficacy was tested. It was felt that such a measure would provide a detailed analysis of a policy in terms of staff support. This would then allow the researcher to ascertain the possible contribution which a policy might make to levels of staff/client interaction and client engagement in an establishment.

Inter-rater reliability information was collected for this measure. A second researcher was asked to read the policy scripts and code them according to the schedules provided. Inter-rater reliability information for this measure was collected for all 39 establishments involved in the study.

Design and analysis

Data were analysed using SPSS (1988).

The first part of the study was a comparison of the services offered by two different organisations. Comparisons were made for client demographic variables, Behaviour Development Survey variables, staff demographic variables, Malaise Inventory Scores, Active Support Scores, Client Engagement Variables, Management Practices Scores, Index of Community Involvement Scores, Participation in Domestic Life Scores, Facility Descriptive Variables and Policy Scores,

Statistical analysis used to compare the two services for the variables described above were a Chi-square test when the data collected were nominal and a Mann-Whitney test when the data collected were ordinal.

The Mann-Whitney U test can be applied where the scores from the two independent samples for a particular variable can be measured on an ordinal scale. Mann-Whitney U is a non-parametric test. This means that scores are not taken from a population which necessarily has a normal distribution or which have an exact numerical difference (Siegel and Castellan, 1988), i.e., x is greater than y by the same amount. If two independent samples are to be compared and the scores are ordinal, that is, scores can be ranked in

relation to each other (i.e. greater than) then the Mann-Whitney-U test is an appropriate tool of analysis.

'When at least ordinal measurement has been achieved for the variables being studied, the Wilcoxon-Mann-Whitney test may be used to test whether two independent groups have been drawn from the same population.' (Siegal and Castellan, 1988, p128).

A chi-square statistic was calculated when the scores from the two independent samples for a particular variable were measured on a nominal scale. Chi-square is again a non-parametric test. This means that scores are not taken from a population which necessarily has a normal distribution or which have an exact numerical difference. As Siegal and Castellan suggest, 'Measurement at its weakest level exists when numbers or other symbols are used simply to classify an object, person or characteristic. When numbers or other symbols are used to identify the groups to which various objects belong, these numbers or symbols constitute a nominal or categorical scale.' A chi-square statistic is therefore a weaker non-parametric test as it measures if there is a relationship between the variables of interest rather than the results being due to chance but it can only indicate whether an association exists but not the extent of any association found.

The statistical procedures used to analyse data collected from the staff contingency questionnaires are described under the heading 'of staff'.

a. Clients

Behaviour Development Survey (BDS) questionnaires for individual clients were sent to each establishment with a covering letter. The letter gave instructions for completion and requested that the staff member who knew the client best fill out the questionnaire. Questionnaires were collected when the researcher visited the facility to conduct further tests. This enabled any problems or difficulties with the questionnaires to be explained by the researcher during a visit.

The two sub-scales of the BDS were summed and recorded separately. Scores were totalled for each client included in the survey for both adaptive behaviour and maladaptive

behaviour and the results recorded as a raw score. These scores were recoded as per Conroy et.al.1982; Conroy and Bradley,1985) for the purposes of regression analysis.

The age of clients was recorded initially as a value. Respondents were asked to code client's age by placing a tick in one of 5 categories. Each score was coded with a value of 1-5. The gender of clients was coded 1 = female, 2 = male.

b. Staff

The researcher made 1,2 or 3 visits to a facility depending on the size of the unit and whether reliability information was to be collected. All staff present during these visits were interviewed. Staff were asked by their employer to assist in supplying information and subsequently no staff member who was approached refused to be interviewed. Staff names were not requested as a number was allocated to each to maintain confidentiality. The interview schedule and prompt questions are included in Appendix 2. Prior to the main study being conducted the interview schedule was subjected to a pilot study (Appendix 1). This enabled the author to gauge, amongst other things, the length of time the schedule took to complete. It was found to take approximately an hour and this time period was replicated in the main study. 28 interviews were taped for reliability purposes (19.59%). Staff included were asked their permission to tape their responses. At the end of each interview each staff respondent in an interview format completed the 'malaise inventory'. These interviews were not taped.

Respondents were asked questions about 13 tasks (Unit management, paperwork, escorting, socialising, supported personal care, personal care, supported domestic tasks, domestic tasks, advocacy, training/therapy with clients, staff meetings/supervisions, training, non-work tasks). The questionnaire formed part of a larger interview in which staff were firstly asked to provide basic details about their employment. These responses were then coded at a later date.

As described in the section above dealing with staff measures, respondents were asked a number of questions about a range of 13 tasks which they may or may not perform as part of their employment. The questions dealt with what kinds of duties they performed under

each of the described headings, what they believed would happen if they did or didn't perform these tasks and who would impose the consequences identified. Each response for each task was coded into one of 10 categories following three dimensions strength (none, weak, strong), certainty (none, uncertain, certain) and direction (positive, negative). The categories are described and examples are described in Appendix 2 alongside a copy of the measure.

Early research suggests that consequences can reinforce behaviour (Loeber and Weisman, 1975, Reid et. al. 1989) hence the classification in this study of responses into positive and negative. The assumption is that consequences will be imposed rather than the respondent actually knowing that the effect of such a consequence might be punishing or rewarding. It is an inevitable assumption to make in a non-experimental study and this assumption is replicated in previous research including studies that observe the consequences applied to staff members and client behaviour. (e.g. Felce et. al. 1987, Warren and Mondy, 1971). Also one cannot possibly judge whether a consequence really is negative or positive for example chastisement from a staff member might actually reinforce behaviour if attention is what the person craves. For this reason consequences were assigned as positive or negative based on their face value as this is the only way of ascribing a value to a response without experiment.

The data collected in the form described were too vast and unwieldy to provide for clear analysis. Responses were combined for analysis.

Initial cross-tabulations suggested that staff responses were similar in respect to certain tasks performed and for certain audiences. It was decided, therefore to combine responses to produce four new task groupings and six new audiences. Thus tasks were recoded to produce 'administration' (unit management, paperwork, staff meetings/supervision, staff training) 'client-enabling (socialising, supported personal care, supported domestic tasks, advocacy, training/therapy with residents) 'everyday' (escorting, personal care, domestic tasks) and 'other' (non-work tasks). The audiences were recoded to produce co-workers (co-workers and team), managers (senior/deputy, manager, upper manager), professionals, residents families, yourself and other (general public, workers in other services for persons with a learning disability, other).

Combining categories of responses by recoding was considered valid because staff responses for certain groups of persons or tasks were very similar and also because new combined categories yielded a larger number of entries for analysis.

The data were combined to produce entries for strong certain consequences for each group of persons and for each group of tasks, both positive and negative if the task was and was not performed. This was achieved by recoding the data with a value of 1 if a strong certain consequence was recorded and 0 for all other entries and then aggregating the data and selecting the maximum value for both positive and negative. Four variables were created for each audience, for example in the case of residents there would be residents positive do, residents positive don't, residents negative do and residents negative don't for each of the four groups of tasks. This manipulation of the information was undertaken so as to create variables which allowed one to analyse which tasks and which audiences were related to the strongest, most certain consequences. These new variables form the basis for the analysis of the data the results of which are described in Chapter 4.

The data were then analysed in order to compare responses for different audiences in terms of the strong certain consequences for the performance and non-performance of tasks. Data was also analysed so as to investigate the effect of client adaptive behaviour on responses from staff, the effect of length of staff service on responses, the effect of team membership and service agency on responses and the examination of responses regarding consequences for the direct-care worker themselves.

Results of analysis described in Chapter 3 indicated that for many of the variables of interest there were no significant differences between organisations and therefore data were subsequently treated for purposes of this analysis as a single sample.

The statistical test Cochran's Q was used to compare the number of direct-care staff who reported consequences for different tasks and different audiences. This is a nonparametric test and it examines the possibility that related variables have the same mean. The test examines whether variables come from the same population. The Cochran Q test for k related samples provide a method for testing whether three or more matched sets of frequencies or proportions differ significantly among themselves. The matching may be

based on relevant characteristics of the different subjects or on the fact that the same subjects are used under different conditions (Siegel and Castellan, 1988).

Wilcoxon's signed-rank test was used with post-hoc comparisons between pairs of tasks or audiences. This is a nonparametric statistical test used to examine if two related variables have the same distribution. This is a test that can look at the extent of differences within pairs and assign more weight to pairs exhibiting large differences than to pairs exhibiting small differences. '.... The researcher can make the judgement of "greater than" between any pair's two values as well as between any two-difference scores arising from any two pairs' (Siegel and Castellan, 1988, p?)

The effect of staff team membership and of client adaptive behaviour was examined using Kruskal-Wallis one-way analysis of variance. The Kruskal-Wallis is a non-parametric test that explores whether independent samples are from the same or different populations. Once again an ordinal measurement of scores is required.

Post-hoc comparisons were made using the Mann-Whitney U test. The Mann-Whitney U test is a non-parametric test that again looks at whether two independent samples are from the same population and is therefore similar to a t-test. It also requires ordinal measurement and uses the ranks of cases.

Comparisons of staff responses from the two different agencies was also made using the Chi-square test. This is a weaker non-parametric test because although it can indicate an association between variables it cannot provide information as to the strength of the relationship or its direction. The chi-square '....technique is of the goodness-of-fit type in that it may be used to test whether a significant difference exists between an observed number of objects or responses falling in each category and an expected number based upon the null hypothesis' (Siegel and Castellan, 1988). Interpretation of the results was aided by referring to the interview transcripts.

Reliability data were analysed to ascertain levels of inter-rater reliability using Cohen's Kappa (1960). This is a measure of whether two independent raters achieve a certain level of agreement when scoring the same observation. Values range from 1 to 0 with 1 indicating perfect agreement. It is only possible to use Kappa when variables have the

same values and the same number of categories. A value above 0.6 is seen as the acceptable level of agreement (Fleiss, 1981, quoted in Bakeman and Gottman, 1986). Cohen's kappa was calculated for each audience for performance and non-performance for the dimensions of strength, certainty and direction.

c. Care practices and outcomes

The 'Active Support' observation schedule was completed during a visit by the researcher. Coding was carried out at the end of the observation. The same time period was used as with the 'Client Engagement Schedule'. The time period selected was one that represented an activity that any client might be expected to be involved in. The activity was the preparation of a meal. The duration of the observation depended on the length of time the activity took. In most cases this was an hour and a half. Reliability observations were taken in some facilities with either a second observer or a second observation by the same observer. This was to ascertain if observations were accurately measuring the active support of clients by staff. Guidance notes were provided for the observers (see Appendix 2) and it was advised that notes be taken during the observation to aid completion. Items on the schedule were coded immediately after observations.

Cohen's kappa and point-by-point agreement statistics were calculated as a measure of inter-rater reliability.

The Client Engagement observation schedule was also completed during a visit by the researcher. A time period was selected which represented an activity which clients might be expected to be involved in. The activity chosen was the preparation of a meal. The duration of the observation depended on the length of time the activity took. In most cases this was an hour and a half. Reliability observations were taken in some facilities with either a second observer or a second observation by the same observer. This was to ascertain if observations were accurately measuring client involvement.

As with the Active Support Schedule Cohen's Kappa and point-by-point agreement statistics were calculated as a measure of inter-rater reliability.

The 'Management Practices Scale' and Index of Community Involvement Scale' were administered in an interview format. Instructions issued by the authors of the measures were followed during its completion and in the subsequent coding. The researcher interviewed the manager or deputy manager during one of the visits to the facility. Each interview took approximately ½ hour. It was decided to use an interview format, as it would allow the researcher to clarify any difficult terms or answer queries by respondents. Interviews were taped in 16 out of the 39 facilities (41.02%) for reliability purposes. A second researcher was then asked to listen to the tapes and to code the responses according to the schedule provided. The scores obtained were then compared by calculating Spearman's correlation coefficients. This allows a measure of correlation to be calculated between variables whose values are ordinal

Items were ticked and then later scored. Total scores were achieved by summing scores for sub-scales. Thus, a total score was achieved for the sub-scales of 'rigidity of routine', 'block treatment', 'depersonalisation' and 'social distance' by adding up the items identified as representing these dimensions by the authors of the measure. These totals were then added together to give an overall total of 'management practices'. For the scale of 'index of Community Involvement' items were scored as instructed and then totalled to give an overall figure. Raw scores were entered as a variable.

The IPDL questionnaire was administered by interview. The manager or deputy manager of each unit was interviewed and the researcher recorded responses. Scores were totalled for each client included in the survey and the results recorded as a raw score.

Qualitative observations were noted down at the end of a visit or visits. This information was recorded in long hand and the data were used in quotation format to support statistical findings.

d. Facility Descriptives and Policy Schedule

Managers were asked the number of clients currently resident in the facility and the number of staff currently employed in an interview. Details of the age of the project, the length of time the manager had been in post and confirmation of the number of clients and

staff in a facility were requested from the upper management of each organisation. A raw score was recorded for the number of clients resident and the number of staff employed in a facility. A value was accorded to each age category for the length of time managers had been in post and the age of a facility (1 – 0-2 months, 2 - 13-36 months, 3 – 37-72 months and 4 – 73 months and above).

Managers were asked to provide a copy of the facility policy if one existed. This was collected during a visit and coded at a later date. The policy was also coded for reliability purposes by a second observer. Each policy was coded in accordance with the active support schedule as described under measures used. A total was achieved by summing scores for each item.

Statistical Comparison of the Two Organisations

All scores for each variable described above (Active Support Schedule; Client Engagement Schedule; Participation in Domestic life Schedule; Management Practices Scale, Facility Descriptives and Policy Variables) were aggregated to provide a mean score for each facility. Scores were then ordinal in nature and thus scores for each organisation for each variable were compared using the Mann-Whitney U test for two independent variables. Scores which were nominal in nature (client age, client gender, staff gender, staff desire for promotion, staff intention to leave, staff hours worked) were compared using a Chi-square test.

Regression Analysis

As the aim of this study was to uncover which features of a service, its organisation and delivery are responsible for levels of active support offered by staff and the degree of client engagement in a service, further analysis of all of the data collected were undertaken using an ordinal multiple regression technique (MINITAB 1988). The information was treated as a single sample as an analysis of the two organisations included in the study revealed very few differences and therefore a comparative study was not possible (see Chapter 3). The large number of variables included in this study meant that simple correlation or analysis of variance approaches were not appropriate statistical tools to sufficiently address

the question of which factors effect client engagement. Multiple regression was therefore the most suitable method of analysis.

Regression is a statistical technique based on ascertaining the relationship between variables. The relationship between variables can be described using this technique in terms of the strength of the relationship and whether it is positive or negative. The regression equation can also allow us to make a prediction as to the extent to which 'x' might affect 'y'. Multiple regression, which is the statistical technique that this study will use, is more exploratory in nature and is often used to develop and test theories. Multiple regression develops an equation to describe the relationship between the dependent and independent variables. Simple correlation is not adequate as it only tells us about the relationship between two variables, not multiple variables. Multiple regression produces a model that asks the question does the regression model fit the dependent variable better than by chance. It asks which independent variables make a significant contribution to the prediction of the dependent variable. Multiple regression will therefore allow us to ask in this study which variables explain variation in levels of both active support and client engagement (dependent variables).

Multiple regression produces an equation that explains the relationship between the dependent and independent variable. Regression analysis reduces the degree of error between observed scores and predicted scores using the 'least squares criterion'. This makes the sum of the differences between the two scores as small as possible. This procedure is suitable for analysis that includes more than one variable, in other words multiple variables.

Multiple regression techniques usually requires interval level data, however, in recent years regression methods have been developed for nominal and ordinal data. As almost all the data in this study is ordinal, regression analysis can be conducted using this data. It is important to note, however, that ordinal regression analysis is a relatively new technique and therefore use of this technique is best viewed as exploratory in nature.

An ordinal multiple regression analysis was undertaken to determine which variables best explain the levels of active support and client engagement found in services used in this study. In order to conduct an ordinal multiple regression firstly all of the dependent

variables had to be ordinal in nature and secondly information had to be combined so as to produce an entry for each resident which represented the facility variables, the staff variables and the client variables. This was achieved in most cases by merging the datum so that the value of a variable at the home level was used for every resident of that home and the value of a variable at the staff level was averaged for all staff in the home and that value then used for every resident of that home. An important note of caution must be made at this point. Although 208 client values were available for the measures of client variables, client engagement and Participation in Domestic Life, for all other variables included in the regression analysis a single value for each facility was replicated. In other words there were only 39 entries for each of the variables not named above. Regression analysis is only valid with larger numbers of entries so although it was appropriate to proceed with analysis because of the large number of client entries the results of any such analysis must be seen as purely speculative due to the smaller number of entries for all other variables. Of course for many of the variables, such as the Management Practices Scale, it is only possible to produce a single value, which is then replicated for each individual client in a facility. As there is really no methodological solution to this problem the regression can proceed. It may have been advisable where possible to collect more data at the level of the client, for example scoring each individual resident for the level of active support they received. This might have made the results of any analysis more valid and less tentative.

The consequences data, which was collected from direct-care staff using the contingency questionnaire, posed a more difficult challenge in terms of combining the datum. The consequences datum had to be condensed in some way to produce an ordinal value that represented the level of congruence between staff member's responses in each facility. In other words the percentage of staff that say strong, certain consequences will occur from a particular audience in the performance of their work. For each member of staff there were positive and negative responses for performance and non-performance of four tasks across six audiences. A new variable was created by summing positive and negative effects in support of action and inaction across audiences for each member of staff, preparatory to aggregating across each facility to get an average per house.

The following equation enables one to achieve net strong positive consequences for each audience for each task. Positive consequences for the performance of a task were added to

negative consequences for non-performance then negative consequences for performing the task were subtracted from positive consequences for not performing the task and the first part of the equation was subtracted from the second ((+do) + (-don't) – (-do) – (+don't)). Effectively what you achieve by using this equation is a summing of the responses of members of staff to achieve a single entry that represents the strongest positive responses for each task. When these values are aggregated across facility for each staff member we achieve a new value that represents the net responses of staff in each facility. This new variable gives us a value that tells us for each facility the net result for all staff responses for strong positive consequences. The variables created are for example net consequences from residents for administration, net consequences from co-workers for administration, net consequences from managers for administration, net consequences for all audiences for administration and so on for all of the four groups of tasks. In a regression analysis we can therefore determine if strong positive consequences for particular audiences and tasks has an effect on the dependent variable of client engagement. For example we might find that the net consequences from managers for the task of 'client enabling' might account for some of the differential for scores on the client engagement measure. A result such as this would suggest that strong positive consequences from managers could affect levels of client engagement.

A further variable was also created for the regression analysis. If the net consequences for each audience for 'client enabling' was greater than that of the task of 'administration' then a new value accorded. So four new variables were created for managers, co-workers, residents and all audiences combined which described the balance of net consequences for client enabling over administration. This new variable allows us to ascertain in a regression analysis if audiences for which there are greater numbers of net strong positive consequences for client enabling account for variation in client engagement scores. So for example if the balance of consequences for managers was found to be significant in a regression analysis then this would tell us that managers who are believed to impose strong positive consequences for client enabling more than for administration can have an effect on levels of client engagement.

Prior to conducting a regression analysis it is important to address the issue of multi-collinearity. This is when variables are highly intercorrelated or, in other words, are linear

functions of each other. Highly correlated independent variables are a problem because they can distort the result of a multiple regression producing a significant result where none in fact exists (i.e. none of the individual regression coefficients differ from '0' or the results are very different from what might have been expected).

A rough and ready way to check for multi-collinearity is to carry out non-parametric correlations of the variables of interest using Spearman's bivariate. This would allow one to see which variables are highly intercorrelated. The correlation co-efficient is a statistical index of the extent to which two variables are related in a linear fashion. The co-efficient can take a value from –1.00 to +1.00. The magnitude of the correlation coefficients tells us how strong the linear relationship is between measures with '0' indicating no relationship, and +1 or –1 indicating a perfect linear relationship. . Correlation statistics revealed that several variables were inter-correlated at the 0.4 levels or above. This led to the exclusion of a number of variables from the ordinal multiple regression analysis. Correlation statistics are presented in Appendix 3 for client variables, staff characteristic variables, staff consequences variables and facility variables.

a. Client Variables

Obviously for the purposes of the first regression analysis the variable of 'total active support' is an outcome variable (dependent variable) and therefore the correlation between this and BDS can be ignored when we look at what predicts active staff support. For the dependent variables of client engagement and IPDL it was decided to include all of the client variables in a regression analysis as none of them were correlated with each other. Also correlation statistics produced when looking at facility variables revealed that community involvement can be excluded from the regression analysis and therefore the correlation between this variable and BDS is not important. Some of the staff consequences variables would also be excluded based on intercorrelations discovered and these are presented in the section on 'staff consequences variables'. Correlation statistics are presented Appendix 3.

b. Staff Characteristic Variables

It was decided on the basis of the correlations presented in Appendix 3 to include all of the staff characteristic variables for analysis. This was because correlation of 'length of time in service' variable with 'net consequences all audiences' was low (-0.447) and the correlation with net consequences co-workers other was irrelevant as this variable was excluded on the basis of further analysis. 'Intention to leave' was included as the correlation with balance of consequences was low. Hours worked was included in analysis as the variable with which it correlated (net consequences all audiences non-enabling) was excluded. Results are presented in Appendix 3.

c. Staff Consequences Variables

The table of correlations presented in Appendix 3 indicates that there appears to be a strong correlation between variables which represent scores for net consequences all audiences administration, net consequences all audiences client-enabling, net consequences all audiences non-enabling, net consequences all audiences other and the variables for individual audiences for these tasks. For example net consequences all administration was strongly correlated with net consequences managers administration.

As the reason for the regression analysis was to uncover what might predict the levels of both active support by staff and client engagement, all variables that represented the net consequences for managers, residents and co-workers and all for the task of client enabling were included unless there was evidence of multi-collinearity.

The balance variables represent a value that denotes greater numbers of strong certain consequences for client enabling over administration. It was decided to include balance variables for managers, residents and co-workers and the category 'all' as it is possible that strong certain consequences from a particular audience or all audiences that favour client engagement might influence the level of both active support by staff and client activity.

Net consequences for administration for each audiences were excluded as the balance variables for each audience were included and it is these variables which indicate whether the net consequences for each audience for client enabling was greater than that of the task of 'administration'. In other words this variable would already tell us if an audience which favours client enabling more than administration could account for variation in levels of active support and client engagement.

It was decided to omit net consequences for any audience for the tasks of 'non-enabling' and 'other' as analysis in Chapter Four revealed that these tasks were considered to be of less importance in terms of consequences for staff if they performed or failed to perform them.

Correlation statistics are presented in Appendix 3. The staff consequences variables included in a regression analysis using 'active support', 'client engagement' and 'Participation in Domestic Life' as the dependent variables were 'net consequences all client-enabling', net consequences managers client-enabling', 'net consequences residents client-enabling', 'net consequences co-workers client-enabling' and 'balance all', 'balance managers', 'balance residents' and 'balance co-workers'.

d. Facility Variables

The correlation results for facility variables presented in Appendix 3 indicate that there appears to be a strong correlation between the variables for number of staff, number of clients and staff/ client ratio. For this reason it was decided to exclude the variables for number of staff and number of clients and to include staff/client ratio in the regression analysis as it was felt that this variable was a combination of staff and client variables.

There appeared also to be a correlation between the two variables representing the Management Practices Scale and the Index of Community Involvement Scale. It was decided on the basis of this correlation to include only the Management Practices variable as this represents a more in-depth score of various components of daily living for persons with a learning disability living in residential care whereas the Community Involvement variable represents only one particular aspect of the quality of daily life.

The overall variables to be included in a regression analysis are described below in Table 2d.

Table 2d:Variables included in an Ordinal Multiple Regression Analysis

Clients	***Staff Characteristics***	***Staff Consequences***	***Facility***
Age of clients	Length of Service	Net consequences from managers for client-enabling	Staff/Client Ratio
Total Behaviour Development Score	Desire for Promotion	Net consequences from residents for client-enabling	Age of Project
Maladaptive Behaviour Score	Intention to leave	Net consequences from co-workers for client-enabling	Length of time manager in post
	Hours worked	Net consequences from all audiences for client-enabling	Policy Total
	Stress (Malaise Inventory)	Balance of consequences from managers	Management Practices
		Balance of consequences from residents	Total Active Support (except when regression analysis uses Active Support as the dependent variable).
		Balance of consequences from co-workers.	
		Balance of consequences from all,	

A multiple ordinal logistic regression was conducted with total active support as the dependent variable. The dependent variable is the variable we are trying to predict and is sometimes called the 'criterion variable'. The result would tell us if any of the variables selected could predict variation in active support. A multiple ordinal regression was also conducted with 'Client Engagement' scores as the dependent variable. A further multiple ordinal logistic regression was then conducted with Participation in Domestic Life scores as the dependent variable.

These three variables were chosen as dependent variables for a number of reasons. The premise of this research is that certain variables are likely to influence staff behaviour towards clients hence the inclusion of these variables in the analysis. The active support instrument was developed to measure the levels of active support given by staff to clients. This is a measure of staff performance. Statistical analysis can then reveal if any of the chosen variables predict active support. The second premise is that active support is likely to predict the level of client engagement. A measure of client engagement was therefore required. The Client Engagement Scores were collected using a new and relatively untried measure that attempts to gauge levels of engagement for an individual client over a specified time period. As the measure was untested it was decided to include an established measure of client engagement for purposes of comparison. The established measure used was the 'Index of Participation in Domestic Life'.

The variables described above were included in the analysis. The Minitab software used for the ordinal regression is unable to automatically conduct a stepwise regression as in analysis using interval datum. That is to say that variables with a low significance have to be excluded from the datum by the researcher and the analysis re-run. Those variables with the least significance (or the highest 'p' value) are those that contribute least to a prediction of the dependent variable. The process of excluding the least significant variables was continued until only the variables that had a significant effect on the dependent variable were left. This procedure was conducted using blocks of variables, as the use of large numbers of variables at once is more difficult to compute and interpret. The results and discussion of the ordinal multiple regression analyses are presented in Chapter 5.

This chapter has summarised the method used to collect information for the purposes of this study. It has also set out the analysis used to examine the information in terms of a comparison of two types of service for persons with a learning disability. It has also set out the analysis of the information collected from direct-care staff about what they do at work and the contingencies which they belief operate in the workplace if they perform or fail to perform tasks. Finally this chapter also describes the analysis of all the information collected in this study using a multiple ordinal regression technique in order to determine which aspects of a service might be responsible for active support of clients by staff and client engagement in meaningful activity.

The following three chapters describe the results of the analysis. Chapter 3 sets out the results of the analysis comparing two different organisations and the residential services that they provide for persons with a learning disability. The objective of this comparison is to determine if differences between services account for differential outcomes in terms of client engagement.

Chapter 4 describes the results of an analysis of staff consequences information. The purpose of this analysis is to determine if the influence of others in the work environment may have an effect on the way that staff behave towards clients and the way they engage with them.

Chapter 5 describes the results of analysis which attempts to examine if any of the variables for which information was collected be they at the level of the client, the direct-care staff or the facility, account for variations in the dependent variables which are active support, client engagement and 'Participation in Domestic Life'.

Chapter 3: Results of a Comparative Study of Two Organisations Providing Residential Care for Persons with a Learning Disability

This chapter presents the results of a comparative study of two organisations that provide care to persons with a learning disability in England in the late 1990s. A number of measures were used to enable comparisons to be made of clients and client outcomes, staff and staff outcomes and facility variables. The instruments used, method of collecting information and details of data analysis are described in Chapter 2.

The two organisations selected for the purposes of the study were chosen to represent different types of service provider. These organisations were a National Health Service Trust (The Trust) and a Charitable Association (The Charity). It was felt that a comparative study of these two types of provision would enable the author to explain differences in outcomes in terms of the active support offered to clients and the quality of care provided for persons with learning disabilities who were resident in facilities at the time of the study. In particular the study expected to find that the Charity was able to supply preferred outcomes for clients. As the results presented in this chapter reveal, however, expected significant differences were not found.

i) Client Variables

a. Inter-interviewee agreement reliability results

No inter-interviewee agreement reliability data were collected for any of the client measures for reasons described in the previous chapter.

b. Comparison of Trust and Charity

The two groups of organisations were compared for 4 client variables: BDS scores (Conroy 1980, 1985), which is a measure divided into client ability (ABS) and maladaptive behaviour (MBS). The mean score for ABS was 83.63 and the range was 30-171 (mean 44.94. and range 1-126 when re-scaled as per Conroy 1982,1985). The

mean score for MBS was 46.59 and the range was 23-56. The other variables included in analysis were client age and client gender.

BDS: As this data is ordinal a Mann-Whitney U test was conducted on the two independent samples for ABS and MBS (see Table 3a). A significant difference in BDS scores for the variable of client ability (ABS) was found between the two groups of clients in the different organisations ($U = 3589.500$, $p < 0.01$, $z = -4.008$). The mean rank score (Trust, 87.01: Charity, 120. 31) suggests that clients from the 'Charity' were more able. If we look at the mean scores for each organisation for ABS we see that for the 'Trust' the mean score was 73 and for the 'Charity' the mean score was 94.

Client age: Age is ratio, however the data were recorded in this study as age group, which is ordinal, and therefore a Mann-Whitney U test was conducted on the two independent samples. No significant differences were found ($U = 3799.500$, $z = -1.477$, n.s.).

Client gender: As the scores for the variable of client gender were nominal a chi-square statistic was calculated. No significant difference was found between the two groups of clients (Chi-square = 2.699), df = 1, n.s.).

Table 3a: Mann-Whitney U test results for client variables.

Variable	**Name of Organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig (2-tailed)**
ABS (including institutional facilities)	Trust Charity	104 102	87.01 120.31	9049.50 12271.50	3589.500	0.000
MBS (including institutional facilities)	Trust Charity	102 96	101.66 97.20	10369.50 9331.50	4675.500	0.583
Client Age (including institutional facilities)	Trust Charity	98 88	98.73 87.68	9675.50 7715.50	3799.500	0.140

c. Commentary

For client variables the only significant difference found between the two organisations used in the study was for the variable of 'ABS'. Clients from the charity were found to be more able. Included in this analysis, however, were clients who were resident in a hospital setting. Section d presents the results of analysis after hospital clients were excluded.

d. Comparison of Trust and Charity (community only)

Eight Health Authority facilities included in the study were termed 'institutional' in that these were services provided within a hospital setting. It was felt that the clients present in these facilities might represent persons with a greater degree of learning disability and that therefore significant results might reflect this bias. The eight facilities were therefore excluded and the analyses re-run using the remaining group homes from both organisations (Table 3b).

