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

Submitted for the Degree of PhD in Applied Psychology

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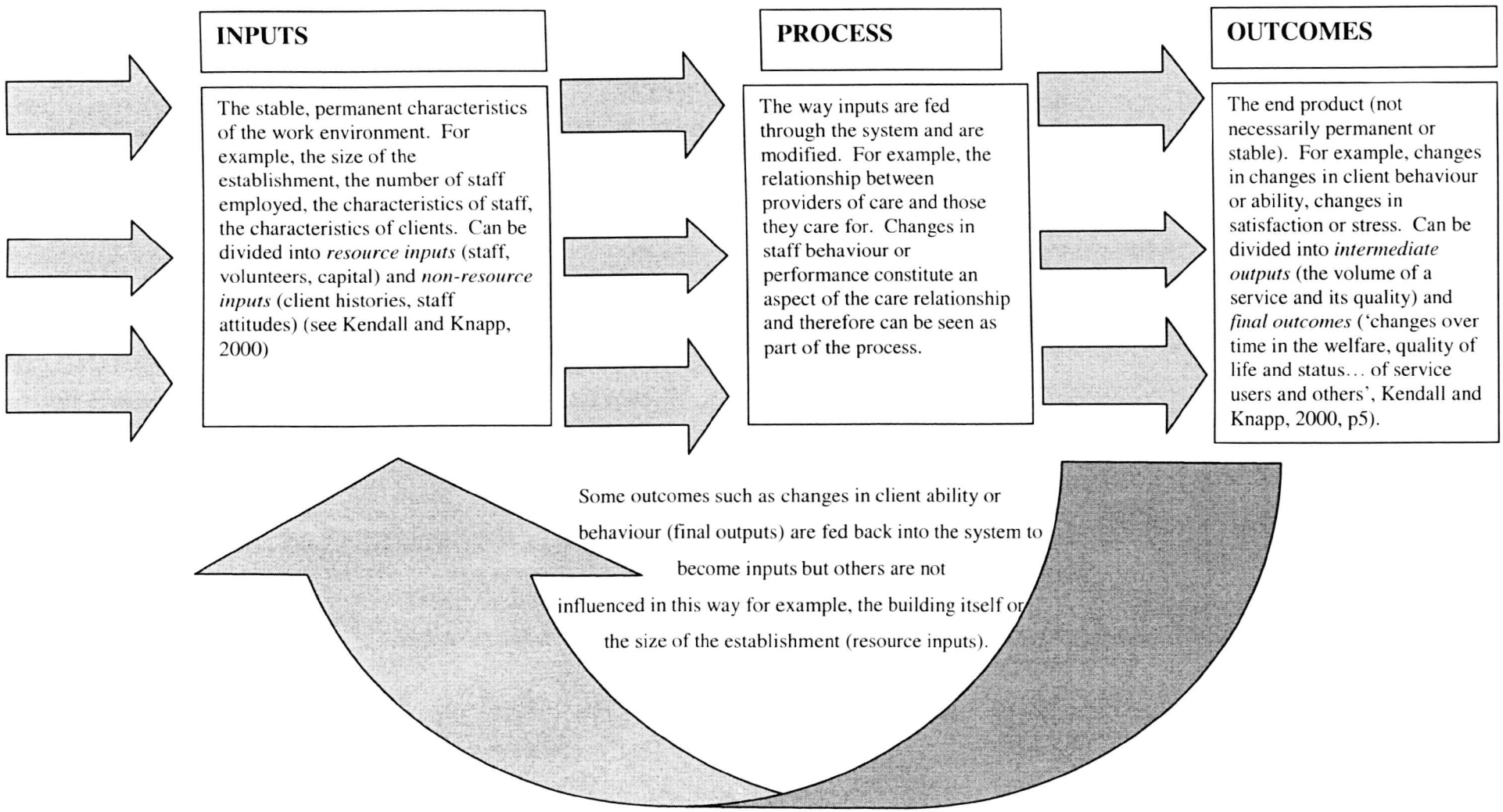
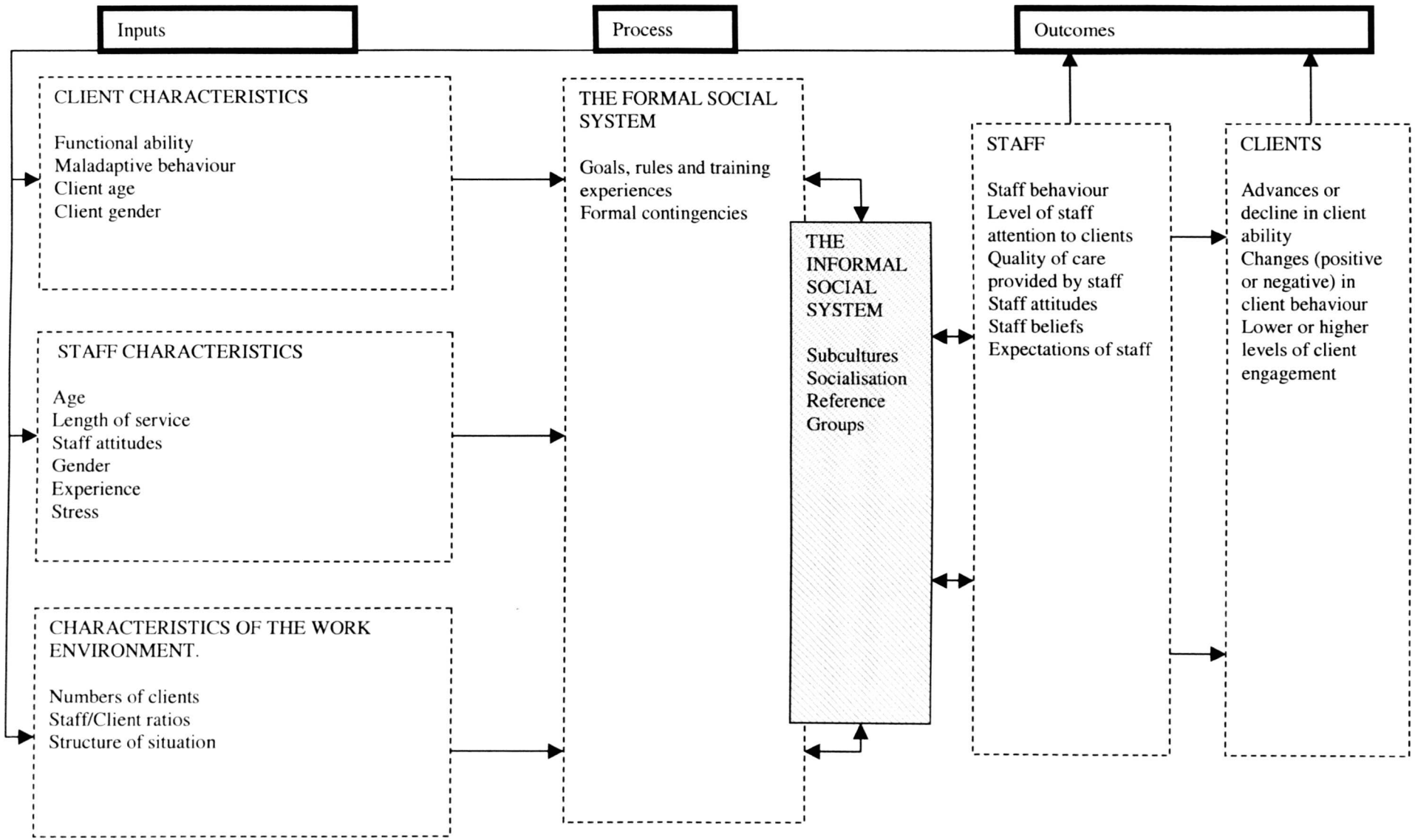
Appendices

Appendices

Appendix (a) A Figure of the Production System.



Appendix (b) Table of Variables Considered in Previous Literature



Appendix (c) Documents relating to Ethical Review and Participant Consent

(i) Ethical Review of Proposed Project

Section 1 – Details of Project Organisers

Teresa Elliott, B.S.c., M.A. (PhD Student – Tizard Centre)

Professor J. Mansell – Supervisor

Section 2 – Title of Project

' Service Organisation, Staff Performance and Client Outcomes in Services for People with Learning Disabilities'.

Section 3 – Purpose of Project

Research on the performance of direct-care staff has typically focused on the effect of one variable, such as training. Several authors have acknowledged that a number of contingencies, or factors, present together in the workplace might account for poor performance. Factors that affect staff behaviour might differ depending on the situation. Thus, research ought to develop a model of staff performance that takes account of situational variables.

A second problem is that although several studies allude to the possible influence which persons present in the workplace may have on staff, there is a lack of studies that adopt a sufficiently comprehensive approach. There are, for example, several studies which consider the effect that managers have on staff behaviour but very few which attempt to consider how influential co-workers, professionals or families of residents might be. There is, therefore, a need to consider (I) a greater range of contingencies, such as pressure from peers, (ii) the link between contingencies and expectations and (iii) the possible interplay of contingencies.

The aim of the thesis is 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.

Section 4 – Conduct of project

a) Location – Residential services for persons with a learning disability provided by an NHS Trust and a Charity.
b) Description of participants – Managers, direct-care staff and clients in services described in above services. It is expected that 20-30 residential services will be involved.
c) How will the requirements of the Data Protection Act be complied with? – Respondents will be assured confidentiality and although names may be required, this is for the purposed of cross-referencing data. If the respondent does not want to give this information identifier numbers will be used. Raw data will be handled only by the author and supervisor and additional Tizard member involved in assessing the reliability of the study. Respondents will be told the purposed of the study and how the data will be used. Data will be held in locked units accessible only by the author.
d) Start date – April 1996. Duration of data collection 9-12 months.
e) Frequency and duration of procedures – 2 or more days spent in each unit covering on the first day a 9-5 period and on the second day including an evening meal for observational purposes.
f) Payment to participants – none
g) Source of funding – none. Completed as part of authors PhD.
h) Methodology –

Measures:

Clients:

Demographics (age, gender)

Behaviour Development Survey (Conroy, 1980; Conroy and Bradley, 1982; Conroy et.al., 1985). This is a measure of the adaptive and maladaptive behaviour exhibited by clients with a learning disability.

Staff:

Demographics (gender, length of time they have worked in a facility, intention to leave, hours worked and desire for promotion)

Malaise inventory (Maslach and Jackson, 1978; 1981). This is a measure of stress experienced at work.
Contingency questionnaire. A measure of the activities staff are involved in, how they perform these activities, the consequences for performing or not performing a task and who imposes any consequences identified. Measure developed by the author based on the work of Murphy (1983).

Care Practices and Outcomes
Active support measure. An observational instrument developed by the author to measure overall staff support given to clients for all clients present during the preparation and eating of an evening meal.
Client engagement and challenging behaviour schedule. An observational instrument developed by the author which examines the individual client, their behaviour and their involvement in tasks.
Management Practices Scale and Index of Community Involvement (Pratt, Luszcz and Brown, 1980, Raynes et.al. 1979). A standard measure of the practices of residential homes, their practices and quality of care.
Index of Participation in Domestic Life (Raynes and Sumpton, 1986). An established measure of the extent to which clients are involved in domestic tasks.
Qualitative observations. Authors overall personal observations of a service.

Facility descriptives
Descriptives (age of a service, length of time manager in post, number of staff currently employed, number of clients currently resident).
Policy. An evaluation of the degree to which a unit policy emphasises the active support of clients.

The copy of the unit policy will provide an outline of the extent to which the organisation itself clearly sets out its expectations of staff performance and the degree to which active support of residents is encouraged as a direct-care practice. The completion of the Management Practices Scale and Index of Community Involvement will enable the author to determine the extent to which supposed management practices in the unit reflect client-centred practices as suggested by the house manager. Discrepancies between the organisational

policy and managers beliefs about care practices can then be investigated as a possible cause of incongruence for staff and may provide evidence as to whether upper managers and house managers hold different expectations of the direct-care worker.

The congruence measure will provide data on the extent to which different expectations are present in the workplace for the staff member and, more particularly, what contingencies respondents believe will occur if they perform a task in a certain way. The findings of this combined data will allow for comparisons between the two organisations, individual units and individual staff in order to provide evidence to accept or reject the hypothesis that divergent contingencies present for the direct-care worker may have a differential effect on their performance and their morale. Observational data will be used to ascertain if units with lower degrees of congruence also have poorer levels of performance as measured by the extent to which active support of clients is offered. This will provide data through which to investigate if the hypothesis can be validated, that a high degree of congruence between key persons expectations and those of staff might result in better quality of care and higher staff morale if based on client-centred care practices.

Section 5 – Ethical Considerations

The service generally: Confidentiality will be assured throughout data collections and persons will be told that findings will be presented in general terms and individual experiences will not be related or names or specific units which persons might associate with particular practices will not be identified.

Difficulties in relation to power imbalances will be minimal in the sense that services involved have been informed that the author is someone who has spent many years working in direct-care and this will hopefully diminish the academic/employee division that might possibly occur. Other difficulties may be that staff fear repercussions from services of relating negative experiences but it is hoped that because interviews are one-to-one and confidentiality is assured ill overcome this problem to some extent.

Permission for this project has been sought from the services (directors or most relevant persons). Detailed research proposals outlining the intended measures have also been sent to the services concerned and letters outlining the general requirements of the survey have also been sent to each unit and the author has spoken personally to the manager of each unit in order to arrange suitable dates and deal with any queries or difficulties. This has provided an opportunity to deal with issues of consent and any ethical considerations that might be raised. Services are encouraged to contact the author should any difficulties arise.

Staff: They will not be paid, as they will be completing these measures at the request of management and as part of their work requirements. It is, therefore, not suitable to offer payment to participants as this will conflict with their employment conditions. Participation is expected to be high because of the agreement of organisations and managers to conduct this research. There will be no coercion, however, if a respondent does not desire to participate in the study. Respondents will be asked on an individual basis at the time of the interview for their consent to this study as it affects them (i.e. the congruence measure and period of observation).

It is not expected that there will be any intrusive 'risks' to participants from procedures involved as respondents will be assured that the data will be collated to observe general trends and not for an analysis of individual performance. The measure of 'stress' (malaise inventory) used is standard but some of the questions may be seen as intrusive as they ask about health matters. Respondents will fill out this measure themselves and will not be required to give their name. An identifier number will be used to analyse data. They will also be assured that the data produced will give a general indication of staff stress in the unit and that the responses given will not be used for any other purposes.

Feedback to participants will be via feedback to organisations as a whole. Collated data will not be fed back to individual participants or services but rather services will be encouraged to use general findings in a positive way to enhance staff morale and address the relevant performance issues.

Clients: Clients will not be paid as the study looks at how staff interact with residents and does not, therefore, require them to complete any measure.

Observations made of staff interacting with residents will be taken for a limited time and will not involve any personal or private areas but will focus purely on shared domains (kitchen and dining rooms) and specific aspects of how staff relate to residents. Consent for this procedure will be sought from clients, or the appropriate advocate, through a letter (see the heading 'consent') and at the time of the observation in order to 'double-check' that consent is assured. Data collected on client abilities will be collated and used only as a variable though which to compare differences in staff responses. For example, clients who have more severe learning disabilities may relate to specific aspects of staff performance. This data will not be used for any other purpose. Names will be asked for in order to cross check the observational data responds to the same individual but when analysing the data an identifier number will be used.

Feedback to residents will be the responsibility of the organisations studied. Collated data will not be fed back to individual participants or services but rather services will be encouraged to use general findings in a positive way for client benefit.

Section 6 – Consent

a) Staff – Informed consent from staff will be obtained as a preliminary step prior to each interview commencing. Staff who do not give verbal consent will not be required to participate. In relation to the issue of whether staff should be able to with-hold consent it is felt by the author that the congruence measure requires honest and detailed responses and persons forced to participate might be inclined to either withhold information or give limited responses. Thus, despite staff being required to participate as part of their work commitments, individually it is neither feasible nor advisable to insist on this.

b) Clients – All clients, or their appropriate advocate, will be sent an individual letter with name and contact address of the author asking them for their consent for the observation to take place. The purpose of the study is also described in the letter and simple but non-condescending language is used to aid understanding. It is left to the discretion of the house manager to determine an appropriate response time for individual consent to be given. Clients are asked to let their reservations, if any be known to a key-worker, parent etc., who can them pass them onto myself or I can be contacted directly.

For the actual observational period those persons present will be told the intentions of the author (i.e. the purpose is not to gather data on individual clients but rather on what happens normally during this period) and they will be asked if it is acceptable for the author to continue. If a person objects to this procedure then the observation will not continue but individual consent will be sought to return at another time or to return to observe when the person is not present, or to explain in more detail the project concerned to the client and their advocate. If consent is withheld at any time the observation will not proceed. Data on client ability levels will not be used for any other purpose than to gain information through which to compare this variable for general effect on staff performance. This data will not be used for any other purposes than to be collated to give simple definition of client ability in each unit. Consent to collect this data has been sought and agrees to by the organisation concerned.

Comments by the 'Ethics Committee' (Tizard Centre) on the proposed research duly noted and acted upon.

*It was hard for some Committee members to comment on this paper as not all measures were explained * although it was understood that all or most of the measures would involve discussion with staff and only the Active Support/Client Engagement Measure involves observing clients meaning minimal risk to clients was involved.*

**(Copies of measures made available at a later date).*

*How can the researcher be sure that organisations will carry out project feedback? The Committee suggested the researcher draft a feedback pamphlet for participants, with a separate one for staff as a guide on the level at which they could pitch feedback – by way of encouraging them to feedback. The pamphlet should also give a contact number for further queries. **

**(Pamphlet not produced as it was felt that the need for feedback would be so individual as to make this difficult to produce. Rather consent letters or interviews stressed that should the individual require general feedback on the research being undertaken they should contact the researcher directly or communicate this desire to their parent or carer. If the participant requested feedback at the time of interview or visit this was duly noted. It should be remembered that no individual feedback was possible due to issues of confidentiality and the nature of the research undertaken, i.e. observations were general rather than specific, names were not sought etc.)*

*If the client has no speech/verbal skills and no 'appropriate advocate' how would the client consent/participate? The Committee advised that it would be unwise to use house staff to consent for clients and perhaps parents/next of kin or even an advocacy group should be involved on their behalf. **

**(Consent of parents/next of kin sought if clients unable to consent).*

*This area of research is not intrusive so there is minimal risk involved but the researcher must note on the consent letters that if a client without verbal skills appears distressed, this would be acted on appropriately. **

**(This was a priority at the time of visits and it was communicated during all visits that should a client appear distressed at any time then the observation would cease).*

*A copy of the researcher's consent letter would have been useful attached to the proposal. **

(Distributed at a later date – Copy of client consent letter included below).

Copy of 'Client Consent Letter' sent to each individual person via their place of residency with instructions to manager to pass on a copy to the parents/carer of individuals unable to give informed consent.

Teresa Elliott
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Beverley Farm
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CT2 7LZ

Tel: 01227 827373
Fax: 01227 763674
Email: tizard-gen@kent.ac.uk
www.kent.ac.uk/tizard

Dear resident/parent/carer *(individual names of residents not sought or required)* of *(name of unit/facility)*

My name is Teresa Elliott and I work at the Tizard Centre in Canterbury. My job is to look at the services that are provided to people who live in residential homes.

At the present moment I am researching the ways in which care staff help and support you in your home. I would very much like to visit the place where you live to ask the staff about the ways in which they help you. I would also like to

stay for a short while to look at the ways in which they support you during the preparation of a meal. My observations will not be about looking at you specifically rather they will be about trying to get a general idea of how staff help everyone who lives at your house. I have already contacted the manager of your home to ask permission to visit but I would also like to ask your permission for me to observe what goes on in your house during a mealtime.

I have attached a letter asking your permission to observe. You can either fill it in and return it to me in the envelope provided or talk to me about my visit on the day. You can ring me or write to me about any concerns/problems you have at the address/phone number on the top of the letter. Alternatively you can let your parent/carer/key-worker know of any concerns you have and they can contact me. I will not observe in you home if you do not wish me to. If you find this letter difficult to understand please contact me or discuss it with your manager/parent/carer or key-worker.

If on the day of my visit you have changed your mind and do not want me to look at how staff help you then I will not continue with my observation.

Please do not hesitate to contact your parent/carer, if you are worried about any aspect of my proposed visit. Also please contact me if you wish to know more about my research. If you want to know about my general findings when the research is finished it is possible for me to provide feedback. Just let me know when you respond to the letter or at the time of my visit.

I look forward to meeting you soon,

Yours Sincerely

T.Elliott

Copy of Attached Consent Form

Name of Unit/Facility

I do wish you to visit my home to look at how staff help me.

I do not wish you to visit my home to look at how staff help me.

Please tick one of the above sentences.

I wish you to send me some more information about your research.

Please tick the above sentence if you want to know more.

I would like to know the results of your research when it is finished.

Please tick the above sentence if you want to know more.

Don't forget if you want to contact me for any reason my address and phone number is on the front of this letter or you can talk directly to the manager of your home is you prefer.

APPENDIX 1

The Results of the First Stage of the Pilot Study

The first stage of the pilot study was undertaken so as to determine the relevance of the research concept, which was that the ability of direct-care staff to interact with clients with a learning disability is affected by the range of persons with whom they come into contact with during the course of their work and the competing importance assigned to other tasks. This preliminary stage of the pilot study was intended as an information gathering exercise so as to determine who direct-care staff came into contact with, the range of tasks which they performed and the types of supports or constraints which different persons may offer to aid or hinder the employee in their work. The study sought to map out the boundaries that define the interactions that direct-care staff have with others in their work environment. In particular the study sought to identify if different persons are associated with different expectations and if these expectations are reinforced by specific contingencies. It also sought to determine if contingencies are particular to specific aspects of the work that direct-care staff undertake. The study also sought to ascertain if the contingencies associated with a person's expectations operate in particular situations or at particular times. The information gathered during this exercise is later used to form the basis of a contingency questionnaire, which is used in the main study. A concise précis of the study is presented in this appendix.

Method

i) Settings

8 residential units for persons with a learning disability were included in this pilot study. All of the units were located in a Central London Borough and offered a service to 52 clients who were supported by 83 direct-care staff.

ii) Participants

42 direct-care staff attended 8 focus groups for the purpose of the study (50.60% of total staff). 40 staff completed a questionnaire providing biographical details. Only 3 staff (7.5%) were employed on a part-time basis (less than 37 hours per week). Of the 40 respondents 13 were male (32.5%) and 27 female (67.5%) and the average age of respondents was 34.9 years (n = 35). Only 12 respondents (30%) had been employed in their job for 12 months or less and the average length of employment in their current job was 30.07 months (n = 40). The average length of time respondents had been employed in jobs caring for people with learning disabilities was 85.5 months (n = 40) with only 10 respondents (25%) having worked less than 5 years in the field of learning disabilities. 17 respondents (42.5%) were 'white UK/Irish' in terms of ethnicity, 8 (20%) were 'black Caribbean', 8 (20%) were 'black African', 1 person (2.5%) described themselves as 'black -other', 1 person (2.5%) described themselves as 'Asian-other', 1 person (2.5%) was 'white-European', 1 (2.5%) person described themselves as 'white-other' and 2 persons (5%) noted that they were 'other'. 1 respondent failed to identify their ethnicity. It should be noted at this point that some respondents expressed concern about supplying information regarding their ethnic identity. These respondents felt that such information might make it easy to identify them despite assurances of confidentiality. 7 persons (17.5%) described themselves as having a specific qualification in learning disability but only 4 of these persons described what it was ('Diploma in Welfare Studies', 'R.M.N.H., K.S.S.' 'O.U. Diploma in Health and Social Welfare, 'N.V.Q. Unit Level 3'). There were 2 'no-responses'. In terms of other qualifications there was a broad spectrum of responses. These ranged from 'none' (6 respondents - 15%) to degree level education (8 respondents - 20%). In general 11 respondents could be said to have qualifications related to direct-care work with people with learning disabilities (27.5%) whilst 21 respondents could be said to have qualifications not directly relevant to their work (52.5%). There were 4 'no-responses'.

On average respondents had received 37.33 hours of training in the last year (n = 33) although some respondents specified either that training was on-going (2 persons) or did not specify the amount of training they had undertaken. There were 3 'no-responses'. 7 persons (17.5%) said that they had received no training at work during the last year and 12 persons had received 60 hours/5 days or more (30%). There appeared to be little overlap

as to the type of training which respondents had received and courses ranged from 'N.V.Q' to 'Food Hygiene', 'Induction', 'Stress Management', 'Computing' and 'Sexuality' amongst many others. Nobody appeared to have had specific training on how to deal with clients who exhibit challenging behaviour.

26 persons (65%) wished to remain in their job and did not intend to leave their employment in the next year. 9 people (22.5%) intended to leave their job in the next year and 4 of these felt that they did not wish to continue working with people with learning disabilities. There were 5 'non-responses'. 27 persons (67.5 %) said that they wished to try for promotion within their job, 10 did not (25%). There were 3 'non-responses'.

iii) Measures

a) Focus groups

The focus group format was designed to elicit certain information. This information was sought using the group format because it was quick and easy. The responses of a large number of staff could be sought with only minimal contact and any problems with providing the data could be dealt with face to face as it were. The more relaxed atmosphere of a group setting and the less rigid format meant that respondents could give detailed responses and examples. Also the format allowed issues to arise which might be potentially important for any further research but which the author had not considered.

Staff present were asked 9 questions as a group. These were:

Q1. - Can you give me a list of the people you come into contact with in the course of your work?
Q2. - I want you to look again at the list you have complied. Can you tell me which people on it you come into contact with most and which least? (Supplementary question - how often are you actually seeing these people).
Q3. and Q4. - Which people from the list which you have compiled would you like more contact with and why? Which people would you like less contact with and why?

Q5. - Can you list the kinds of tasks or things which you do at work? (Supplementary question - which tasks do you do most and which least?).
Q6. - Can you look again at the list of tasks which you do at work. What are the tasks you most like doing and which least and can you give reasons why?
Q7. - Who/what helps you do the things you like doing at work?
Q8. - Who/what stops you doing the things you like doing at work?
Q9. - Who/what makes you do the things you like doing at work?

No inter-rater agreeement reliability data was sought for this measure. Focus group discussions were not taped for reasons of confidentiality and because it was felt by the author that taping sessions would inhibit conversations by participants.

b) Questionnaire

The questionnaire was based on the work of 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.

The questionnaire used in this study asked respondents to rate both the persons whom they came into contact with in the course of their job and the tasks they performed at work for their importance or influence on various variables. These were career prospects, the consequences which may occur for staff if they failed to perform certain aspects of their work, staff motivation, and finally their influence or importance for people with learning disabilities who were resident in the respondent's unit of employment. Respondents were also asked to evaluate how important certain work tasks were for persons whom they came into contact with in the course of their work. Rating scales were adopted with '1' signifying that these people or tasks were of no importance/influence ranging to '5' signifying that these people were of very great influence/importance. The persons whom the respondents were expected to rate were senior care staff, house managers, area managers, residents, co-workers, professionals, workers in other services for persons with a learning disability, families of residents with a learning disability, community, ancillary

workers and neighbours (of unit). The tasks respondents were expected to rate were training, unit management, administration, client training, advocating for clients, therapy, supported personal care, personal care, socialising with clients, therapy, housekeeping involving clients, housekeeping not involving clients, escorting, and non-work related tasks. The measure was devised as a quick and easy way of gathering data that related to the research questions of interest.