BDS: No significant differences were found for ABS ($U = 2024.000$, $p>0.01$, $z = -1.709$) or MBS ($U = 1926.500$, $z = -1.602$, n.s.) once the clients from these eight facilities were excluded from the analysis.

Client age: No significant differences were found ($U = 1704.00$, $z = -1.398$, n.s.).

Client gender: No significant differences were found between the two groups of clients (Chi-square=1.703, df=1, n.s.).

Table 3b: Mann-Whitney U test results for client variables (community only).

Variable	Name of Organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig (2-tailed)
ABS (minus institutional facilities)	Trust Charity	48 102	66.67 79.66	3200.00 8125.00	2024.000	0.088
MBS (minus institutional facilities)	Trust Charity	48 96	64.64 76.43	3102.50 7337.50	1926.500	0.109
Client Age (minus institutional facilities)	Trust Charity	45 88	73.13 63.86	3291.00 5620.00	1704.00	0.162

e. Commentary

No significant differences were found between the two organisations for any of the client variables once institutional facilities were excluded.

ii) Staff Characteristic Variables

a) Inter-rater agreement reliability results

Inter-rater agreement reliability data were not collected for the staff characteristic variables. The reasons for this decision are set out in the previous method chapter.

b) Comparison of Trust and Charity

The two organisations were compared on 6 variables representing staff characteristics. These were length of time in current house, gender, desire for promotion, intention to leave, hours worked and levels of stress.

Length of time in current house: As this data is ordinal a Mann-Whitney U test was conducted on the two independent samples of staff (see Table 3c). No significant difference was found between the two groups of staff (U = 2266.00, z = -1.251, n.s).

Table 3c: Mann Whitney U results for Length of Time in Current House

Variable	Name of Organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Length of Time in Current House	Trust Charity	70 73	67.87 75.96	4751.00 5545.00	2266.000	0.211

Gender: Chi-square statistics were calculated for the variable of staff gender, as the scores were nominal. No significant difference was found between the two groups of staff (Chi-square =0.021, df=1, n.s.).

Desire for Promotion: Chi-square statistic was calculated for the variable of 'desire for promotion' as the scores were nominal. No significant difference was found between the two groups of staff (Chi-square = 0.168, df=1, n.s.).

Intention to leave: Chi-square statistic was calculated for the variable of 'intention to leave' as the scores were nominal. A significant difference was found between the two sets of staff (Chi-square = 14.359, df=1, $p<0.05$). Cross-tabulation statistics suggest that 10% of staff in the 'Trust' said that they had no intention of leaving their current employment compared with 36% in the 'Charity'.

Hours worked: Chi-square statistic was calculated for the variable of 'hours worked' as the scores were nominal. No significant difference was found between the two groups of staff (Chi-square=0.746, df =1, n.s).

Levels of stress: As this data is ordinal a Mann-Whitney U test was conducted on the two independent samples of staff (see Table 3d). No significant difference was found between the two groups of staff (U = 2381.500, z = -0.432, n.s).

Table 3d: Mann Whitney U results for Staff Stress

Variable	Name of Organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Malaise Score	1 2	70 71	69.52 72.46	4866.50 5144.50	2381.500	0.666

c. Commentary

A significant difference between the two organisations was found only for the variable of 'intention to leave'. Staff from the 'Charity' were more likely to say that they desired to leave.

d. Comparison of Trust and Charity (community only)

Length of Time in Current House: A Mann-Whitney U test was conducted on the two independent samples of staff (see Table 3e). No significant difference was found (U = 1265, z = -0.809, n.s).

Table 3e: Mann Whitney U results for Length of Time in Current House

Variable	Name of Organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
Length of Time in Current House (community only)	Trust Charity	38 73	52.79 57.67	2006.00 4210.00	1265.000	0.419

Gender: Chi-square statistic was calculated, as the data is nominal, however, no significant difference was found between the two groups of staff (chi-square = 0.036, df=1, n.s).

Desire for promotion: Chi-square statistic revealed that there was no significant difference between the two sets of staff (chi-square = 0.755, df =1, n.s.).

Intention to leave: The Chi-square statistic was significant for the variable of 'intention to leave' (Chi-square = 10.724, df=1, p>0.05). Cross-tabulation statistics suggest that 7.9% of staff from the 'Trust' were likely to say that they wished to leave compared with 36% of staff from the Charity.

Hours worked: Chi-square statistic revealed no significant differences between the two sets of staff for the variable of 'hours worked' (Chi-square=0.207, df = 1, n.s.).

Levels of stress: As the data were ordinal a Mann-Whitney U test was conducted (see Table3f), however, no significant difference was found between the two groups of staff (U = 1319, z = -0.193, n.s).

Table 3f: Mann Whitney U results for Staff Stress (community only)

Variable	**Name of Organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
Malaise Score (community only)	Trust Charity	38 71	55.79 54.58	2120.00 3875.00	1319.000	0.847

e. Commentary

A significant difference was found for the variable of 'intention to leave' between the two organisations even after the exclusion of institutional staff. It would appear that staff who work for the Trust are less likely to express an intention to leave.

iii) Care Practices and Outcomes

a) Inter-rater agreement reliability results

Active Support Schedule: It was important to collect reliability data for this measure, as the Active Support Schedule was untested. Inter-rater agreement reliability data using a second observer were collected in seven out of the thirty-nine facilities

included in the survey (17.95%). Pre-post test reliability data using a second observation in the same facility were collected in thirteen out of the thirty-nine facilities included in the survey (33.3%). Cohen's kappa and point-by-point agreement statistics were calculated for active support and are presented in Table's 3g and 3h. A kappa statistic of +1 suggests total agreement between observers whilst a kappa statistic of 0 suggests that 'the agreements among the observers are no more than can be expected by chance' (Suen and Ary, 1989, p113). A kappa of 0.60 is deemed to be the lowest value of inter-observer agreement acceptable (Suen and Ary, 1989, p113).

Table 3g. Inter-rater agreement reliability for the Active Support Schedule

Coding Category/Item	**Numbers of pairs of ratings**	**Kappa**	**Percentage agreement**
Age Appropriateness	7	0.79	85.71%
Graded Assistance	7	0.76	85.71%
Challenging Behaviour	7	1.00	100%
Activity Choice	7	1.00	85.71%
Client Communication	7	0.77	85.71%
Staff Contact	7	0.77	85.71%
Presentation of Demands	7	1.00	100%
Developmental Level	7	1.00	100%
Differential Reinforcement	7	1.00	100%
Interpersonal Warmth	7	0.28	57.14%
Programmes in Use	7	1.00	100%
Real Activities	7	1.00	100%
Developmental Speech	7	0.30	57.14%
Teaching	7	1.00	100%
Teamwork	7	0.53	71.43%

The inter-rater agreement reliability results imply that the quality of the data was good with twelve of the fifteen categories achieving a kappa value above 0.60. It should be noted, however, that such strong agreement might be the result of poor levels of client engagement. In other words, because few clients were involved in activities it was relatively easy to judge that nothing was going on. A situation in which there was

complex client involvement occurring may have been more difficult for observers to agree on. General details of the level of active support and client engagement are provided in the next section. The use of fellow graduate students as reliability observers allowed only limited opportunities for training, which of course may compromise the accuracy of results.

Table 3h:Test/retest reliability for the Active Support Schedule

Coding Category/Item	**Numbers of pairs of ratings**	**Kappa**	**Percentage agreement**
Age Appropriateness	13	0.490	69.23%
Graded Assistance	13	0.21	53.85%
Challenging Behaviour	13	0.435	84.62%
Activity Choice	13	0.863	92.31%
Client Communication	13	0.735	84.62%
Staff Contact	13	0.220	53.85%
Presentation of Demands	13	0.683	76.93%
Developmental Level	13	0.606	69.23%
Differential Reinforcement	13	0.369	61.54%
Interpersonal Warmth	13	0.831	92.31%
Programmes in Use	13	0.000	84.62%
Real Activities	13	0.683	76.93%
Developmental Speech	13	0.375	61.54%
Teaching	13	0.52	69.23%
Teamwork	13	0.212	69.23%

Stability over time reliability statistics reveal that only six of the fifteen categories achieved kappa values above the 0.60 level. These results imply that staff support patterns might vary given that inter-rater reliability data suggested that the quality of the observational data was good.

Client Engagement and Challenging Behaviour Schedule: As with the Active Support Schedule inter-rater agreement reliability data were collected in seven out of the thirty-nine facilities included in the survey (17.95%) and included observations of thirty-four clients. Pre/post test reliability data were collected in thirteen out of the thirty-nine facilities included in the survey (33.3%) and included observations of fifty-three clients. Cohen's kappa and point by point agreement statistics were calculated and are presented in tables 3i and 3j below

Table 3i: Inter-rater agreement reliability for Client Engagement and Challenging Behaviour Schedule

Coding category/Item	**Numbers of pairs of ratings**	**Kappa statistic**	**Percentage agreement**
Engagement in meaningful activity	34	0.63	79.41%.
Types of activities engaged in	34	0.61	76.47%
Challenging behaviour frequency	34	0.53	70.59%
Challenging behaviour severity	34	0.84	91.18%

Inter-rater agreement reliability results show that three of the four categories of the 'Client Engagement and Challenging Behaviour Schedule' achieved a kappa value above 0.60, which can be deemed an acceptable level of agreement. As suggested previously in regard to the Active Support Schedule, strong agreement could be the result of low levels of client engagement in that it is relatively easy to judge that nothing was going on. The actual levels of client engagement are described in the next section.

Table 3j: Test/retest reliability for Client Engagement and Challenging Behaviour Schedule

Coding category/Item	**Number of pairs of ratings**	**Kappa**	**Percentage agreement**
Engagement in meaningful activity	53	0.46	73.58%
Types of activities engaged in	53	0.61	81.13%
Challenging behaviour frequency	53	0.17	69.81%
Challenging behaviour severity	53	0.17	69.81%

Test/retest reliability results reveal that only one of the four categories achieved kappa values above the 0.60 level. These results may suggest that, as with levels of staff support, clients were differentially engaged at different times. It should be noted, however, that the lengths of observations were short. Thus, a client may have exhibited a challenging behaviour during one observation but not another. It may have been more advisable, therefore, to collect information on several occasions rather than twice only. This approach would have taken account of variations in the observed situation over time and have allowed more detailed comparisons to be made.

Management Practices Scale and Index of Community Involvement: Management Practices Scale and Index of Community Involvement interviews with managers were tape-recorded in sixteen out of thirty-nine facilities involved in the study (41%). A second researcher was then asked to listen to the tapes and to code the responses according to the schedule provided. The scores obtained were then compared by calculating Spearman's correlation coefficients. This allows a measure of correlation to be calculated between variables whose values are ordinal. The results are presented in Table 3k below.

Table 3k: Inter-rater Agreement Reliability for Management Practices Scale and Index of Community Involvement.

Variable	**Significance (at the 0.001 level)**	**Spearman's rho**
Rigidity of routine	0.002	0.728
Block Treatment	0.000	0.861
Depersonalisation	0.000	1.000
Social Distance	0.000	1.000
Management Practices	0.000	0.947
Community Involvement	0.000	1.000

As the results above indicate all of the variables are highly correlated for reliability between rater's scores. Two of the categories achieved perfect correlation meaning that total agreement was achieved.

Index of Participation in Domestic Life: Reliability data were not collected in the case of this measure. In retrospect it may have been advisable to collect reliability data by asking other staff to complete a schedule for each client included in the study. Although comparisons can be made using the observational data it may have enhanced the quality of the analysis if more than one respondent had provided data on the extent of client engagement.

Qualitative Observations: As indicated in the method chapter reliability information were not collected for qualitative data as these observations were specific to each visit and were a record of the authors time spent in each house.

b. Comparison of Trust and Charity

Prior to a presentation of the comparative analysis of the two organisations involved in the study it is important to highlight generally how poor levels of support from staff sometimes were regardless of the service. A copy of the coding schedule and accompanying notes for completion are contained in Appendix 2. Presented below are general findings of the levels of active support offered in facilities. Only 38 facilities out of a total of 39 were observed.

Age Appropriateness: 9 facilities from the Trust (50%) and 9 facilities (45%) from the Charity demonstrated staff support that was appropriately adult. This means that overall 47.4% of all support from staff was adult in nature. 39.5% of all facilities included, however, offered no activities at all to clients and 13.2% of staff support only offered activities that were a mixture of childish and adult.

Activity Choice: Of those facilities that offered activities only staff in 3 of those (7.9%) engaged clients in multiple tasks that they were able to move between. The majority of clients who were engaged in tasks in of facilities were not offered any choice of activity (47.4%).

Presentation of Demands: In the majority of facilities overall where activities were offered to clients (remember 39.5% of facilities offered no activities at all) they were either not prepared beforehand or were inappropriately prepared by staff (39.4%).

Developmental level: For most facilities where activities were offered to clients opportunities to engage clients were missed some or most of the time (42.1%). For the Trust staff in 4 facilities out of 18 (22.2%) took most opportunities to engage clients whilst for the Charity it was 3 facilities out of 20 (15%).

Staff contact: In no facility regardless of organisation were clients left alone, however, in many of the facilities (65.8%) contact was occasional or moderate.

Graded assistance: 4 Trust facilities out of a total of 18 (22.2%) and 5 Charity facilities out of a total of 20 (25%) offered graded frequent assistance appropriate to the needs of the individual clients. For the majority of clients, however, assistance was occasional, basic moderate or missing (71.05%).

Developmental Speech: 9 out of 18 facilities for the Trust (50%)and 15 facilities out 20 for the Charity (75%) offered speech to clients that matched their developmental level. Therefore 63.2% of facilities overall had staff which appropriately communicated with clients by matching their speech with the developmental level of the clients.

Interpersonal Warmth: The majority of facilities demonstrated staff support which was either warm and respectful (55.3%) or a mixture of respectful and disrespectful (42.1%).

Differential reinforcement: The majority of staff behaviour towards clients was either random or contingent on the adaptive behaviour of clients (94.7%).

Client Communication: 9 Trust facilities and 13 Charity facilities (overall 57.9%) demonstrated staff who responded to most client communication, however, 9 Trust facilities and 7 charity facilities demonstrated staff who rarely or only occasionally responded to client attempts at communication (42.1%).

Challenging behaviour: Very few incidents of challenging behaviour were observed in any of the facilities (81.57%). When incidents were observed however there was either major disruption (7.9%) or staff coped only moderately well (10.5%).

Real activities: The majority of activities when offered in facilities were either real but simple or real or complex (50%). However in 39.5% of facilities activities were not offered to clients at all.

Teamwork: There was very little evidence of teamwork observed in any of the facilities with 21 facilities overall (55.3%) demonstrating an uncoordinated and unplanned approach.

Teaching: In 30 of the facilities observed (79%) there was little or no teaching of clients observed.

Programmes in use: 30 facilities (79%) had no client programmes in use and only 7 had one or 2 (18.4%).

Overall in regard to active staff support of clients the quality of assistance was often poor. If we take the example of the category of 'programmes in use' thirty of the thirty-eight facilities observed in the study had no programmes at all in operation to guide their work with clients. Similarly only three facilities in the study offered multiple activities to clients that they were able to move between and only six facilities offered activities that were well presented and prepared. In regard to 'teaching' only three facilities took advantage of most opportunities to teach clients. In regard to teamwork only one facility had staff that as a team planned in advance how they would work with clients. If we look active support totals 18.42% received weak levels of active support (total 0-15) but the majority 55.26% received mixed levels of active support (total16-30) and only 26.3% (total 30-45) received good levels of active support.

If we look at the engagement levels of individual clients in facilities the data further indicates poor quality. Table 3l contains details of the levels of client engagement.

Table 3l: Levels and type of engagement of clients

Name of Organisation		**Trust No. of clients**	**Charity No. of clients**	**Total No. of clients**
Engagement in meaningful activity	Largely disengaged	67	49	116
	Engaged < 50%	15	12	27
	Engaged > 50%	8	8	16
	Engaged > 75%	3	6	9
Total		93	75	168
Types of activities engaged in	None	66	45	111
	Largely childish/pretend	2	3	5
	Mixed child/adult - pretend/real	10	6	16
	Largely adult and real	15	21	36
Total		93	75	168

As one can see from the detail contained in Table 31 overall client engagement regardless of the organisation concerned is very poor. One hundred and sixteen clients involved in observations were found to be largely disengaged (69.04%) with one hundred and eleven clients (66.07 %) not involved in any activities at all. Only nine clients from both organisations were found to be engaged seventy-five percent of the time or over (5.36%) whilst only thirty-six clients (21.43%) were engaged in activities which were adult and real. If we compare these results with those of the active support offered by staff to clients one can surmise that even when staff were involving clients in tasks the numbers included were small and the types of tasks were likely to be simple. Overall it would appear that the staff support and client engagement in many facilities was poor. Let us now look at the results of a comparative analysis that compares the two organisations for the variables of active support and client engagement as well as Index of Participation in Domestic Life', the 'Management Practices Scale' and the Index of Community Involvement' to see if any significant differences exist.

Active Support: The active support offered by staff to clients in facilities was compared for the two organisations for 15 variables. As the data were ordinal a Mann-Whitney U test was used. Results are shown in Table 3m. Only one variable was significant which was 'teamwork' ($U = 112.000$, $p<0.05$). Mean rank scores (Trust, 22.41: Charity 16.10) suggest that 'Trust' facilities achieved on average higher scores for this variable.

Table 3m: Mann Whitney U test results for Active Support Variables

Active Support Variables	Name of organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
ASAGE age appropriateness	Trust Charity	18 20	20.42 18.67	367.50 373.50	163.500	0.597
ASASS graded assistance	Trust Charity	18 20	18.56 20.35	334.00 407.00	163.000	0.600
ASCB challenging behaviour	Trust Charity	18 20	17.75 21.08	319.50 421.50	148.500	0.173
ASCHO activity choice	Trust Charity	18 20	20.25 18.83	364.50 376.50	166.500	0.665
ASCOM client communication	Trust Charity	18 20	18.11 20.75	326.00 415.00	155.000	0.406
ASCON staff contact	Trust Charity	18 20	21.31 17.88	383.50 357.50	147.500	0.302
ASDEM demands presented carefully	Trust Charity	18 20	20.94 18.20	377.00 364.00	154.000	0.426
ASDEV developmental level	Trust Charity	18 20	20.89 18.25	376.00 365.00	155.000	0.444
ASDIF differential reinforcement	Trust Charity	18 20	18.83 20.10	339.00 402.00	168.000	0.687
ASINT interpersonal warmth	Trust Charity	18 20	17.72 21.10	319.00 422.00	148.000	0.282
ASPROG programmes in use	Trust Charity	18 20	19.83 19.20	357.00 384.00	174.000	0.804
ASREAL real activities	Trust Charity	18 20	19.67 19.35	354.00 387.00	177.000	0.927
ASSPE developmental speech	Trust Charity	18 20	17.08 21.67	307.50 433.50	136.500	0.137
ASTEAC teaching	Trust Charity	18 20	22.56 16.75	406.00 335.00	125.000	0.084
ASTEAM teamwork	Trust Charity	18 20	22.41 16.10	381.00 322.00	112.000	0.045

Client Engagement and Challenging Behaviour: As the data were ordinal the client engagement and challenging behaviour variables were compared using Mann-Whitney U tests. Results are shown in Table 3n. No significant differences were found.

Table 3n: Mann-Whitney U results for Client Engagement and Challenging Behaviour Variables

Client Engagement and Challenging Behaviour	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
EMAC engagement in meaningful activity	Trust Charity	18 20	20.00 19.05	360.00 381.00	171.000	0.786
TAEI types of activities engaged in	Trust Charity	18 20	19.56 19.45	352.00 389.00	179.000	0.976
CBFRE challenging behaviour frequency	Trust Charity	18 20	17.03 21.73	306.50 434.50	135.500	0.172
CBSEV challenging behaviour severity	Trust Charity	18 20	18.72 20.20	337.00 404.00	166.000	0.667

Index of Participation in Domestic Life: PDL scores for clients in both organisations were compared using a Mann-Whitney U test as the data were ordinal (Table 3o). No significant difference was found (U=163.000, z = -0.733, n.s).

Table 3o: Mann Whitney-U test results for IPDL variable.

Participation in Domestic Life	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
PDL	Trust Charity	18 21	18.56 21.24	334.00 446.00	163.000	0.464

Management Practices Scale and Index of Community Involvement: Scores for the 'Management Practices' scale and 'Index of Community Involvement' were compared between the 2 organisations using the Mann -Whitney U test (see Table 3p). This test was suitable as the data were ordinal in nature. Significant differences were found for the variables of 'block treatment' ($U = 50.500$, $p<0.01$), 'depersonalisation' ($U = 99.500$, $p<0.05$), and 'management practices' overall ($U = 95.000$, $p<0.01$). In all cases the Trust has higher scores than the Charity.

Table 3p: Mann Whitney U test results for Management Practices and Index of Community Involvement Variables

Variables	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
BLOCK block treatment	Trust Charity	18 21	27.69 13.40	498.50 281.50	50.500	0.000
COMINV community involvement	Trust Charity	18 21	23.39 17.10	421.00 359.00	128.000	0.085
DEPER depersonalisation	Trust Charity	18 21	24.97 15.74	449.50 330.50	99.500	0.011
RIGID rigidity of routine	Trust Charity	18 21	22.17 18.14	399.00 381.00	150.000	0.267
MANAGE management practices	Trust Charity	18 21	25.22 15.52	454.00 326.00	95.000	0.008
SOCDIS social distance	Trust Charity	18 21	19.75 20.21	355.50 424.50	184.500	0.897

Qualitative observations of the project: The results of quantitative analysis have revealed few differences between organisations for variables of client engagement and active support. Qualitative observations support the finding that overall staff support

of clients was poor regardless of the organisation in which the facility was found. Examples are provided below.

'During one period of observation a client was wheeled into a kitchen and was left to fall asleep whilst the staff member made lunch' (Trust)

'One client was encouraged to become involved in hoovering but when the staff member left the task to do something else the client was unable to continue alone and so stood there for a long time with the Hoover in his hand' (Trust)

'One young man sat for long periods of time in his wheelchair. He became restless and agitated and wanted access to the kitchen...Staff responses to his agitation were ignoring his protests, telling him to stop, locking the kitchen door, giving him a vibrating object which he was then left alone with for long periods of time, taking him to another room or getting him out of his wheelchair and allowing him to lay on the dining area lino slapping a bowl on the floor repeatedly for long periods of time before someone else got fed up with it and the bowl was taken off him.' (Trust)

'At one point clients were lined up in their wheelchairs whilst staff sat and chatted to each other'. (Trust)

'On all of my visits to the house (3) one woman did not get up until at least lunchtime' (Charity)

'One client was very disengaged and basically sat in the chair for most of the observation' (Charity).

'One man who had been pacing around and biting his hand was persuaded by staff to lay down and sleep on the sofa. This action was taken just before dinner which meant he slept through the meal...a man was left trying to consume a drink alone in his wheelchair which he had great difficulty in doing. He dropped the cup and this was then taken away without a replacement being given' (Charity).

'a staff member did attempt engagement.....she arranged for one client to spend a long period of time drawing. The paper was taped down and the woman just made the same series of marks over and over again' (Charity)..

'one client went into the kitchen and attempted to make herself a cup of tea unsupported. She did this several times and poured cold water into the pot...When she poured the tea out it was cold and she threw it away' (Charity).

c. Commentary.

It is interesting to note that for both active support and client engagement only one significant difference was found between the two organisations. This was for the variable of active support 'teamwork' with Trust facilities achieving a higher scores. These results supports the finding that overall staff support and client engagement was similar regardless of the organisation concerned.

In regard to the 'Management Practices Scale' significant differences were found for the variables of 'block treatment', 'depersonalisation', and 'management practices total'. For 'block treatment' the mean rank score (Trust, 27.69: Charity, 13.40) indicates that facilities in the Trust achieved higher scores for this variable. For 'depersonalisation' the mean rank score (Trust, 24.97: Charity, 15.74) once again indicates that on average Trust facilities achieved higher scores. For the variable 'management practices (total)' the mean rank score (Trust, 25.22: Charity, 15.52) indicates that the overall score on average was higher for facilities in the Trust. It would appear, therefore, that NHS facilities may engage in more institutional practices.

d. Comparison of Trust and Charity (community only).

Active Support: Mann-Whitney U tests were conducted for the ordinal variables of 'Active Support' to ascertain if significant differences existed between the two organisations once scores for institutional variables were excluded. Results are contained in Table 3q. Only one variable, 'teaching' achieved a significant result (U

= 50.000, p<0.05). The mean rank scores (Trust, 20.50: Charity, 13.00) indicate that on average 'Trust' facilities achieved higher scores for this variable.

Table 3q: Mann Whitney U test results for Active Support variables

Active Support	Name of organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
ASAGE age appropriateness	Trust Charity	10 20	18.80 13.85	188.00 277.00	67.000	0.107
ASASS graded assistance	Trust Charity	10 20	15.80 15.35	158.00 307.00	97.000	0.888
ASCB challenging behaviour	Trust Charity	10 20	13.55 16.48	135.50 329.50	80.500	0.186
ASCHO activity choice	Trust Charity	10 20	18.70 13.90	187.00 278.00	68.000	0.124
ASCOM client communication	Trust Charity	10 20	15.05 15.73	150.50 314.50	95.500	0.816
ASCON staff contact	Trust Charity	10 20	19.05 13.73	190.50 274.50	64.500	0.089
ASDEM demands presented carefully	Trust Charity	10 20	19.20 13.65	192.00 273.00	63.000	0.090
ASDEV developmental level	Trust Charity	10 20	19.20 13.65	192.00 273.00	63.000	0.090
ASDIF differential reinforcement	Trust Charity	10 20	14.85 15.82	148.50 316.50	93.500	0.739
ASINT interpersonal warmth	Trust Charity	10 20	14.25 16.13	142.50 322.50	87.500	0.521
ASPROG programmes in use	Trust Charity	10 20	14.50 16.00	145.00 320.00		0.496
ASREAL real activities	Trust Charity	10 20	17.30 14.60	173.00 292.00	82.000	0.410
ASSPE developmental speech	Trust Charity	10 20	13.25 16.63	132.50 332.50	77.500	0.234
ASTEAC teaching	Trust Charity	10 20	20.50 13.00	205.00 260.00	50.000	0.019
ASTEAM teamwork	Trust Charity	9 20	17.78 13.75	160 275.00	65.000	0.156

Client Engagement: Mann-Whitney U tests were carried out on the ordinal data comparing the two independent samples. Results are shown in Table 3r below. No significant differences were found.

Table 3r: Mann Whitney U test results for Client Engagement and Challenging Behaviour variables (community only).

Client Engagement and Challenging Behaviour	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
EMAC engagement in meaningful activity	Trust Charity	10 20	18.25 14.13	182.50 282.50	72.500	0.217
TAEI types of activities engaged in	Trust Charity	10 20	17.65 14.43	176.50 288.50	78.500	0.338
CBFRE challenging behaviour frequency	Trust Charity	10 20	12.20 17.15	122.00 343.00	67.000	0.125
CBSEV challenging behaviour severity	Trust Charity	10 20	14.15 16.17	141.50 323.50	86.500	0.529

Participation ion Domestic Life: Table 3s shows the results of a Mann-Whitney U test to compare the two organisations for Participation in Domestic Life Scores. As with the results when all facilities were included no significant difference was found (U = 80.000, z = -1.057, n.s.).

Table 3s: Mann Whitney-U test results for IPDL variable (community only)

Participation in Domestic Life	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
PDL	Trust Charity	10 21	13.50 17.19	135.00 361.00	80.000	0.291

Management Practices Scale and Index of Community Involvement Scale: The eight institutional facilities were excluded from analysis and the Mann-Whitney U tests were re-run (see Table 3t). Only the variable 'block treatment' ($U= 50.500$, $p<0.05$) was significant with the Trust achieving a higher score.

Table 3t: Mann Whitney U test results for Management Practices and Index of Community Involvement variables (community only)

Variables	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
BLOCK block treatment	Trust Charity	10 21	21.55 13.36	215.50 280.50	49.500	0.017
DEPER depersonalisation	Trust Charity	10 21	19.35 14.40	193.50 302.50	71.500	0.153
RIGID rigidity of routine	Trust Charity	10 21	18.15 14.98	181.50 314.50	314.500	0.358
SOCDIS social distance	Trust Charity	10 21	13.10 17.38	131.00 365.00	76.000	0.212
MANAGE management practices	Trust Charity	10 21	19.30 14.43	193.00 303.00	72.000	0.162
COMINV community involvement	Trust Charity	10 21	17.75 15.17	177.50 318.50	87.500	0.459

e. Commentary

The results contained in Tables q, r and s show that only one of all of these variables, active support 'teaching' achieved a significant result at the $p <0.05$ level. This result should be treated with some caution, however as the analysis of a large number of variables may lead to some results being significant by chance. It would appear that even though one variable was significant, in general staff support and client engagement including 'Participation in Domestic Life' was similar for both organisations regardless of the exclusion of institutional facilities.

If we look at the results for the Management Practices Scale only the variable 'block treatment' yielded significant results once institutional facilities were excluded. It may be, therefore, that hospital facilities that were included in the analysis engaged in more institutionalised practices compared to houses in the community.

iv) Facility Descriptives and Policy Schedule

a) Inter-rater agreement reliability results

Facility Descriptives: No reliability data was collected for this measure

Policy Schedule: A second scorer was asked to examine all of the policies provided by a facility and to rate them according to the 15 categories of active support see Appendix 2). These results were then compared with the original scores achieved and both kappa and crude inter-rater agreement reliability values were calculated. It should be said that overall scores were so low that the calculation of reliability statistics may be deemed unviable. Out of a total possible score of 45, the highest scores recorded was 15 and this was achieved by only 3 facilities. Indeed 11 facilities recorded a score of '0'. Results of reliability analysis are, however, reported in Table 3u as it is important to substantiate that more than one rater found the policies provided to be of a poor quality.

Table 3u: Kappa statistics for Policy Schedule

Coding category/Item	**Numbers of pairs of ratings**	**Kappa**	**Percentage agreement**
Age Appropriateness	39	0.753	92.3%
Graded Assistance	39	1.000	100%
Challenging Behaviour	39	1.000	100%
Activity Choice	39	0.903	94.9%
Client Communication	39	1.000	100%
Staff Contact	39	1.000	100%
Presentation of Demands	39	0.629	92.3%
Developmental Level	39	1.000	100%
Differential Reinforcement	39	1.000	100%
Interpersonal Warmth	39	0.605	76.92%
Programmes in Use	39	0.917	94.9%
Real Activities	39	0.805	89.74%
Developmental Speech	39	0.545	92.3%
Teaching	39	1.000	100%
Teamwork	39	1.000	100%

14 categories achieved a kappa value above 0.60 which is the suggested level at which inter-rater agreement is deemed acceptable.

b) Comparison of Trust and Charity

Facility Descriptive Variables: The 2 organisations were compared for facility variables of interest using the Mann -Whitney U test. The results are shown in Table 3v. No significant differences were found.