No inter-rater agreement reliability was sought for this measure

iv) Design and Analysis

a) Focus groups

8 focus groups were conducted, each of which was two and a half hours in length. Responses given to questions in the focus groups were recorded on flip charts and transcribed after each group. Each script was then analysed in terms of the themes it presented, examples that were given by respondents and the range of tasks and persons identified.

b) Questionnaire

Sections of the questionnaire were administered at relevant points during the focus group discussion.

Chi-square statistics were calculated for each variable categorised in the questionnaire (career prospects, consequences, staff motivation, and importance for people with learning disabilities). Chi-square was used to measure if there really was a relationship between variables rather than the result being due to chance. That is chi-square was calculated to see if respondents were identifying differences in influence or importance for groups of persons or tasks.

Cronbach's Alpha statistic was calculated for each part of the questionnaire to test it's overall within-scale reliability.

Results

Focus Groups

The influence of persons

Respondents indicated that they had contact with a broad range of professionals. These included for certain staff, psychologists, psychiatrists, chiropodists, dentists, occupational therapists, social workers, physiotherapists, speech therapists, solicitors, aromatherapists, police officers, teachers, doctors, opticians, and audiologists. These responses indicate that there may be some difficulty for respondents in rating professionals as a singular category in terms of their influence or importance especially given the differences apparent in the nature of their work.

Discussion revealed that the nature of the contact with various professionals could differ greatly depending on the service they offered and their availability. Many staff commented that contact with certain professionals was often limited to phone conversations. This lack of direct contact may determine the extent to which these persons exercise influence over staff and the consequences that they might impose.

Respondents indicated that they had contact with a broad range of persons in the community. These included, for certain staff, chemists, people in pubs, people in general public facilities, people in parks and gardens, people in community leisure and social facilities, postman, milkman, neighbours, staff at registry offices, workers in local and central shops, hospital staff, local transport providers, people in church, employees from public utilities, social and welfare workers, people in restaurants, post office workers, hairdressers, cab drivers, people you meet on holidays and people you see when you go on trips. Although this range appears very broad respondents did not appear to rate these persons as having any great influence on them as staff or indeed on the residents. These findings indicate that the nature of the contact which direct-care staff have with the community as a whole is perhaps superficial compared with the relationships that they have with other persons at work. Responses given about the kinds of experiences which staff had in their contact with the local community revealed that for some respondents' meetings were negative, distant or non-existent (i.e.. it was a case of seeing people rather than interacting with them) which may reveal that people in the community may only be

influential in a limited sense in that contact only occurs in specific locations and for short periods of time.

Respondents indicated that they had contact with a considerable range of workers in other services for people with learning disabilities. These included day centre workers, escorts for residents to attend other services, clubs and leisure facilities for people with learning disabilities, advocates and be-frienders, employers of persons with learning disabilities, volunteers, service brokers and staff and residents from other residential units. Discussions revealed, however, that the greatest extent of contact and indeed the most meaningful was with workers in day services.

Respondents indicated that they had contact with a range of auxiliary workers. These included domestic workers/cleaners, maintenance workers, internal delivery people, gardeners, cooks and administration staff. Discussions revealed, however, that respondents did not rate auxiliary workers as a whole as of any great influence or importance. These persons were not noted as significant to staff in respect to most aspects of their work. This indicates that auxiliary workers may be seen on a frequent basis but the nature of that contact is superficial in the sense that these persons have very little impact on what direct-care staff do/or their influence is limited to those spheres which impact on their own work role, for example domestic issues.

Respondents indicated that a range of persons made visits to their residential units. These included families, clients and colleagues from other units, clients who previously lived in the unit, observers from audit and inspection teams, clients' friends, delivery drivers, registration teams and workers who came to repair or service utilities etc. Discussions revealed, however, that only one of these categories, inspection/audit/registration teams, might have had some impact or influence over direct-care staff. This influence appeared limited to those instances when teams actually visited the unit. It was apparent from discussions that respondents felt that suggestions, which audit teams made, were interpreted by management and it was they who were influential, or otherwise, in implementing them with staff.

Particular staff appeared to have contact with certain persons not included in the questionnaire. These included fire officers, adult education providers and housing

associations. Discussion revealed, however, that such persons did not seem to have any impact on direct-care staff's work and indeed only a small minority of respondents appeared to have had contact with such persons.

Overall the responses given in the focus group discussions appeared to support the categories as designated in the questionnaire and it would appear that only in respect to professionals might it have been useful to ascertain the impact of particular persons such as social worker, psychologist etc. depending on the range of professionals individual staff saw. It also appeared that the concept of 'contact' or 'association' could mean something different depending on the person concerned and the situation.

Respondents in the 8 focus groups were asked 'can you tell me which people you come into contact with most and which least?' (supplementary question - how often are you actually seeing these people?) so as to ascertain if persons whom staff saw most were associated with greater influence.

Respondents in every focus group indicated that residents and co-workers were the persons they had most contact with - indeed they saw them on a daily basis. In relation to other groups of persons, responses differed depending on the unit where the member of staff worked. In general, however, persons could be divided into those whom respondents saw regularly and that whose contact might be described as sporadic or less frequent.

Those persons whom respondents saw regularly were seniors (daily or several times a week), day service providers (weekly - although this contact might be limited to seeing day service staff when they picked up or dropped off residents or relaying phone messages), and escorts or transport providers and people in leisure clubs for people with learning disabilities (weekly). Other persons whom most, though not all, respondents saw more frequently included managers (although some respondents saw very little of them), certain professionals (although it depended on both the professional, the situation and the client - for example if there was a problem with a particular client then professional input might be very intense), the families of certain clients (although other families might visit very infrequently or not at all and contact with families might only be in relation to a specific issue), certain people in the community or neighbours (although the length of interaction and it's quality was often negligible - for example a shop might be used regularly but the

relationship was purely one of buying goods rather than engaging in any meaningful way or the contact might be negative in nature for example staff and residents being verbally abused) auxiliary workers (although once again the intensity of this contact was superficial) and neighbours (although once again contact might be either a case of exchanging greetings on a daily basis or regular negative complaints from people who live in the vicinity about the residents of the unit). Particular respondents had weekly contact with GPs, advocacy workers, or more senior management but this might be only for a limited amount of time and in relation to a particular issue. To summarise it would appear that staff might see certain persons frequently but the nature of their contact with that person depended on the individual member of staff, the individual source of contact, the situation in which contact occurred and the reason for that contact. Thus in certain cases contact with a person might be particular to that unit, interaction might be brief, negligible, specific or conducted purely over the phone. In short contact means different things in different cases/situations.

Those persons whom certain respondent staff saw infrequently or sporadically included the families of particular residents (for example some parents would only visit on special occasions), neighbours, audit/registration teams (once a year or less), specialist services and professionals (for example, some respondents did not have access to an advocacy service or rarely had contact with professionals), managers (due to the fact that their manager was attending a course of study), area managers/upper managers (very few respondents had contact with upper management on a consistent basis and some staff did not actually know who they were) and finally staff from other units (usually contact was limited to those times when they trained together). In summary it appeared that the persons whom staff saw infrequently to some extent depended on the type of service their unit offered, the managerial situation that currently operated, the residents who live in the unit, and lastly the individual respondent.

Persons whom staff saw a great deal of or had frequent contact with may not necessarily have any great influence over their performance (for example, auxiliary workers, people in the community etc.) and conversely staff may not have a great deal of contact with persons but these persons may still have a great deal of influence (for example, managers, area managers and some professionals). Respondents might only see their area manager or manager on specific occasions such as in crisis but they consider them to have a great deal

of influence over most aspects of their work. In reference to some persons whom staff saw infrequently their influence appeared confined to specific aspects of respondent's work but nevertheless within this sphere these persons could determine the ways in which staff behaved. For example, the families of residents might only visit the unit on an occasional basis but during and after their visit staff might feel compelled to act in a particular way. So, some people appeared to have influence only in particular respects or on particular occasions

These findings seem to indicate that the amount of contact which direct-care staff have with persons does not appear to determine the extent of influence these people have. Rather, it is the nature of the contact between staff and others, the situation in that contact occurs, and the power that each person wields within an interaction, which appears to be related to the amount of influence they might have over what staff do.

Focus group discussions provided evidence of the consequences that respondents associated with particular persons. These consequences can be subdivided into various categories each of which is described below.

Positive consequences for doing the right thing.

Positive consequences which seemed to be associated with fulfilling different persons' expectations seemed to fall into two categories, either those that brought personal satisfaction to respondents, or those which helped respondents in the performance of their job. Each category of person appeared to be associated with certain consequences.

Colleagues - respondents seemed to feel that getting on with co-workers and being part of a team could be beneficial in a number of ways. For example, exchanging ideas with other staff resulted in more consistency for residents - encouragement and support from colleagues was important in fulfilling the requirements of the job - respecting colleagues meant an inclination for staff to pull their own weight or appealed to a sense of fairness, meeting colleagues in staff meetings allowed for the exchange of information and ideas which might aide work practices - visits to other units to witness other staff's performance could inform respondents own practices - getting on well with co-workers meant you are more likely to undertake more ambitious projects with them for the benefit of the residents

- setting good standards could result in other workers following suit, good communication between colleagues aides work practices by making what has to be done consistent/clear.

Community and neighbours - good relationships with neighbours and the local community meant that staff were more likely to have positive experiences when they enabled residents to utilise local facilities. Some respondents, for example, said that the neighbours around their unit were friendly and supportive towards the residents and staff had a good relationship with them. Respondents emphasised the importance of maintaining a good relationship and of planning community experiences (i.e. going to sympathetic community services etc.) to ensure that the results for themselves were positive

Management - Praise from senior staff , their encouragement and support was considered important by many respondents in enabling them to both perform aspects of their work and remain motivated. The completion of certain tasks such as paperwork might be more likely to result in praise or approval from managers. Also access to upper management and their subsequent interest in staff were seen by some staff to result in a rise in morale.

Personal satisfaction - Several respondents commented that the performance of a certain task resulted in either personal satisfaction or met with their own personal standards for example, 'feeling an activity has been worth it', or completing a task even if it is undesirable results in a clear conscience or the feeling that, 'the more you put into things the more you get out of them'

Professionals - Maintaining good links with certain professionals were seen as beneficial by several respondents particularly if these professionals were sympathetic/understanding of people with learning disabilities. Some respondents felt that engaging professional support can assist staff in their job and provide them with both enthusiasm and ability (e.g. welfare workers) and more access to professionals might assist in meeting the needs of residents.

Residents - Some respondents commented that resident progress/enthusiasm was both a positive consequence of their job and one which gave them personal satisfaction as well as encouraging them to carry on performing certain tasks.

Day Services - Many respondents commented that more positive liaison and communication with day services would be useful in assisting residential staff with their work. Also some other services for people with learning disabilities, for example, advocacy projects, were felt by respondents to provide a supportive service to both residents and staff.

Families – Those families who keep regular contact and who have a good relationship with staff and residents were seen by some respondents as creating a relaxed and happy atmosphere and it was felt that positive links with these families ought to be maintained.

Positive consequences for doing the wrong thing

The positive consequences which seemed to result for respondents from engaging in bad practice seemed to fall into three categories, those associated with avoiding unpleasant contingencies from certain persons, those for which bad performance resulted in a positive reward, and those for which there should be a negative consequence for failing to behave in a correct manner but this expected consequence was absent.

Community or Neighbours - Certain respondents recounted how they had, had bad experiences with neighbours or people in the community as a result of outings with clients, for example verbal abuse, refusal to serve a resident, eggs being thrown at them. Such negative consequences associated with community involvement might make both staff and clients reluctant to engage in similar activities again. Similarly one respondent related how staff reacted in a negative way towards neighbours. This example of creating a bad relationship with the local community might have resulted in a positive consequence for those staff that encouraged it in the sense that they could then avoid contact with neighbours.

Managers - Respondents gave examples of how they avoided undertaking certain tasks in order to avoid the negative consequences from managers. For example, one respondent said that they avoided taking decisions or taking responsibility because it resulted in not being told off by managers. This provides an example of how initiative and responsibility on the part of staff is stifled by the fear of consequences. Some respondents also told how they avoided managers whom they did not get on with and others related how they avoided

difficult situations at work as a method of also avoiding having to explain subsequent actions to one's managers. Certain tasks were associated with positive consequences from managers even if perhaps respondents felt these tasks were not the most appropriate to undertake. For example, completing paperwork rather than spending time with clients was identified by some respondents as more likely to result in praise or satisfaction from managers. It might also be that completing the paperwork was a way of avoiding criticism. Other tasks, if performed, appeared to result in a positive outcome in the sense of avoiding negative contingencies. For example, some respondents mentioned that managers encouraged cleaning without residents and staff seemed to engage in this task a great deal, despite finding it abhorrent, in order to avoid being chastised by managers. Some respondents mentioned that they were happy with the lack of contact from upper management because they saw it as a way of avoiding their criticism/interference. Thus what should be a prerequisite of the job in terms of the monitoring of management is not cultivated or welcomed by staff as it is a way of creating a positive outcome - i.e. the evading of someone evaluating your work. Similarly some respondents noted that they would like less contact with audit/registration teams as this would create a situation in which there were less difficulties for staff, however the role which these teams fulfil in reviewing services for people with learning disabilities should be recognised by those who work in these services as a necessary one. Interestingly in one focus group several respondents were disappointed in their managers' lack of power in enforcing negative consequences for those who did not perform to an appropriate standard. In another focus group several staff indicated that they recorded information in an inappropriate manner but it became obvious in the discussion that managers were not reprimanding them for doing this. In other words, this was an example of how performing a task in the wrong way was not receiving the expected negative consequences from the relevant person as a result.

Families - In many focus group discussions' respondents felt that more contact with particular residents' parents might result in a more difficult work situation for staff. This was because they saw these parents as critical or interfering. Thus, respondents might avoid creating relationships with residents' families as a means of escaping from the negative contingencies associated with them.

Residents - Many respondents gave examples of working with residents who might be described as difficult, for example, a resident who refuses to do something or finds a task

arduous so staff end up doing it themselves, or a resident is continually demanding or abusive. Thus, staff might receive positive consequences in terms of an easier work situation, if they evade the demands, needs or attention of certain residents.

Personal - In several focus groups respondents mentioned that performing a task in a particular way resulted in personal satisfaction. It was evident in certain cases, however, that the positive consequence that they received might result from the performance of an inappropriate task or doing something in an unsuitable way. For example, some staff mentioned that their own feelings of wanting to get things done might make them do things *for* clients rather than engaging the client in doing for themselves e.g. washing residents' clothes. Similarly certain respondents requested more domestic support in order to create a situation where the pressure to undertake domestic duty is lifted from them. This positive consequence for staff, however, might be at the expense of resident independence in the sense that these tasks would be denied them.

Colleagues - Several respondents mentioned that they performed duties that they disliked or disagreed with in order to avoid the chastisement of their colleagues or to receive their approval. Thus performing a task inappropriately might result in a positive outcome for the respondent. As one person commented she did certain undesirable duties at work because 'you like to keep the peace'.

Professionals - In terms of contact with professionals there seemed to be several positive consequences for direct-care staff for either avoiding them or not following their guidelines. These were, for example, evading the criticism that these persons might give out or neglecting professional suggestions because it satisfies the respondent's belief that they know best about the welfare of residents.

Negative consequences for doing the right thing.

It was apparent from focus group discussions that staff received negative consequences from a wide range of people for performing the correct task or doing it appropriately. Such situations might provide an explanation as to why direct-care staff fail to perform as services wish them do.

Community - Many respondents recounted incidences in which either neighbours or people in the community had been negative or resistant. For example, unfriendly neighbours, people in the community being insensitive or rude, neighbours/people in the local community had thrown eggs at the residents and staff of one unit when they went out, a hairdresser refused to cut one residents hair, certain shops and services were un-welcoming and refused entry and certain people in the community acting in a fearful way. Thus, it might be that the experiences of respondents when involved in community activities with residents are of such a negative nature that it might provide an explanation as to why staff might be reluctant to engage in them.

Families - Some respondents recounted incidences of contact with certain residents' families as disagreeable. For example, some respondents quoted particular parents as critical, others noted that parents made promises to clients which they don't keep resulting in staff having to deal with the subsequent emotional repercussions, some staff said that their work in helping a client to become independent was sabotaged by parents when clients go home, one respondent noted that trying to put into practice 'risk' policies resulted in staff being 'piggy in the middle' between parents and upper management when the former disagreed with what was being undertaken, some respondents mentioned that trying to gain information from residents families was difficult and indeed encouraging family contact sometimes unproductive as they were unsettling for residents and finally some respondents noted that certain families wreaked a residents programme by not following the guidelines established. These examples give an indication of the negative consequences for staff that might be associated with trying to maintain contact with the families of residents in their unit.

Professionals - Many respondents quoted examples of how trying to engage professional as a support for themselves and residents resulted in difficulties and problems. Staff mentioned problems of access to professionals in general (long waiting-lists, substantial referral times etc.). Some respondents had experienced difficulties with the attitudes of a particular professional (for example a GP who seemed to have little knowledge of learning disability). Several persons recounted how contact with a professional had resulted in criticism and chastisement of themselves and others said that they found the contact they had with professionals unhelpful and some of their suggestions staff found ineffectual. One person noted how her attempts to obtain information from a professional had met a

great deal of resistance and others mentioned that following professional guidelines does not result in client progress. These examples may indicate some of the negative consequences that staff experience when trying to enlist the necessary support they and the residents in their unit require from professionals.

Colleagues - Many respondents quoted examples of where maintaining positive relationships with colleagues was difficult as a result of the consequences that resulted. For example, dealing with difficult situations might result in a lack of support from colleagues, certain respondents described other staff as lazy and that interacting with certain staff was difficult as there is a clash of personalities thus creating a bad atmosphere. Some respondents noted that they found it difficult to follow a client's programme when their colleagues don't, and others noted that when they tried to do something new or show initiative at work they are met with indifference from colleagues. Several respondents also noted that trying to deal with agency workers who don't know what happens in the unit, or may only come to the unit once etc. made the work situation problematic. Thus, these examples may indicate that direct-care worker's attempts to create or maintain positive team working might be associated with negative contingencies from their co-workers.

Managers - Management as a whole appeared to provide the most examples on behalf of respondents of how performing a task correctly might result in negative consequences. Such evidence may provide an explanation of why staff fail to undertake aspects of their work or perform them in an undesirable fashion. Many staff felt that contact from managers was often critical and one respondent in particular felt that taking responsibility/making decisions resulted in a culture of blame, which had the subsequent effect of deterring her from taking those decisions. Some staff noted that approaching managers to discuss things of concern was not welcomed by management and others felt that expressing opinions means being threatened with grievances. These examples indicate how difficult it may be for staff to cultivate a positive relationship with managers because of the negative consequences associated with doing so. Other examples given by various respondents of the problems related with management contact was, trying to organise a holiday resulted in management disapproval and the presentation of hurdles, trying to be flexible and spontaneous resulted in being criticised, trying to flag up client needs and staff difficulties in dealing with them resulted in an attitude from mangers to simply get on with things as they were, trying to raise funds to create better experiences for

residents was met with resistance from management, upper managers sit in their office and don't visit staff and units, staff trying to implement proposals were often beset with confusion, some managers didn't explain things, staff don't know where they stood, managers were seen as in-efficient and incompetent, when staff make complaints managers did not support them, trying to do inventive things was met with procedural impositions, calling on management for advice and support was met with a lack of help - expectation that manager should be at a meeting to support them (staff) resulted in manager not being there, trying to enhance a respondent's skills by taking an N.V.Q. was not supported by her senior - wanting supervisions and chances to talk about problems is not supported, - 'managers ...don't give a damn - when you need their support they don't give it', attending training was made difficult by the expectation of managers for staff to attend on their day off or being expected to return after training has finished and finally, if staff trying to involve clients in domestic chores they were met with unhappiness with colleagues and managers because of the amount of time it takes. Some respondents gave examples of how contact with managers did not so much result in negative consequences so much as a lack of expected positive consequences, for example a 'lack of gratitude for what you are doing - especially when you have worked hard', taking decisions/responsibility is not rewarded by managers, and managers don't appreciate the work that direct-care staff do.

Residents - Respondents in all focus groups mentioned occurrences in relation to their contact with residents that were negative. These included residents who exhibited challenging behaviour that prevented both themselves and staff being able to do more enjoyable tasks, if a client liked something then staff had to do it even if they disliked it for example going to a pub, being in situations with clients which were embarrassing, for example regurgitating food, when respondents spend time with clients they can be abusive and demanding and arranging activities for clients could result in clients not wanting to know. Thus, the negative consequences associated with interacting with certain clients might affect how staff respond to these clients needs.

Day Services - Respondents in most focus groups generally viewed contact with day services as negative. The relationship between the two types of services was viewed as competitive, its nature being critical and antagonistic. Day services were described as not following protocols or neglecting client's programmes and as undertaking tasks that they did not complete. Certain respondents noted that trying to contact day services were met

with difficulties (i.e. lack of information, not being able to locate people's.) and that the expectation that day service workers would turn up for meetings was not met. These examples provide evidence as to the difficulties that staff may face in trying to maintain positive and co-ordinated communication between themselves and day centres.
Personal - Several respondents mentioned how commitment to their work resulted in negative consequences for them on a more personal level, for example giving a great deal of time to the job can make for difficulties such as stress or problems with one's own family.

Auxiliary - One person mentioned how dealing with administration staff over aspects of their work resulted in rudeness from the former.

Audit/Registration Teams - Several respondents were critical of the negative consequences which they felt resulted from the visits of audit teams, for example, spending time with auditors meant neglect of clients, doing the right thing can still result in being criticised by audit teams or there is little appreciation of the problems which staff face in doing their job. Thus, the necessary visits from audit or registration teams might be associated with negative experiences for staff, which may make them reluctant to co-operate with their contacts in the future.

Negative consequences for doing the wrong thing

There were several examples of respondents receiving negative consequences from persons for performing the wrong task or doing a task badly.

Managers - Certain respondents gave a range of examples of how their managers introduced negative consequences for them if they failed to perform necessary aspects of their work or if they performed them inadequately. For example, not meeting deadlines set by senior staff results in criticism, not meeting mangers demands or expectations made doing certain things difficult, managers enforced going to meetings, managers ensured that staff have to implement client reviews even if staff disagreed personally with them, having to explain why you didn't do something to managers, those staff who take too much time off sick are reprimanded by their managers, managers telling staff that they 'can't do something', reprisals from managers if you don't do the right thing, not recording

information about clients is a source of reprimand from managers, and finally respondents noted a fear of both discipline and of losing your job for behaving incorrectly as identified by managers. It should be noted that respondents did not necessarily recognise themselves the appropriateness of managers imposing negative consequences for poor performance and many indeed felt that these consequences were unjustified.

Families - Criticism from residents families was seen as unwelcome by many respondents, however, this criticism could be interpreted as perhaps necessary and appropriate in certain circumstances - for example, if staff failed to achieve reasonable standards of care.

Personal - Certain respondents gave an example of how doing something that some people might feel is negative, such as working extra hours, resulted in negative personal consequences i.e., increased stress.

Audit/registration teams - These teams were seen as keeping staff on their toes and it was mentioned that they 'watched you like a hawk' and although many respondents disliked the input of persons who monitored and evaluated their services others recognised the legitimacy of such contact in that it was necessary to face these consequences if incidences of poor practice were to be avoided.

Co-workers - Many respondents were dissatisfied with the criticism and 'back-biting' from colleagues. Undoubtedly these negative interactions may be unnecessary but this is not always the case and there may be times where criticism from work colleagues is justified if good standards of care are to be maintained.

Professionals - Several respondents noted incidences where professionals criticised them over an aspect of their work (for example a hygienist who chastised staff for failing to reach adequate standards of dental care with a resident) and there was a recognition by one respondent that not following professional guidelines may result in a negative consequence, i.e., a lack of client progress. These negative consequences for doing the wrong thing, as it were, may discourage staff from repeating these mistakes, although once again respondents did not necessarily recognise the legitimacy of the negative consequences that emanated from professional input.

Residents - There were several responses given by staff that indicated that they recognised that there would be negative consequences if they acted inappropriately in respect to residents. For example, staff having no choice but to deal with certain things e.g. someone who has wet themselves, or someone who is naked, partly because someone has to deal with it but also because staff would feel personally uncomfortable if a resident were left unattended in these conditions.

The importance of tasks.

Responses were given to the question 'Can you list the kinds of tasks which you do at work?'

Domestic tasks performed with and without clients encompassed quite a large range of duties - these included cooking, cleaning, ironing and laundry, shopping for household and personal goods, and unit maintenance. It may be that each particular task might merit a different response from staff in terms of importance for either themselves or others. For example, cleaning might be highly prioritised in a unit but not cooking. In the focus group discussions, however, it did not appear that was a great deal of distinction was made between these tasks in terms of what impact they had for staff or other persons who came into contact with them within the unit.

Some respondents indicated that there were certain tasks which perhaps might cross the boundaries of several categories or which were not included in the category divisions as identified in the questionnaire. It has to be said, however, that these were tasks performed either rarely, or in specific situations or by only a handful of respondents. For example, counselling clients, health and safety responsibilities, engaging in tasks like enabling clients to have a foot spa (therapy or personal care?), keep-fit sessions within the unit, out-reach work, emotionally supporting residents, sleep-ins, feeding domestic animals in the unit or organising holidays,

Respondents were asked in the 8 focus groups 'Which tasks do you do most and which least ?'

Tasks which respondents indicated that they did frequently and on a regular basis, differed to a small extent between individuals but generally there was a great deal of similarity. Respondents did indicate, however, that the extent to which residents were involved in activities depended on the task itself, the timing and other staff available to complete the task, the ability level of the resident and any behavioural problems which they might display. Tasks included personal care (both doing it for clients and supporting them in doing it for themselves) which all respondents seemed to do on a daily basis, domestic chores (daily - with and without residents although many staff noted that much of the domestic work which they performed was undertaken without residents' input), paperwork and administration (daily), escorting clients (daily), answering the phone or door (surprisingly many staff mentioned that they did this frequently at work), administering medication, following client programmes, hand-over duties, and staff meetings (weekly or fortnightly).

Tasks which different staff engaged in to a greater or lesser extent depending on which unit they worked in or who they were, included planning the rota, socialising with residents, booking agency staff, organisational tasks, liasing with professionals and therapy.

Tasks which respondents indicated that they did least differed between respondents and seemed also to depend somewhat on the unit in which they worked, but generally such tasks included, training opportunities, supervision sessions, attending certain meetings about residents and counselling clients.