Table3v: Mann Whitney U test results for Facility Descriptive variables.

Facility Variables	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
MANLEN length of time manager in post	Trust Charity	18 21	18.61 21.19	335.00 445.00	164.000	0.438
NUMCLIEP number of clients in project	Trust Charity	18 21	23.50 17.00	423.00 357.00	126.000	0.071
NUMSTAFP number of staff in project	Trust Charity	17 21	23.18 16.52	394.00 347.00	116.00	0.065
PROAGE age of project	Trust Charity	18 21	22.67 17.71	408.00 372.00	141.000	0.150

Policy Schedule

Facility policies were compared using a Mann-Whitney U test (see Chapter 2 for details of this measure). The results of analysis can be seen in Table 3w below.

Table 3v Mann Whitney-U test results for Policy Schedule.

Policy Variables	Name of organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
ADAPCA adaptive	Trust Charity	18 21	20.58 19.50	370.50 409.50	178.500	0.280
AGAPCA age appropriateness	Trust Charity	18 21	24.08 16.50	433.50 346.50	115.500	0.002
ASSCA assistance	Trust Charity	18 21	21.92 18.36	394.50 385.50	154.500	0.144
CBCA challenging behaviour	Trust Charity	18 21	21.17 19.00	381.00 399.00	168.000	0.437
CHOICA Choice	Trust Charity	18 21	22.11 18.19	398.00 382.00	151.000	0.222
COMMCA communication	Trust Charity	18 21	18.61 21.19	335.00 445.00	164.000	0.291
DEMCA demands	Trust Charity	18 21	20.67 19.43	372.00 408.00	177.000	0.464
OPPCA opportunities	Trust Charity	18 21	20.78 19.33	374.00 406.00	175.000	0.641
PROGCA programmes	Trust Charity	18 21	27.56 13.52	496.00 284.00	53.000	0.000
REALCA real activities	Trust Charity	18 21	22.00 18.29	396.00 384.00	153.000	0.228
SPEECA speech	Trust Charity	18 21	20.72 19.38	373.00 407.00	176.000	0.428
SUPPCA support	Trust Charity	18 21	23.75 16.79	427.50 352.50	121.500	0.017
TEACHCA teaching	Trust Charity	18 21	27.28 13.76	491.00 289.00	58.000	0.000
TEAMCA Teamwork	Trust Charity	18 21	19.36 20.55	348.50 431.50	177.500	0.720
WARMCA warmth	Trust Charity	18 21	20.03 19.98	360.50 419.50	188.500	0.988
TOTPOLIC total of policy	Trust Charity	18 21	23.69 16.83	426.50 353.50	122.500	0.057

A significant difference was found in policy scores for the variable of 'age appropriateness' between the two groups of facilities in the different organisations (U = 115.500, $p < 0.05$; mean rank score Trust, 24.08: Charity, 16.50). A significant difference was also found for the variable 'programmes' (U = 53.000, $p<0.001$; mean rank score Trust, 27.56: Charity 13.52). A significant difference was also found for the variable 'teaching' (U = 58.000, $p<0.001$; mean rank score Trust, 27.28: Charity 13.76). A significant difference was also found for the variable 'support' (U = 121.500, $p<0.05$; mean rank score Trust, 23.75, Charity, 16.79). The mean rank scores seem to indicate that facilities from the Trust achieved higher scores. Overall, however, total policy scores were low for both organisations (mean scores = Trust, 7.22, Charity, 3.95 out of a possible total score of 45) and no significant difference was found between the two groups for policy total.

c) Commentary

Several significant differences were found between the two organisations for a number of 'policy schedule' variables (age appropriateness, programmes, teaching and support) but not for facility descriptive variables. In regard to the policy schedule variables for which differences were found between the two organisations it may be pertinent to note the result that showed no significant difference for the variable of 'policy total'. Scores generally were very low and it is therefore difficult to determine if any really meaningful differences existed. In fact out of a total possible score of 45 the mean score for Trust facilities was 7.22 and the Charity 3.95 if all facilities were included in analysis and 4.80 for the Trust and 3.95 for the Charity if institutional facilities were omitted.

d) Comparison of Trust and Charity (community only)

Facility Descriptives: Mann-Whitney U tests were conducted on the ordinal facility descriptive data. Results are described in Table 3x: below. No significant differences were found.

Table 3x: Mann Whitney U test results for Facility Descriptive variables (community only)

Facility Variables	**Name of organisation**	**N**	**Mean Rank**	**Sum of Ranks**	**Mann-Whitney U**	**Asymp. Sig. (2-tailed)**
MANLEN length of time manager in post	Trust Charity	10 21	14.25 16.83	142.50 353.50	87.500	0.413
NUMCLIEP number of clients in project	Trust Charity	10 21	17.20 15.43	172.00 324.00	93.000	0.607
NUMSTAFP number of staff in project	Trust Charity	10 21	17.55 15.26	175.50 320.50	89.500	0.510
PROAGE age of project	Trust Charity	10 21	15.60 16.19	156.00 340.00	101.000	0.856

Policy Schedule: Table 3y describes the results of Mann-Whitney U tests conducted on the policy schedule data excluding institutional facilities from analysis. The variables of 'age appropriateness' ($U = 73.500$, $p<0.01$) 'programmes' ($U = 25.000$, $p<0.001$) and 'teaching' ($U = 31.000$, $p<0.001$) all achieved significant results with the Trust achieving higher scores in all cases. No significant difference was found between organisations for policy total.

Table 3y Mann Whitney-U test results for Policy variables (community only)

Policy Variables	Name of organisation	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Asymp. Sig. (2-tailed)
ADAPCA adaptive	Trust	10	16.00	160.00		
	Charity	21	16.00	336.00		
					105.000	1.000
AGAPCA age appropriateness	Trust	10	18.80	188.00		
	Charity	21	13.85	277.00		
					73.500	0.009
ASSCA assistance policy	Trust	10	16.05	160.50		
	Charity	21	15.98	335.50		
					104.500	0.967
CBCA challenging behaviour	Trust	10	17.80	178.00		
	Charity	21	15.14	318.00		
					87.000	0.320
CHOICA Choice	Trust	10	18.00	180.00		
	Charity	21	15.05	316.00		
					85.000	0.333
COMMCA communication	Trust	10	15.50	155.00		
	Charity	21	16.24	341.00		
					100.000	0.771
DEMCA demands	Trust	10	15.50	155.00		
	Charity	21	16.24	341.00		
					100.000	0.490
OPPCA opportunities	Trust	10	13.50	135.00		
	Charity	21	17.19	361.00		
					80.000	0.166
PROGCA programmes	Trust	10	24.00	240.00		
	Charity	21	12.19	256.00		
					25.000	0.000
REALCA real activities	Trust	10	16.15	161.50		
	Charity	21	15.93	334.50		
					103.500	0.936
SPEECA speech	Trust	10	15.50	155.00		
	Charity	21	16.24	341.00		
					100.000	0.490
SUPPCA support	Trust	10	17.65	176.50		
	Charity	21	15.21	319.50		
					88.500	0.308
TEACHCA teaching	Trust	10	23.40	234.00		
	Charity	21	12.48	262.00		
					31.000	0.000
TEAMCA Teamwork	Trust	10	13.10	131.00		
	Charity	21	17.38	365.00		
					76.000	0.168
WARMCA warmth	Trust	10	14.00	140.00		
	Charity	21	16.95	356.00		
					85.000	0.340
TOTPOLIC total of policy	Trust	10	18.00	180.00		
	Charity	21	15.05	316.00		
					85.000	0.389

e) Commentary

The results of significant differences between organisations for facility variables demonstrate that even if only community houses were included in analysis no significant differences were found. In regard to policy schedules although there were some significant differences in terms of policies in operation between the two organisations it is difficult to draw any meaningful conclusions from this result when as indicated earlier the overall quality of the policies for both organisations was so poor. Indeed once institutional facilities were excluded the highest score achieved by only one facility was 12 whilst the mean scores were 4.80 for the 'Trust' and '3.95' for the Charity. The total score it was possible to achieve was 45.

Discussion

If we consider the overall results of a comparison between two organisations as presented in this chapter we can draw a number of conclusions. The first is in regard to the quality and reliability of the data collected.

It was suggested from the outset that the research to be undertaken would need to collect data using a wide range of measures to ensure that all important variables that might affect active support and client engagement, were considered. As this was a stated objective it was also important to ensure that the measures used were reliable and valid particularly in regard to those instruments that were developed for the purpose of the study and were therefore untested. It was not possible to collect inter-rater agreement reliability or inter-interviewee agreement information for all the measures included in the study due to reasons of an ethical, practical or resource nature. Those measures where it was possible to collect such information, however, achieved acceptable levels of inter-rater agreement or inter-interviewee agreement reliability. In the case of the 'active support' measure 12 of the 15 categories achieved acceptable levels of reliability. As regards the 'client engagement/challenging behaviour measure 3 of the 4 categories achieved acceptable inter-rater reliability scores. In respect to the 'Group Home Management Scale' all of

the variables were highly correlated between raters scores. Finally in the case of 'policy schedules' 14 out of 15 categories achieved acceptable levels of reliability.

What then were the main findings of the comparative analysis of two organisations providing residential care for persons with a learning disability? The first and most obvious result, which is evident from the findings, is that very few significant differences existed. Indeed the expected dissimilarities that were predicted between two different types of service provider, that of a traditional NHS Trust and a Charity, were simply not evident. Overall the standard of service was generally poor. If for example we look at client engagement scores for both organisations, 72.4% of clients observed in Trust facilities were largely disengaged in activities compared with 65.3% of those clients observed in Charity facilities. In fact overall 69.05% of clients regardless of organisation were largely disengaged in activities. Only 3.23% of clients from the Trust and 8% of clients from the Charity were observed to be engaged in activities 75% of the time or more.

As stated earlier statistically significant differences that existed between the two organisations were few. In regard to client variables the only significant difference between the two organisations was for the variable 'ABS' which is an indicator of client ability. It was found, however, that once institutional facilities were excluded from analysis no significant difference existed between the two organisations for client ABS scores.

The results for staff variables suggest that only one variable was found to be significant which was 'intention to leave'. Staff employed by the 'Charity' were more likely to say they wished to leave both if institutional facilities were included and if they were omitted from the analysis.

In respect to the results for 'Care Practices' there were significant differences found between the two organisations for scores on the 'Active Support' measure. If all facilities were included in analysis Trust facilities achieved higher scores for the variable 'teamwork' whilst if institutional facilities were omitted Trust facilities achieved higher scores for the variable 'teaching'. It should be noted, however, that regardless of the inclusion or omission of institutional facilities the fact that only one

variable from a possible fifteen achieved a significant result indicates that overall the differences between the two organisations for active support were negligible. As suggested earlier the analysis of a large number of variables can produce a small number of significant results that are purely due to chance and this may have been the case in regard to the analysis conducted here. The alternative explanation may be, however, that for certain dimensions of active support Trust facilities demonstrated better levels of support. This is perhaps not surprising in respect of 'teamwork' as more traditional services may have more established staff and working patterns which may result in more planned activates rather than chance opportunities.

Significant differences were found between the two organisations for scores on the 'Management practices' measure. When all facilities were included the variables of 'Block Treatment', 'Depersonalisation' and 'Management Practices Total' were found to be significant although interestingly once institutional facilities were omitted from analysis only the variable 'Block Treatment' achieved a significant result. Trust facilities were found to engage in more institutional practices. This result is perhaps not surprising. The facilities that the Trust managed were traditional in that they were either still located in the confines of a hospital or they were based in the community but retained many of the same staff and also many of the practices associated with hospital routines. Once community facilities only were compared the sole significant difference was for the variable 'Block Treatment' which indicates that dissimilarities between management routines were confined to one area.

The results for the measure 'Policy Schedule' indicate that a number of significant differences were found regardless of the inclusion or omission of institutional facilities. It has to be said, however, that these differences are difficult to interpret in any meaningful way as in general scores for both organisation were very low. Also there were no significant differences found between total scores for the two organisations. These results are so poor that any variables that are found to be significant must be based on a comparison of very low scores. It is difficult to say, therefore, that one organisations policy was really better than another. If we look at the result of a comparison when all variables are included the policy variables of age appropriateness, programmes, teaching, and support did achieve significant results

with Trust facilities achieving higher scores. This implies that the Trust did have facility policies that were more oriented towards active support.

The results of this comparative analysis lead one to question whether community services as represented by the Charity in this study are really no better than institutional care of the past as represented by the Trust or indeed whether institutional services have reached parity with those in the community. It may help to compare the results of this study with those of past research in order to attempt an answer to this question.

We can compare the finding that clients in the Charity were more able than those in the Trust when institutional facilities were included with those of Raynes, Wright, Sheill and Pettipher (1994). They conducted a large-scale survey of 150 residential care facilities for persons with a learning disability in England. BDS data were collected and analysed for 1108 residents with a learning disability using the adapted version of the Adaptive Behaviour Scale (Conroy, 1980). Their results showed a significant ability difference between residents in different types of facility when an analysis of variance was conducted. In particular they report that 'residents in Health Authority facilities had the lowest behavioural competence; those in voluntary had the highest competence' (p79). This replicates an earlier study by Raynes, Sumpton and Flynn (1987), which found using the BDS measure that residents in hostels and voluntary homes were generally more able than those in hospital facilities.

Conroy et al (1985) conducted a large-scale study of persons with a learning disability leaving a long stay hospital in America. Using the Behaviour Development Survey they found a statistically significant difference between the adaptive behaviour of those people who were in community settings when compared to 'matched peers' who continued to live in the hospital facility (p97).

It would appear from the findings of this and earlier studies that clients who remain in hospital settings are likely to be the least able. Indeed when these clients were omitted from analysis in this study no significant difference was found between the ability of residents from the two different types of organisation.

The results for staff characteristic variables was that overall the only significant result for differences between staff in the two organisations was for the variable of intention to leave. These results are in contrast to those of Allen, Pahl and Quine (1990) who in a comparative study of hospital and community residential facilities for persons with a learning disability found significant differences between hospital and community staff for variables of gender, hours worked, age, experience, recruitment, attitudes, role ambiguity, job satisfaction and training. Although not all of these variables were included in this study those that were failed to produce significant results with the exception of intention to leave. Indeed no significant differences were found for the variables of 'gender', 'desire for promotion', 'hours worked' and 'levels of stress'. In regard to the level of stress experienced by staff, Allen, Pahl and Quine (1990) in their study of care staff did not find a significant difference between community and hospital staff for Malaise Inventory scores (mean scores 3.04 for community staff and 2.74 for hospital staff). Mean scores for staff in this study was 2.66 for the 'Trust' and 3.00 for the 'Charity' if all facilities were included, and 2.95 for the 'Trust' and 3.00 for the 'Charity' once institutional facilities were excluded. Thus results were similar to those of Allen et.al in that community staff appeared to experience greater stress on average, however, it is important to note that in this study no *significant* difference was found between staff for Malaise Inventory Scores if all facilities were included or if scores for staff in institutional facilities were omitted.

It would appear from the results of this study that the characteristics of staff were very similar although Charity staff did appear more dissatisfied in that they were more likely to say they intended to leave. These results were different to the findings of an earlier study by Allen, Pahl and Quine. One could interpret this result as indicating that perhaps hospital services have changed with advances in care practices and that therefore the expected differences that the Allen, Pahl and Quine study observed could no longer be demonstrated. The fact that the omission of institutional facilities from the analysis still only yielded one statistically significant difference suggests that community services do not appear to differ in terms of the make-up of their direct-care staff from those facilities of a more traditional nature.

No significant differences were found for the care practice variable of Index Participation in Domestic Life (IPDL). This is in contrast to the earlier finding by Raynes et al (1994) who, in a large-scale study of community care for persons with a learning disability, found a significant difference between four types of agency (Local Authority, Health Authority, Private Sector, Voluntary Sector) for PDL scores. 'Scheffe' tests indicated significant differences 'between the Local Authority and voluntary sector, between the Health Authority and voluntary sector and between the Private sector and the other three agencies' (p46) for PDL scores. Mean scores suggested that Private sector clients were the least likely to be involved in daily tasks with Health Authority clients next, followed by Local Authority whilst voluntary sector clients appeared to be the most likely to participate in domestic tasks. This study found that regardless of the type of organisation there were no significant differences in terms of client involvement in domestic tasks.

The most obvious reason why Raynes et al's found a significant difference between agencies for PDL scores could be due to the fact that a significant difference was also observed between the ability of clients with less able clients being found in hospital settings, followed by Private Sector clients, then Voluntary clients with the most able clients in Voluntary facilities. This study observed that once hospital based facilities were excluded from analysis no significant difference in client ability between organisations was found which could also account for why no difference in regard to PDL scores was also found.

Several significant differences were observed between organisations in regard to the Management Practices Scale particularly when all services were included. Raynes et al (1994) used the Management Practices Scale in their wide-scale study of the community residential care. Their result for the 'Management Practices Scale' revealed low mean scores for all facilities (Local Authority 18.1, Health Authority 17.7, Private Sector 12.6 and Voluntary Sector 18.3) although they did find a significant difference between groups using an analysis of variance. Scores were also low for 'Community Involvement' with an overall mean score for all facilities of 26.2 and no significant difference between the types of agency provision when an analysis of variance was performed. Mean scores for this study were Trust 26.56 and Charity 19.95 in respect to the Management Practices Scale and Trust 44.39, Charity 39.19 for

the Community Involvement Scale if all facilities were included. If institutional facilities were excluded from analysis mean scores were Trust 23.40 and Charity 19.95 for the Management Practices Scale and Trust 41.60, Charity 39.19 for the Community Involvement Scale. Results in this study were similar to those discovered by Raynes et al in their research in that a significant difference was observed between the types of agency for 'Management Practices' if all facilities were included in the analysis. Interestingly, however, when institutional facilities were excluded from analysis no significant difference between scores on the Management Practices Scale was observed. What this suggests is that *community* facilities were very similar in regard to the ways in which they were managed regardless of service provider. As with results for the Raynes et al study no significant difference was found in this study between type of agency for 'Community Involvement' regardless of whether institutional facilities were included in the analysis or not although interestingly scores overall were higher in this study.

The comparison of the results of this study with those of previous research did reveal some discrepancies. In particular the findings of this study appear to suggest that services for persons with learning disabilities that operate in the community are very similar regardless of the service provider. Indeed once institutional, or more traditional hospital services, were excluded from analysis, very few significant differences overall were apparent. It would appear that the less able clients are still to be found in hospital services, a result which replicates by earlier research however in many respects services were similar even if institutional facilities were included in analysis and even less significant differences were found when these facilities were omitted. These results indicate that there may be differences between community services and services offered in an institutional setting rather than *between* organisations providing care in the community.

It was stated at the outset that the intention of the study undertaken was to compare the provision of services for persons with a learning disability offered by two different organisations in order to determine if differences between good quality and poor quality services could account for discrepancies in levels of active support and client engagement. The results described in this chapter suggest that there were very few significant differences between the two organisations which means that a comparative

study to explore which variables explain client outcomes was not possible given that community services were not only similar but also that many were of a poor standard.

Of course it would be unwise to assume from these results that *all* community residential services for persons with a learning disability in England are similar, however, the sample was large enough to allow one to speculate as to the general lack of differences between the provisions of care offered by the two types of organisation. The most interesting result is in regard to the similarity of the quality of active support and engagement experienced by clients regardless of which organisation managed the residential facility was. Indeed only one significant difference was found between the two organisations in terms of active support and this was for the variable of 'teaching' clients if institutional facilities were included. If institutional facilities were excluded then only 'teamwork' was found to be significant. In general qualitative observations supported the finding that levels of active support and client engagement were not only similar but of a generally poor standard.

Given that the proposed comparison, which formed the basis of this study, is flawed the proposition is that the data collected should be treated as a single data set and a multivariate technique be adopted in order to explore the relationship between variables and explain which of them might contribute to differences in client engagement. Chapter 5 describes the results of such an analysis. The following chapter, however, contains the results of detailed analysis focusing on staff beliefs about the consequences related to aspects of their work. This part of the study was conducted in order to determine if the influence of others in the workplace and the consequences they may or may not impose have any effect on the ways in which staff support clients. What follows in Chapter 4 are the findings of this research.

Chapter 4 : Results of a Study of the Consequences Predicted by Direct-Care Staff Working in Residential Services for People with Learning Disabilities.

Chapter 3 dealt with an investigation as to whether significant differences between types of agency could account for dissimilarities in outcomes for clients in terms of engagement in activities. Results revealed that not only were levels of staff support and client engagement generally poor but also very few significant differences were evident between the two types of provision. This led to the conclusion that a comparative study was not possible and that therefore all of the data collected should be treated as one sample for the purposes of future analysis. The results of multiple regression analysis using all of the data as a single sample in order to determine what might predict level of client engagement are detailed in Chapter 5. Let us now turn to part of the study which explores a relatively under researched area in regard to explanations of levels of active support and client engagement.

The research conducted for this study deals with the possible impact that informal social systems may have on levels of client engagement. The part of the study described in this chapter attempts to define and evaluate one aspect of the informal social system that exists in residential establishments. This aspect is the expectations that other persons present in the work environment have of direct-care staff. In short this chapter sets out to examine part of the process by which inputs are integrated into the system of residential care to produce outputs for both staff and clients. As suggested in the introductory chapter early research carried out in institutions for persons with a learning disability seemed to indicate low levels of staff-client interaction generally, particularly in respect to persons with severe or profound learning disabilities (Cullen, Burton, Watts and Thomas, 1983; Moores and Grant, 1976; Wright, Abbas and Meredith, 1974). Recent research in community-based projects appears to provide evidence that levels of staff-client engagement are similarly low in comparison (Bratt and Johnson, 1988; Emerson et al, 1999; Felce and Perry, 1995; Hewson and Walker, 1992; Mansell, 1996).

It was argued in Chapter 1 that the informal social system within a residential home for persons with a learning disability was likely to be an important influence on what staff do, and that a useful focus for further research was staff beliefs about the

consequences that would follow from different courses of action they may take or may not take. In short this refers to the contingencies experienced by direct-care staff in the residential work environment and in particular the consequences associated with particular audiences if a task is, or is not performed. The opportunity to examine this issue in more detail is described in this chapter.

As suggested in the introductory chapter, research in this area has examined the influences that a range of persons in the work environment may have on staff performance. Little has been done, however, to study the effect that inconsistent expectations have on staff behaviour. Similarly, few studies have attempted to examine the consequences for staff of performing or failing to perform particular tasks and whether certain other aspects of their daily work compete with active support of clients with a learning disability.

The part of the study described in this chapter looks in detail at the consequences or contingencies that staff *perceive* will occur if they perform or fail to perform a task. This part of the study also examines with which key audiences staff associate described consequences. It is appropriate to focus on staff beliefs about what will happen rather than what actually happens as beliefs are easier to measure than actual consequences. Also the research examines the contingencies which staff report will happen rather than actual consequences observed because performance is likely to be influenced by learned rules which staff use to govern their work behaviour (Baum, 1994).

Much of the previous literature on staff performance has used a behavioural model in which tangible consequences such as recognition or praise are used to reinforce desirable staff behaviour (see Introductory chapter). These studies typically show clear but short-term effects and these results are in contrast to data collected in studies of staff performance in ordinary services, which show that staff performance is consistently poor.

The explanation as to why staff performance is generally poor in services might be found in broader studies of staff performance such as those of Jones, Brown, Cunningham, Roberts and Williams, 1975; and Woods and Cullen, 1983. These

studies suggest that although direct-care staff comply with projects to alter performance in the short-term they really perceive them as irrelevant hence the effects of such projects are not sustained. Why staff perceive them as irrelevant might be explained by the subculture, which exists amongst workers, and as such the notion of subculture might provide a more convincing explanation as to why staff continue to work in a certain way despite interventions (see Chapter 1 for examples of how the subculture of a facility might affect staff performance).

Expectations have been studied partly as manifested in the *attitudes* of staff. The question is then asked as to whether inappropriate attitudes by staff lead to poor performance. This approach sees staff as blameworthy in their contribution to poor performance.

An alternative approach, and one supported in the thesis, is the notion that staff are in fact acting rationally in their responses to contingencies as they perceive them. What this means in behavioural terms is that their behaviour is governed, not by direct contingencies, but by rules which they have learned about what will happen if they follow certain courses of action.

The study described in this chapter has two main hypotheses to guide research. The first is that other tasks in the work environment provide more powerful consequences for staff for performance or non-performance than do client-enabling ones. It could be, for example, that administration is a more highly consequated task by more key audiences than is the task of supporting clients in carrying out an activity for themselves. The second hypothesis is that staff receive differing perceptions of consequences from different audiences. In other words, consequences could be inconsistent. The effect of both these outcomes would be to lower levels of staff-client interaction and support. The possible relationship between staff reports of consequences and related audiences and the level of client engagement is examined in Chapter 5. What is described in this chapter are the results of a study into the contingencies experienced by staff.

The methodology adopted in this study is detailed in Chapter 2. The study follows a methodology devised by Murphy (1983) in which he interviewed nursing staff in an

institution for persons with a learning disability so as to ascertain the consequences of their actions. He found that there were strong consequences for failing to undertake administration but few outcomes for failing to engage with clients. As reported in the previous chapter, as very few significant differences were found between staff and facilities in the two organisations studied, analysis was carried out using staff responses as one sample.

Results

a) Inter-rater agreement reliability results for the consequences data

28 out of 143 (19.6%) interviews were taped for reliability purposes with the consent of the respondent. The author and an independent researcher coded the scripts in order to calculate the level of inter-rater reliability. A full explanation of how scripts were coded is given in Chapter 2/Method. The second observer, as it were, was expected to follow the same scoring guidelines and procedures as the original observer (see Appendix 2). The statistic used was Cohen's Kappa (1960). A value above 0.6 is seen as the acceptable level of agreement (Fleiss, 1981, quoted in Bakeman and Gottman, 1986). Cohen's kappa was calculated for each audience for performance and non-performance for the dimensions of strength, certainty and direction. A mean level of 0.9 was achieved (range 0.64 to 1) which is above the 0.6 level of acceptability. The mean level of kappa obtained was 0.9 (range = 0.64 to 1). Scores for inter-rater agreement reliability were high for this measure.

b) Results of consequences from other people in the workplace.

Table 4a below illustrates the percentage of respondents who reported strong certain consequences from different audiences when they performed, or failed to perform a task.

Table 4a: Results of Consequences for tasks from Other People

	Tasks				
	Admin	Client Enabling	Everyday	Other	Q
Positive consequences for action					
Co-workers	23%	43%	31%	1%	81.2***
Families	1%	10%	4%	16%	25.3***
Managers	65%	51%	23%	1%	163.5***
Professionals	0%	7%	1%	8%	27.4***
Residents	1%	17%	1%	0%	64.6***
Q	283.8***	134.3***	112.3***	6.4	
Positive consequences for inaction					
Co-workers	6%	10%	3%	13%	11.5**
Families	0%	0%	0%	0%	-
Managers	33%	8%	0%	7%	82.8***
Professionals	0%	1%	0%	1%	3.0
Residents	0%	1%	0%	0%	3.0
Q	160.4***	34.9***	20.0***	53.2***	
Negative consequences for action					
Co-workers	6%	3%	0%	15%	29.5***
Families	0%	1%	1%	0%	3.7.
Managers	11%	3%	0%	12%	26.0***
Professionals	0%	1%	1%	1%	2.0
Residents	0%	10%	10%	3%	23.3***
Q	46.5***	25.0***	45.9***	54.6***	
Negative consequences for inaction					
Co-workers	41%	53%	57%	0%	125.3***
Families	1%	4%	1%	0%	11.9***
Managers	76%	62%	49%	0%	189.9**
Professionals	1%	3%	2%	6%	7.7n.s.
Residents	2%	11%	2%	0%	32.8***
Q	319.1***	231.4***	243.4***	-	

Cochran's Q: ** p<0.01, *** p<.001

c) Commentary

The results suggest that staff do not perceive there to be strong certain consequences from residents regardless of whether they perform or fail to perform a task. 17% of staff did say that they would receive strong, certain, positive consequences from residents if they performed tasks which were client enabling, however, 10% of staff also said that they would receive negative consequences, such as challenging behaviour, from residents when they performed these tasks. 11% of staff also said that they would receive negative consequences from residents when they failed to perform client-enabling tasks. These results suggest that the consequences from residents even when staff do try to actively engage them in a task are inconsistent. In other words, resident reactions are mixed.

In regard to resident's families the large majority of staff did not report that families provide strong certain consequences for any kind of task. The largest number of staff reported positive consequences from families if staff members undertake client-enabling activities. Similarly, very few staff members reported strong certain consequences from external professionals who were involved with residents in the home. This may reflect the fact that contact with professionals for staff working in residential care environments is limited. 7% of staff report strong, certain, positive consequences if they perform client-enabling tasks and 3% if they do not. Limited contact with professionals is likely to revolve around programmes which professionals have established and which involve clients in a task. For example, a psychologist may have devised a strategy to enable a client to dress him/herself. It is not surprising, therefore, that even limited contact with professionals produces some consequences for client enabling tasks. 8% of staff report certain, strong, positive consequences from professionals if they perform 'other' (i.e. non-work) tasks and 6% if they do not.

More staff did report consequences from co-workers both for performing or failing to perform a task although it should be noted that a majority of staff members reported no strong certain consequences for action. Interestingly 43% of staff report strong, certain, positive consequences from co-workers when they perform a client-enabling task and 53% report a strong, certain, negative consequence when they fail to perform

these tasks. 57% of staff, however, report strong, certain, negative consequences when they fail to perform everyday tasks not involving a resident, such as cleaning or cooking. When staff do perform a task the most amount of staff report positive consequences from co-workers for client-enabling (43%), then everyday (31%) and then administration tasks (23%).