Respondents in the 8 focus groups were asked the question 'what are the things you most like doing and which least ?' in order to ascertain if the tasks which they identified were also the tasks which they rated as important for any of the variables as specified in the questionnaire (career, consequences for non-performance, motivation and learning disabled residents). Unsurprisingly, there was a great deal of individual differentiation between those tasks which people found enjoyable and not so enjoyable.

A lot of respondents seemed to dislike routine personal care tasks, although it should be noted that several respondents enjoyed aspects of personal care and other people commented that it depended on the client concerned and the nature of the task.

In all focus groups most respondents seemed to agree that they disliked performing domestic tasks that didn't involve residents such as cleaning toilets.

Many respondents mentioned that they did not particularly like completing paperwork tasks but this seemed more to do with the conditions under which they were performed/or the way they were to be completed rather than the task itself, as it were.

Several staff mentioned disliking the shift system and having to do 'sleep-ins'. Also a lot of staff seemed unhappy with aspects of administration such as answering the phone or giving out medication and a lot of respondents appeared to dislike partaking in staff meetings. Several respondents seemed unhappy with tasks that left them in a situation where they felt unsupported, as for example when having to deal with challenging behaviour from residents, or following a programme that was ill-defined.
Several respondents appeared to dislike tasks that involved lifting and handling residents.

In nearly every focus group respondents mentioned that going out with residents in a social or leisure capacity was something that constituted one of the more enjoyable aspects of their work. Several respondents enjoyed engaging in tasks, like client training programmes, where they could witness the progress of residents.

It became apparent in many of the focus group discussions that the positive or negative conditions which were associated with the performance or non-performance of a task were very much dependent on the conditions under which it was to be fulfilled. For example, the ability level of the client concerned and their behaviour, the amount of support one received, where one was performing the task, who requested the task to be performed and the difficulties present when trying to carry out a task appeared to determine what contingencies were present. The tasks which respondents seemed to enjoy performing seemed very much associated with receiving positive personal satisfaction rather than with avoiding the negative consequences which might result from non-performance. Such contingencies may, however, provide an explanation as to why staff do and don't perform aspects of their work.

Positive consequences for doing the right thing.

Paperwork - although many respondents felt that they were required to complete too much paperwork several persons mentioned that if performed under the right conditions paperwork tasks gave them a sense of achievement in that they could see an observable end result. One respondent commented that they enjoyed working on the computer as it made paperwork easier and created a well-presented document that led to a subsequent sense of pride.

Socialising with residents - In most focus group discussions respondents mentioned that they found socialising with residents both inside and outside the unit as resulting in positive consequences. However, many people noted that these enjoyable contingencies were dependent on the particular client one was working with (their ability level, enthusiasm etc.) and also on the resources and support one received when planning social outings. The positive consequences which were identified by staff were that these duties were enjoyable, pleasant, relaxed, they gave the opportunity to go at the residents own pace, it was good to see clients doing something positive, going on holiday with residents was hard work but enjoyable, engaging in tasks that one personally enjoyed e.g. football, and helping clients to look good led to a great deal of personal satisfaction.

Client training programmes - The positive consequences which staff received from carrying out training programmes with clients depended to a certain extent on whether programmes were clearly set out, precise and thoroughly explained. The consequences were that training aspects of work were enjoyable because they allowed staff to be more flexible, compiling training programmes and watching them work was personally satisfying, following programmes with clients could be creative and observing progress was gratifying. One respondent also noted that those times when a member of staff could spend one-to-one time with residents in a relaxed way meant they were not cast in the role of always dictating to them.

Personal care - Some respondents mentioned that engaging in personal care tasks with residents was enjoyable to them as it afforded an opportunity to spend some quality one-to-one time with residents.

Therapy - One respondent noted that they particularly enjoyed undertaking an aromatherapy session with residents as it resulted in a time that was calm and relaxed.

Non-work tasks - It should be said that there may be some debate as to whether staff engaging in tasks which are more to do with themselves than the residents are beneficial to services for people with learning disabilities. It may be, however, that the opportunity for respondents to deal with the stressful repercussions of their work might result in them being better able to provide good quality care for residents in the long term. In one focus group respondents mentioned that having a break was vital to them being able to unwind so that they were then able to carry on work Several respondents noted that taking a break and being able to discuss matters with colleagues in an informal way was especially important when they had been engaged in a situation in which they had been hit or intimidated by a resident.

Administration - There were several examples given by respondents that demonstrated the positive contingencies associated for them in performing administration tasks. For example, a well-planned shift was seen as satisfying because it allowed for flexibility and responsibility, and similarly planning activities gave staff gratification because it allowed them an opportunity to display responsibility and engage in teamwork (indeed the ability to plan appeared to be very dependent on support from colleagues).

Training and supervision - Several respondents gave examples of how training or supervision was associated for them with positive contingencies for example the chance to learn new skills, the opportunity to spend time away from the unit and supervision sessions if conducted well could be an opportunity to discuss matters of importance

Positive consequences for doing the wrong thing.

Respondents provided few examples of how the performance of an inappropriate task or the poor performance of a duty was associated with positive consequences which might then explain why staff undertook these duties.

Housekeeping not involving a resident - Several respondents commented that they found cooking without a resident as something which they enjoyed and associated with positive

consequences such as it being personally creative and providing a break from residents. Thus not involving residents in aspects of their own lives might bring certain rewards for staff.

Socialising with residents - Several respondents noted that they enjoyed chatting with residents, watching TV with them, and they found listening to music with residents both relaxing and enjoyable. This might indeed be an example of how the performance of a positive aspect of client care was positively rewarded but it might also be an illustration of how non-active or non-training activities are more highly associated with pleasurable experiences for staff.

Negative consequences for doing the right thing.

Staff provided many illustrations of how good or appropriate performance resulted in negative consequences for them. Indeed as one respondent indicated it depended on what happened as the result of performing a task as to whether it was enjoyable. Several of these illustrations also indicated that the conditions under which tasks were performed might affect both what consequences occurred and also the way in which staff performed them:

Paperwork - Many respondents commented that they found paperwork to be one of the least enjoyable aspects of their job mostly because of the amount they were expected to complete but also because of the conditions that surrounded its fulfilment. For example, paperwork was expected last minute, people demanded and were waiting for it, being requested to log large amounts of resident data, finding some data logging repetitive and finally trying to juggle these paperwork demands against competing interests.

Personal care - Several respondents highlighted some of the negative consequences that were related to having to complete one of the most necessary aspects of their work which was personal care. Several staff said that aspects of personal care such as incontinence and menstruation made them feel uncomfortable or they found it personally distasteful. Other staff found personal care routine and repetitive and other respondents mentioned that they disliked having to lift or handle clients because of a lack of adequate equipment and support and also because of the pervading attitude being one of 'get on and lift on your

own'. It should be noted, however, that staff may be engaging in personal care duties without trying to encourage residents to become independent in performing these tasks for themselves and this may perhaps explain why some aspects of these duties were described as repetitive. Several people did also comment that the negative contingencies associated with personal care tasks very much depended on the resident one was working with and the conditions under which it was performed. For example, personal care was performed in the morning to a time-scale that made it a more pressured and less enjoyable activity for some staff.

Sleep-ins - Many respondents mentioned that having to undertake night shifts resulted in unpleasant consequences for them. For example, there were personal costs such as not spending time with their family or tiredness. Respondents also complained the night shifts were conducted under undesirable conditions such as residents getting up throughout the night or the sleeping-in room containing little more than a bed. One respondent commented that certain people hated night shifts to such an extent that they would take time off sick to avoid them. This provides a clear illustration of how having to deal with unpleasant consequences as a result of performing sleep-in duties led staff to actually avoid them.

Administration - There were many aspects of administration that apparently led to negative contingencies for staff if they performed them. For example, drawing up staff rotas led to complaints from colleagues if they weren't pleased with their assigned duties, when dealing with drug administration some respondents experienced difficulties with a lack of clear guidelines or inappropriate or inadequate information and staff felt the pressure of responsibility if things went wrong, one person noted that when she planned a day or shift her preparations were often destroyed by a lack of available staff and others found that planning a shift caused them inconvenience because of imprecise instructions or the imposition of other responsibilities. Thus, performing necessary aspects of work can be met with severe difficulties for some members of staff.

Socialising with clients - Some respondents noted that going out socially with residents could be difficult because of the problems they experienced as a result, for example, a lack of resources such as transport. Other staff said that they found arranging holidays difficult because of a lack of finances, the bureaucratic problems when planning these holidays and

the subsequent obstacles in terms of pay and conditions which resulted when respondents made claims for the overtime which these duties incurred. It would not be surprising, therefore, if staff were reluctant to undertake these responsibilities.

Training and supervision - Many respondents disliked staff meetings because they associated them with unpleasant experiences. For example, many respondents found them divisive and useless, they dealt with too many issues at once, not as occasions for sharing ideas, staff found their opinions were not considered, some staff felt others to be too vocal or disrespectful, and some people described staff meetings as frustrating, repetitive and not leading to change. Several respondents commented on how training opportunities were often not interesting experiences due to them being in-effective and poorly presented.

Client training programmes - Several respondents noted incidences when following clients' programmes was not met with positive consequences which might explain why staff do not always conduct programmes as and when required. Examples were given of the difficulties encountered when sticking to a programme or policy which was not clearly explained, of attempting to engage clients in activities like cooking without the right conditions being available such as a working definition of involvement and of being met with challenging behaviour as a result of involving clients which staff then had to try and deal with often alone and without the opportunity to talk about an incident after it has occurred. These negative consequences for staff might thus subsequently affect how they perform a training programme with residents.

Negative consequences for doing the wrong thing.

Staff mentioned very few incidences where they experienced negative consequences as a result of performing the wrong task or performing a task badly. Those examples, which respondents did mention, did not seem to prohibit or deter them from performing these tasks. Thus, although there were negative consequences associated with undertaking a task there may have been greater negative contingencies attached to not performing the task at all. Many respondents mentioned that they found performing domestic chores without a resident was time-consuming, distracting from clients, demeaning, did not utilise their skills and it was de-motivating. It was apparent, however, that these unpleasant associations related to performing tasks without engaging residents did not stop staff from

undertaking these duties to a great extent. Another example given of where there might be negative consequences for doing the wrong thing were that of when not sticking to a timetable means being called to account why.

The importance of tasks for persons.

Evidence was collated from focus group discussions of the consequences associated with various persons if a particular task was not performed or was performed in an inappropriate way.

Managers/Area Managers/Seniors - management appeared to be associated with both negative and positive consequences for paperwork and administration tasks, for example praise if they were performed and criticism if they were not. It became apparent in focus groups' discussions, however, that house managers in particular were associated with negative consequences for many respondents in relation to domestic tasks without the involvement of residents.

Community/ neighbours - there appeared to be both positive and negative consequences for respondents associated with interacting with the local community. These contingencies appeared to be related to those aspects of respondent's work through which they might be involved with these people for example, socialising with residents or escorting/supporting them in their use of community facilities. All of these duties are representative of those aspects of direct-care work through which staff are most likely to come into contact with members of the local community.

Yourself - respondents in the focus groups generally appeared to associate more pleasant and rewarding consequences for them personally with tasks involving leisure/social activities with residents. They also seemed to associate the most powerful negative consequences with the non-performance of paperwork and administration tasks.

Professionals - many of the consequences which respondents seemed to associate with professionals were related to the difficulties of acquiring their services and particularly so in respect to therapists (e.g.. speech therapists, occupational therapist's etc.).

Families of residents - In focus group discussions respondents appeared to associate definite negative and positive consequences with contact from families, however, examples were not provided of the kinds of tasks with which these contingencies were related.

Workers in other services for people with learning disabilities - the difficulties which respondents associated with contact with workers in other services for people with learning disabilities seemed to centre around communication, information and access. For example, not being able to contact a relevant day service worker or receiving negative communications over resident issues such as personal care or client training programmes.

Co-workers - Focus groups' discussions appeared to suggest that the kinds of consequences, both positive and negative, associated with colleagues were those related to teamwork, for example praise and support when a task was performed well and criticism or lack of support if it was not. Respondents felt that many of the tasks that they themselves thought to be important they also felt to be important for co-workers. This may suggest perhaps that there was recognition by respondents that colleagues faced similar consequences to themselves in work by virtue of the fact that they occupied the same employment position.

Residents - Focus group discussion revealed that there were very obvious positive and negative consequences that respondents related to working with clients. These included, from a negative perspective, having to deal with undesirable aspects of care such as incontinence or having to cope with behavioural difficulties when engaging in tasks with residents and from a positive perspective socialising and engaging in leisure activities with residents. These tasks all represent those aspects of respondents work where they have most contact with residents and therefore they may also reflect those duties where staff would face the consequences as described in discussions.

There appeared to be a great deal of evidence provided in focus groups' discussions that persons such as managers had a great deal of influence over what respondents did or didn't do by the imposition of powerful consequences. This was despite the fact that respondents felt that they didn't necessarily have a great deal of contact with management. Respondents appeared to indicate that it was a fear of negative repercussions that might

make them perform or fail to perform something rather than a desire to receive praise from managers.

There appeared to be much evidence provided in focus group discussions that the consequences related to a particular person or to a particular task could be related to the time, place, individual or situation in which contact occurred. For example, respondents identified occasions where they had negative experiences when using a community facility but these negative experiences were dependent on factors such as the ability level and behaviour of the resident they were accompanying, the resources they had available like staff numbers, the particular service they were utilising and how welcoming it was, and finally the situation within which contact occurred for example if a restaurant was quiet or busy etc.