There was a significance difference observed in a post-hoc comparison between staff reporting positive consequences for administration and client-enabling ($z=-4.23$, $p < 0.001$) with the highest percentage of respondents reporting positive consequences from managers for administration (65%) followed by co-workers (23%). For client-enabling 51% of respondents reported positive consequences from managers followed by 43% from co-workers. There was also a significant difference observed in a post-hoc comparison between client-enabling and everyday care tasks ($z=-2.38$, p0.05). 53% of respondents reported that, if they failed to perform a task, they would receive a negative consequence from co-workers for everyday care tasks, followed by client-enabling tasks, followed by administration tasks. In a post-hoc comparison no significant difference was observed between everyday and client-enabling tasks. A significant difference was observed, however, in a post-hoc comparison between client-enabling and administration ($z=-2.324$, $p<0.05$).

Managers are the audience from whom staff report the most strong, certain consequences. The most amount of consequences appear to be for the task of administration. 65% of staff report strong, certain, positive consequences from managers for performing an administration task and 76% report strong, certain, negative consequences if they fail to perform it. 51% of staff also report strong, certain positive consequences for performing a client-enabling task and 62% report strong, certain, negative consequences for failing to perform a client-enabling task. 23% of staff reported strong certain positive consequences from managers if they performed an everyday task and 49% reported strong, certain, negative consequences for failing to perform these tasks.

Significant differences were observed in a post-hoc comparison between positive consequences for doing administration and client-enabling ($z=-2.887$, $p<0.01$) and client-enabling and everyday ($z=-5.252$,$p<0.001$) and between negative consequences

for failing to do administration and not enabling clients ($z=-2.967$, $p<0.01$) and for not-enabling clients and not doing everyday tasks ($z=-2.474$,$p<0.05$). A third of staff said that if they failed to undertake administration tasks they would experience positive consequences from managers and this appeared to be mostly in the form of assistance so as to guide them as to how to correctly perform the task. Help of this kind appeared to be far less apparent in relation to client-enabling tasks ($z=-5.000$, $p<0.001$).

If we review the consequences that different audiences have for respondents we can see that managers, unsurprisingly, are the persons with whom the most amount of strong, certain consequences are associated. The next most important audience appears to be co-workers. Other audiences such as residents themselves, professionals and residents families do not appear to provide many strong, certain consequences for staff.

If we look at the consequences for the performance or non-performance of a task the most important tasks appear to be administration and client enabling.

The picture that emerges from these results is one of conflicting demands. The most important audience, managers, are related strongly with consequences for both administration and client-enabling tasks whilst co-workers are associated with strong consequences for client-enabling, everyday and administration tasks. Thus, this perceived conflict of demands from different audiences may have some impact on how direct-care staff perform their work.

d) Results of the effects of Client Adaptive Behaviour on responses.

For each facility a mean BDS score (Conroy et. al. 1982) was calculated for the persons with a learning disability who were resident at the time of the research. Facilities were then assigned to a group based on the mean BDS score (Group 1 0-39, Group 2 40-59, Group 3 60-78 and Group 4 79-100). In order to ascertain if staff in facilities with residents who had differing levels of adaptive behaviour reported

different consequences for the performance or non-performance of a task a one-way analysis of variance was conducted. The results are shown in Table 4b.

Table 4b: Results of the Effect of Adaptive Behaviour on Consequences

	BDS1 (0-39)	BDS2 (40-59)	BDS3 (60-78)	BDS4 (79-100)	Chi-square	d.f.	Significance
Positive consequences for action							
Co-workers	25%	24%	33%	45%	4.982	3	n.s.
Families	3%	9%	0%	0%	10.603	3	*
Managers	32%	40%	48%	55%	8.409	3	*
Professionals	2%	2%	5%	0%	2.281	3	n.s.
Residents	2%	4%	8%	30%	39.446	3	***
Positive consequences for inaction							
Co-workers	8%	7%	20%	0%	9.275	3	*
Families	0%	0%	0%	0%	0.000	3	n.s.
Managers	11%	13%	13%	35%	9.371	3	*
Professionals	0%	0%	0%	0%	0.578	3	n.s.
Residents	0%	0%	0%	5%	25.200	3	***
Negative consequences for action							
Co-workers	6%	8%	3%	15%	4.489	3	n.s.
Families	0%	2%	3%	0%	6.685	3	n.s.
Managers	8%	5%	0%	5%	4.826	3	n.s.
Professionals	1%	0%	0%	0%	1.159	3	n.s.
Residents	2%	10%	0%	20%	23.733	3	***
Negative consequences for inaction							
Co-workers	37%	44%	45%	45%	2.895	3	n.s.
Families	3%	0%	0%	0%	5.286	3	n.s.
Managers	48%	48%	53%	50%	0.380	3	n.s.
Professionals	2%	2%	0%	0%	1.378	3	n.s.
Residents	2%	6%	3%	35%	53.218	3	***

Note 1. Kruskal-Wallis : * $p<0.05$, ***$p<0.001$

e) Commentary

There was a significant difference in consequences experienced from residents. Facilities with more able residents demonstrated more consequences, positive and negative, for both performance and non-performance of a task.

In services that catered for more severely disabled residents families appeared to provide significantly more positive consequences for action. It should be noted, however, that the proportion of staff reporting any consequences was low. In facilities with mean BDS scores in group 3 a significantly higher proportion of staff reported positive consequences form co-workers for inaction. This result should, however, be treated with care due to the fact that in one facility almost all direct-care staff in one unit reported that co-workers would react positively to their need to 'take a break' especially from working directly with residents.

In units with different mean BDS scores positive consequences from managers were also significantly different with a higher quantity of staff reporting consequences in units with more able residents.

f) The effect of length of service on consequences

In order to examine if staff members who differed in their length of service reported differing consequences a one-way analysis of variance was conducted using the categories of 0-12 months, 13-24 months, 25-60 months and 61 months plus. The results are contained in Table 4c.

Table 4c: Results for the Effect of Length of Service on Consequences in Percentages

	<12 mths	13-24 mths	25-60 mths	61+ mths	Chi-Square	df	Sig[1]
Positive consequences for action							
Coworkers	21%	32%	25%	28%	4.534	3	n.s.
Families	2%	5%	6%	8%	7.647	3	n.s.
Managers	33%	42%	31%	41%	4.578	3	n.s.
Professionals	1%	3%	2%	3%	1.149	3	n.s.
Residents	4%	8%	7%	0%	8.025	3	*
Positive consequences for inaction							
Coworkers	6%	10%	11%	9%	3.709	3	n.s.
Families	0%	0%	0%	0%	0.000	3	n.s.
Managers	10%	19%	8%	18%	10.876	3	*
Professionals	0%	0%	0%	1%	6.526	3	n.s.
Residents	0%	0%	0%	0%	1.080	3	n.s.

	<12 mths	13-24 mths	25-60 mths	61+ mths	Chi-Square	df	Sig[1]
Negative consequences for action							
Coworkers	5%	7%	5%	11%	3.943	3	n.s.
Families	0%	1%	1%	1%	2.996	3	n.s.
Managers	7%	6%	4%	11%	3.163	3	n.s.
Professionals	0%	0%	0%	3%	13.076	3	**
Residents	7%	7%	6%	0%	5.552	3	n.s.
Negative consequences for inaction							
Coworkers	38%	37%	33%	46%	3.684	3	n.s.
Families	0%	1%	3%	4%	7.972	3	*
Managers	44%	55%	41%	55%	8.025	3	*
Professionals	2%	3%	1%	0%	3.013	3	n.s.
Residents	5%	4%	3%	0%	4.274	3	n.s.

Note 1. Kruskal-Wallis: * $p<.05$, ** $p<0.01$

The results show that there are significant differences for 4 variables. For staff members who had worked for 73 months plus (5 years or more) no staff members

reported positive consequences from residents when they performed a task. It should be noted, however, for all groups the number of staff members who reported consequences was very low.

A small number of staff that had worked 73 months plus reported that they received negative consequences from professionals when they performed tasks. Staff members who had been in the service for 0-12 months and those who had been employed for 2-5 years reported that they received fewer consequences, positive or negative, from managers when they failed to perform a task.

A small percentage of respondents felt that they would receive negative consequences from resident's families if they failed to perform a task. The percentage of respondents who reported negative consequences from resident's families rose the longer that they had been employed in a service.

g) The effect of team membership and service agency on consequences

In order to examine if staff employed in different teams and in different settings reported different consequences a one-way analysis of variance was carried out. Table 4d describes the results.

Table 4d: Results for the Effect of Team Membership on Consequences

	χ^2	df	Sig[1]
Positive consequences for action			
Coworkers	72.26946	38	***
Families	64.02328	38	**
Managers	56.75438	38	*
Professionals	58.27046	38	*
Residents	55.3483	38	*
Positive consequences for inaction			
Coworkers	55.85989	38	*
Families	0	38	n.s.
Managers	63.30077	38	**
Professionals	70.49906	38	**
Residents	70.49906	38	**
Negative consequences for action			
Coworkers	36.97307	38	n.s.
Families	44.82358	38	n.s.
Managers	49.26503	38	n.s.
Professionals	48.13429	38	n.s.
Residents	62.05548	38	**
Negative consequences for inaction			
Coworkers	56.68167	38	*
Families	72.25121	38	***
Managers	48.20422	38	n.s.
Professionals	76.54845	38	***
Residents	88.50497	38	***

Note 1. Kruskal-Wallis: * p<.05, ** p<.01, *** p<.001

h) Commentary

Significant differences were found for the majority of different audiences and across teams both for positive consequences when tasks were or were not performed and negative consequences when a task was not performed.

Seven variables were significant. 'Charity' direct-care staff reported that they would experience a greater number of negative consequences from coworkers if they performed other (non-work) tasks $\chi^2(1, N = 143) = 6.23, p < .05$, and a greater number of positive consequences if they did not perform other (non-work) tasks, $\chi^2(1, N = 143) = 6.83, p < .01$. These staff also reported that they would receive more positive consequences from managers if they performed client-enabling tasks, χ^2 (1, N =143) = 5.08, $p < .05$, and if they failed to perform administration, χ^2 (1, N = 143) 4.58, $p < .05$. They also reported a greater number of negative consequences from residents if they did everyday care tasks, χ^2 (1, N =143) 4.70, $p < .05$ or other (non-work) tasks χ^2 (1,N = 143) =3.95, p< .05 and a greater number of positive consequences from residents if they did client-enabling tasks, χ^2 (1, N =143) = 4.51, $p < .05$.

i) Consequences from the staff member themselves

Respondents sometimes described a personal consequence i.e. that regardless of consequences from other audiences the respondent would feel good or bad about what they had done or not done. Results described in Table 4e indicate the consequences that respondents themselves experienced when they performed or failed to perform a task.

Table 4e: Results for Consequences from Staff Member Themselves

	Tasks				
	Admin	Client Enabling	Everyday	Other	Significance (1)
Positive consequences for action	18%	7%	5%	1%	***
Positive consequences for inaction	1%	0%	0%	0%	n.s.
Negative consequences for action	13%	4%	9%	0%	***
Negative consequences for inaction	1%	2%	4%	3%	n.s.

Note 1: Cochran's Q : ***p<0.001

j) Commentary

Interestingly administration was the task that the most respondents said were of both positive and negative consequence to themselves when the task was performed. When interview transcripts were examined it would appear that this result reflects the 'sense of achievement' respondents experienced when they completed an administrative task and in a negative sense the fact that administrative duties detracted from time spent with residents.

Discussion

It is important at the outset to note that this part of the study is an exploratory one and as such the results of this research although interesting, must be treated with some caution and for a number of reasons.

The first note of caution is in regard to the measure itself. The questionnaire used was tested in a pilot study and in the main study achieved acceptable levels of inter-rater reliability. It has not been used in any further research, however. Thus the findings presented in the study cannot be validated by comparison with the results of similar studies. Also the measure took a long time to administer and relied on free response. It could be that a more refined version of the questionnaire would yield more accurate responses and also allow for a more widespread study to be undertaken encompassing a larger sample.

The second note of caution relates to the relationship between what staff felt would happen when they performed, or failed to perform work tasks, and what might actually occur. In other words the study did not test the reality of consequences imposed in the work place. Also the study did not attempt to ascertain if the perceived consequences reported by staff have any effect on the way they actually support and care for residents with a learning disability.

The third note of caution is in regard to the responses staff gave to questions of care. It may be that respondents answer questions about their work in order to reflect a

desired response of supporting clients in an active manner. It is difficult to counter such a possible bias in responses. Respondents were assured of confidentiality and encouraged to answer questions in a way which reflected what they really felt and experienced. Future studies should, however, test the accuracy of responses by interviewing the same respondent on two different occasions using different interviewers and comparing responses. Also a future study should observe staff performance and attempt to relate it to the consequences that staff describe. This would prove a more adequate test of the bias in staff responses.

What then are the main findings of this study of the consequences predicted by staff in residential care for persons with a learning disability?

a) Certain audiences appeared to be associated with fewer consequences for staff in the performance of their work. Only a small number of staff reported strong, certain consequences for the performance or non-performance of tasks from residents, resident's families or professionals outside of the service.

b) A noticeable minority of staff do not report consequences from managers or co-workers. Many staff of course did specify strong, certain consequences from these two audiences, but it is an interesting finding that so many did not.

c) The tasks associated with the most amounts of consequences for staff are administration and then enabling residents

d) Staff that are employed in facilities where there are more able residents reported that there would be more consequences from residents and managers.

e) Staff employed in the same facility reported that different audiences were associated with similar consequences, which were mainly negative consequences when a task was not performed, and positive consequences when it was.

f) In terms of themselves the number of staff who reported consequences was few. Of those who did report consequences for themselves when a task was or was not performed the largest number of staff reported both positive and negative outcomes when they undertook an administrative task.

We can compare these results with those of Murphy (1983, unpublished). Murphy attempted to provide a comprehensive explanation of the contingencies that exist in the workplace.

Murphy asked twenty-one staff to rank a variety of tasks for their importance relevant to a number of criteria. These criteria were - the consequences to themselves as staff if they did not perform that duty, the importance to career prospects, the importance to job satisfaction, and finally, the importance to residents. Staff were also asked why they performed each of these duties and what the consequences would be of failing to perform these duties.

Murphy's findings were that in terms of the consequences for staff if they did not perform a task, nursing procedures, administrative duties and personal care tasks (whether performed by staff themselves or merely supervised by them) were ranked more highly. Tasks such as 'Staff time' and 'Domestic duties normally performed by nursing staff' were ranked as least important. This is comparable with the results found in this study where administration was seen as the task associated with the most amounts of consequences.

In terms of career prospects staff ranked administration duties, nursing procedures, talking to visiting staff and following training programmes as most important. Once again staff time and domestic duties normally performed by nursing staff were ranked as least important. In terms of job satisfaction talking to residents, leisure activities with residents, following client training programmes and spending time away from the workplace were all ranked as more important. Nursing procedures, administrative duties, and domestic duties normally performed by nursing staff and staff time were ranked as least important. Although the study described in this thesis did not specify consequences for staff themselves in terms of career or satisfaction, it did ask about consequences for themselves. The responses given to this question indicated that the performance of administration was the task identified as associated with the most amounts of consequences for staff themselves both positive and negative. This finding is similar to that of Murphy's results for importance for career.

Unfortunately Murphy's study did not extend to an examination of the consequences related to particular audiences and there is, therefore, no data available with which to compare the responses given by staff in this study in regard to the question of who has influence over what they do.

How then can we explain the findings of this study? It is perhaps not surprising that residents are more likely to be a source of consequences if their level of ability is higher. Those persons with a learning disability who exhibit higher degrees of adaptive behaviour may be more likely to verbalise their demands and needs. Earlier research such as that by Woods and Cullen (1983) have indicated that generally residents in a service are not related with strong consequences for staff in the performance of their work and these findings are also supported by the results of this study. This is an interesting result as it suggests that services for persons with more profound needs may experience difficulty in enabling clients to advocate for themselves.

Co-workers may impose strong certain negative and positive consequences for the performance or non-performance of several tasks. As co-workers, along with residents, are the audience which staff are most likely to have majority of contact with it is possible that in the day-to-day work environment perceived consequences from co-workers for the performance of different tasks may be in conflict. It is not difficult to imagine a direct-care worker perceiving that the consequences from co-workers for failing to do the cleaning will be greater than the consequences for failing to actively involve a resident.

If we look at client-enabling tasks we find that co-workers appear to be the most important audience particularly in relation to positive consequences if the task is performed. Residents, residents' families and external professionals do not appear to be of any great influence. Managers are an important audience for the performance or non-performance of client-enabling tasks. It would appear, however, that administration is the task most strongly associated with consequences from managers. These findings are not unsurprising. Professionals and residents families do not provide a consistent audience. In other words they may be infrequent visitors to a facility. This may make it difficult for staff to judge their importance or they may

associate any influence they do have with a limited range of work activities. This finding may also reflect the fact that such audiences have less perceived power to enact consequences. Managers who may also be absent for much of the time may, on the other hand, be able to exact the most powerful of consequences. This could be based purely on the fact that they have the ability to affect areas such as pay, promotion and the continuation of employment.

Informal and structured observations of the facilities concerned in this study revealed that co-workers, along with residents, appeared to be the audience who were present for the most amount of time. As such they may have the power to exact consequences which are as potent as those of managers but which are perhaps more subtle and less obvious. For example, the non-performance of a task could be met with hostility or non-co-operation, which could subsequently effect the staff member's morale and perhaps their ability to carry out their work. It is interesting that co-workers are seen as an important audience in terms of the performance of client-enabling tasks. This finding, combined with the observation that co-workers are the audience most likely to be present in the workplace implies that they could become an important resource in the provision of good quality care based on client-enabling principles. As earlier studies have suggested, however, direct-care staff are poorly trained (Ward, 1999) and rates of staff turnover in this field of employment are high (see Felce, Kushlick and Mansell, 1980). Indeed, in this study nearly half of staff interviewed had been in their post for less than a year. Unless these issues are addressed co-workers are unlikely to provide the sort of support needed to enable good working practices with clients.

Managers were the most important audience for staff in terms of perceived consequences imposed. This is unsurprising given the fact, mentioned previously, that they control access to most powerful positive and negative outcomes such as pay increases or disciplinary procedures. The findings of the study suggest, however, that the most amounts of consequences from managers were associated with the task of administration, followed by client enabling and then everyday tasks. This may explain why staff appear to spend more time in administration tasks and less time interacting with clients. It could also explain why staff who report consequences for themselves, such as satisfaction, associate these with the performance of administration. If managers favour the completion of administration tasks over that of

client-enabling then it may be unsurprising if staff are less likely to do the latter. Conversely perhaps if enabling, or not enabling, clients was likely to result in the most consequences staff might be more likely to adopt strategies of active support. Earlier research indicates that the part administrative tasks play in the effective delivery of quality care for clients is questionable (de Kock, Saxby, Felce, Thomas and Jenkins, 1985, Repp and Barton, 1980)

One of the most worrying findings is that a large minority of staff do not report strong consequences from any or few audiences in the performance of their work. This could suggest, either that some staff work largely alone, or that certain staff do not feel that anyone is aware of what they do. This could be a real cause for concern and even more so in the sense that staff did not generally report strong, certain consequences for themselves from working with clients.

The conclusions of this study are similar to those of Murphy's who felt that although establishments stated the development of clients as their primary objective, the consequences for staff for failing to follow this goal are not as severe as those for failing to perform other aspects of their work. Murphy also felt that the tasks, which staff feel to be important to both themselves and residents, are also those tasks that are stated as of importance to the establishment but, however, these are not the duties which carry the most serious consequences for non-performance. Also the duties which staff might relate to management's perceptions of importance, that is those which would aid staff's career prospects, correspond with those for which there are the most serious consequences for non-performance, but these are not the duties which necessarily reflect the development of residents. In short staff may be accurately responding to management contingencies in their work related behaviour.

Overall what this study suggests is that contingencies in the workplace do not support staff enabling clients with learning disabilities. Managers appear to prioritise administration and staff appear to have only a 40-60% chance of the consequences that they experience in the work environment supporting the task of client-enabling. This finding seems to suggest that managers need to associate strong certain consequences (both positive and negative) with effective work with clients. Such

consequences need to be recognised by staff and imposed consistently and effectively by all key audiences.

The issues raised in the discussion section of this chapter are continued in the concluding chapter, as are the implications for future research and policy decisions.

The following chapter describes the results of a multiple regression analysis that attempts to identify what variables, if any, might predict active support by staff and levels of client engagement. Variables, which represent consequences identified by staff, as described in this chapter are included in the regression analysis.

Chapter 5 : What Might Explain Levels of Staff/Client Engagement in Residential Services for Persons with a Learning Disability?

The previous two chapters examined various aspects of the residential workplace. In Chapter 3 variables such as the characteristics of a residential establishment, the characteristics of staff and the characteristics of residents with a learning disability were analysed in order to ascertain if statistical differences existed between two different organisations providing services for persons with a learning disability in England. The results indicated that regardless of which organisation provided residential care, the pattern and quality of that care were very similar. It was decided on the basis of this result, to therefore treat all the information gathered as one sample for the purposes of further statistical analysis.

Chapter 4 looked at staff responses in relation to questions about tasks they did at work and who had influence over those tasks. In other words it examined the consequences and expectations that staff perceived as being related to the performance of their work. Chapter 4 also looked at the audiences present in the workplace whom staff thought provided these consequences. The results indicated that direct-care staff saw certain audiences, such as residents and professionals, as providing few strong consequences in the performance of their work. Many staff saw certain other audiences, such as managers and co-workers, as providing strong certain consequences both if a task was carried out, and if they failed to perform it. Certain tasks were also seen as more important in terms of the consequences that might occur if they were, or were not undertaken. Administration and client-enabling tasks were seen as producing strong, certain consequences particularly from managers and co-workers.

These findings lead us onto the main question posed by this study at the outset. How can we explain low levels of staff support and client engagement? In other words why, in many instances, do direct-care staff fail to actively support clients with a learning disability? This study failed to find differences between two types of organisation that provided services for persons with a learning disability. The data on consequences which might occur for staff in the performance of their work seems to suggest that others in the workplace may be an important factor affecting how, or indeed if, they work with clients.

The analysis presented in this chapter brings all of the data together in order to try to uncover if any of the variables examined in this study can explain levels of staff support and client engagement found. This study found that 18.42% of facilities offered weak levels of active support (total 0-15), 55.26% of facilities offered mixed levels of active support (total 16 –30) and 26.3% offered good levels of active support (total 30-45). In terms of client engagement 69.04% of clients were largely disengaged and only 5.36% of clients were engaged 75 percent of the time or more.

The questions set out above are important ones, as the aim of this study remains that of attempting to determine which features of service organisation and delivery might be responsible for active support and client engagement in meaningful activity. As suggested earlier since the comparative analysis of the two organisations included in this study yielded so few significant differences it is appropriate for the purposes of further analysis to treat the information collected as a single sample. The study described in this thesis collected a large amount of information representing many aspects of the workplace both formal and informal and across a wide range of facilities. The richness of this data allows one to examine in relative detail some of the variables affecting staff support of clients and to attempt to uncover which, if any, are important in explaining variations. The size of this sample allows one to draw relatively meaningful conclusions from the findings of analysis.

One of the features of this study is the multiplicity of variables included for analysis. The amount of variables studied means that simple correlation or analysis of variance techniques are basically inadequate as a means of answering questions as to which features of a service might account for levels of client engagement or active staff support. The most appropriate technique that can be applied in these circumstances is that of multiple regression.

As originally developed, multiple regression techniques required data to be at interval or ratio level. An interval scale has an equal distance between all points on the scale, for example, the measurements on a thermometer. A ratio scale possesses equal intervals between points on a scale and it has an absolute '0'. This means that 'the ratio of any two scale points is independent of the unit of measurement' (Siegel and Castellan, 1988) for example the weight of objects. The data collected in this study is, however almost all ordinal.

An ordinal scale is not able to answer the same questions that we would be able to ask of items on an interval or ratio scale and therefore is a weaker level of measurement. Ordinal data is a set of scores that you can put in an order, for example, from smallest to largest. This scale does not require that a distance between each point on the scale is equal. In recent years regression methods have been developed for nominal and ordinal data. Thus new methods of 'ordinal regression' (MINITAB,1988) will allow us to use regression methods to examine the wide range of data collected in order to ascertain if any of the independent variables included in this study predict active support and client engagement scores. Thus, we can include the data on consequences which staff perceive as operating in the workplace in order to gauge if staff expectations help to explain staff support and subsequent client engagement.

In this chapter ordinal regression analyses are conducted to determine which variables best explain levels of active support and client engagement found in a residential facility. The subjects, setting and methodology used for this analysis are described in Chapter 2. What are described in this chapter are the results of the analysis.

Results of an ordinal multiple regression with 'active support' as the dependent variable

A multiple ordinal logistic regression was conducted with 'active support' as the dependent variable. This is the variable we are trying to predict and is sometimes called the 'criterion variable'.

The variables included in the multiple regression were client age, total ABS score (re-coded), total MBS score, staff/client ratio, age of project, length of time manager had been in post, policy total, management practices total, IPDL total, length of service (staff), desire for promotion (staff), intention to leave (staff), hours worked (staff), stress (staff), net consequences from managers for client enabling, net consequences from residents for client enabling, net consequences from co-workers for client enabling, net consequences from all audiences for client enabling, balance of consequences from managers, balance of consequences from residents, balance of consequences from co-workers and balance of consequences from all audiences.

The analysis was run in blocks with the main characteristics grouped together. This procedure helps to avoid the possibility of variables in different subgroups cancelling each other out. Also the output produced is easier to understand and interpret. This procedure was repeated in all further multiple regression analyses. In multiple regression techniques a logistic regression table is produced and at each stage the variable with the highest 'p' value above 0.005 is excluded from the next stage of the analysis and the regression is re-run minus the excluded variable. Degrees of freedom are reported, as are the G value and the p value (i.e. $p < 0.05$). The p value tells us if the multiple regression model is significant.

The final summary output for the ordinal multiple regression using 'active support total' as the dependent variable is shown in Table 5a below. The full output is contained in Appendix 5.

Table 5a: Final output for an ordinal multiple regression with 'active support total' as the dependent variable.

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-0.1543	0.2582	-0.60	0.550			
Const(2)	1.9777	0.2916	6.78	0.000			
Const(3)	3.5059	0.3705	9.46	0.000			
TOTABS	-0.037287	0.005283	-7.06	0.000	0.96	0.95	0.97

Log-likelihood = -222.982
Test that all slopes are zero: G = 56.722, DF = 1, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	271.950	248	0.142
Deviance	234.023	248	0.729

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	9318	73.2%	Somers' D	0.48
Discordant	3267	25.7%	Goodman-Kruskal Gamma	0.48
Ties	141	1.1%	Kendall's Tau-a	0.35
Total	12726	100.0%		

The result is that only one variable, 'total ABS', was significant in predicting variations in scores when active support was used as the dependent variable ($p<0.05$). The co-efficient in the case of the BDS result was negative which means that the more able the clients in a facility were the more active support they receive. The model produced is a reasonable fit (Pearsons and Deviance values were not significant) which means that this can be considered a valid finding.

Having found that the ability of clients can influence the degree of active support that they receive from staff does the level of active support influence the extent of client engagement in meaningful activity? Thus, the question to be answered next is which variables, including active support by staff, are likely to predict variation in levels of client engagement. In order to answer this question multiple ordinal regression analysis was conducted using two different measures of client engagement as the dependent variables. These were 'engagement in meaningful activity' scores and 'participation in domestic life' scores.

Results of an ordinal multiple regression with 'client engagement' as the dependent variable

A multiple ordinal logistic regression was conducted with client engagement as the dependent variable.

Those variables included for further analysis were the age of clients, Total BDS score, MBS score, staff/client ratio, age of project, length of time manager had been in post, total of policy, management practices, length of service (staff), desire for promotion (staff), intention to leave (staff), hours worked (staff), stress (staff), net consequences from managers for client enabling, net consequences from residents for client enabling, net consequences from co-workers for client enabling, net consequences from all audiences for client enabling, balance of consequences from managers, balance of consequences from residents, balance of consequences from co-workers and balance of consequences from all audiences.

The final summary output for the ordinal multiple regression using 'client engagement' as the dependent variable is shown in Table 5b below. The full output is contained in Appendix 5.

Table 5b:Final output for an ordinal multiple regression with 'client engagement' as the dependent variable

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.0663	0.7491	1.42	0.155			
Const(2)	2.0504	0.7637	2.68	0.007			
Const(3)	3.2003	0.8094	3.95	0.000			
NC_ALL_2	-0.03177	0.01183	-2.69	0.007	0.97	0.95	0.99
BAL_ALL	0.03113	0.01128	2.76	0.006	1.03	1.01	1.05

Log-likelihood = -151.678
Test that all slopes are zero: G = 9.215, DF = 2, P-Value = 0.010

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	39.055	43	0.643
Deviance	42.468	43	0.494

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	3479	50.8%	Somers' D	0.17
Discordant	2316	33.8%	Goodman-Kruskal Gamma	0.20
Ties	1056	15.4%	Kendall's Tau-a	0.08
Total	6851	100.0%		

The final result appears to indicate that two variables 'net consequences all audiences for client–enabling' and 'balance all' were significant in explaining 'engagement in meaningful activity' scores. This result is difficult to explain, however. A negative coefficient for 'net consequences all audiences for client–enabling' means that a higher number of strong certain consequences for client-enabling are associated with higher levels of client engagement. The result for 'balance all' (which is the percentage of staff who report more consequences for enabling than for administrative tasks) has a positive coefficient, which means that the lower the balance of consequences is in favour of client-enabling the higher the level of client engagement. Obviously these results are contradictory. Further analysis revealed that when univariate regression analyses were run for the two significant variables individually neither was significant.

As neither variable was significant on its own it appears that there must be some kind of interaction between 'net consequences all client-enabling' and 'balance all audiences'. It would appear, therefore, that the two variables in question should not have been included in the multiple regression analysis. The overall result therefore is that there are no variables included in the analysis that are found to be significant when client engagement is used as the dependent variable. This result indicates that none of the variables identified in this study is able to predict variations in client engagement scores ($p>0.05$). An alternative explanation could be, however, that the engagement instrument chosen failed to accurately measure staff interaction with clients. As this measure was devised for use in this study and was therefore untested it is possible that the results found are questionable. This possibility is examined in more detail in the discussion.

It was decided on the basis of the results for 'engagement in meaningful activity' to look at an alternative outcome measure of client activity. A multiple ordinal logistic regression was therefore conducted with the variable IPDL or 'Index of Participation in Domestic Life' as the dependent variable.

Results of multiple ordinal logistic regression with Index of Participation in Domestic Life as the dependent variable.