Questionnaire

Validity of questionnaire

Cronbach's Alpha statistic was calculated to ascertain the internal reliability of the scale devised. Cronbach's 'rule of thumb' is that 0.7 or higher indicates that items in a scale appear to be measuring the same thing. In other words items appear to be consistent. Results indicated that items in the scale did indeed appear to be measuring the same phenomenon (0.7 or above) although the omission of several categories may have improved the scale.

i) The influence of persons.

Chi-square statistics for each variable and for each group of named audiences are presented in Table 1. Means for each audience are presented in Table 2.

Table 1. Chi-square statistics for the influence of audiences

Variable	**Chi-square**	**Significance (level p<0.05)**
Influence on career	63.79	0.001*
Influence on 'consequences if you don't do what is expected of you'.	2.92	0.572
Influence on motivation	7.96	0.093
Influence on residents with learning disabilities.	52.84	0.001

Table 2: Mean Scores for the influence of each audience

Source of Influence	Influence on Career (Missing cases = 2.5%)	Influence on 'consequences if you don't do what is expected of you'. (Missing cases = 3.0%)	Influence on Motivation (Missing Cases = 3.6%)	Influence on Residents (Missing Cases = 4.3%)
Area Manager	3.54	3.89	3.02	3.72
House Manager	3.97	4.42	3.65	4.20
Senior/Deputy	4.05	4.25	3.47	4.05
Co-workers	2.80	3.02	3.56	4.23
Residents	2.85	3.07	3.77	3.71
Professionals	2.29	2.97	2.71	4.08
Workers in other services for people with a learning disability.	1.92	2.51	2.45	3.45
Residents families	1.92	2.79	2.54	3.71
Community	1.77	2.13	2.03	2.66
Ancillary Workers	1.62	1.89	1.97	2.39
Neighbours of unit	1.47	1.55	1.62	2.11

ii) Commentary

Computation of a chi-square statistic for each variable revealed that for two of them - the influence of persons on 'the consequences if you don't do what is expected of you' and on 'motivation' - the results were not significant (see Table 1). This result indicates that respondents did not appear to be answering in a meaningful way. In other words they may have randomly rated the perceived influence of persons (Independent Variable) for these variables (Dependent) and therefore there may be no association between them. In the case of influence on 'career' and 'learning disabled residents' the chi-square statistic was highly significant at the 0.05 % level indicating that respondents were answering in a meaningful way (see Table 1). In other words they appeared to rate persons influence in a non-random way thus suggesting an association between the independent and dependent variable.

If we look at the means for each category of persons (see Table 2) we can see that for all variables, people in the 'community', 'ancillary workers' and 'neighbours of the house' were not rated as of great influence.

For the variable 'career' respondents rated persons associated with management (senior/deputy, house managers and area managers) as having a great deal of influence. This result does not seem surprising, as these are the persons most often associated with promotion and career enhancement within organisations. In other words these people have the power to withhold or award career related consequences for staff.

For the variable 'consequences that may occur if you don't do what is expected of you' respondents rated once again persons associated with management (senior/deputy, house managers, area managers) as having a great deal of influence. Interestingly 'residents' and 'co-workers' were rated as having some degree of influence whereas 'professionals', the 'families of learning disabled residents' and 'workers in other services for people with learning disabilities' were rated quite low in terms of influence. This result would appear to suggest that those in positions of power within the service are able to exact the strongest consequences for staff, either positive or negative (although this was not indicated in the question). This result is questionable, however, as the chi-square calculated indicated that respondents may have been rating their answers in a random manner.

For the variable 'motivation' interestingly respondents rated 'Residents' as having a good deal of influence. This may indicate that service for people with learning disabilities users are perhaps associated with positive consequences for staff in terms of motivating them in their employment. It should be noted, however, that none of the means calculated were very high which may indicate that none of the persons present in the workplace were associated with a great deal of influence on staff motivation. 'Managers' and 'co-workers' were also rated by respondents as having some deal of influence on their motivation. This may be indicative of the power that managers may have within the workplace to bestow positive or negative contingencies that may lead to an increase or decrease in motivation. In the case of 'co-workers' this result may reflect the importance that other direct-care staff have for individuals in terms of motivation. Colleagues may provide positive outcomes such as support and friendship for respondents. These findings are questionable, however,

as the chi-square calculated indicated that respondents were rating persons influence in a random manner (although only just non-significant).

For the variable 'clients' respondents rated 'co-workers' as having some great deal of influence. This may suggest that staff recognised the importance of direct-care workers for client care. 'Managers', 'professionals' and 'senior/deputies' were also rated by respondents as influential for learning disabled residents and this might reflect both the power which managers and seniors have within the unit and in the case of professionals, the direct contact and control which they sometimes have over clients lives, as for example social workers. Interestingly respondents did not rate families as particularly influential in regard to residents.

iii) The importance of tasks

Table 3

Chi-square statistics for the importance of tasks

Variable	**Chi-square**	**Significance (level p<0.05)**
Influence on career	40.40	0.001*
Influence on 'consequences if you don't do what is expected of you'.	140.996	0.001*
Influence on motivation	92.610	0.001*
Influence on residents with learning disabilities.	460.297	0.001*

Table 4: Mean Scores for the influence of each task

Source of Influence	Influence on Career (Missing cases = 2.1 %)	Influence on 'consequences if you don't do what is expected of you'. (Missing cases = 2.30%)	Influence on Motivation (Missing Cases = 2.3%)	Influence on Residents (Missing Cases = 2.9%)
Unit Management	4.05	4.57	3.59	4.20
Administration	4.05	4.20	3.55	4.23
Training	4.20	3.79	4.15	4.05
Client Training	3.88	3.77	4.27	4.67
Supported Personal Care	3.33	4.02	3.82	4.61
Personal Care	3.00	3.74	3.10	4.21
Therapy	3.47	3.60	3.73	4.45
Socialising with Client	3.32	3.74	3.92	4.75
Involving Client in Housekeeping	3.26	3.72	3.61	4.39
Not Involving Client in Housekeeping	2.45	3.20	2.50	3.29
Escorting	2.82	4.07	3.10	4.45
Non-work Tasks	2.35	2.13	3.20	2.77

iv) Commentary

Computation of a chi-square statistic for all 4 dependent variables (career, consequences for not performing them, motivation and clients with learning disabilities) indicated significance at the 0.05 % level (see Table 3) suggesting that respondents appeared to be

answering in a meaningful way rather than randomly rating the importance of tasks suggesting an association.

For the variable 'career' respondents rated 'training', 'unit Management' and 'Administration' tasks as of high importance for their job (see Table 4). This result is not surprising as employment training in particular is associated with career enhancement and promotion in most jobs. Similarly management and administration tasks are often associated with managerial positions that constitute the higher echelons of a service. Therefore, it would not be surprising if these tasks were rated as important in terms of career. Client centred tasks such as 'client Training', 'advocating for a client' and 'therapy' were rated as of some importance by respondents. These tasks are more frequently related to aspects of administration, which subsequently may be more oriented towards career enhancement. For example, client training programmes may have to be regularly recorded and results represented at various meetings. Interestingly care and leisure tasks associated with clients (supported personal care, socialising with clients and housekeeping involving clients) were not rated by respondents as of relative importance for their career. In other words these aspects of employment were probably not seen as highly important for enhancing respondents' careers. Tasks which staff performed without clients (non-work tasks and housekeeping not involving clients) were rated as low in terms of career importance. It is probable that in care settings these tasks are not likely to be influential in gaining promotion.

For the variable 'consequences for not performing these tasks' respondents rated 'unit management', 'administration' and 'escorting clients' as of great importance. This may give an indication as to the organisation of a particular service and subsequently which tasks are deemed meaningful by those persons in positions of power. Interestingly client centred tasks such as 'socialising with a client', 'housekeeping involving clients' and 'therapy' with clients were not deemed by respondents as of as great importance in terms of the consequences that may occur if they failed to perform them. It was not indicated in the question as to whether consequences were positive or negative and it may be that responses would have been different if this demarcation were made. These results appear to suggest, however, that the non-performance of these tasks is not associated with strong consequences. This could indicate that management has not related these tasks with particular consequences (positive or negative) for staff. Not unsurprisingly respondents

rated 'housekeeping not involving clients' and 'non-work tasks' as less important in terms of consequences for non-performance. Indeed it is unlikely that services would punish staff for not having a break, or indeed reward them for doing so.

For the variable 'motivation' respondents rated client-oriented tasks as of great importance (client training', 'advocating for a client', 'socialising with a client' and 'therapy'. These tasks also reflect duties that encourage client independence rather than staff simply doing things for residents. These results indicate that the work tasks that motivate staff, i.e. those oriented towards client independence, are not the ones that staff associate with certain consequences as suggested by responses to the previous question. These tasks were also not rated as high in terms of career prospects. This suggests that although working with clients is considered important for motivating staff these may not be the duties that the service itself rewards employees for performing, or punishes them for failing to undertake. Respondents also indicated that staff training was important for their motivation. Respondents indicated that 'housekeeping not involving clients' was of lesser importance for their motivation. It was perhaps a surprising finding that respondents did not rate 'non-work tasks', i.e., having a break etc. as more important for their motivation, as it might have been expected that having an opportunity to relax at work, or take time-out from a stressful situation, would be a more considerable factor in motivating employees.

For the variable 'importance for clients with learning disabilities' respondents rated the majority of tasks highly with only 'non-work tasks' and 'housekeeping not involving clients' as of lesser importance. This is not surprising as both of these work aspects do not directly involve clients and in the case of the former, staff time spent in unrelated employment duties may have less tangible benefits for residents. These results also indicate that respondents felt that tasks that were important for clients were not the same tasks for which there were consequences for non-performance or which were associated with enhancement of career prospects. It is interesting, however, that tasks which respondents felt were important for clients were also considered important for staff motivation, for example 'client training'.

v) The importance of tasks for persons

Computation of chi-square statistics for the variables 'persons' indicated significance at the 0.05% level for the importance of tasks ($p<0.001$) for all variables. In other words'

respondents appeared to be answering in a meaningful way rather than randomly rating the importance of tasks for persons thus indicating an association. Details of mean scores for each category of person for each task and chi-square statistics are found in Table 5.

Table 5: Mean scores for the importance of tasks for persons.

Persons	Tasks (Means)					
	Administration	Advocating for a Client	Client Training	Escorting	Involving Housekeeping	Non-work tasks
Professionals	4.00	3.75	3.87	2.70	2.97	1.90
Senior	4.27	3.45	3.72	2.87	3.45	2.29
Manager	4.58	3.58	4.03	3.24	3.80	2.53
Area Manager	4.31	3.40	3.62	2.78	3.25	2.12
Yourself	4.38	4.33	4.36	4.17	4.21	3.91
Workers In Other Services for Persons with a Learning Disability	3.47	3.38	3.45	3.59	2.79	2.17
Community	1.72	2.08	1.79	2.02	1.90	1.33
Neighbours	1.56	1.79	1.45	1.71	1.42	1.34
Ancillary Workers	1.94	1.86	1.92	1.64	2.11	2.06
Families	2.97	3.79	3.55	3.79	2.95	2.06
Residents	3.20	4.13	4.05	4.29	4.18	2.35
Co-workers	4.17	4.00	4.20	3.76	3.95	3.44

Persons	Tasks (Means)				
	Not-Involving Housekeeping	Personal Care	Socialising With a Resident	Supported Personal Care	Therapy
Professionals	1.82	2.97	2.80	3.35	4.25
Senior	2.69	3.21	3.30	3.56	3.54
Manager	2.97	3.54	3.65	3.81	3.84
Area Manager	2.28	2.97	3.25	3.22	3.42
Yourself	3.25	3.83	4.46	4.31	4.40
Workers In Other Services for Learning Disabled	1.76	3.26	3.29	3.15	3.47
Community	1.33	1.87	2.53	1.74	1.76
Neighbours	1.21	1.61	1.86	1.61	1.66
Ancillary Workers	2.67	2.13	1.91	1.94	1.91
Families	2.23	3.82	3.62	3.67	3.65
Residents	2.68	4.29	4.62	4.18	4.19
Co-workers	2.97	3.74	4.02	4.07	4.05

Persons				
	Training	Unit Management	Total	Chi-Square D.F. - 4
Professionals	3.59	3.35	3.19	17.965 Sig. - 0.001
Senior	4.02	4.37	3.46	58.725 Sig. - 0.001
Manager	4.25	4.50	3.73	133.073 Sig.0.001
Area Manager	3.72	4.00	3.28	19.711 Sig. - 0.001
Yourself	4.33	4.42	4.19	350.570 Sig. - 0.001
Workers In Other Services for LEARNING DISABLED	3.12	3.42	3.11	26.595 Sig. - 0.001
Community	1.56	1.90	1.81	518.976 Sig. - 0.001
Neighbours	1.55	1.61	1.57	750.432 Sig. - 0.001
Ancillary Workers	2.24	2.03	2.03	269.520 Sig. - 0.001
Families	2.57	3.17	3.22	26.853 Sig. - 0.001
Residents	3.36	3.65	3.79	174.482 Sig. - 0.001
Co-workers	4.17	4.42	3.93	244.339 Sig. - 0.001

vi) Commentary

For the variable 'Professionals' respondents rated 'Therapy', 'Administration' and 'Client Training' as of great importance. This result could reflect the fact that many of the professionals whom direct-care workers come into contact with are oriented toward therapy and training using specific programmes - as is the case with for example physiotherapists, speech therapists, psychologists etc. Similarly respondents may have rated 'administration' highly in terms of importance as various professionals such as social workers, psychologists etc. may expect direct-care staff to complete various paperwork in relation to client care. Respondents did not rate unsurprisingly 'Non-work tasks' and 'Housekeeping Not Involving Residents' as of great importance. Interestingly, however, 'Escorting' was *not* rated as of a great deal of importance. One might have expected that staff would escort clients to and from appointments with various professionals and that therefore this task would be rated more highly by respondents in terms of its importance for professionals. It may have been more useful to specify particular professionals in order to gauge if respondents rated tasks differently for each category of person.