The Index of Participation in Domestic Life Schedule is an established measure. It records the extent of individual client involvement in domestic tasks. As such the results obtained in any analysis may represent an alternative picture of the extent of active client engagement with which to compare the results for 'engagement in meaningful activity'. The final summary output for the ordinal multiple regression with 'IPDL' as the dependent variable is contained in Table 5c below. The full output of the analysis is contained in Appendix 5. As with previous multiple regressions conducted, the analysis was run in blocks.

Those variables included for further analysis were the age of clients, Total ABS score, MBS score, staff/client ratio, age of project, length of time manager had been in post, total of policy, management practices, length of service (staff), desire for promotion (staff), intention to leave (staff), hours worked (staff), stress (staff), net consequences from

managers for client enabling, net consequences from residents for client enabling, net consequences from co-workers for client enabling, net consequences from all audiences for client enabling, balance of consequences from managers, balance of consequences from residents, balance of consequences from co-workers and balance of consequences from all audiences.

Table 5c:Final output for an ordinal multiple regression with 'client engagement' as the dependent variable.

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-3.2058	0.5467	-5.86	0.000			
Const(2)	-2.9333	0.5317	-5.52	0.000			
Const(3)	-2.1706	0.5044	-4.30	0.000			
Const(4)	-1.9447	0.4992	-3.90	0.000			
Const(5)	-1.7999	0.4963	-3.63	0.000			
Const(6)	-1.4686	0.4909	-2.99	0.003			
Const(7)	-1.2424	0.4879	-2.55	0.011			
Const(8)	-0.7883	0.4835	-1.63	0.103			
Const(9)	-0.6109	0.4822	-1.27	0.205			
Const(10)	-0.4150	0.4812	-0.86	0.388			
Const(11)	-0.2561	0.4807	-0.53	0.594			
Const(12)	0.1449	0.4806	0.30	0.763			
Const(13)	0.4535	0.4821	0.94	0.347			
Const(14)	0.8760	0.4869	1.80	0.072			
Const(15)	1.1165	0.4915	2.27	0.023			
Const(16)	1.4992	0.5023	2.98	0.003			
Const(17)	1.7120	0.5107	3.35	0.001			
Const(18)	2.0439	0.5280	3.87	0.000			
Const(19)	2.4010	0.5537	4.34	0.000			
Const(20)	2.6342	0.5754	4.58	0.000			
Const(21)	3.3473	0.6745	4.96	0.000			
Const(22)	4.749	1.096	4.33	0.000			
BAL_ALL	0.007323	0.005838	1.25	0.210	1.01	1.00	1.02

Log-likelihood = -601.611
Test that all slopes are zero: G = 1.602, DF = 1, P-Value = 0.206

Table 5c continued: Final output for an ordinal multiple regression with 'client engagement' as the dependent variable.

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	198.670	153	0.008
Deviance	192.470	153	0.017

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	8958	45.4%	Somers' D	0.11
Discordant	6733	34.1%	Goodman-Kruskal Gamma	0.14
Ties	4049	20.5%	Kendall's Tau-a	0.11
Total	19740	100.0%		

The final results were that, as with the results for engagement in meaningful activity', none of the variables included in the analysis appeared to have a significant effect on index of Participation in Domestic Life (IPDL) ($p>0.05$). In other words none of the included variables is predictive of engagement as measured by the IPDL. This result adds weight to the previous finding which was that none of the variables included in analysis were able to predict client activity levels as measured by 'engagement in meaningful activity'.

Discussion

Active Support

The results of a multiple ordinal regression analysis with 'active support' as the dependent variable were that only one independent variable, 'total ABS', was significant. The finding was that the more able the client with a learning disability the more support they were likely to receive from staff. This result is consistent with the findings of previous research.

Mansell, Beadle-Brown, MacDonald and Ashman (2002) found in a recent study using the active support measure as the dependent variable that implementation of active support was more likely with more able residents. The findings of this study and those of Mansell et.al appear to suggest that direct-care staff may find it easier to engage actively with

clients who display a greater degree of ability. This finding tends to infer that the implementation of active support strategies by staff is more difficult to achieve when the client group is more severely disabled.

Client Engagement

Engagement in Meaningful Activity (EMAC) is an outcome variable that describes the results of observations of client activity. As such it is a measure of actual events. It is interesting and surprising that none of the wide range of independent variables included in the multiple regression analysis could explain variations in scores on the EMAC measure.

Participation in Domestic Life

As with 'Engagement in Meaningful Activity' none of variables included in the multiple regression were significant and could not therefore explain variations in client engagement as measured by 'Index of Participation in Domestic life'.

If we summarise the results of all of the regression analyses which were conducted using 'active support', 'engagement in meaningful activity' and 'participation in domestic life' as the dependent variables, they were that ability of clients with a learning disability was associated with higher levels of support from direct-care staff but none of the variables included in the analyses could predict or explain levels of client engagement as measured by 'engagement in meaningful activity' or 'participation in domestic life'.

How then do we explain these findings?

It is not difficult to understand why staff find it easier to offer active support to clients who display more adaptive behaviour. It is likely that such clients are more able to understand instructions, can complete a task with less support and may be capable of providing feedback to the staff member whilst receiving support. Less able clients may require more sophisticated help and therefore staff may have to display a greater range of skills themselves if they intend to support these clients to achieve maximum participation. Also

less able clients may be less likely to provide feedback to staff and therefore staff may find it difficult to monitor and enhance the skills that the individual already has. In short staff may have to display very advanced understanding of how to engage persons with limited ability and these may be skills that they simply do not have.

Why then are none of the variables included in this study, including the level of active support offered by staff to persons with a learning disability, able to predict client engagement? There are several possible reasons for this.

(a) The measure of engagement is itself inaccurate.

As the measure for client engagement (EMAC) was designed for use in this study and had not previously been utilised elsewhere the possibility exists that the observational schedule could have been at fault and therefore failed to accurately record the level of individual client engagement. It has to be said, however, that levels of inter-rater reliability were high which does seem to suggest that something *real* was being measured. It is more likely that the EMAC schedule was a crude measure of client engagement and might therefore have concealed subtle differences in levels of client activity. The EMAC schedule had a limited number of categories and therefore direct observation techniques may have been able to highlight subtle yet real differences in levels of engagement. Regression analysis may then have yielded a result in which certain variables did affect activity. It has to be said in defence of the client engagement schedule, however, that its development and use was based on the premise of finding an instrument that was able to measure all clients present during a particular activity at the level of the individual. As this measure was to be utilised in 39 establishments it had to be both easy to administer and be able to record an overall impression of individual client engagement during that period. It may well be that that subtle differences were sacrificed in order to achieve high levels of coverage.

It should be noted that a multiple regression analysis in which an alternative measure of client engagement, that is the 'Index of Participation in Domestic Life' scale, was used as the dependent variable, yielded a similar result. In short no variables were found to predict client engagement. This lends weight to the finding obtained using 'engagement in meaningful activity' as the dependent variable, which also found that none of the variables included in the analysis could predict levels of client engagement.

(b) The independent variables included in the research were not the important determinants of client engagement.

The possibility exists that the study described failed to adequately measure variables of interest. In other words important variables, which might have contributed to an explanation of differentials in staff support of clients, were omitted. In addition errors may have occurred in the measurement of those variables that were included.

In regard to the first point it has to be said that no study could ever hope to be totally comprehensive in the sense that every possible variable capable of measurement is included. This study set out to incorporate variables that other studies had found to be significant and to include other variables, such as consequences from audiences present in the workplace, which other studies had ignored. Some variables were excluded for ethical reasons but an attempt was made to include all those considered to be potentially important. Thus well-established measures of variables of interest were included that one might predict would have an effect

In regard to errors of measurement the study described did attempt to use established and tested measures such as the Management Practices Scale (Pratt, Luszcz and Brown, 1980). It also undertook to test the validity and reliability of those instruments that were developed specifically for this research such as the 'active support' measure. Of course the true validity and reliability of these measures can only truly be ascertained by their use in other circumstances. Future research whose objective is to replicate this study and the measures used may also support or refute the findings of this study.

An important point to note in regard to the suggestion above relates to the active support measure. It was used in this study on a group level. That is the measure rated staff support as offered to *all* clients present during an observation. Subsequent research (see Mansell, Beadle-Brown, MacDonald and Ashman, 2002) has used the active support measure on an individual basis. That is each individual client present has been rated separately so as to ascertain the level of active staff support that they receive. This appears to be a useful development that might allow for subtle variations between clients to become apparent in regard to the type of support they receive. These subtle differences were possibly obscured

when the active support instrument was used at the group level and thus subsequent analysis may produce an inaccurate result due simply to the fact that more finite measurement was not achieved. Indeed Mansell et.al. (2002) recorded similar levels of active support to those found in this study but unlike in this study where no variables were significant a regression analysis produced a finding that both client ability and the care practices of staff were predictors of levels of client engagement. It may be that a similar finding would have been achieved had the active support measure been used at the level of the individual client.

(c) Levels of client engagement in the services included in this study were entirely contingent.

It is possible that none of the variables selected in this study contribute to differentials in client engagement. In other words they cannot predict why clients with a learning disability are, or are not engaged in tasks by staff. That is client engagement was dependent on particular combinations of circumstances in an unpredictable way. This finding suggests that engagement by staff is purely arbitrary and therefore various client, staff and facility variables cannot explain why direct-care staff do or do not engage with clients. This finding is not supported by the results of previous research (see Raynes, Pratt and Roses 1979; Conroy and Bradley 1985; Hile and Walbran 1991) Indeed researchers such as Felce (1996) and Emerson et.al. (1999) found a clear relationship between active support by staff and client engagement and between client ability and engagement. It is surprising therefore that this result was not replicated in this study. It has to be said, however, that the notion that client engagement is contingent on unpredictable circumstances may have some validity. Given that this study found that many of the services included were disorganised, shambolic and provided poor quality care the suggestion is that outcomes for clients may indeed be the result of ad-hoc reactions to random and erratic situations. The reason that Mansell et al (2002) found significant differences between active support and client engagement may be due to the fact that they studied facilities where active support was being systematically introduced. The effect of this organised approach to active support may have thus been demonstrated in significant findings.

The notion is then that client engagement in services observed in this study might be random and contingent on happenstance rather than based on predictable and measurable variables. In other words both the observational data and the IPDL data might provide us with an accurate picture of client engagement in these services and the finding that staff support is random might be the correct one.

There is some evidence produced from the study overall to support this finding. Services generally were of a poor standard regardless which organisation they came from with a general lack of co-ordinated active support from staff. Qualitative observations revealed a quite haphazard and unskilled approach from staff in regard to how to engage clients with a learning disability.

Certainly the consequences data revealed that not only did certain audiences present in the workplace, such as professionals, appear to have little relevance for staff in terms of what they do, but more importantly a noticeable minority of staff did not report consequences from managers or co-workers. These are presumably the audiences which one would most expect to be active in guiding direct-care staff support of clients. This does suggest a picture of services in which staff are not receiving direction from essential audiences. Key groups such as professionals who should be critical in guiding staff in ways to engage clients are seen as incidental by many staff. More importantly many staff were unable to identify consequences from *any* audiences which does hint at the possibility that none of the important audiences were either present or active in telling staff how to engage clients in activities. This muddled and inadequate guidance for staff in how to involve clients does add to the notion that client engagement might be dependent on arbitrary circumstances rather than on predictable and measurable variables.

Let us summarise the findings of this chapter and the hypothesis as to what these results reflect in terms of what is occurring in these services for persons with a learning disability. The study found that only one variable, client ability, was predictive of active support by staff. However, this study found that no independent variable included in the regression analysis was found to be predictive of client engagement regardless of the way in which it was measured. In other words a model which fitted the data was not discovered. Although this result was surprising given the findings of previous research there was evidence produced by many of the measures used in the study to suggest that client engagement in

these services was arbitrary, unpredictable and contingent on happenstance. One should not discount the possibility, however, that methodological problems, such as inadequate measures of client engagement, may have led to these results. The fact that neither of the dependent variables, which measured client engagement, resulted in a sufficient predictive model does suggest that perhaps the theory of arbitrary circumstances has some relevance.

The implications of this finding are somewhat difficult to interpret. The result does leave one with the impression that as nothing is able to predict the outcome of client engagement then there is little services can do to improve poor levels of client activity. An alternative interpretation of the results is that poorly organised services will result in poor quality of care and hence poor outcomes for clients. Better organised services may result in better outcomes. The findings of this research could, therefore, reflect the fact that general disorganisation of the services included dilute the effect of variables which might normally predict client engagement such as ability.

Recent research may suggest that this interpretation is valid. Mansell, Beadle-Brown, MacDonald and Ashman (2002) looked at variables such as the adaptive and maladaptive behaviour of clients with a learning disability, costs and staffing of homes and the care practices of staff and attempted to ascertain their effect on client engagement. A multivariate analysis revealed that only two variables were predictive of engagement. These were, as consistent with the findings of earlier research, the adaptive behaviour of clients and the care practices of staff. The authors imply that changes in service organisation and particularly in care practices, i.e. active support, lead to changes in client activity rather than alterations in resources alone.

Unfortunately this research found similar levels of active support but low levels of engagement and multivariate analysis did not find active support or client ability to be predictive of client activity. As mentioned previously, however, the use of the active support measure on an individual rather than a group basis may have produced a similar result to those of Mansell et al. It might also be the case, however, that the services included in the Mansell study represented more able clients (mean ABS for all clients in this study when rescaled was very low – 44.94) and therefore levels of engagement were higher. This may make it easier to determine the effect, if any, of active support on client activity. The fact that many clients in this study were either largely disengaged or

disengaged for large periods of time means that the data collected is less variable. Greater homogeneity in the outcome data makes it less easy to demonstrate what variables might predict client engagement, as the levels recorded were not sufficiently variant.

If we are truly able to imply a link between good service organisation, high levels of active support and high levels of engagement then a study must be conducted in which two services are properly compared for this variable. Thus an organisation providing good levels of active support and one providing poor levels of active support should be comparatively studied so as to ascertain if high levels of active support do indeed lead to high levels of engagement. This was the intention in this study, however, comparatively poor or mixed levels of active engagement found in both organisations meant that such an evaluation was not possible. Future research should also adapt the active support measure for use on an individual basis in order to ensure that more sophisticated and detailed data is obtained.

The following chapter reviews the results obtained in this study and details possible methodological oversights. It also brings together all of the findings obtained and draws wider policy and research conclusions based on these results

Chapter 6: Discussion and Conclusion

The introductory chapter set out a theory in which staff behaviour was seen as one of the possible determinants of client activity. A study of staff behaviour and it's possible effect on client engagement such as the one described in this thesis is bound to encounter problems both in terms of application, i.e. how the study was conducted, and also representativeness i.e. the extent to which meaningful conclusions can be drawn. This chapter considers firstly the design and conduct of the research detailed in this thesis both in light of its findings and in terms of the author's experience of carrying out the study. Secondly the main findings of the research are discussed and thirdly the implications for further research and policy in the field of learning disability are considered.

a) The design and conduct of this study.

The main thrust of the study was to examine the issue of direct-care staff support and client engagement with clients from within a theoretical framework. The theory put forward was one in which the residential work environment is viewed as a system. Inputs into the system are processed in order to achieve outcomes for clients, staff and the system itself. The system is fluid and changeable with each part potentially affecting each other. Multiple variables are likely to be present in the system any of which might affect the ways in which staff engage with clients. The adoption of such a model allows one to introduce the notion of an informal social system operating from within the workplace. This is an area of research in which little work has been undertaken in community services using quantitative methodology and which considers the possible impact that persons present in the workplace, their expectations and the contingencies that they bring to bear may have on the subsequent performance of direct-care staff.

The study devised and presented in this thesis loosely encompassed all aspects of the theoretical model presented by attempting to measure both the *inputs* into the residential care system (client characteristics, staff characteristics and characteristic of the work environment), the *processing* of those inputs (the informal social system in terms of the expectations and related contingencies of others in the workplace) and *outcomes* (levels of active support and client engagement). In particular the study set out to consider whether the expectations of others in the workplace would provide an important explanation of

levels of client engagement that had previously been ignored. The intention was to uncover which variables present in the workplace might best explain poor staff performance in terms of their support for clients with a learning disability and what subsequent effect poor performance, amongst other variables, might have on client engagement. The design and conduct of such a study is potentially affected by a number of issues, each of which is now considered in turn.

i) Comprehensiveness

One of the problems that this study faced was in regard to how comprehensive it could realistically be. In short the question posed was could the research proposed hope to successfully incorporate all important variables that might explain differential levels of active support and client engagement found in residential services for persons with a learning disability? The answer to this question must be negative. Part of the objective of this research was to be exploratory in nature. Previous research had suggested which aspects of the work environment either proved important or might be worthy of consideration and these were to a large extent included. A two-stage pilot study was carried out that developed and tested various measures. Data were then collected using a wide range of measures including both established ones and those newly developed. Analyses of the data were extensive. In short, steps were taken to ensure that the study was as comprehensive as possible given the limitations of time and human resources. This is not to say, however, that alterations in the design of the study may not have improved its comprehensiveness.

A different kind of pilot study which sought to identify and measure potentially significant variables might have allowed one to consider the efficacy of the theory guiding research before embarking on the main study. Such a pilot study might have allowed one to identify those variables whose effect on staff support and client engagement were important or indeed eliminate those that were negligible. One of the findings of the present study suggested that client engagement might be purely arbitrary. In other words none of the variables identified appeared to be a predictor of the activity of clients. This might be a valid conclusion, however, it could be that important alternative explanations of levels of client engagement were not considered and therefore relevant measures were not included. Although this study did attempt an inclusive examination it was far from exhaustive. A

different kind of pilot study may, therefore, have identified important omissions from this research. Unfortunately restrictions of time and resources prevented such a pilot study from being undertaken. It should be said, however, that perhaps the study presented here could be seen as an important basis for further research.

ii) Representativeness

The notion of a study being representative refers to the extent to which we can say that the services studied were representative of other residential services for persons with a learning disability found elsewhere.

Two services were included in this study covering 39 facilities, 143 staff and 208 clients with a learning disability. Clients were of mixed ability and services were mostly based in the South-East of England. The inclusion of a reasonable number of services and subjects means that the results cannot be dismissed as necessarily unrepresentative. Of course the inclusion of more services and more subjects would give more weight to the results.

At the outset of the study the intention of the research was to compare two services, one that was expected to be performing poorly in terms of quality of care and another that was better performing. The fact that differences were not found between the two services for care practices or outcomes means that the proposed comparison was not possible. This of course means that one cannot draw conclusions from this study that better performing services might lead to better outcomes for clients. In this sense the study is not representative of all residential services that exist in England for persons with a learning disability. If a different kind of pilot study had been undertaken in order to uncover differences in quality of care between organisations then a truly comparative study may have been possible and thus the results may not only have been different but also more representative of different services. Such an approach may have been advisable rather than basing the choice of services included on misplaced expectations. Having made this point, however, it has to be said that it may have taken an inordinate amount of time and resources to uncover services that were performing well in order to compare them with those that weren't. In other words it could well be that services generally for persons with learning disabilities in England are under performing and in that sense the services chosen

were representative of the majority. This speculation is one that only further research can validate.

iii) Validity

Validity refers to the extent to which the phenomenons being measured really exist and are important. Let us take each of measures used in turn and discuss issues of validity.

Client and Staff Characteristics

In relation to data on client characteristics specific information were requested as to client age, gender, a measure of ability (adaptive behaviour) and the degree of challenging behaviour they exhibited (maladaptive behaviour). These variables were included based on the findings of previous research as to what characteristics might preclude a person with a learning disability from being actively supported by staff or engaged in an activity. Of course there is always the possibility that important client variables might have been excluded and it might have been beneficial to collect data on the ethnicity of the client and the length of time they had been in the facility. It has to be said, however, that ethical issues can make the collection of detailed personal information on clients difficult. Certainly in this study the clients themselves, their parents and/or significant others were asked for their consent to take part in this study and several concerns were raised during this process regarding issues of confidentiality. Any study of the quality of life experienced by persons with a learning disability must take account of the fact that they are intruding into the deeply personal and as such moral considerations about how far one goes in an examination should be paramount. Objections raised by participants must, therefore, be taken seriously.

Reliability data were not collected for any of the client measures and that may prove to be an unfortunate omission. In relation to the measure of client ability (ABS) although comparisons can be made with other studies which have used this measure (Raynes, Sumpton and Flynn, 1987: Conroy et. al., 1985) it is not possible to assert the reliability of the data collected for the purposes of this research. As suggested in the method section, however, it would have been difficult to identify two staff members who worked in a facility who knew a client sufficiently well so as to make a comparison of responses

possible. Of course it would have been impossible in terms of time for the author herself to collect BDS data for all 208 clients included in the study. Omission of reliability data in this case was, therefore, for reasons of necessity.

Staff respondents in the study were asked to provide details of their gender, their desire for promotion, intention to leave, hours worked and the length of time they had worked in the house. The reason for the inclusion of these variables was based on the findings of a pilot study (Appendix 1). Some staff in the pilot study were reluctant to give information as to their age or ethnicity as they felt it could be a way of identifying their responses. Initial interpretation of pilot responses indicated that these characteristics might not be a source of significant difference between staff. In retrospect, however, it would have been advisable to reassure the respondents as to their concerns about confidentiality and to collect data on any obvious characteristic that might affect their experiences of their work and their subsequent performance. As there has been negligible research conducted into issues of gender, ethnicity or religion and their impact on the work of direct-care staff it is not safe to assume based on the subjective interpretations of a small-scale pilot study that these variables are not likely to be significant.

Malaise Inventory

The malaise inventory is a standard measure of stress experienced by a person (Maslach and Jackson, 1978; 1981). In this study it was administered to all staff that were interviewed. Interviews were not taped for reasons of confidentiality.

The measure was administered on a single occasion and therefore represents a snapshot of the respondent's experience of stress at that moment. It might have been advisable to collect data on stress experienced on more than one occasion so as to gain an impression of how reliable responses were, but this was not deemed feasible or necessary in this study. A measure of how staff felt at one particular point in time was required partly because it was desirable for responses to correspond with answers given in the consequences questionnaire. Invariably stress experienced changes constantly so that responses given are bound to be different when requested on a further occasion. Comparing responses would therefore be difficult because there can be no measure of what might have changed in the

intervening time, i.e. what other variables might have affected the answers given. A stress questionnaire is therefore best viewed as a tool that reflects the duress that the respondent experiences at that given time. Comparisons with a similar study which used the Malaise Inventory to measure the stress experienced by staff in the community and in hospitals (Allen, Pahl and Quine, 1991) indicates that the findings were similar in that there were no significant differences between the two sets of staff. This does give some validity to the responses recorded in this study.

Staff Consequences Questionnaire

The author and Prof. J Mansell devised this measure. Initial observations were undertaken in a two-stage pilot study to determine what tasks staff actually performed at work and which audience's direct-care staff came into contact with. Focus groups were conducted with direct-care staff and an initial draft of the questionnaire was given to staff to complete. The results suggested that the research questions were viable (see Appendix 1) but the questionnaire was changed in format and in the main study it was completed by means of an interview. This format was tested in a further pilot study prior to the main study to test it's effectiveness and to determine issues of length. In the main study inter-rater agreement reliability statistics suggested a mean level of for Cohen's Kappa (1960) of 0.9, which was well above the 0.6 level of acceptability. It should be said, however, that acceptable levels of reliability do not indicate that the methodology is really measuring the issue of concern. As this was a first attempt to measure the influence of others on direct-care staff behaviour the methodology is both new and untested in that other researchers have not yet used the schedule. It is not possible, therefore, to compare results for similarity. It might have been advisable to have two researchers interview a sample of respondents on different occasions so as to ascertain if answers remained consistent. Unfortunately constraints of time meant that this was not possible. Future research should bear these points in mind, however.

A further omission relates to issues of outcomes. The research proposed intended to examine how others present in the work environment, their expectations and the contingencies that they bring to bear can affect the behaviour of direct-care staff towards clients. The study concentrated on the beliefs of staff rather than what actually occurs in the workplace because beliefs are easier to measure than the presence of actual

consequences. Also beliefs which staff have about what will happen may guide their conduct regardless of whether or not such consequences actually exist.

The study did not attempt to examine if staff perceptions of what they *thought* would occur actually did happen in the workplace. In other words the study did not attempt to measure if contingencies were actually in operation in the workplace or which audience, if any, they in fact related to. It has to be said that attempting to devise a study that enabled one to examine these issues would have been difficult and would also have raised ethical dilemmas.

The notion that the expectations of others influence staff behaviour is based partly on the theory that the informal culture of a workplace might provide a significant explanation as to why staff fail to actively support clients. The idea is that co-workers and others present in the workplace might expect different things from direct-care staff, some of which are contrary to positive engagement with clients. A study that hoped to measure the influence of persons in the workplace would invariably have to take a long-term approach. Contingencies in operation and the audiences they are related to would not be immediately obvious and it would take some time to uncover both the directly observable and the covert influences operating in any one work environment. Any methodology that one would adopt to measure this phenomenon might also be fraught with problems partly because any observations made would have to be lengthy and partly because there are moral issues surrounding just how you observe covert aspects of a client's life and also the behaviour of staff. Of course the presence of an observer would be bound to have an effect in itself on what staff do. In fact the presence of a researcher may make aspects of the informal culture even less likely to be observed in that staff could cease any behaviours that they do not wish others to see. It should be said, however, that such a study would be extremely useful bearing in mind the results that this part of the research has uncovered.

Active Support Schedule

Although many observational tools have been used to examine staff engagement with clients (see Chapter 1) the study proposed in this thesis required a specific measure that tried to encompass the entire environment at any one time. In short the objective was to capture an overall impression of how staff were supporting all clients present and in

particular to look at key areas of engagement. A measure was devised for this purpose by the author and Professor J. Mansell. A small-scale pilot study allowed the measure to be tested in terms of length and operation, unfortunately, a large-scale pilot study which might have subjected this measure to greater scrutiny was not included.

In the main study inter rater agreement reliability data using a second observer were collected in 7 out of the 39 facilities included in the survey (17.95%). Reliability data using a second observation in the same facility (stability over time) were collected in 13 out of the 39 facilities included in the survey (33.3%). Cohen's kappa was calculated and for 'active support' reliability, 12 of the 15 categories achieved a kappa value above 0.60, which is deemed an acceptable level of agreement. For 'active support' during the second observation only 6 of the 15 categories achieved kappa values above the 0.60 level. The suggestion is, however, that in terms of reliability the measure has not been thoroughly tested. Indeed levels of active support were found to be so low in many instances that rating by observers might have proved too easy. If more complex behaviours were observed then it might have been more difficult to score behaviours. Informal comments from reliability observers did indicate that some of the observational categories were difficult to score despite being given an accompanying explanation and instruction sheet. Large-scale use of this measure would allow more thorough testing to occur.

This measure has been used on subsequent occasions by other researchers in the field of learning disability and quality of care (Mansell, Beadle-Brown, MacDonald and Ashman, 2003) and inter-rater reliability scores were found to be acceptable. It has to be said, however, that the measure was used to rate the active support given by staff to each individual client rather than to a group of clients. This might be the way forward in regard to future use of this measure, as many of the problems encountered when trying to rate the behaviours of a group of persons would be diminished when evaluating the behaviour of just one individual.

In terms of observations of client engagement on a second occasion (stability over time) only 6 of the 15 categories achieved an acceptable level of agreement. This appears to suggest that there were variations in active support dependent on the occasion of the visit. The intention was to use a specific activity (the preparation of a meal) as a basis for observation for reasons of comparability, i.e. it was an activity which had to occur

regardless of location and which it could be reasonably expected that clients were likely to be involved in. Of course many variations are still likely to occur even if the same activity is observed on different occasions. Such variations could be the result of different numbers of staff or clients present, whom those persons present actually are, and the complexity of an activity at that specific time.

As mentioned previously, research which has since utilised this measure, has recorded active support scores for each individual client rather than for a group of persons (Mansell, Beadle-Brown, MacDonald and Ashman, 2003, Mansell, Elliott, Beadle-Brown, Ashman and MacDonald, 2002). This seems a sensible approach in that it combats the potential methodological problems highlighted previously. Future research might observe on more than one occasion, but also lengthen the observation time and include other activities that involve the active support of clients.

Client Engagement and Challenging Behaviour Schedule

Similar to the active support measure this instrument was devised for use in this particular study although it has since been used in subsequent research (Mansell, Beadle-Brown, MacDonald and Ashman, 2003; Mansell, Elliott, Beadle-Brown, Ashman and MacDonald, 2002).

Three of the four categories in the schedule achieved an acceptable level of agreement. This means that the data appears to be reasonably reliable. Other research has found acceptable levels of inter-rater reliability (Mansell, Beadle-Brown, MacDonald and Ashman 2003, Mansell, Elliott, Beadle-Brown, Ashman and MacDonald, 2002).

Pre/post test reliability data collected (stability over time) achieved only one category with an acceptable level of agreement. This appears to show that levels of client engagement were different on different occasions perhaps due to any number of factors, for example different members of staff, changes in environment or the presence of others such as other clients or managers. To test the valididity of this measure further, therefore, it may be necessary to use it on several occasions so as to allow for such variations.

Management Practice Scale and Index of Community Involvement

The Management Practices Scale and the Index of Community Involvement are established measures devised by Pratt, Luszcz and Brown (1980) and Raynes et al (1979) that look at the degree to which practices in a home are institutionalised. 41.02% of interviews with Home managers were taped and a second researcher scored the interview for reliability purposes. Spearman's correlation coefficients were calculated and very high levels of agreement were reached. In retrospect, however, reliability could have been tested in a more appropriate way if a second researcher had actually interviewed a manager on a second occasion. This would have allowed one to compare responses given on two different occasions rather than ascertaining if the original scorer had accurately recorded the responses heard. Also it would have been interesting to interview perhaps direct-care workers as well as managers using the Management Practices Scale so as to compare the responses of those persons employed at different levels of the care home hierarchy. It may well be that direct-care worker responses indicate that there is a level of institutionalised practice different to that suggested by a manager. The limitations of this study meant that more wide-scale use of this measure was not possible.

It should be said that the Management Practices Scale and the Index of Community Involvement although useful as a starting point in the measurement of care practices are perhaps limited in their scope. The majority of clients with a learning disability in England now live in community settings and many have done for some time. The use, therefore, of a questionnaire which identifies whether everybody gets up at the same time etc. may not be as relevant today as it was when researchers first attempted to measure institutional practices in hospitals and newly established homes in the community. Also the questionnaire allows little free response when answering a question and in this study it was found that respondents often wanted to qualify their answers or to expand on what was asked. Indeed some respondents themselves said that they found the questions asked irrelevant given the current setting. If this study were to be repeated it would be advisable to develop an alternative measure of care practices that is based on the Management Practices Scale but which updates the concepts contained within it and allows a more in-depth interview of what actually occurs in the day-to-day lives of residents. Raynes, Wright, Sheill and Pettipher (1994) attempted to do this in their study of community care by including measures of adult autonomy, choice-making, family contact, client plans,

staff autonomy, environmental quality, room rating scales, mealtime scales amongst others. This study may have benefited from a more comprehensive approach by using more than one measure of the quality of home life. Due to the large number of other measures also employed in this study, however, the decision was made to include the Management Practices Scale as it was easy to administer and had been used before (Raynes, Wright, Shiell and Pettipher, 1994). It was therefore possible to compare results.

Participation in Domestic Life Scale

The 'Index of Participation in Domestic Life' or 'IPDL' (Raynes and Sumpton, 1986) is an established measure. It appraises the extent to which clients in residential settings are involved in different types of domestic tasks. Managers or deputy managers were interviewed using the IPDL for each client in their service. Unfortunately no reliability data were collected using this measure. Constraints of time meant that the collection of such data were omitted, however, in hindsight this may have been a mistake.

The data collected from the IPDL represents only a manager's opinion of the level of client engagement in domestic tasks. In a rough way one is able to compare the responses of the managers with the actual level of observed engagement. Managers generally felt that active involvement was high for some clients, however, observation revealed low levels of engagement for most clients regardless of ability or degree of challenging behaviour and the multiple regression analysis did not reveal any variables which might predict differential involvement by clients. It would have been useful to collect IPDL data from several persons in the work environment including direct-care staff and from some of the clients themselves and to compare their responses directly so as to ascertain discrepancies between them. The fact that observational data did not correspond with manager's perceptions of certain client's levels of engagement is a useful finding as it indicates that managers might be out of touch with the reality of what occurs on the 'shop floor' as it were. What is needed to verify this finding is more accurate data.

Multiple regression analysis using both the client engagement and IPDL as the dependent variable revealed that in both cases no variable was significant. This finding represents the fact that none of the variables measured was able to predict levels of client engagement. The fact that the use of two different measures of client engagement resulted in the same

finding does give some weight to the result. Also levels of client engagement were generally poor which means trying to account for any variation found is problematical. This is because it is difficult to predict which, if any variable is significant when comparing similarly poor outcomes whose variation may only be subtle.

Policy Schedule

This measure was devised by the author and was based on the 'Active Support Schedule'. Policies provided by facilities were scored according to the degree to which they described a category of active support and how it should be performed by direct-care staff. It should be noted at this point that the majority of policies that operated in the residential establishments achieved very low scores overall in terms of identifying active support and offering guidelines for staff. As such this finding is interesting as it does suggest that general written information, which staff might refer to for guidance on the practice of active support, was lacking. Of course such guidelines could have been contained in more detail in other documents such as client files. The research project described, however, intended to examine the overall ethos of a facility and as such investigate whether notions of active client engagement were contained in the basic principles by which a facility was run.

In terms of reliability a second researcher coded all of the policies and the two sets of scores were compared. 14 out of 15 categories achieved a kappa value above 0.60 which is the suggested level at which inter-rater agreement is deemed acceptable. It is likely, however, that the poor standard of many of the policies and the lack of detail contained within them made scoring them in terms of active support relatively simple and the high levels of inter-rater agreement are a reflection of this. It is difficult to conceive of an alternative method to determine the accuracy of the data collected using this measure and it is the author's impression that the findings presented are perhaps an accurate reflection of the quality of the policy documents in operation in many residential establishments for persons with a learning disability.

b) The Main Findings of This Study

We have considered some of the limitations, which this study encountered, and the possible effects these may have had on subsequent findings. Let us now discuss in some detail the actual findings of this study bearing in mind any restrictions that the adequacy of the data might impose. There are really five main findings, which this study has uncovered.

i) Quality of care based on a number of variables was generally poor.

The study conducted was initially designed as a comparison of two services, one that was expected to perform well in regard to care practices and one that was expected to be a poor performer. Results indicated that not only were there very few expected significant differences between the services but also standards of care were somewhat poor throughout both. Levels of active support by staff were often missing or inappropriate with a high level of support offered to clients being either weak or mixed in nature and only a quarter of support offered could be described as of a high level. In terms of client engagement nearly two thirds of clients were found to be largely disengaged and many were not involved in any activities at all. Qualitative observations supported the finding that generally quality of care was inadequate with clients often left alone for long periods of time or inappropriately supported. The finding that standards of care were poor regardless of the organisation concerned is interesting in itself. Of course there were differences between individual facilities but overall standards were relatively mediocre on a range of measures.

ii) Few significant differences existed between the provisions of care offered by the two organisations included in the study.

The study described set out to compare two types of provision offered by two different organisations and examine what differences, if any, explained outcomes in terms of staff support and the engagement levels of clients with a learning disability. Analysis revealed, however, that very few statistical differences existed and in particular the active support offered to clients appeared to be similar regardless of which organisation that the facility represented.

The sample was large enough to suggest that real differences in the quality of care offered by *any* organisation might be difficult to find if the research were to be repeated elsewhere. Individual facilities may demonstrate diversity in the extent to which they engage in active support but it is not possible to generalise so as to determine whether organisational issues really have an impact on care outcomes.

Of course this study is representative of a point in time and may therefore offer a description of services in transition. Later studies may find that initiatives set up to encourage active support are beginning to translate into higher levels of engagement for some clients with a learning disability.

We can compare the results of this research with those of earlier studies.

Allen, Pahl and Quine (1990) undertook a comparative study of hospital and community residential facilities for persons with a learning disability. Their objective was to study differences in terms of outcomes for staff making the transition between working in a hospital setting to working in the community. Although their focus is primarily on staff the study is important because it is comparative in nature and may give an indication as to the relevance of possible differences between staff in the different settings. They did find differences in terms of gender, hours worked, age, experience, recruitment, attitudes, organisation of work, dependency of clients, behaviours of clients, nature of the work involved, levels of staff/client interaction, role ambiguity, management, job satisfaction and training between hospital and community staff. These findings might be important as indicators of differences between facilities in terms of staff disparity, which might then contribute, to explaining variations in client engagement.

The study described in this thesis was not as comprehensive as that undertaken by Allen, Pahl and Quine (1990) in that limited staff variables were measured. Also the focus of this study was different to that of Allen Pahl and Quine in that it set out to discover what might affect staff support and client engagement. The two studies can be compared, however, in regard to the fact that they both attempted to uncover differences between two different types of organisation. The study described in this thesis found only one significant difference between staff in the two types of organisation and this was for the variable

'intention to leave' with staff in community facilities more likely to express a desire to leave their current job. This study found no significant differences between organisations for gender, desire for promotion, hours worked, levels of stress or length of time in post.

These findings of this study are somewhat different to Allen, Pahl and Quine (1990) in that so few significant differences were found compared to their research. There may be several explanations for this. The first is that this study was far from comprehensive in nature and many variables of importance may have been excluded. The second reason is that these studies reflect a point in time. Allen, Pahl and Quine were measuring staff that either continued to work in a hospital, those who were going to move to a community setting or those who already had. This study measured variables from staff, the majority of whom had worked in the community for some time. Although some hospital staff were included in the research the reality of employment for direct-care staff working in the field of learning disability today is that they will be community-based. This study therefore aimed to identify differences between organisations offering services in the community rather than between institutional and community facilities. As such it is a reflection of services offered to persons with a learning disability in the late 1990's in Britain rather than the late 1980's, as is the case with the Allen. Pahl and Quine study. Variables that may have been considered important in their study, such as attitudes of staff or the hierarchy of management, were not necessarily pertinent for the research described here.

A more recent study attempted to compare types of residential provision offered to persons with a learning disability in England. Raynes, Wright, Shiell and Pettipher (1994) studied facilities offering residential care for persons with a learning disability and compared establishments on a wide range of variables. These included client characteristics, staff characteristics and quality of life.

The study found a great number of differences between types of residences. If we compare their findings with those of the study presented in this thesis a number of dissimilarities are evident. Raynes et.al. found a significant difference between residences for scores on the Management Practices Scale, Index of Participation in Domestic Life Scale and also for measures not included in this study such as the 'Physical Quality Instrument', aspects of the 'Room Rating Measure', the 'Index of Adult Autonomy', 'Choice Making Scale', 'Care Plans for Clients' and 'Family Contact Scale'. Other differences were noted

between facilities in regard to staff and client characteristics such as scores for adaptive behaviour.

The scale of the differences discovered by Raynes et.al. in their research is not replicated in this study. In the research presented in this thesis significant differences *were* found between facilities for adaptive client behaviour, however, once facilities deemed to be institutional (i.e. they still operated from within a hospital environment) were excluded no significant differences were found. Significant differences were found between facilities for scores on the Management Practices Scale but once again once institutional facilities were excluded only 'block treatment' yielded a significant result. No significant differences were observed for scores on the Index of Participation in Domestic Life Measure.

How then can one explain the disparity in results between this study and those of Raynes et.al? Firstly the Raynes et.al. study was more wide-scale and compared four types of residential provision including local authority, health authority, private sector and the voluntary sector. It may be that differences observed, therefore, reflected real dissimilarities between a range of residential provision. The study presented in this thesis compared only residential services for persons with a learning disability provided by the voluntary sector and a health authority. A more complex comparison between types of service was not allowed for. Also the scale of the Rayne's et.al. study was larger (150 facilities) which means that real differences are more likely to emerge simply due to the fact that the sample size is increased. Unfortunately due to the restrictions of time and other limitations such as the fact that the author alone conducted the majority of research, the sample included in this study was limited to 39 facilities.

iii) Certain audiences and certain tasks appeared to be seen as of more importance for direct-care staff in the performance of their work.

The study described intended to examine whether other persons present in the residential workplace had any impact on levels of active engagement by clients. The suggestion was that certain variables had been relatively ignored in previous attempts to discover why staff often fail to actively support clients. The impact of the informal social system (i.e. the

expectations and influences of others) is one area where previous research had been negligible.

Analysis of interviews with direct-care staff led to a finding that only certain audiences appeared to be of some importance for staff (managers and co-workers) whilst others (residents, residents families, professionals) were associated with few consequences for staff in the performance of their work. A further finding was, however, that a noticeable minority of staff do not report consequences from managers or co-workers. The tasks associated with the most amounts of consequences for staff were administration and then enabling residents. Also staff that worked with more able persons with a learning disability reported that they expected more consequences from residents and managers. Staff reported few consequences for themselves in the performance of tasks and finally staff employed in the same facility reported that different audiences were associated with similar consequences. These were mainly negative consequences when a task was not performed and positive consequences when it was.

The finding that certain audiences and certain tasks appeared to be seen as of more importance for direct-care staff in the performance of their work is interesting. Observations of day-to-day life in many of the facilities included in this study certainly lead one to conclude that other tasks were deemed as either more important or more interesting than engaging with clients. Responses given to the questionnaire on the performance of tasks appeared to confirm this informal finding. Staff did appear to see administrative tasks as bearing more consequences for performance or non-performance than client-enabling tasks. Also interviews with direct-care staff found that only certain audiences, such as managers and co-workers appeared to be of some importance for staff whilst others such as residents, resident's families and professionals did not appear to be so relevant.

This finding may be a reflection both of the power that certain persons have to exact consequences and the proximity of different audiences in the day-to-day work of staff. It is not surprising, for example, that professionals or residents' families have a lesser impact on the work of direct-care staff given the probability that they are infrequent visitors to a facility. Co-workers on the other hand work closely alongside each other and therefore monitor aspects of work that may be invisible to others. They also have access to

consequences, which though informal can also be influential, for example withdrawing co-operation, or allowing a new worker into a circle of friendships.

Managers of course have access to the most powerful of consequences, in short the ability to punish or reward a worker. It is understandable, therefore, that staff find them to be an important audience. The reality, however, is that managers may be on site infrequently and as such are unable to closely monitor or advise staff as to the quality of their work. As such they are unable to impose contingencies for everyday aspects of staff performance. They may fail to notice if clients are being actively supported and indeed even when they are on site this may not be their priority.

The fact that staff did not appear to find residents to be a particularly important audience is perhaps the most worrying finding. Residents with a learning disability have access to few consequences that they can impose on staff who fail to meet their needs. Those persons with a high level of dependency are often unable to request assistance or to make demands. As such it may be easy for staff to ignore them and to opt to perform those tasks such as administration or household chores where more powerful audiences such as co-workers and managers will exact consequences. One of the findings from this research was that staff from facilities with more able residents reported that they expected more consequences from them. This certainly appears to suggest that those who are able to make demands may be more likely to receive attention. It should also be said that the contingencies that some residents impose when staff do engage with them might make staff less likely to continue such interaction in the future. If, for example, a resident hits a staff member who tries to involve them in a task then this is not likely to increase the chances of engagement.

One has to tie this finding in with another, which was that few staff reported consequences for themselves in the performance of tasks. If staff receive little or no encouragement from any audience for engagement with clients, if clients themselves exhibit hostile behaviour when interaction is attempted and if staff feel little satisfaction when attempting engagement then this could provide a powerful explanation as to why staff fail to provide the quality of care expected. If this is combined with lack of effective monitoring, i.e. staff left on their own, then it perhaps not surprising that levels of active support by direct-care staff are so often appallingly low.

These findings appear to suggest that direct-care staff do perceive there to be differing expectations between the audiences they encounter. These expectations appear to be related to certain tasks and most importantly client-enabling does not appear to be strongly associated with consequences for many of the audiences identified.

As indicated this area of research is relatively new and therefore findings must be treated with caution if only because similar studies have yet to be conducted that can verify the results of this study.

One of the few studies that attempted to examine the impact of consequences on the performance of tasks was by Murphy (1983, unpublished). It has to be said that this was a small-scale study interviewing only 21 staff and Murphy did not look at whether particular audiences are associated with particular tasks, however the results are interesting and do appear to support the findings of this study.

Murphy found that nursing procedures, administrative duties and personal care tasks were ranked more highly in terms of the consequences for staff if they did not perform a task. Staff ranked administration duties, nursing procedures, talking to visiting staff and following training programmes as most important in terms of career prospects. In terms of job satisfaction talking to residents, leisure activities with residents, following client training programmes and spending time away from the workplace were all ranked as more important. Nursing procedures, administrative duties, domestic duties normally performed by nursing staff and staff time were ranked as least important. In terms of importance to residents staff ranked talking to residents, leisure activity with residents and training programmes as most important. Administrative duties, talking to visiting staff, domestic duties normally performed by nursing staff and staff time were ranked as of least importance.

Overall Murphy concluded that that although establishments stated the development of clients as their primary goal, the consequences for staff for failing to follow this objective are not as severe as those for failing to perform other aspects of their work. Also the duties which staff might relate to management's perceptions of importance, that is those which would aid staff's career prospects, correspond with those for which there are the most

serious consequences for non-performance, but these are not the duties which necessarily reflect the development of residents.

The study described in this thesis also found that the consequences for failing to perform those tasks that actively supported clients were not associated particularly with strong consequences from a wide range of audiences. In other words the key objective, which is that of staff actively engaging with clients, did not appear to be strongly supported by the expectations of others in the workplace.

iv) Only one variable, the adaptive behaviour of clients was able to predict differences in the levels of active support offered by direct-care staff.

The findings of a multiple ordinal regression were that only one of the many variables included in the analyses was able to explain differences in the levels of active support offered by staff. The significant variable was that of adaptive behaviour, or the ability of clients. More able clients were offered higher levels of active support.

This finding is unsurprising. It would seem probable that clients who display more adaptive behaviour are more likely to receive greater support if only because they are easier to help and because they may find it easier to follow instructions and perform a task with less sophisticated assistance. Clients with more profound disabilities, on the other hand, may require such complex levels of assistance from staff to improve their levels of engagement in activities that staff are reluctant or simply unable to offer such support. Feedback and the acquisition of skills by such clients may be marginal making subsequent support from staff less likely on future occasions.

The finding that the ability of clients can explain the level of support that they receive from staff is replicated in other research. Raynes, Pratt and Roses (1979) in a study of institutional care found that in terms of staff support 'the less able get less in every way' (p95). Further studies such as those by Hile and Walbran (1991) found that the types of behaviours clients with severe disabilities receive are different to those that are offered to more able clients. They found that more able clients are likely to receive support in more complex matters such as training or socialisation whereas less able clients were likely to receive supervisory behaviours. This certainly lends weight to notion put forward in this

thesis which is that clients who are less able may be less easy to actively support in more complex tasks such as skills training.

Of course it is not easy to determine from this result in which ways the behaviours of clients act as an antecedent or consequence for staff although many studies have found that certain behaviours will make staff support more or less likely to support clients (Warren and Mondy, 1971, Dailey, Allen et.al, 1974, Grant and Moores, 1977, Cullen, 1987). Research on consequences conducted for this study did find that a minority of staff reported that when they undertook client-enabling tasks with residents they reported positive consequences and when they did not engage clients in tasks the consequences were negative. 10% of staff said that they received negative consequences from clients such as challenging behaviour or distress when they did support them in tasks. This part of the research reported in full in Chapter 4 also found that more able clients provided more consequences, positive or negative, for action and inaction than did less able clients. This result does tend to suggest that more able clients may display behaviours that make it more likely that staff will actively support them.

An earlier study, which tried to determine which of a range of variables might have an effect on care practices, was that conducted by Raynes, Pratt and Roses (1979). Raynes, Pratt and Roses (1979) undertook a study of residential care in America and measured client characteristics (age, sex, functional ability, numbers of residents), staff characteristics (age, sex, length of service, training, staff attitudes) and management characteristics (management perception of organisation and care, role specialisation, relationship between supervisors and subordinates views). The authors then looked at the relationship between the variables mentioned and scores on two quality of care measures. These were the Revised Resident Management Practices Scale (RRMP) and the Informative Speech Index (ISI). They found that variables such as the functional ability of residents, number of residents, age and sex of staff, length of service of staff, attitudes of staff and aspects of management such as degree of centralisation of decision-making were correlated with differences in scores on either the RRMP or the ISI or both.

These results when compared with those of the study presented in this thesis are somewhat different. For the outcome measure of client engagement and Participation in Domestic Life the findings of this study were that no client, staff or facility variables could explain

differentials in scores. Raynes et.al. found that a large number of variables appeared to be significant in explaining differences in the scores on their quality of care measures. Of course we are not comparing like with like in that the outcome measures are different as are the independent variables used as possible indicators of the kind of care provided and also what might explain differences found. One might expect to find some similarity, however, in the kinds of variables that were found to be important in predicting outcome, such as the ability of clients.

Of course it is difficult to compare these studies in any detail as different measures were employed. It is interesting, however, that although both studies attempted to explain differentials in quality of care provided they did not produce very similar results. Of course it has to be said that one of the major differences between these two studies is that Raynes et.al. conducted their research in large residential facilities whereas the focus of this study was to examine aspects of care in the community. It is likely that the type of care provided in these establishments would be very different especially given that the Raynes et al study was conducted prior to wide-scale de-institutionalisation in America.

A study which was conducted subsequent to this research and which also attempted to measure a range of variables in order to determine which might predict the levels of active support offered by staff is that by Mansell, Beadle-Brown, MacDonald and Ashman (2003). They found, as did this study that more able clients were more likely to receive more active support.

v) None of the variables identified in the study, including active staff support or staff beliefs, appear to explain differences in client engagement or 'Participation in Domestic Life' scores.

In the introduction to this study presented in Chapter One the suggestion was made that the ways in which staff behave and support clients is likely to have an effect on what clients do. Multiple regression analysis detailed in Chapter 5 revealed that variables such as client age, ability, maladaptive behaviour, numbers of staff, numbers of clients, staff/client ratio, staff characteristics, consequences for staff in the performance of their work, active support and facility variables such as age of project or scores on Management Practices Scale were

not predictors of scores for engagement by clients. Thus neither staff support nor any other of the included variables chosen could explain differences in client engagement.

We can compare these results with those of earlier studies. In a long-term study of de-institutionalisation Conroy and Bradley (1985) attempted to 'identify and measure aspects of community residential settings that are correlated with developmental progress among people living in them' (p143). In other words the authors wanted to discover if differences apparent in community living could explain increases in ability among learning disabled residents. They found using regression analysis that if individual characteristics of residents were held constant then length of time spent in a day programme, individualised treatment, less medication, a greater number of staff, smaller living areas and 'residential continuity' (p149) appeared to be statistically significant. They do say, however, that these variables do not explain much of the variation observed and infact individual characteristics do appear to be the biggest predictors of enhanced ability. Also the authors suggest that problems of measurement may make definitive answers to the question of increased ability difficult to provide. This is because they suggest that some of the environmental measures used are actually measuring the ability of clients in the sense that more able clients were found to be living in smaller establishments, with less staff input etc.

These findings, although measuring changes in adaptive behaviour rather than increases in client engagement, are comparable with those above in the sense that the longitudinal study described attempted to ascertain what, if anything, could explain, outcomes for clients. The statistical procedure adopted was similar to the one used in this study and the finding that none of the environmental measures could explain variation to any great extent does parallel the finding of this study that differences such as numbers of staff, numbers of clients, policies in operation, group home management variables etc. were not statistically significant in explaining variation. This study, however, did not find variables related to the individual client significant in explaining differences in client engagement.

There may be some validity in Conroy and Bradley's suggestion that measures of the quality of the environment may confuse issues of ability but the fact that this study did not find any significant difference between organisations in terms of the adaptive behaviour of clients may mean that at least in terms of community establishments the individual

characteristics of clients do not necessarily offer the best explanation of why staff do, or do not, actively engage with clients.

A recent study (Mansell, Beadle-Brown, MacDonald and Ashman, 2003) used both the active support and client engagement measures, which were also used in this research. Levels of active support were similar to those found in this study although client engagement was higher. A regression analysis revealed that both the ability of clients and the level of active support offered by staff were important predictors of client engagement. This is in contrast to this study which expected a relationship between active support and engagement but which found that neither active support nor ability was significant in predicting engagement. The reasons for this discrepancy in findings are likely to be methodological. The active support measure was adopted in this study on a group level and was used to give an overall representation of staff support for all clients present during an observation. A coverage score was also recorded but this was abandoned prior to analysis due to problems that observers experienced when trying to apply the coverage categories. The Mansell et al. study, however, utilised the active support measure on an individual level producing a score for each client during an observation. This approach, therefore, was probably able to pick up on individual variation between clients that the group approach may have masked. Also greater variation in engagement in the Mansell et al. study may have enabled significant variables to be identified. In other words it is difficult to predict client engagement when levels of engagement are so poor that only subtle variation exists.

c) Implications for further research and policy in the field of learning disability

In this section we will discuss the implications of the findings of this study for further research and for policy decisions in learning disability services. Let us take each finding in turn before giving an overall impression of the implications of this study.

i) Quality of care based on a number of variables was generally poor.

This was a particularly interesting, though depressing finding, as it was expected that differences between the two types of services would be apparent. Given that they were not we could make an assumption that standards of care in the community are not particularly

good or indeed that dissimilar from the types of support offered to clients in more traditional settings such as hospitals. This is an assumption of course based on limited research covering only two types of service and 39 facilities.

Future research should attempt to uncover the reality of this situation as this finding questions the assumptions made by many, including policy-makers, that care in the community offers people with a learning disability higher standards of care. Any future policy decisions in regard to 'Care in the Community' and increased provision for the majority of persons with a learning disability in the community should assess how effective and appropriate that care really is.

It is difficult to say with any certainty that the quality of care for persons with a learning disability is generally poor based purely on the findings of limited research presented here. It is possible, however, to question the kinds of services offered to persons with a learning disability and to suggest that measures of quality should be uniformly included in everyday evaluations of a providers care. It is perfectly feasible and not unreasonable to expect services to collect data themselves in a co-ordinated way that monitors just what kind of service their clients receive. It would also allow for comparisons to be made to determine what contributes to differences between facilities who provide good quality care and those that are poor performers. Although time and money are involved in such a proposal it is essential from the authors point of view for services to audit their own provision and to base future proposals on their own research. If services are to move forward they must recognise themselves where they are failing and closely monitor areas of concern. If evaluations of performance are left to outsider agencies then potential problems that might involve neglect, or in some cases even abuse, may fail to be identified.

ii) Few significant differences existed between the provisions of care offered by the two organisations included in the study

The finding, as described in the previous section, was that there were few significant differences observed between the services offered by two providers of residential care for persons with a learning disability. This is perhaps initially surprising given the results of other research. It has to be said, however, that this research is a reflection of services in the late 1990's in England and as such may provide evidence that the type of provision has

changed, as mentioned previously. A valid interpretation might be the suggestion that national social and political changes have translated into practice so that regardless of the type of organisation the standards of care are similar. Unfortunately for the services included in this study the quality of care offered was often uniformly poor. Qualitative observations by the author supported this impression. Very few facilities in this study appeared to offer high or even moderate quality of care regardless of ability. This finding cannot be generally substantiated in regard to all services, however.

The implications of this finding are really confined to future research, as it is important to validate the results presented in this thesis. In particular there does appear to be a need to undertake a true comparative study that is able to identify differences in the quality of care offered to clients and client outcomes. To make this possible future researchers should find services that perform well and those that are of a poor quality. Although this may prove a difficult objective to achieve it is necessary if one is truly to attempt to answer to the question of why many persons with a learning disability in residential services are largely disengaged. There is a need to find a service that does successfully engage clients in activities and subsequently to explain what contributes to that outcome. The findings of such a survey can then form the basis for policies that are structured to improve client engagement by altering those parts of the service that have been found to inhibit it.

iii) Certain Audiences and certain tasks appeared to be seen as of more importance for direct-care staff in the performance of their work.

Research into the expectations of others and its impact on subsequent staff behaviour is very limited and the findings presented in this thesis are exploratory in nature and as such only preliminary speculations can be made on the basis of them. Also there is no evidence to suggest that the findings of this research necessarily translate into outcomes for clients. Analysis was conducted so as to ascertain which variables might have an impact on levels of staff support but no significant association was found between responses given to the staff questionnaire and observed active support offered by staff or levels of client engagement. It would appear, therefore, that as well as future research in this area being made a priority any advice regarding future policies and training should be treated with caution. Having noted this it is important to remember that the research presented in regard to the impact of the informal system on the behaviour of staff is ground breaking

and as such is an important growth point for new research. In terms of policy implications several suggestions can be made.

The first is prioritising active support of clients as the key task to be performed by direct-care staff. This task should not only be associated with positive consequences for performance and negative consequences for non-performance, but, its importance should be shared by all key audiences in the residential environment. In short there should be a co-ordinated approach to ensuring the engagement of clients. This suggestion also has other implications, the first of which is that managers must be on site more frequently to ensure such a co-ordinated approach is effective. This approach would also ensure that managers observe at first hand levels of staff/client interaction and client engagement and act accordingly if problems are highlighted. A further implication is that the importance of administrative tasks for direct-care staff is downgraded, as it were. Of course accurate information recorded by staff as to the progress of clients is essential, but it should be viewed more as part of the process of client involvement and less as a task in itself that is worthy of praise if it is undertaken or condemnation if it is not. Also staff should be discouraged from using paperwork as an excuse to escape interaction with clients.

As for the residents and staff themselves efforts should be made to make the involvement of clients in an activity worthwhile to both parties. If staff can see real benefits emerge from client engagement such as increased ability or decreases in dysfunctional behaviour then this may make the performance of such tasks more rewarding. Also if client engagement is introduced as part of a wider training programme in which the benefits of involving clients are explained and if the rewards of work such as praise and enhancement are made contingent upon such involvement then this may encourage good working practices to emerge. Similarly if structured, consistent involvement in meaningful activity is offered to clients regardless of degree of disability then the advantages for client in terms of more stimulation, less isolation and a degree of reciprocity may become obvious. Of course it would also become necessary to offer staff good quality training in regard to active support so as to equip them with solid skills as to how to involve clients regardless of their ability.

The notion of contingencies, which operate in the workplace, and the influence of audiences which impose them is a very important area for future research. The results

described in Chapter 4 did appear to support the assumption that audiences in the workplace might have influence over what direct-care staff actually do and in particular the extent to which they engage with clients although these findings were not validated in regard to the results of regression analysis for active support, client engagement or Participation in Domestic Life Measure. In other words staff perceptions as to who had influence over their work did not appear to predict outcomes for actual staff behaviour or client involvement in activities. Of course the only way that this result can be validated is by conducting a comprehensive study of the contingencies that actually exist in the residential work environment and which audiences impose these contingencies. It would also be interesting to relate the findings of such a study to outcomes for clients both in terms of actual levels of engagement and improvements in ability or behaviour. This of course would be a difficult study to undertake due to ethical and logistical problems identified earlier but nevertheless it might yield immensely interesting and worthwhile results. This is a suggestion, therefore, for future research.

iv) Only one variable, the adaptive behaviour of clients was able to predict differences in the levels of active support offered by direct-care staff.

The finding that the ability of clients with a learning disability was able to predict the levels of active support offered by staff was unsurprising. As suggested earlier the level of skill and expertise needed by staff to successfully support less able clients in an activity may be lacking. There is a need, therefore, to examine in detail the difficulties which staff encounter when working with clients with complex needs. Further research on this specific area could yield useful results that could then be used as the basis for staff training. Indeed the active support schedule could be used on an individual basis with a particular client so as to highlight those areas in which staff need further skills training.

v) None of the variables identified appear to explain differences in active client engagement or Participation in Domestic Life scores.

The finding that for client engagement and PDL no variable was able to predict differences in outcome is difficult to interpret. One might have expected to find that variables such as client ability were important in explaining differentials as has been found in previous and subsequent research (Raynes, Pratt and Roses, 1979; Conroy and Bradley,1985; Hile and

Walbran, Mansell, Beadle-Brown, MacDonald and Ashman, 2003). This was not the case. The notion that the performance of staff support might be important in predicting levels of client engagement was also not found to be significant.

At the outset this study attempted to pull together the strands of previous research and advance the theory that perhaps more than one variable could account for why staff failed to actively engage with clients. Also the suggestion was that variables previously overlooked in accounts of quality of care such as the impact of the informal social system might provide a better explanation of client engagement in residential care or at least add to our understanding. The findings that relationships were not found between a range of variables which might explain care differentials or that the impact of the informal social system was not significant seems to suggest one of two things. It could be that the study devised failed to adequately measure the variables of interest or indeed omitted other more powerful explanations. In other words variables of interest could have been overlooked. There is always this possibility and no study could possibly include every aspect of residential life that might contribute to the way clients are cared for. It has to be said that this study tried to include all possible variables of interest based on the findings of previous research and on the areas neglected by other studies. Any omissions were carefully considered and some omissions were on the basis of ethical considerations.