For the variable 'Senior' respondents rated 'Unit Management', 'Administration' and 'Staff training' as of greater importance. This result may reflect the probability that these are the tasks with which senior direct-care staff are most often involved. In the case of 'Staff Training' it may be that senior direct-care staff are more likely to be involved in training as a result of either promotion to this position or due to the increased responsibilities which they have. As with professionals 'Non-work tasks' and 'Not Involving Housekeeping' were not rated as of any particular importance for 'senior' direct-care workers.

For the variable 'House Manager' respondents rated 'Administration', 'Unit Management' and 'Staff Training' highly in terms of importance. This result is unsurprising as these are the tasks with which managers are most often associated. 'Client Training' was also rated as of high importance, which may be a reflection of either the orientation of a unit or a house manager's responsibility for ensuring client programmes are followed. As with seniors, 'Non-work tasks' and 'Not Involving Housekeeping' were not rated as highly important for 'Managers'.

For the variable 'Area Manager' respondents rated 'Administration', 'Unit Management' and 'Staff Training' as highly important. Once again these are the tasks that Area Managers may perform most frequently as part of their job. As with house managers, 'Non-work tasks' and 'Not Involving Housekeeping' were not rated as highly important for 'Area Managers'.

For 'Seniors', 'Managers' and 'Area Managers' respondents rated 'Administration', 'Unit Management', 'Staff Training' and 'Client Training' as of high importance for them. It would appear therefore that management oriented tasks unsurprisingly are of greater importance for those persons associated with the management of a service. If we compare these results with those which respondents gave for the importance of tasks for 4 variables ('Career', 'Consequences for not performing these tasks', 'Motivation' and 'Learning Disabled Residents') we can see that for 'Unit Management' and 'Administration' respondents rated these highly in terms of their importance for the variables 'career' and 'the consequences if they did not perform them'. 'Training' was also rated as of great importance for the variable career. This might imply that these tasks are the ones which management has designated as of high importance for staff to perform both if they desire

promotion (a positive consequence) and if they wish to avoid negative consequences emanating from those in power. 'Non-work tasks' and 'Not-Involving Housekeeping' were rated quite low in terms of importance for the variables 'Career' and 'Consequences for not performing these tasks' and if we compare this with the responses given for how important these tasks were for each level of management we can see that similarly these were rated as of low importance. This is perhaps not surprising as managers are unlikely to accord priority to those aspects of a direct-care worker's job that are not oriented towards the more formal aspects of a service. A house manager, for example is unlikely to praise a member of staff for having a break although it is feasible that they would criticise workers for doing this. If we look at the responses given to the question of how influential persons were for the 4 variables of 'career', 'consequences if you don't do what is expected of you', 'motivation' and 'learning disabled residents' we can see that for the first two variables 'seniors', 'house managers' and 'area managers' were rated as of high importance (although for the variable 'consequences if you don't do what is expected of you' the chi-square statistic calculated indicated that respondents may have been answering in a random manner). This corresponds with the responses given in terms of what tasks were important for staff for their career (positive consequences) and which tasks were important for the consequences which might result if they did not perform them. In other words the fact that tasks like 'unit management' and 'administration' are important for the powerful persons in a service might make them similarly important for those staff who occupy the lower echelons of the employment structure. The responses given for 'Co-workers' and the importance of tasks for them seem to reinforce this finding as 'Unit Management', 'Client Training' and 'Administration' were all rated highly. These are once again the tasks which were rated correspondingly highly for those in management positions which, as co-workers occupy similar positions to the respondents, may reflect the influence which certain persons within a service may have over designating which tasks become those associated with the most powerful and negative consequences.

For the variable 'Residents' respondents rated most tasks highly with only 'Non-work Tasks' and 'Housekeeping not involving residents' being rated as not of lesser importance. Responses to this question provide a measure of how reliable the instrument of measurement might be. This is because respondents had already answered the same question when they were asked to rate tasks for the importance of the variable 'learning disabled residents'. If we compare the results we can see that although 'socialising with

residents' is rated as of high importance for residents in response to both questions and 'Non-work tasks' and 'Housekeeping not involving residents' was rated as of lower importance the means are different and for most tasks the responses do *not* appear similar (see Table 6). This finding might indicate that the questionnaire may not be an effective measure of the variables of interest or it could mean that respondents perceived the 2 questions differently.

Table 6: Comparison of responses in respect to the category of learning disabled residents.

Source of Importance	**Importance of tasks for Residents with Learning Disability (Missing Cases 15/2.9%)**	**Importance of tasks for persons (including for Residents with a Learning Disability (Missing Cases 26/5%)**
Socialising with a Client	4.75	4.62
Client Training	4.67	4.05
Advocating for a Client	4.63	4.13
Supported Personal Care	4.61	4.18
Escorting Clients	4.45	4.29
Therapy	4.45	4.19
Involving Housekeeping	4.39	4.18
Administration	4.23	3.20
Personal Care	4.21	4.29
Unit Management	4.20	3.65
Training	4.05	3.36
Not Involving Housekeeping	3.29	2.68
Non-work Tasks	2.77	2.35
TOTAL MEAN	4.21	3.79

For the variable 'Families' respondents rated 'Personal Care', 'Advocating for a client', 'Escorting Clients' and 'Supported personal care' more highly in terms of importance. This result is unsurprising as it is conceivable that these are the types of tasks which clients' families, and particularly parents, might prioritise. The physical and aesthetic well being of residents may be something which parents request from direct-care staff and these tasks may determine the basis of families' expectations of the role of a direct-care worker. Thus these may be the tasks that staff associate certain consequences with from residents families if they do or do not perform them.

For the variables 'Ancillary workers', Neighbours' and 'Community' the means for each task were low indicating perhaps that these persons were not particularly important in the work environment. It might also imply that services for people with learning disabilities and the kind of tasks involved in caring for them have not made a big impact on these groups of persons. For 'Ancillary workers', 'Housekeeping not involving residents' was rated most highly in terms of importance (although the actual mean was not that high). This result is probably not surprising, as these tasks constitute the main aspect of employment for ancillary workers such as cleaners and maintenance persons. This task may thus be the task that staff associate with certain consequences if not performed by them. For example if the unit was untidy or unclean every time a cleaner came on duty complaints might follow that the staff are not doing their job. For 'Neighbours', although all means were low 'Socialising with a client' produced the highest mean in terms of importance. This result may reflect the fact that the only tasks which respondents associate with 'Neighbours' are those through which they come into contact with them, for example, going out with residents. Neighbours are unlikely to go into the residential unit and observe other aspects of a direct-care worker's role. The same may also be true for the variable 'community' for which respondents rated 'Socialising with a resident' most highly (although the mean was fairly low). Respondents may have associated people in the community with seeing staff and residents in a social role and these persons will probably not be considered familiar with tasks which staff perform with residents inside the unit and hence these tasks may not have been rated as of great importance. For the task 'Socialising with residents' it may be that direct-care staff associate certain consequences from neighbours and people in the community in respect to poor performance of this aspect of their role. For example, if a resident displays anti-social behaviour in the community, persons may reprimand staff themselves for not controlling the resident or blame them for bringing the resident into this particular situation.

For the variable 'Workers in other services for people with learning disabilities', 'Escorting' was rated highly in terms of importance. This may reflect the fact that direct-care workers most often come into contact with workers from other services, such as day service staff, in their role as escorts for residents and hence they may assume that this task is of greater importance for this group of persons. Similarly respondents rated 'Administration', 'Therapy' and 'Client training' quite highly in terms of importance for workers in other services and this may reflect respondents beliefs that these tasks constitute

not only the main aspects of these persons jobs, but may also be associated with those aspects of respondents own work which brings them into contact with these other workers, for example completing paperwork for use by day services. These tasks may thus be associated with certain consequences from these persons if they are not performed by direct-care staff.

For the variables 'Yourself' most tasks were rated highly in terms of importance. 'Socialising with a resident' was rated most highly in terms of importance for respondents as was, 'Unit management' 'Therapy' 'Administration', 'Client training', 'Training' and 'Advocating for a resident'. If we compare these responses with answers given in relation to the importance of tasks for 4 variables ('Career', 'Consequences for not performing them', 'Motivation' and 'Learning disabled residents) we can see that unit management, administration and staff training were all rated as important for the variables of career and consequences for not performing them, whilst client training, staff training, advocating for a client and socialising with a client was rated as important for respondent's motivation. Socialising with residents, resident training and advocating for a resident were rated highly in terms of importance for residents themselves. Thus we can see that the results of the importance of tasks for 'Yourself' appear to reflect a combination of the answers given in responses to an earlier question. As a rough indication of reliability these results suggest that the questionnaire may be measuring the variables of interest.

If we look at the means for each category of person we can see that for certain of them - 'Yourself', 'co-workers', 'Residents' etc. - more tasks were more highly rated overall. This may indicate that certain persons may not have a great deal of contact with direct-care staff or are perhaps not associated with powerful consequences for respondents if they fail to perform certain tasks (i.e.. they are not important for these persons or these persons have less ability to insist staff perform those tasks which may be important for them).

Discussion

a) The design and conduct of this study.

The objective of this pilot study was to examine a research concept so as to ascertain its merit for further research. The basic premise was that persons present in the residential

workplace might influence the performance of direct-care staff particularly in relation to how they support clients. Data was gathered in two forms to fulfil this purpose and responses were collated and compared. Responses were used to provide information about the range of interactions that staff have with others, the intensity of those interactions and the kinds of tasks that they are expected to perform. Responses also provided information about the consequences that are associated with certain audiences.

The measures described were specifically designed for use in this study and as such they have not been used in other research. They are therefore untested and thus any results obtained must be treated with caution. No reliability data was sought for this pilot study and this also means that the information obtained is compromised. Also the numbers of staff used in this study was very small and the sample was one of convenience. These limitations reduce the strength and certainty of any conclusions which one can draw from the findings of this research.

In regard to the questionnaire developed for use in this study it should be noted that for the variables of influence of persons on 'consequences' and on 'motivation' the chi-square statistics were not significant. This suggests either that the measurement of these concepts is unviable or that the questionnaire itself is problematic. Respondents may have experienced difficulty in rating a concept such as motivation, which is vague and undefined. Also the wording of the questionnaire may have been at fault. The notion of consequences, for example, may have been poorly explained. Also the use of the chi-square statistic itself is limited as it is a non-parametric test that can only indicate an association rather than the strength of that association. More detailed analysis was not attempted, as the objective of the study was purely to explore the boundaries of influence in order that the phenomenon might be studied in greater depth in a large-scale study. Limited statistical analysis does, however, restrict the questions that can be asked of the data. Cronbach's Alpha statistics suggested that the questionnaire did achieve both within-scale reliability and internal consistency although the results also indicated that this reliability would have been improved if certain items were omitted. Further use of the questionnaire in this format should take account of these results.

Despite these limitations it should be said that the information obtained does have some validity and for a number of reasons.

Firstly many themes and responses were replicated in each focus group held regardless of the participants and this does give a rough and ready indication that the views expressed might be representative of the wider views held by direct-care workers.

Secondly a great deal of commonality was observed between responses given in the questionnaire and focus group responses. Indeed focus group discussions often provided qualitative examples of the questionnaire findings.

For these reasons it seems appropriate despite the lack of inter-rater reliability data or further data with which to compare to view the findings as a useful guide for further research.

b) The Main Findings of This Study

The main findings of this small-scale pilot study are really 3-fold. In brief they were that;

1) - Certain persons were deemed more influential for staff and their influence was more prominent in relation to certain tasks or spheres of work. Managers, for example, were more likely to be seen as influential in respect to respondent's careers. Respondents, on the other hand, saw co-workers, as an important source of influence on the care of the residents and on motivation but not so important an influence on career or the consequences that would occur for staff in the workplace.

2) - Certain duties were deemed more important for staff and different duties were associated with particular persons. Unit management and administration, for example, were seen as important for respondents for their career and for the consequences that would occur if they failed to complete them. These two tasks were not seen as so important either for the respondent's own motivation or for the residents whom they worked with.

3) - There appeared to be particular contingencies (both positive or negative) related to particular persons/tasks and in certain circumstances this appeared to provide an explanation as to why staff do or don't perform duties. Managers, for example, were seen

as important in providing positive consequences both for correctly performing a task and negative consequences for failing to perform a task or for failing to adequately complete it. Management also seemed to be associated with providing negative consequences when a task was correctly performed and positive consequences when a task was incorrectly completed. Many respondents mentioned that there were negative consequences from residents when they did correctly engage them in a task, for example challenging behaviour. Some respondents also noted that residents could provide positive consequences as a result of staff interaction and this was an important source of motivation.

How then do these results compare with those of Murphy (1983) whose research formed the basis of the methodology used in this study? 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, domestic duties normally performed by nursing staff and staff time were ranked as least important.