The notion that methodological errors might account for this finding does have implications for future research. Although high levels of inter-rater reliability were found in all of the measures used in this study some of the instruments (Client Engagement Schedule, Active Support Schedule and Consequences Questionnaire) were newly devised for use in this research and as such were untested. Problems with the application of these measures could mean that error produces an unexpected result. Further research is needed to verify the accuracy of these measures and indeed this is currently ongoing in the case of the active support and client engagement instruments (see Mansell et al, 2003). Levels of inter-rater reliability for these measures in these studies were found to be high. These studies did use the 'Active Support' measure at the level of the individual client and this appears to be a sensible way forward if subtle variations between clients and the way staff support them is to be captured. Of course only on-going research can validate which variables it is important to include in a study that attempts to explain why many clients with learning disabilities in residential care experience poor levels of active engagement.

The second possibility that explains the finding that no variable appeared to predict client engagement is that these findings are an accurate reflection of residential life for persons with a learning disability in the late 1990's in England. Levels of active engagement are generally low and the support offered to clients is haphazard and arbitrary. In other words there is no significant variable that can predict the level of client engagement found in a facility and therefore be manipulated to produce more favourable results in the future.

This finding is rather depressing, as there is no clear indication from these results of the ways in which residential care could be organised in the future to improve staff support of clients. Of course, as suggested a number of times earlier in this chapter the methodology devised for use in this study may have been an inaccurate measure of the phenomenon under investigation and as such the results found may be incorrect. Informal observations and responses given on the staff consequences questionnaire did, however, corroborate the finding that staff support was often poor and clumsy and levels of client engagement were low. This supporting evidence does seem to suggest that the results for client engagement may be an accurate record of the ways staff support clients in these residential facilities. In other words staff support was so universally arbitrary that it was not possible to predict if it had any effect on client engagement.

The implications of this finding are not necessarily hopeless, however. From a research perspective the implication must be to determine if better performing services do produce an association between variables such as client ability and care practices and the level of client engagement. This study was not able to demonstrate such an association, even though one was expected, perhaps because overall levels of care were poor and variation was not pronounced. If such a variation is demonstrated and an association found as in the Mansell et al study then there is a possibility that manipulations in care practices by services might lead to greater client involvement. Thus better organised and performing services might lead to greater activity on the part of clients with a learning disability. Of course the problems of introducing and sustaining changes in staff practices are the subject of research all its own (Jones et al., 1999 : Mansell, Hughes and McGill, 1994 : McGill and Mansell, 1995). Indeed the findings of the staff consequences study described in this thesis does appear to suggest that working with clients and actively supporting them may not be the most prioritised aspect of direct-care staffs work.

Overall it would appear that the research presented in this thesis is best viewed as an exploratory study that can be used to guide future investigations in this field of interest. Indeed it might be seen as a comprehensive pilot study that can form the basis of more accurate research in the future. The theoretical model proposed in this study, which advocates looking at the residential environment, as a fluid and adaptable system certainly appears to have some merit. This is particularly so in the sense that it allows one to focus on particular aspects of the workplace and to examine them from within a context that acknowledges the existence of other important influences on staff support of clients.

The suggestion that this research is in a sense a pilot study could allow any future research to utilise the results put forward in this thesis as a guideline. What this means is that a further study could use both the omissions and the variables found to be significant as a way of formulating a more accurate study. This would mean that any future research is not a direct replication for the purposes of validation but rather it should be a way of incorporating important findings so as avoid possible mistakes made here. It would certainly be of interest to compare information from future research with the findings presented here. This is particularly important if one is to claim that the results of this research are a truer reflection of current residential care as compared to the results of earlier studies many of which were inconsistent with some of the findings presented in this thesis.

BIBLIOGRAPHY.

Aamodt, M.G. (1991) ***Applied Industrial/Organisational Psychology***. Wadsworth Belmont California.

Abraham, C., Lindsey, W. and Lawrenson, H. (1991) The role of 'carers' of people with mental handicaps; an observational study across contexts. ***Mental Handicap Research, Volume 4, Number, Jan, pp20-40.***

Allen, G.J., Chinsky, J.M. and Veit, S.W. (1974) Pressures toward institutionalisation within the aide culture: A behavioural-analytic case study. ***Journal of Community Psychology, 2, pp67-70.***

Allen, P., Pahl, J. and Quine, L. (1990) ***Care Staff in Transition: The impact on staff of changing services for people with mental handicaps.*** London. HMSO.

Anderson, S.R. (1987) The Management of Staff Behaviour in Residential Treatment Facilities : A Review of Training Techniques. In Hogg, J. and Mittler, P. (Eds) ***Staff Training in Mental Handicap***. Croom Helm. Kent.

Bakeman, R., and Gottman, J. M. (1986). ***Observing Interaction: An introduction to sequential analysis.*** Cambridge: Cambridge University Press.

Balla, D.A. (1976) Relationship of Institutional Size to Quality of Care: A Review of the Literature. ***American Journal of Mental Deficiency, Volume 81, No.2, pp117-124.***

Baum, W. M. (1994). ***Understanding behaviorism: Science, behavior, and culture.*** New York: Harper Collins College Publishers.

Baumeister, A.A. and Zaharia, E.S. (1987) Withdrawal and Commitment of Basic-Care Staff in Residential Programs. In S. Landesmann and P. Vietze (Eds) ***Living Environments and Mental Retardation***. American Association on Mental Retardation. Washington D.C.

Beail, N. (1988) Observations of nurse behaviour on a ward for profoundly mentally handicapped children. Brief Research Report. ***International Journal of Rehabilitation Research, 11, (2), pp172-173.***

Bernstein, G.S. (1982) Training Behaviour Change Agents: A Conceptual Review. ***Behaviour Therapy, 13, pp1-23***

Bersani, H.A. and Heifetz, L.J. (1985) Perceived stress and satisfaction of direct-care staff members in community residences for mentally retarded adults. ***American Journal of Mental Deficiency, 90, pp289-295.***

Bjannes, A.T. and Butler, E.W. (1974) Environmental variation in community care facilities for mentally retarded persons. ***American Journal of Mental Deficiency, 78, pp429-439.***

Blair, A. (1992) Working with people with learning disabilities who self-injure. A review of the literature. ***Behavioural Psychotherapy, 20, pp1-23***.

Blaumer, R. (1964) ***Alienation and Freedom.*** University of Chicago Press.

Blunden, R. (1988) Safeguarding quality. In D. Towell (Ed.) ***An Ordinary Life in Practice.*** London. Kings Fund Centre.

Bratt, A., & Johnson, R. (1988). Changes in lifestyle for young adults with profound handicaps following discharge from hospital care into a "second generation" housing project. ***Mental Handicap Research, 1(1), 49, pp49-74.***

Briggs, R.M. (1990) Reducing direct-care staff absenteeism: Effects of a combined reinforcement and punishment procedure. ***Mental Retardation, Jan, Volume 28 (3), pp163-168.***

Browner, C.H., Ellis, K.A., Ford, T., Silsby, J., Tampoya, J and Yee, C. (1987) Stress, Social Support and Health of Psychiatric Technicians in a State Facility. ***Mental Retardation, Volume 25, Number 1, pp31-38.***

Brusca, R.M., Nieminen, G.S., Carter, R. and Repp, A.C. (1989) The Relationship of Staff Contact and Activity to the Stereotypy of Children with Multiple Disabilities. ***Journal of the Association for Persons with Severe Handicaps, Volume 14, Number, pp127-136.***

Buckhult, J.A., Bearden, L.J. and Marchetti, A. (1990) Sources of Job Stress and Job Satisfaction Reported by Staff of Large Residential Mental Retardation Facilities. ***Education and Training in Mental Retardation, Dec., Volume 25 (4), pp344-351.***

Burch, M.R., Reiss, M.L. and Bailey, J.S. (1987) A competency-based 'hands-on' training package for direct-care staff. ***Journal of the Association for Persons with Severe Handicaps, Spring, Volume 12 (1), pp67-71.***

Burdett, C. and Milne, D. (1985) 'Setting Events' as Determinants of Staff behaviour: An Exploratory Study. ***Behavioural Psychotherapy, 13, pp300-308.***

Burg, M.M., Reid, D.H. and Lattimore, J. (1979) Differential effects of supervisor feedback on institutional staff performance. ***Journal of Organization and Behaviour Management, 3, pp57-68.***

Burgio, L.D., Whitman, T.L. and Reid, D.H. (1983) A participative management approach for improving direct-care performance in an institutional setting. ***Journal of Applied Behaviour Analysis, 16, pp37-53.***

Butler,E.W. and Bjames, A.T. (1977) A typology of communitycare facilities and differential normalisation outcomes. In P.Mittler (Ed.) ***Research to Practice in Mental Retardation. Volume 1. Care and Intervention.*** University Park Press. Baltimore.

Butterfield, E.C, Barnett, C.D., Bensberg, G.J. (1966) A Measure of Attitudes Which Differentiates Attendants From Separate Institutions. ***American Journal of Mental Deficiency, 72, pp890-899.***

Cambridge, P. (1999) The Physical Abuse of People with Learning Disabilities and Challenging Behaviours: Lessons for Commissioners and Providers. ***Tizard Learning Disability Review, Volume 3, Issue 1, pp18-26.***

Care Standards Act 2000 (2000) London. HMSO.

Caring for People. Community Care in the Next Decade and Beyond. (1989) London. HMSO. Cm849.

Cataldo, M.F. and Risley, T.R. (1972) ***The Organisation of Group Care Environments: The Infant Day Care Center.*** Paper presented at American Psychological Association, Honolulu.

Caton, D.J., Grossnickle, W.F., Cope, J.G., Long, T.E. and Mitchell, C.C. (1988) Burnout and stress among employees at a state institution for the mentally retarded. ***American Journal of Mental Retardation, 31, pp234-238***

Chaya, K. (1993) Enhancing the consumer-family-staff relationship in adult services. ***Mental Retardation, October, Volume 31 (5), pp326-331.***

Cherniss, C. (1987) Staff Burnout : Too much Stress or Too Little Commitment. In S. Landesmann and P. Vets (Eds.) ***Living Environments and Mental Retardation.*** American Association on Mental Retardation. Washington.

Cherniss, C. (1986) Instruments for observing supervisor behaviour in educational programs for mentally retarded children. ***American Journal of Mental Deficiency, 91, pp18-21.***

Cherniss, C. (1980) Human Service Programs as Work Organisations: Using Organisational design to Improve Staff Motivation and Effectiveness. In ***Evaluation and Action in the Social Environment.*** Academic Press Inc.

Cherniss, C. and Egnatios, E. (1978a) Participation in decision-making by staff in community mental health programmes. ***American Journal of Community Psychology, 6, pp171-190.***

Cherniss, C. and Eqnatios, E. (1978b) Is there job satisfaction in community mental handicap? ***Community Mental Handicap Journal, 14, pp309-318.***

Cleland, C.C. and Dingman, H.F. (1970) Dimensions of institutional life. In A.A. Baumeister and C. Butterfield (Eds.) ***Residential facilities for the mentally retarded.*** Aldine Chicago.

Cohen, J. A. (1960). A coefficient of agreement for nominal scales. ***Educational and Psychological Measurement, 20, pp37-46.***

Coleman, A. (1985) Where Silence is not Golden. ***Nursing Mirror, October 9th, Volume 161, Number 15, pp52-54.***

Coles, E. and Blunden, R. (1981) Maintaining new procedures using feedback to staff, a hierarchical reporting system and a multidisciplinary management group. ***Journal of Organizational Behaviour Management, 3, pp19-33.***

Cooley (1912) ***Human Nature and the Social Order.*** Scribners New York.

Cooper, B., and Picton. C. (2000) The long-term effects of relocation on people with an intellectual disability: Quality of life, behavior, and environment. ***Research on Social Work Practice, 10 (2), pp195-208.***

Conneally, S., Boyle, G. and Smyth, F. (1992) An evaluation of the use of small group homes for adults with a severe and profound mental handicap. ***Mental Handicap Research, 5, pp146-168.***

Conroy, J (1980) ***Reliability of the Behaviour Development Survey.*** Philadelphia : Temple University Development and Disabilities Center.

Conroy, J., Efthimiou, J. and Lemanowicz, J. (1982) A matched comparison of the developmental growth of institutionalized and deinstitutionalized mentally retarded clients. ***American Journal of Mental Deficiency, 86(6), pp581-587.***

Conroy, J and Bradley, V.J. (1985) ***The Pennhurst Longitudinal Study : A report of five years of research and analysis.*** Philadelphia : Temple University. Developmental Disabilities Center and Boston Human Services Research Institute.

Crawford, J.V. (1990) Maintaining staff morale: the value of a staff training and support network. ***Mental Handicap, Volume 18, June, pp48-51.***

Crisp, A.G. and Stumey, P (1988) The Promotion of Purposeful Activity in Micro-Environments for People with a Mental Handicap. ***Advances in Behaviour Research and Therapy, 10, pp7-23.***

Cullari, S. and Ferguson, D.G (1981) Individual Behaviour Change: Problems With Programming in Institutions for Mentally Retarded Persons. ***Mental Retardation, Volume 19, Number 6, pp267-270.***

Cullen, C. (1987) Nurse training and institutional constraints. In J. Hogg and P. Mittler (Eds.) ***Staff Training in Mental Handicap.*** Croom Helm London.

Cullen, C., Burton, M., Watts, S., & Thomas, M. (1983). A preliminary report on the nature of interactions in a mental handicap institution. ***Behaviour Research and Therapy, 21, pp579-583.***

Dailey, W.F., Allen, G.H., Chinskey, J.M. and Veit, S.W. (1974) Attendant behaviour and attitudes towards institutionalised retarded children. ***American Journal of Mental Deficiency, 78, pp586-591.***

Dalgleish, M. and Matthews, R. (1981) Some effects of staffing levels and group size on the quality of day care for severely mentally handicapped adults. ***British Journal of Mental Subnormality, XXVII, 52, pp30-35.***

Decker, F.H. (1985) Socialisation and interpersonal environment on nurses affective reactions to work. ***Social Science Medicine, Volume 20, No5, pp499-509.***

deKock, U., Felce, D., Saxby, H., and Thomas, M (1987) Staff turnover in a small home service. ***Mental Handicap, Volume 15, September, pp97-101.***

de Kock, U., Saxby, H., Felce, D., Thomas, M., & Jenkins, J. (1988). Individual planning for adults with severe or profound mental handicaps in a community-based service. ***Mental Handicap, 16(4), pp152-155.***

Demchack, M. (1987) A Review of Behavioural Staff Training in Special Education Settings. ***Education and Training in Mental Retardation, 22, pp205-217.***

Deutsch, M. and Gerrard, H. (1955) A Study of Normative and Informational Social Influences Upon Individual Judgements. ***Journal of Abnormal and Social Psychology, 51.***

Donabedian, A. (1980) ***Explorations in Quality Assessment and Monitoring. Volume 1. The Definition of Quality and Approaches to its Assessment.*** Health Administration Press. Michigan.

Dudley, H (1989) Managing Ward Closure. ***Health Service Journal, June, 8, pp694-695.***

Duker, P.C., Boonekamp, J., Ten Brummelhuis, Y., Hendrix, Y, Hermans, M., Van Leeuwe, J. and Seys D. (1989) Analysis of ward staff initiatives toward mental retarded residents : clues for intervention. ***Journal of Mental Deficiency, 33, pp55-67.***

Duker, P.C., Seys, D., van Leeuwe, J. and Willinge Prins, L. (1991) Occupational Conditions of Ward Staff and Quality of Residential Care for Individuals with Mental Retardation. ***American Journal or Mental Retardation, Volume 95, Number 4, pp388-396.***

Dyer, K., Schwartz, I.S. and Luce, S.C. (1984) A Supervision Program for Increasing Functional Activities for Severely Handicapped Students in a Residential Setting. ***Journal of Applied Analysis, 17, Number 2, Summer, pp249-259.***

Edwards, P. and Miltenberger, R. (1991) Burnout among staff members at community residential facilities for persons with mental retardation. ***Mental Retardation, Jan, Volume 29 (3), pp125-128.***

Emerson, E., Beasley, F., Offord, G. and Mansell, J. (1992) An evaluation of hospital-based specialized staffed housing for people with seriously challenging behaviours. ***Journal of International Disability Research, 36, pp291-307.***

Emerson, E. and Hatton, C. (1996) Impact of deinstitutionalization on service-users in Britain. In J. Mansell and K. Ericsson (Eds) ***Deinstitutionalization and Community Living: Intellectual Disability Services in Britain, Scandinavia and the USA***. Chapman and Hall. London.

Emerson, E. and Emerson, C. (1987) Barriers to the Effective Implementation of Habilitive Behavioural Programs in an Institutional Setting. ***Mental Retardation, Volume 25, Number 2, pp101-106.***

Emerson, E., Robertson, J., Gregory, N., Kessissoglou, S., Hatton, C., Hallam, A., Knapp, M., Järbrink, K., & Netten, A. (1999). ***Quality and costs of residential supports for people with learning disabilities: An observational study of supports provided to people with severe and complex learning disabilities in residential campuses and dispersed housing schemes.*** Hester Adrian Research Centre. Manchester:.

Emerson, E., Robertson, J., Gregory, N., Hatton, C., Kessissoglou, S., Hallam, A., Knapp, M., Jarbrink, K., Walsh, P.N., and Netten, A. (2000) Quality and costs of community-based residential supports, village communities and residential campuses in the United Kingdom. ***American Journal of Mental Retardation, 105 (2), pp81-102.***

Etzioni, A. (1961) ***A Comparative Analysis of Complex Organisations.*** Free Press Chicago

Felce, D. (1987) The planning and evaluation of community-based residences for individuals with severe and profound mental retardation. In S. Landesman and P.Vietze (Eds) ***Living Environments and Mental Retardation.*** American Association on Mental Deficiency, Washington D.C.

Felce, D. (1988) Behavioural and Social Climate in Community Group Residences. In Janicki, M.P., Wyngaarden Krauss, M., Seltzer, M.M. (Eds.) ***Community Residences for Persons with Developmental Disabilities: Here to Stay.*** Paul H. Brookes Publishing Company. London.

Felce, D. (1991) Using Behavioural Principles in the Development of Effective Housing Services for Adults with Severe or Profound Mental Handicaps. In B. Remington (Ed.) ***The Challenge of Severe Mental Handicap***. John Wiley and Sons Ltd.

Felce, D. (1996). Quality of support for ordinary living. In J. Mansell & K. Ericsson (Eds.), ***Deinstitutionalization and community living: intellectual disability services in Britain, Scandinavia and the USA***. London: Chapman & Hall.

Felce, D., Bowley, C., Baxter, H., Jones, E., Lowe, K. and Emerson, E. (2000) The effectiveness of staff support; evaluating Active Support training using a conditional probability approach. ***Research in Developmental Disabilities, 21, pp243-255.***

Felce, D., DeKock, U., and Repp, A.C. (1986) An Eco-Behavioural Analysis of Small Community-Based Houses and Traditional Large Hospitals for Severely and Profoundly Mentally Handicapped Adults. ***Mental Retardation, Volume 7, pp393-408.***

Felce, D., Kushlick, A. and Mansell, J (1980) Evaluation of Alternative Residential Facilities for the Severley Mentally Handicapped in Wessex: Client Engagement. ***Advanced Behavioural Residential Therapy, Volume 3, pp13-18.***

Felce, D., Kushlick, A. and Mansell, J (1980) Evaluation of Alternative Residential Facilities for the Severley Mentally Handicapped in Wessex: Staff performance. ***Advanced Behavioural Research and Therapy, Volume 3, pp25-30.***

Felce, D., Kushlick, A. and Mansell, J (1980) Evaluation of Alternative Residential Facilities for the Severley Mentally Handicapped in Wessex: Staff recruitment and Continuity. ***Advanced Behavioural Research and Therapy, Volume 3, pp31-35.***

Felce, D., Kushlick, A., and Smith, J. (1980) An overview of the research on alternative residential facilities for the severely mentally handicapped in Wessex. ***Advances in Behavioural Research and Therapy, 3, pp14.***

Felce, D., Lowe, K. and Blackman, D. (1995) Resident behaviour and staff interaction with people with intellectual disabilities and seriously challenging behaviour in residential services. ***Mental Handicap Research, Volume 8, Number 4, pp272-295.***

Felce, D., Lowe, K., Perry, J., Jones, E., Baxter., H and Bowley, C. (2000) The quality of residential and day services for adults with intellectual disabilities in eight local authorities in England; objective data gained in support of a social services inspectorate inspection. ***Journal of Applied Research in Intellectual Disabilities, 12 (4), pp273-293.***

Felce, D., & Perry, J. (1995). The extent of support for ordinary living provided in staffed housing: The relationship between staffing levels, resident characteristics, staff:resident interactions and resident activity patterns. ***Social Science and Medicine, 40,* pp799-810.**

Felce, D., Repp., A.C., Thomas, M., Ager, A. and Blunden, R. (1991) The Relationship of Staff: Client Ratios, Interactions and Residential Placement. ***Research in Developmental Disabilities, Volume 12, pp315-331.***

Felce, D., Saxby, H., deKock, U., Repp, A., Ager, A., and Blunden, R. (1987) To What Behaviours Do Attending Adults Respond? A Replication. ***American Journal of Mental Deficiency, Volume 91, Number 5, pp496-504.***

Feldman, M.A. and Dalrymple, A.J. (1984) Staff Training Using Instructional and Management Strategies: A review of the literature. In J.M. Berg (Ed.) *Perspectives and Progress in Mental Retardation.* ***Volume 1 - Social, Psychological and Educational Aspects.***

French, J.R. and Raven, B. (1959) The Bases of Social power. In D. Cartwright and A. Zander (Eds.) (1968) ***Group Dynamics.*** *(3rd Ed.)* Tavistock. London.

Goffman, E. (1961) ***Asylums.*** Doubleday. New York.

Grant, G.W.B. and Moores, B. (1977) Resident characteristics and staff behaviour in 2 hospitals for mentally retarded adults. ***American Journal of Mental Deficiency, 82, 259-265.***

Green, C.W., Parsons, M.B., and Reid, D.H. (1993) Integrating instructional procedures into traditional congregate care situations for people with sever disabilities. ***Behavioural Residential Treatment, Volume 8 (4), pp243-262.***

Green, C.W. and Reid, D.H. (1991) Reinforcing staff performance in residential facilities: a survey of common managerial practices. ***Mental Retardation, 29, pp195-200.***

Greene, B.F., Willis, B.S. Levy, R., and Bailey, J.S. (1978) Measuring client gains from staff implemented programs. ***Journal of Applied Behavioral Analysis, 4, 2, pp395-412***

Gunzburg, H.C. (1989) Editorial. ***British Journal of Mental Subnormality, 35, 1.***

Halliday, S. and Potts, M. (1987) Moving into the community: Views from the staff involved on the causes and effects of delays in one move. ***British Journal of Mental Subnormality, Vol.XXXIII, Part 1.***

Harmatz, M.G. (1973) Observational study of ward staff behaviour. ***Exceptional Children, 39, pp554-558.***

Harris, P and Thomson, G. (1983) The Staff Support Questionnaire. ***Mental Handicap, Vol.21, Number 4, December, pp122-128.***

Harris, J.M., Viet, S.W., Allen, J.G. and Chinsky, J.M. (1974) Aide-resident ratio and ward population density as mediators of social interaction. ***American Journal of Mental Deficiency, 79, pp320-326.***

Harvey, E. and Burns, J. (1994) Staff Burnout and Absenteeism Through Service Transition : From Hospital to Hostel. ***Mental Handicap Research, Volume 7, Number 4, pp328-337.***

Hastings, R.P. (1995) Understanding factors that influence staff responses to challenging behaviours: an exploratory interview study. ***Mental Handicap Research, Volume 8, Number 4, pp296-320.***

Hastings, P.R. (1996) Staff strategies and explanations for intervening with challenging behaviours. ***Journal of Intellectual Disability Research, 40, 2, pp166-175.***

Hastings, R.P. and Remington, B. (1993) Is there anything on...Why 'good' behavioural programmes fail? A Brief Review. ***Clinical Psychology Forum, May, 55, pp9-11.***

Hastings, R.P. and Remington, B. (1994) Rules of Engagement: Toward an Analysis of Staff Responses to Challenging Behaviour. ***Research in Developmental Disabilities, Volume 15, Number 4, pp1-21.***

Hastings, R.P. and Remington, B. (1994) Staff behaviour and its implication for people with learning disabilities and challenging behaviours. ***British Journal of Clinical Psychology, pp***

Hastings, R.P. Remington, B. and Hatton, C. (1995) Future Directions for Research on Staff Performance in Services for People with Learning Disabilities. ***Mental Handicap Research. Volume 8, Number 4, pp333-339.***

Hatton, C. and Emerson, E.B. (1993) Organisational Predictors of Staff Stress, Satisfaction and Intended Turnover in a Service for People with Multiple Disabilities. ***Mental Retardation, Vol. 31, No. 6, pp388-395.***

Hatton, C and Emerson, E. (1995) Staff in Services for People with Learning Disabilities : An Overview of Current Issues. ***Mental Handicap Research, Volume 8, Number 4, pp 215-219.***

Hauber, F.A. and Bruninks, R.H. (1986) Intrinsic and extrinsic job satisfaction among direct-care staff in residential facilities for mentally retarded people. ***Educational and Psychological Measurement, 46, pp95-105.***

Herzberg, F. (1974) ***Work and the Nature of Man.*** Granada Publishing Ltd.

Herzberg, F., Mausner, B. and Syndermann, B.B. (1959) ***The Motivation to Work.*** (2nd Ed.) Chapman and Hall.

Hewson, S., & Walker, J. (1992). The use of evaluation in the development of a staffed residential service for adults with mental handicap. ***Mental Handicap Research, 5(2), pp188-203.***

Hile, M.G. and Walbran, B.B. (1991) Observing Staff-Resident Interactions : What Staff Do, What Residents Receive. ***Mental Retardation, Vol.29, 1, pp35-41.***

Holburn, C.S. and Forrester, J. (1984) Alterable Correlates of Extrinsic and Intrinsic Job Satisfaction at a State Residential Facility. ***American Journal of mental Deficiency, Volume 89, Number 1, pp50-59.***

Holland, J.G. (1973) Behaviourism; part of the problem or part of the solution? ***Journal of Applied Behavior Analysis, 11, pp163-174.***

Holland, T. (1973) Organisational structures and institutional care. ***Journal of Health and Social Behaviour, 14, pp241-251.***

Hollander, M.A. and Plutchik, R.A. (1972) A reinforcement program for psychiatric attendants. ***Journal of Behaviour Therapy and Experimental Psychiatry, 3, pp292-300.***

Hollander, M.A., Plutchik, R. and Horner, J. (1973) Interaction of patient and attendant reinforcement programs. The 'piggyback effect'. ***Journal of Consulting and Clinical Psychology, 1, pp43-47.***

Howell, D.C. (1982) ***Statistical Methods for Psychology*** (Second Edition) Duxbury Press. Boston.

Hrdowy, E. and Martin, G.L. (1994) A practical staff management package for use in a training program for persons with developmental disabilities. ***Behaviour Modification, January, Volume 18 (1), pp66-68.***

Hucznski, A.A. and Buchanan, D.A. (1991) ***Organisational Behaviour.*** *2nd Edition.* Prentice Hall. Hertfordshire.

Intagliata, J., Rinck, C. and Clakins, C. (1986) Staff responses to maladaptive behaviour in public and community residential facilities. ***Mental Retardation, 24, pp93-98.***

Ivancic, M.T., Reid, D., Iwata, B.A., Faw, G.D. and Page, T.J. (1981) Evaluating a supervision program for developing and maintaining therapeutic staff-resident interactions during institutional care routines. ***Journal of Applied Behaviour Analysis, 14, pp95-107.***

Iwata, B.A., Bailay, J.S., Brown, K.M., Foshee, T.J.and Alpern, M. (1976) A professional-based lottery to improve residential care and training by institutional staff. ***Journal of Applied Behaviour Analysis, 9, pp417-413.***

Jay, P. (1979) ***Report of the Committee of Enquiry into Mental Handicap Nursing and Care : Volume II*** HMSO London

Jones, E., Felce, D., Lowe, K., Bowley, C., Pagler, J., Strong, G., Gallagher, B., Roper, A., and Kuowska, K. (2001) Evaluation of the Dissemination of Active Support Training and Training Trainers. ***Journal of Applied Research in Intellectual Disabilities, 14 (2), pp79-99.***

Jones, E., Perry, J., Lowe, K., Felce, D., Toogood, S., Dunstan, F., Allen, D and Pagler, J. (1999) Opportunity and the promotion of activity among adults with severe intellectual disability living in community residences; the impact of training staff in active support. ***Journal of Intellectual Disability Research, 43 (3) pp164-178.***

Jones, K. (1975) ***Opening the Door.*** Routledge and Kegan Paul.

Katz, R.C., Johnson, C.A., Gelford, S. (1972) Modifying the dispensing of reinforcers: Some implications for behaviour modification with hospitalised patients. ***Behaviour Therapy, 3, pp579-588.***

Katz, D. and Kahn, R.L. (1966) ***The Social Psychology of Organisations.*** John Wiley and Sons New York.

Kavasek, R. and Theorell, T. (1990) ***Healthy Work. Stress, Productivity and the Reconstruction of Working Life.*** Basic Books.

Kazdin, A.E. (1973) Issues in behavior modification with mentally retarded persons. **American Journal of Mental Deficiency, 78, pp134-140.**

Kendall, J. and Knapp, M. (2000) The third sector and welfare state modernisation: Inputs, activities and comparative performance. ***Civil Society Working Paper 14, December, pp1-14.***

Ketterer, R.F., Price, R.H. and Politser, P.E. (1980) The Action Research Paradigm. In R.H. Price and P.E. Politser (Eds) ***Evaluation and Action in the Social Environment.*** Academic Press. New York.

Kings Fund (1980) ***An Ordinary Life: Comprehensive Locally-Based Residential Services for Mentally Handicapped People.*** Kings Fund Centre. London

King, R.D., Raynes, N.V. and Tizard, J. (1971) ***Patterns of residential care: Sociological studies in institutions for handicapped children.*** Routledge and Kegan Paul. London.

King, R.D. and Raynes, N.V. (1968) Patterns of institutional care for the severely subnormal. ***American Journal of Mental Deficiency, 72, pp700-709.***

Kissel, R.C., Whitman, T.L and Reid, D.H. (1983) An Institutional Staff Training and Self-Management Program for Developing Multiple Self-Care Skills in Severely/Profoundly retarded Individuals. ***Journal of Applied Behaviour Analysis, 16, Number 4, Winter, pp393-415.***

Klaber, M.M. (1970) Institutional programming and research: A vital partnership in action. In A.A. Baumeister and E.C. Butterfield (Eds) ***Residential Facilities for the Mentally Retarded.*** Aldine. Chicago.

Knowles, M and Landesman, S (1986) National Survey of State-Sponsored Training for Residential Direct-Care Staff. ***Mental Retardation, Volume 24, Number 5, pp293-300.***

Kushlick, A. (1970) Residential Care for the Mentally Subnormal. ***Royal Society of Health Journal, 90, pp255-261.***

Lakin, C.K. and Bruninks, R.H. (1981) **Occupational stability of direct-care staff in residential facilities for mentally retarded people.** *Developmental Disabilities Project on Residential Services and Community Adjustment, Project Number 14, Minneapolis, University of Minnesota, Dept. of Psychoeducational Studies.*

Lakin, K.C., Bruinicks, R.H., Hill, B.K. and Hauber, F.A. (1982) Turnover of direct-care staff in a national sample of residential facilities for mentally retarded people. ***American Journal of Menatal Deficiency, 87, pp64-72.***

Lakin, C.K. and Larson, S.A. (1992) Satisfaction and stability of direct-care personnel in community residential services. In J.W. Jacobson, S.N. Burchard and P.J. Carling (Eds) ***Community living for people with developmental and psychiatric disabilities.*** John Hopkins University Press. Baltimore.

Landesman-Dwyer, S. (1985) Describing and evaluating Residential Environments. In R.H. Brunniks and C.K Lakin (Eds.) ***Living and Learning in the Least Restrictive Environment.*** Baltimore. Paul H. Brooks.

Landesman, S. (1988) Preventing 'Institutionalization' in the Community. In M. Janicki, M.W. Krauss, and M.M. Seltzer (Eds) ***Community residences for persons with Developmental Disabilities: Here to Stay.*** Paul H. Brookes. Baltimore.

Landesman-Dwyer, S. and Knowles, M. (1987) Ecological Analysis of Staff Training in Residential Settings. In J. Hogg and P. Mittler (Eds.) ***Staff Training in Mental Handicap.*** Croom Helm London.

Landesman-Dwyer, S., Sackett, G.P, and Kleinman, J.S. (1980) Relationship of Size to Resident and Staff Behaviour in Small Community Residences. ***American Journal of Mental Deficiency, Volume 85, Number 1, pp6-17.***

Landesman-Dwyer, S., Stein, J.G., and Sackett, G.P. (1978) A behavioural and ecological study of graoup homes. In G.P. Sackett (Ed.) ***Observing Behaviour: Theory and Application in Mental Retardation.*** University Park Press, Baltimore.

Larson, S.A., Lakin, K.C. and Brunicks, R.H. (1988) ***Staff Recruitment and Retention: Study Results and Strategies.*** Washington D.C. American Association on Mental Retardation.

Larson, S.A. and Lakin, K.C. (1982) Deinstitutionalisation of Persons with Mental Retardation – Behavioural Outcomes. ***Journal of the Association for Persons with Severe Handicaps, 14 (4), pp324-332.***

Larson, S.A. and Lakin, C.K. (1992) Direct-care staff stability in a national sample of small group homes. ***Mental Retardation, February, Volume 30 (1), pp13-22.***

Lavender, A. (1985) Quality of Care and Staff Practices in Long-Stay Settings. In F.N. Watts (Ed.) ***New Developments in Clinical Psychology***. John Wiley and Sons Limited Chichester

Lee, R.and Lawrence, P (1991) ***Politics at Work***. Stanley Thornes Ltd. Cheltenham.

Levinson, D. (1959) Role, personality and social structure in the organisational setting. In G. Salaman and K. Thomson (Eds) ***People and Organisations.*** Open University Longman London.

Little, J. (1982) Norms of collegiality and experimentation: Workplace conditions of school success. ***American Educational Research Journal, Fall, Vol. 19 (3), pp325-346.***

Loeber, R. and Weisman, R.G. (1975) Contingencies of therapist and trainer reinforcement – A review. ***Psychological Bulletin, 82, pp660-668.***

Lovass, I., Newson, C. and Hackman, C. (1987) Self-stimulatory behaviour and perceptual reinforcemnt. ***Journal of Applied Behaviour Analysis, 20, pp45-68.***

MacEachron, A.E., Zober, M.A. and Fein, J. (1985) Institutional Reform. Adaptive Functioning of Mentally Retarded Persons and Staff Quality of Work Life. ***American Journal of Mental Deficiency, Volume 89, Number 4, pp379-388.***

Mansdorf, I.J., Bucich, D.A. and Judd, L.C. (1977) Behavioural Treatment Strategies of Institution Ward Staff. ***Mental Retardation, 15 (5), I, pp22-24.***

Mansell, J (1988) Training for Service Development. In D. Towell (Ed.) ***An Ordinary Life in Practice (developing Comprehensive community-based services for people with Learning Disabilities).*** Kings Fund. London.

Mansell, J. (1994) Specialized group homes for persons with severe or profound mental retardation and serious problem behaviour in England. ***Research in Developmental Disabilities, 15, pp371-388.***

Mansell, J. (1995) Staffing and staff performance in services for people with severe or profound learning disabilities and serious challenging behaviour. ***Journal of Intellectual Disability Research, Volume 39, Part 1, February, pp3-14***

Mansell, J. (1996). Issues in community services in Britain. In J. Mansell & K. Ericsson (Eds.), ***Deinstitutionalization and community living: Intellectual disability services in Britain, Scandinavia and the USA.*** London: Chapman & Hall.

Mansell, J, Felce, D., deKock, U and Jenkins, J. (1982) Increasing Purposeful activity of Severely and Profoundly Handicapped Adults. ***Behaviour Research and Therapy, 20, pp593-604.***

Mansell, J., Felce, D., Jenkins, J. and deKock U. (1982) Increasing staff ratios in an activity with severely mentally handicapped people. ***British Journal of Mental Subnormality, XXVIII, 55, pp97-99.***

Mansell, J., Jenkins, J., Felce, D and deKock, U. (1984) Measuring the activity of severely and profoundly mentally handicapped adults in ordinary housing. ***British Journal of Mental Subnormality, 28, pp97-99.***

Mansell, J., Felce, D., Jenkins, J., deKock, J. and Toogood, S. (1987) ***Developing Staffed Housing for People with Mental Handicaps.*** Costello Kent.

Mansell, J., Ashman, B., Macdonald, S. and Beadle-Brown, J. (2002) Residential care in the community for adults with intellectual disabilities: needs, characteristics and services. **Journal of Intellectual Disability Research, 46(8), 625-633.**

Mansell, J., Beadle-Brown, J., Macdonald, S. and Ashman, B. (2003) Resident involvement in activity in small community homes for people with learning disabilities. **Journal of Applied Research in Intellectual Disabilities, 16(1), 63-74.**

Mansell, J., Elliott, T., Beadle-Brown, J., Ashman, B. and Macdonald, S. (2002) Engagement in meaningful activity and 'active support' of people with intellectual disabilities in residential care. ***Research in Developmental Disabilities, 23(5), 342-352.***

Maslach, C. (1976) Burned-out. ***Human Behavior, 5(9), pp16-22.***

Maslach, C., and Jackson, S.E. (1978) ***A scale measure to assess experienced burnout. The Maslach Burnout Inventory.*** Paper presented at the Convention of the Western Psychological Association. San Francisco. April.

Maslach, C. and Jackson, S.E. (1981) The measurement of experienced burnout. ***Journal of Occupational Behaviour, 2, pp99-113.***

Maurice, P. and Trudel, G. (1982) Self-injurious behavior: prevalence and relationships to environmental events. In J.H. Hollis and C.E. Myers (Eds) ***Life-threatening behavior. Analysis and Intervention.*** American Association on Mental Deficiency.

McCormick, M., Balla, D. and Zigler, E. (1975) Resident-Care Practices in Institutions for Retarded Persons : A Cross Institutional, Cross-Cultural Study. ***American Journal of Mental Deficiency, Volume 80, No. 1, pp1-17.***

McGill, P., and Mansell, P. (1995)Community placements for people with severe and profound learning disabilities and serious challenging behaviour: Individual illustrations of issues and problems. ***Journal of Mental Health, 4, 183-198.***

McGrath, M. (1993)Whatever happened to teamwork? Reflections on CMHT's. ***British Journal of Social Work , February, Volume 23 (1), pp15-29.***

Mead (1934) **Mind, Self and Society.** Chicago Press Chicago.

Miller, R. and Lewin, L.M. (1980) Training and Management of the Psychiatric Aide: A Critical Review. ***Journal of Organisational Behavior Management, Volume2 (4) Fall, pp295-315.***

Millham, S., Bullock, R and Cherrett, P. (1975) A conceptual scheme for the comparative analysis of residential institutions. In J, Tizard, I. Sinclair and R. V. G. Clarke (Eds.) ***Varieties of Residential Experience.*** Routledge and Kegan Paul. London.

Milne, D. (1985) An observational evaluation of the effect of nurse training in behaviour therapy on unstructured ward activities and interactions. ***British Journal of Clinical Psychology, 24, pp149-158.***

MINITAB Ltd (1988) ***Minitab (Version 12.1).*** Coventry.

Mittler, P.J.(1979) ***People not patients : Problems and policies in mental handicap.*** Methuen.

Mittler, P. J. (1987) Staff Development: Changing Needs and Service Contexts in Britain. In J. Hogg and P. Mittler. ***Staff Training In Mental Handicap.*** Croom Helm. London.

Montegar, C.A., Reid, D., Madsen, C.H. and Ewell, M.D. (1981) Increasing institutional staff to resident interactions through in-service training and supervisor approval. ***Behaviour Therapy, 8, pp533-540.***

Moores, B. and Grant, G.W.B. (1976) On the nature and incidence of staff-patient interactions in hospitals for the mentally handicapped. ***International Journal of Nursing Studies, Volume 13, pp69-81.***

Moores, ,B. and Grant, G.W.B. (1977) The 'Avoidance' syndrome in hospitals for the mentally handicapped. ***British Journal of Nursing Studies, Volume 14, pp91-95.***

Moores, B. and Grant, G.W.B. (1977) Feelings of alienation among nursing staff in hospitals for the Mentally Handicapped. ***International Journal of Nursing Studies, Volume 14, pp5-12.***

Morris, P. (1969) ***Put Away.*** Routledge and Kegan Paul. London.

Mullins, L.J. (1993) ***Management and Organisational Behaviour. 3rd Edition***. Pitman. London.

Munro, J.D., Duncan, H.G. and Seymour, L.M. (1983) Effect of Front-Line Staff Turnover on the Behaviour of Institutionalised Mentally Retarded Adults. ***American Journal of Mental Deficiency, 88, Number 3, pp332-335.***

Murphy, R.J. (1983) ***An investigation into the determinants of nursing staff behaviour in the long-term care of the mentally handicapped.*** Unpublished manuscript. Calderstones Hospital, Blackburn.

Nihira, K., Foster, R., Shellness, M and Leland, H. (1974) ***AAMD : Adaptive Behavior Scale. American Association on Mental Deficiency.*** Washington D.C.

Nirje, B. (1969) The normalization principle and its human management implications. In R.B. Kugel and W. Wolfensberger (Eds.) ***Changing patterns in residential services for the mentally retarded.*** Washington Presidents Committee on Mental Retardation.

O'Brien, J. (1987) A guide to lifestyle planning. In B.Wilcox and G.T.Bellamy (Eds) ***The Activities Catalog: An alternative curriculum for youth and adults with severe disabilities.*** Paul H. Brookes. Baltimore

Orlowska, D. (1992) ***An Eco-Behavioural Perspective on the performance of Direct-Care Staff in Facilities for People with Learning Disabilities.*** PhD. Unpublished. University of Kent at Canterbury.

Orlowska, D., McGill, P. and Mansell, J. (1991) Staff-staff and staff-resident verbal interactions in a community-based group home for people with moderate and severe mental handicaps. ***Mental handicap research, Vol. 4, No. 1, Jan., pp3-19.***

Page, T.J., Iwata, B.A. and Reid, D.H. (1982) Pyramidal training: Alarge scale application with institutional staff. ***Journal of Applied Behavior Analysis, 15, pp335-351.***

Panyan, M., Boozer, H. and Morris, N. (1970) Feedback to attendants as a reinforcer for applying operant techniques. ***Journal of Applied Behaviour Analysis, 3, pp1-4.***

Parry, G. and Watts, F.N. (1989) ***Behavioural and Mental Health Research: A handbook of Skill and Methods.*** Lawrence Erlbaum Associates Ltd.

Parsons, M.B., Scheis, M.M., Reid, D.H., McCarn, J.E. and Green, C.W. (1987) Expanding the impact of behavioural staff management: A large scale, long-term application in schools serving severely handicapped students. ***Journal of Applied Behaviour Analysis, 20, Number 2, Summer, pp139-150.***

Parsons, M.B., Cash, V.B. and Reid, D.H. (1989) Improving Residential Treatment Services: Implementation and norm-referenced evaluation of a comprehensive management system. ***Journal of Applied Behaviour Analysis, 22, Number 2, summer, pp143-156.***

Paton, X. and Stirling, E. (1974) Frequency and type of dyadic nurse-patient verbal interactions in a mental Subnormality hospital. ***International Journal Nursing Studies, Volume 11, pp135-145.***

Patterson, E.T., Griffin, J.C., and Panyan, M.C. (1976) Incentive maintenance of self-help skill training programs for non-professional personnel. ***Journal of Behavioural Therapy and Experimental Psychiatry, 7, pp249-252.***

Paul, G.L., McLunis, T.L. and Mariotto, M.J. (1973) Objective Performance Outcomes Associated with Two Approaches to Training Mental handicap Technicians in Milieu and Social-Learning Programs. ***Journal of Abnormal Psychology, 82, pp523-532.***

Payne, R. (1979) Job demands, supports and constraints. In C. Mackay and T. Cox (Eds.) *Responses to Stress: Occupational Aspects.* International Publishing Corporation London.

Pearlin, L. (1967) Alienation from Work: A Study of Nursing Personnel. In M Abrahamson (Ed.) ***The Professional in the Organisation***. Rand McNally and Company.

Perry, J. and Felce, D. (1995)Measure for measure. How do measures of quality of life compare? ***British Journal of Learning Disabilities, 23, pp134-137.***

Perry, J. and Felce, D. (1995) Objective assessments of quality of life: How much do they agree with each other? ***Journal of Community and Applied Social Psychology, 5(1), pp1-19.***

Pomerleau, O.F., Bobrove, P.H., and Smith, R.H. (1973) Rewarding psychiatric aides for the behavioral improvements of assigned patients. ***Journal of Applied Behavioural Analysis, 6, pp383-390.***

Pommer, D.A., and Streedbeck, O (1974) Motivating staff performance in an operant learning program for children. ***Journal of Applied Behavioural Analysis, 7, pp217-221.***

Porterfield, J., Blunden, R and Blewitt, E. (1980) Improving Environments for Profoundly Handicapped Adults. ***Behaviour Modification, April, pp225-239.***

Pratt, M.W., Bumstead, D.C., and Raynes, N.V. (1976) Attendant staff speech to the institutionalised retarded : Language use as a measure of the quality of care. ***Journal of Child Psychology and Psychiatry, Volume 17, pp133-143.***

Pratt, M.W., Luszcz, M.A and Brown, M.E. (1980) 'Measuring dimensions of the quality of care in small community residences'. ***American Journal of Mental Deficiency, 85, 2, pp188-94.***

Prien, E.P. and Cassel, R.H. (1973) Predicting performance Criteria of Institutional Aides. ***American Journal of Mental Deficiency, Volume 78, Number 1, pp33-40.***

Prior, M., Mimes, P., Coyne, T., Golding, B., Hendy, J. and McGillivary, J. (1979) Verbal interactions between staff and residents in an institution for the young mentally retarded. ***Mental Retardation, 17, pp65-69.***

Quilitch, H.R. (1975) A Comparison of Three Staff - Management Procedures. ***Journal of Applied Behaviour Analysis, 15, pp477-492.***

Raynes, N.V, Pratt, M.W. and Roses, S. (1979) ***Organisational Structure and the Care of the Mentally Retarded.*** Croom Helm. London.

Raynes, N.V., Pratt, M.W. and Roses, S. (1977) Aides Involvement in Decision-Making and the Quality of Care in Institutional Settings. ***American Journal of Mental Deficiency, Volume 81, Number 6, pp570-577.***

Raynes, N.V. and Sumpton, R.C. (1987) Differences in the quality of residential provision for mentally handicapped people. ***Psychological Medicine, 17, pp999-1008.***

Raynes, N.V. and Sumpton, R. (1986) Follow up study of 448 People who are mentally handicapped, ***Final Report to DHSS, Manchester : Department of Social Administration.*** University of Manchester.

Raynes, N.V., Sumpton, R.C. and Flynn, M.C. (1987) ***Homes for Mentally Handicapped People.*** Tavistock. London

Raynes, N.V., Wright, K, Sheill, A and Pettipher, C. (1994) ***The Cost and Quality of Community Residential Care : An Evaluation of the Services for Adults with Learning Disabilities.*** The University Department of Social Policy and Social Work. Manchester.

Razza, N.J. (1993) Determinants of Direct-Care Staff Turnover in Group Homes for Individuals with Mental Retardation. ***Mental Retardation, Vol. 31, No. 5, pp284-291.***

Reid, D.H. and Whitman, T.L. (1983) Behavioural staff management in institutions: a critical review of effectiveness and acceptability. ***Analysis and Intervention in Developmental Disabilities, 3, pp131-149.***

Reid, D. H., Parsons, M. B., & Green, C. W. (1989). ***Staff management in human services: Behavioral research and application.*** Springfield, IL: Thomas.

Repp, A. C., & Barton, L. E. (1980). Naturalistic observations of institutionalized retarded persons: A comparison of licensure decisions and behavioral observations. ***Journal of Applied Behavior Analysis, 13, pp333-341.***

Repp, A.C., Barton, L.E. and Brulle, A.R. (1981) Correspondence Between Effectiveness and Staff Use of Instructions for Severely Retarded Persons. ***Applied Research in Mental Retardation, Volume 2, pp237-245.***

Repp, A.C., Barton, L.E. and Brulle, A.R. (1982) Naturalistic Studies of Mentally Retarded Persons : V : The Effects of Staff Instructions on Student Responding. ***Applied Research in Mental Retardation, Volume 3, pp55-65.***

Repp, A.C., Barton, L.E., Gottlieb, J. (1983) Naturalistic Studies of Institutionalised Profoundly or Severley Mentally Retarded Persons : The Relationship of Density and Behaviour. ***American Journal of Mental Deficiency, Volume 87, Number 4, pp441-447.***

Repp, A.C., Felce, D. and deKock (1987) Observational Studies of Staff Working with Mentally Retarded Persons. A review. ***Research in Developmental Disabilities, Volume 8, pp331-350.***

Reppucci, N.D. (1977) Implementation Issues for the Behaviour Modifier as Institutional Change Agents. ***Behaviour Therapy, 8, pp594-605.***

Rice, D.M. and Rosen, M. (1991) Editorial. Direct-Care Staff : A Neglected Priority. ***Mental Retardation, August, ppiii-iv.***

Rice, D.M., Rosen, M. and Macmann, G.M. (1990) Attitudes of Direct-Care Workers at a Residential Facility. ***Journal of the Multi-handicapped Person, Volume 3, Number 1, pp55-63.***

Risley, T.R. and Favell, J. (1979) Constructing a living environment in an institution. In L.A. Hamerlynck (Ed.) ***Behavioral Systems for the Developmenatally Disabled : II Institutional, Clinic and Community Environments***. N.Y. Brumner/Mazel.

Robinson, T. (1991) Relationships in Question: people with a mental handicap, their parents and professionals. In S. Baldwin and J. Hattersley (Eds.) ***Mental Handicap: Social Science perspectives.*** Routledge London.

Rose, J. (1993) Stress and Staff in Residential Settings : The Move From Hospital to the Community. *Mental Handicap Research, Vol. 6, No. 4, pp312-332.*

Rose, J. (1996) ***Stress and Staff who Work with People with Learning Disabilities***. PhD. University of Hertfordshire

Rose, J. (1997) Stress and Stress Management Among Residential Care Staff. ***Tizard Learning Disability Review. Volume 2, Issue 1, pp8-15.***

Rose, J., Mullen, E. and Fetcher, B. (1994) An Examination of the Relationship Between Staff Behaviour and Stress Levels in Residential Care. ***Mental Handicap Research, Volume 7, Number 4, pp312-327***

Sarata, B.P.V. (1974) Employee Satisfactions in Agencies Serving Retarded Persons. ***American Journal of Mental Deficiency, Vol. 79, No. 4, pp434-442. 8***

Saxby, H., Felce, D., Harman, M. and Repp, A. (1988) The Maintenance of Client Activity and Staff-Client Interaction in Small Community Houses for Severely and Profoundly Mentally Handicapped Adults : A Two-Year Follow-Up. ***Behavioural Psychotherapy, 16, pp189-206.***

Scalley, M. and Beyer, S. (1992) Design for Living. ***Community Care, March 12.***

Schutz, W.C. (1966) ***The Interpersonal Underworld.*** Science and Behaviour Books. New York.

Scnike, S.P. and Wong, S.E. (1977) Evaluation of staff training in group homes for retarded persons. ***American Journal of Mental Deficiency, 82, pp130-136.***

Seligman, M.E.P. (1975) ***Helplessness.*** W.H. Freeman San Francisco.

Seys, D., Kerstan, H. and Duker, P (1990) Evaluating ward staff program for increasing spontaneous and varied communicative gesturing with individuals who are mentally retarded. ***Behavioural Residential Treatment, Volume 5, Number 4, pp247-257.***

Seys, D. and Duker, P. (1988) Effects of Staff Management on the Quality of Residential Care of Mentally Retarded Individuals. ***American Journal of Mental Retardation, Volume 93, Number 3, pp290-299.***

Seys, D.M and Duker, P. (1986) Effects of a Supervisory Treatment Package on Staff-Mentally Retarded Resident Interactions. ***American Journal of Mental Deficiency, Volume 90, Number 4, pp388-394.***

Shaw, M.E. (1971) **Group Dynamics : The Psychology of Small Group Behaviours.** McGraw-Hill New York.

Shibutani, T. (1962) Reference Groups and Social Control. In A.M. Rose (Ed.) ***Human Behaviour and Social Processes***. Routledge and Kegan Paul London.

Shotwell, A.M., Digwell, F. and Tarjan, G. (1960) Need for improved criteria in evaluating job performance of state hospital employees. ***American Journal of Mental Deficiency, 65, pp208-218.***

Siegal, S and Castellan, N.J. Jr., (1988) ***Nonparametric Statistics for the Behavioural Sciences. Second Edition.*** McGraw-Hill International Editions

Sigafoos, J., Roberts, D., Couzens, D. and Liliana, C. (1992) Improving instruction for adults with developmental disabilities : Evaluation of a staff training package. ***Behavioural Research and Treatment, October, Volume 7 (4), pp283-297.***

Slama, K.M. and Bannerman, D.J. (1983) Implementing and maintaining a behavioral treatment system in an institutional setting. ***Analysis and Intervention in Developmental Disabilities, 3, pp171-191.***

Slater, M.A. and Bunyard, P.D. (1983) Survey of residential staff roles, responsibilities and perception of resident needs. ***Mental Retardation, 21, pp52-58.***

Smith, M., Beck, J., Cooper, C.L., Cox, C., Ottoway, D. and Talbot, R. (1982) *Introducing* ***Organisational Behaviour.*** MacMillan Basingstoke.

SPSS Inc (1988) ***SPSS for Windows (Statistical Package for the Social Sciences) Version 9.0.*** Chicago. SPSS Incorporated.

Staw, B.M. (1986) Organisational Psychology and the Pursuit of the Happy, Productive Worker. **California Management Review, Volume 28, Number 4, Summer, pp40-53.**

Sternfert-Krose, B. and Fleming, I. (1992) Staff's Attitudes and Working Conditions in Community-Based Group Homes of People with Mental Handicaps. ***Mental Handicap Research, Volume 5, Number 1, pp82-91.***

Stoter, D. (1992) The Culture of Care. ***Nursing Times, 88, March, 18, pp30-31.***

Sturmey, P and Crisp, A.G. (1989) Organising Staff to Provide Individual Teaching in a Group : A Critical Review of Room Management and Related Procedures. ***Australia and New Zealand Journal of Developmental Disabilities, Volume 15, Number 2, pp127-142.***

Suen, H.K., and Ary, D. (1989) ***Analyzing quantitative behavioural observation data. Hove Erlbaum. Hillsdale. New Jersey.***

Swanson, D. (1987) Stress and Burnout II : Stress and residential rehabilitation services. ***Residential Treatment for Children and Youth, pp31-44.***

Taylor, L.K. (1980) ***Not for Bread Alone: An Appreciation of Job Enrichment. (3rd Ed.)*** Business Books.

Thaw, J and Wolfe, S.W. (1986) The Direct-Care Worker: A Socio-Cultural Analysis. In J. Thaw and Curo (Eds.) ***Developing Responsive Human Services : New Perspectives About Residential Treatment Organisations.*** Hillsdale. New Jersey. Erlbaum.

Thomas, M., Felce, D., deKock, U, Saxby, H. and Repp, A (1986) The activity of staff and of severely and profoundly mentally handicapped adults in residential settings of different sizes. ***British Journal of Mental Subnormality, Volume XXXII, Part 2, Number 63, pp82-92.***

Thormahlen, P. (1965) A study of on-the-ward training of trainable mentally retarded children in a state institution. ***California Mental Handicap Research Monograph, 5.***

Thousand, J.S., Burchard, S.N. and Hasazi, J.E. (1986) Field-Based Generation and Social Validation of Managers and Staff Competencies for Small Community Residencies. ***Applied Research in Mental Retardation, Volume 7, pp263-283.***

Tizard, J. (1964) ***Community Services for the Mentally Handicapped.*** Oxford University Press. London.

Tizard, B., Cooperman, O., Joseph, A. and Tizard, J. (1972) Environmental effects on language development: A study of young children in long-stay residential nurseries. ***Child Development, 43, pp337-358.***

Tizard, J., Sinclair, I. and Clarke, R.V.G. (1975) ***Varieties of Residential Experience.*** Routledge and Kegan Paul. London and Boston.

Tossebro, J (1995) Impact of Size Revisited: Relation of Number of Residents to Self-Determination and Deprivitization. ***American Journal of Mental Retardation. Volume 100, Number 1, pp59-67.***

Towell, D. (1988) Editor. ***An Ordinary Life in Practice (developing comprehensive-based services for people with learning disabilities).*** Kings Fund London.

Tuckman, B.W. (1965) Development Sequences in Small Groups. ***Psychological Bulletin, 63, pp384-99.***

Turner, B.A. (1973) The industrial subculture. In G. Salaman and K. Thomson (Eds.) ***People and Organisations.*** Open University Press Longman London.

Van den Pol, R.A., Reid, D.H. and Wayne Fuqua, R. (1983) Peer Training of Safety-Related Skills to institutional Staff : Benefits for Trainers and Trainees. ***Journal of Applied Behaviour Analysis, 16, Number 2, Summer, pp139-156***

Veit, S.W., Allen, G.J. and Chinskey, J.M. (1976) Interpersonal Interactions Between Institutionalised retarded Children and Their Attendants. ***American Journal of Mental Deficiency, Volume 80, Number 5, pp535-542***

Ward, F. (1999). ***Modernising the social care workforce - the first national training strategy for England: Supplementary report on learning disability***. Leeds: Training Organisation for the Personal Social Services.

Ward, L. (1985) Training Staff for an 'Ordinary Life' ;Experiences in a Community Service in South Bristol. ***British Journal of Mental Subnormality, 32, pp94-102***.

Warren, S.A. and Mondy, L.W. (1971) To what behaviours do attending adults respond? ***American Journal of Mental Deficiency, 75, p449-455.***

Welsh Office (1983) ***All-Wales Strategy for the Development of Services for Mentally Handicapped People.*** Cardiff. Welsh Office.

Welsh Office (1992) The Development of Community Care for Mentally Handicapped People. ***Report of the All-Wales Working Party on Services for Mentally Handicapped People.*** Welsh Office.

Willis, R.H. and Hollander, E.P. (1964) An Experimental Study of Three Response Modes in Social Influence Situations. ***Journal of Abnormal and Social Psychology, 69, pp150-6.***

Wilson, P.G., Reid, D.H., Korabek-Pukowski, C.A. (1991) Analysis of public verbal feedback as a staff management procedure. ***Behavioural residential Treatment, October, Volume 6 (4), pp262-277.***

Wolfensberger, W. (1972) ***The Principle of Normalization in Human Services***. NIMR. Toronto.

Wood, J.R.A. (1989) Comparing interactions in two hospital wards for people with mental handicaps. A Pilot Study. **Mental Handicap Research, 2, 1, pp3-17**.

Woods, P.A. and Cullen, C. (1983) Determinants of Staff Behaviour in Long-Term Care. ***Behavioural Psychology, 11, pp4-17.***

Wright, E.C., Abbas, K.A. and Meredith, C. (1974) A study of the interactions between nursing staff and profoundly retarded children. ***British Journal of Mental Subnormality, 20, pp38-41.***

Zaharia, E.S. and Baumeister, A.A. (1978) Established position replacement costs for technician personnel in a states' public facilities. **Mental Retardation, 16, pp131-134.**

Zaharia, E.S. and Baumeister, A.A. (1978b) Technician turnover and absenteeism in public residential facilities. ***American Journal of Mental Deficiency, 82, p580-593.***

Zaharia, E.S. and Baumeister, A.A. (1979) Cross-Organisational Job Satisfaction of Technician-Level Staff Members. ***American Journal of Mental Deficiency, 84, pp30-35.***

Zaharia, E.S. and Baumeister, A.A. (1979b) Technician losses in public residential facilities. ***American Journal of Mental Deficiency, 84, pp36-39.***

Ziarnik, J.P. and Bernstein, G.S. (1982) A Critical Examination of the Effect of In-Service Training on staff Performance. ***Mental Retardation, Number 20, Number 3, pp109-114.***

Zigman, W.B. and Schwartz, A.A. and Janicki, M.P. (1984) Group Home Employee Job Attitudes and Satisfactions. In J.M. Berg (Ed.) ***Perspectives and Progress in Mental Retardation, Volume 1. Social, Psychological and Educational Aspects.*** I.A.S.S.M.D.