In terms of importance to the residents of a unit 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 7 categories. For example, in the case of administrative duty's 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 findings do seem to correspond with the results of this study. The tasks which staff did most seemed to be the ones which they rated as important for various categories. For example, unit management and administration were rated as of great importance for the variable of career and on the consequences that might occur if these tasks were not performed. Anomalies seemed to be, however, that despite training being identified as important for a respondent's career it was not something of which they did a great deal. Also despite respondents complaining that they did a great deal of housework without clients this was not rated as important for either career or consequences for non-performance. This appears difficult to explain as in discussion staff felt that they were compelled to undertake these duties despite disliking them. It was interesting that some of the tasks which respondents had felt were important for their motivation in response to the questionnaire were not tasks which all of them performed frequently, for example training, socialising with a resident and advocating for clients. Interestingly socialising with residents and advocating for them were also tasks rated as of very high importance for the residents themselves even though respondents did not feel that they performed these duties frequently. Also respondents did not mention non-work related tasks, like taking a break, as something that constituted part of their job. This finding was replicated in the focus group responses, as staff did not rate these tasks as important for either their career, for the consequences for not performing them or for their motivation.

As with Murphy's findings in terms of the consequences for staff if they did not perform a task administrative duties and unit management tasks were seen as more important although not so personal care. In terms of career prospects as with Murphy's study the findings of this research were that respondents viewed administrative duties, unit management and client training programmes as more important. In terms of job

satisfaction (in this study motivation) similar to Murphy client related activities appeared to be seen as more important (e.g. client training). Similarly as with Murphy's study client related tasks were also seen, unsurprisingly as important for the residents of the units themselves.

c) Implications for future research.

The findings of this study although limited and exploratory in nature do appear to give a preliminary indication that certain persons present in the workplace may have influence over what direct-care staff do and how they do it. Importantly certain persons may be influential in regard to how staff engage with clients. This appears to be a worthwhile line of enquiry for future research. If direct-care staff are failing to involve clients in activities and client engagement is low then the influence of others in this process could prove to be an important explanation. The notion that active staff support is compromised or supported by others and that this may determine staff behaviour forms the basis of the main study.

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 which staff feel to be important to both themselves and residents are also those which 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. These notions are also explored further in the main study and a theory of what contributes to poor staff performance and low levels of client engagement is also examined.

APPENDIX 1

The results of the second stage of the pilot study.

The second stage of the pilot study was undertaken to test the usefulness of measures devised from the results of the first stage.

Method

Settings

Two residential facilities managed by the same charitable organisation were selected for the pilot study. Both facilities were in the South-East of England. Details as to how long the facilities had been in operation or the length of time the current managers had been in post were not sought, however, it was felt that these details should be collected in the main study. Both facilities were community based. Facility 1 offered 24-hour support to clients who had severe learning and physical disabilities. Facility 2 offered support to more able clients based on need and was not therefore 24-hour.

Subjects

Details of the direct-care staff and clients included in the study are described in table i) below.

Table i) Details of direct-care staff and clients included in the study

Variable	**Direct-Care Staff in Facility 1**	**Direct-Care Staff in Facility 2**
Number of staff employed in the facility	10	8
Number of staff interviewed	4	4

Table i) continued

Variable	Clients in Facility 1	Clients in Facility 2
Number of clients resident in facility (and included in study)	4	2
Client age 19-30	4	0
Client age 46-65	0	1
Client age 66+	0	1
Gender Female	2	2
Gender Male	2	0

Measures

A brief synopsis of each measure used in the study is described below. Inter-rater reliability data was collected for some of the measures but was not statistically analysed. This was due to the small amount of subjects included in the pilot study.

Behaviour Development Survey: This is a measure of the adaptive and maladaptive behaviour exhibited by clients with a learning disability developed by Conroy (1980,1985). This is a widely used measure, which is easy to administer, and has been utilised both in the UK and America. Respondents (in this case the clients key worker) are requested to rate various aspects of a client's ability and challenging behaviour (see Appendix 2). A total score for both 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.

Malaise Inventory: This is a widely used measure of stress experienced at work and was devised by Maslach and Jackson (1978; 1981). This measure has been used in the field of learning disability research by Rose, (1993; 1994; 1996) and Allen, Pahl and Quine (1990). It is quick and easy to administer. Direct-care staff respondents were asked to answer 'yes' or 'no' to a series of 24 questions concerning their health (see Appendix 2 for a copy of the measure). Total stress scores are 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.

Contingency Questionnaire: The contingency questionnaire was developed for use in this study and is based on the research of Murphy (1983, unpublished). 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 (see Appendix 2 for a copy of the interview schedule) and is completed by interviewing individual staff.

Staff are asked if they perform individual types of task. The questionnaire identifies 13 types of tasks that direct-care staff may or may not perform at work. These tasks are Unit management, Paperwork, Escorting, Socialising with a Resident, Supported personal care, Personal care, Supported domestic tasks, Domestic tasks, Advocacy, Training/therapy with clients, Staff meetings/supervisions, Training and Non-work tasks. 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 1-3 depending on the degree of involvement in each task. A rating of 1 indicates that the respondent is not involved in any tasks under the heading described, 2 indicates that the respondent is only involved in a limited range of tasks and 3 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 and what would happen if they performed it or performed it correctly. There were 14 possible categories of persons whom the respondent was asked to associate identified consequences with. These were residents, upper managers, co-workers, house manager, deputy manager or senior direct-care worker, professionals, yourself, general public, resident's families, workers in other services for the learning disabled, the team, other, a consequence identified but no person, no consequence and no person identified. Responses were recorded free hand. Respondents were also asked questions about what helped or hindered them in the performance of their work and whom they associated with this support or lack of it.

Active Support Schedule: The active support measure is an observational tool devised for use in this study by the author and Professor J.Mansell (see Appendix 2 for a copy of this measure). The active support schedule is intended as an *overall* measure of staff support for *all* clients present during an observation.

The Active Support measure is divided into 15 categories (see Appendix 2). Each category measures an aspect of active support such as for example the age appropriateness of activities offered to clients or how demands were presented to clients. Observers rate each category on a scale of 0-3 (see Appendix 2) and category scores are totalled to achieve an overall active support score that can range from 0-45. Numbers of clients and staff present during an observation are also noted. The activity observed was the preparation of a meal after which the observer completed the active support schedule.

Client Engagement and Challenging Behaviour Schedule: This was an observational instrument devised for use in this study by the author and Prof. J Mansell. This measure rates the individual client, their behaviour and their involvement in tasks (see Appendix 2 for a copy of the measure). 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. The measure was intended as an easy way of assessing a large number of individuals and their involvement in a particular activity, which is the preparation of a meal.

Management Practices Scale and Index of Community Involvement: The Management Practices Scale and Index of Community Involvement were devised by Raynes et. al. (1979) and Pratt, Luszcz and Brown (1980) respectively as a general evaluation of a residential facility and how it supports clients on a day-to-day basis (see Appendix 2 for a copy of these measures). They are established measures used to assess quality of care. It was included in this study so as to provide an overall impression of how a facility was managed. The Manager or deputy of a unit completed the Management Practices Scale and Index of Community Involvement by way of an interview. A score is attained for each

item and a total score is achieved by adding item scores together. Scores are attained for 'Management Practices' (Range 0-74) and the 'Index of Community Involvement' (Range 0-64).

Index of Participation in Domestic Life (IPDL): This is an established measure of client involvement in daily activities devised by Raynes and Sumpton, (1986) and Raynes et.al. (1994). The scale asks respondents to rate client involvement in 13 domestic tasks ranging from '0', a client does not perform a task to '2' a client performs a task without staff help. A total score is achieved by summing item scores (Range 0-26). The PDL is easy to use and provides a basic impression of client engagement. The manager or deputy manager of a unit completed the PDL.

Policy Schedule: The author devised an instrument to measure each facility's written policy based on the active support categories mentioned earlier. Each policy was coded for 15 dimensions of active support on a scale of 0-3 with 0 being no mention of the category and 3 being the category was mentioned in great detail (see Appendix 2). A total policy score was achieved by adding individual category scores (Range 0-45).

Design and Analysis

This small-scale pilot study was devised primarily to test how easy the measures devised were to administer. Due to constraints of time and resources it was not possible to undertake a wide-scale pilot study. As such it represents a trial of the main study. Comparative statistical analysis of the data collected from the two services was not undertaken as the numbers involved were too small. Data was analysed only in basic terms to provide details of the information gathered. As the objective was to test out the measures to be used in the main study comments as to ease of administration and any other point of note are described in the results section.

Results

Behaviour Development Survey (BDS): Copies of the BDS were sent to each facility prior to a visit by the researcher and were completed by the client's key-worker. This system

appeared to be effective. Comments from respondents suggested that in the main they had little difficulty in completing the BDS. It also seemed that the choice of key-worker as the person best suited to complete the BDS for each individual client was appropriate. Comments from respondents indicated that a client's key-worker was usually the person most familiar with the everyday abilities and skills of a client as they were the person who worked most closely with them. It was decided based on these comments that it would be very difficult to collect reliability data, as it would be difficult to find someone in the facility that would be able to provide the same degree of knowledge about a client. It was not possible for the author to collect data on the ability of clients due to the time it would take. Respondents were able to follow up any problems associated with completing the BDS when the researcher later visited the facility. Details of the range of adaptive and maladaptive scores of the clients included in the pilot study are described in Table (ii) below.

Table ii) Range of adaptive and maladaptive behaviour scores (pilot study)

Variable	**Clients in Facility 1**	**Clients in Facility 2**
Adaptive Behaviour (ABS)	Range 35-75	Range 133-137
Maladaptive Behaviour (MBS)	Range 29-53	Range 53-55

Malaise Inventory: Initial trails in which the respondent was given the malaise questionnaire to complete alone proved unsuccessful as respondents often asked for clarification as to what the questions meant. On the basis of these findings it was decided to administer the 'malaise inventory' by way of interview in the pilot and main study. This proved to be a quick and effective way of collecting the data. A number of respondents voiced concerns over having their interviews taped due to the personal nature of the questionnaire and the decision was made therefore not to collect reliability data for this measure in the main study. Details of the average of malaise scores collected are given below in table iii).

Table iii) Range of malaise scores (pilot study)

Variable	Staff in Facility 1	Staff in Facility 2
Malaise Average	3.25	2.75

Contingency questionnaire: The contingency questionnaire, it transpired, took approximately 1 hour to administer. This is quite lengthy given that many other measures would have to be completed for each facility. This raised concerns about the numbers of staff who would be available to complete the measure in the main study as it was felt that asking a unit to free members of staff for perhaps over an hour could be problematical. On the other hand staff seemed at ease with the format of the questionnaire and appeared to view it as an in-depth discussion of their work. Respondents did not object to having their discussions taped for purposes of reliability. It was decided on the basis of these results to retain the format and to collect reliability data in the main study. Due to the complex nature of the data contained in the transcripts details of responses are not given here. The scripts were used, however, to aid analysis of the contingency data collected in the main study. Categories of responses were developed for scoring purposes the details of which are contained in the method section of the main study.

Active Support Schedule: The observation period necessary to complete the active support schedule appeared to take approximately an hour and a half although times varied depending on the facility concerned, the nature of the meal being prepared and the extent to which clients were involved. It did appear somewhat difficult to rate all of the client's behaviour at one time and to complete the coverage category particularly if client involvement was complex and varied. For this reason detailed notes to aid completion were produced based on the observations carried out for the pilot study (see Appendix 2). Total active support scores for each facility were 12 for Facility 1 and 40 for Facility 2.

Client Engagement and Challenging Behaviour Schedule: The observations for the 'client engagement schedule' were undertaken at the same time as those for the active support schedule. As the categories were limited and were based on the activities of individual clients the schedule proved to be relatively easy to complete. Notes were made to aid future completion (see Appendix 2) and details of the data collected are presented below in Table iv)

Table iv) Details of client engagement and challenging behaviour (pilot study)

Variable	Facility 1	Facility 2
Engagement in Domestic Activity – Largely disengaged	3	0
Engagement in Domestic Activity – engaged 50% or more	0	1
Engagement in Domestic Activity – engaged 75% or more	0	1
Types of Activities Engaged in - none	3	0
Types of Activities Engaged in – Largely adult and real	0	2
Challenging Behaviour Frequency - none	2	1
Challenging Behaviour Frequency - Occasional	2	0
Challenging Behaviour Severity - none	2	2
Challenging Behaviour Severity - mild	1	0

Management Practices Scale and Index of Community Involvement: These measures were administered by way of interview and took approximately half an hour to complete. Interviews were taped for reliability purposes and as the respondents did not object and the tapes proved easy to score it was decided to continue this practice in the main study. Respondents did find some of the questions problematical but overall the measure was quick and effective and so it was decided to retain it for the purposes of this study. Scores for the Management Practices Scale and Index of Community Involvement are presented below in Table v).

Table v) Scores for the Management Practices Scale and Index of Community Involvement (pilot study)

Variable	Facility 1	Facility 2
Management Practices Scale	22	23
Community Involvement	40	34

Index of Participation in Domestic Life (IPDL): This measure was completed by the manager, deputy or senior in charge of a facility in the form of an interview. It was felt that these would be the persons with most overall knowledge of *all* clients in a facility. Attempts were initially made to collect reliability data but this proved difficult. Alternative management figures were often absent on subsequent visits and it proved very difficult to identify when they might be available to complete the questionnaires. Because of these difficulties and due to the pressures of time anticipated it was decided to omit the collection of reliability data from the main study. The measure did prove to be very quick and easy to administer and respondents reported no problems. Details of the range of PDL data collected are presented in Table vi) below.

Table vi) Details of the range of PDL data collected (pilot study)

Variable	Facility 1	Facility 2
Participation in Domestic Life Scores	Range 0-11	Range 14

Policy Schedule: Each facility was asked to supply a copy of their schedule, which was then scored for each of the dimensions on the active support scale. On the basis of the pilot study facilities this procedure did not appear to be problematical. It was decided that in the main study asking a second person to score each facility's policy could attain inter-rater reliability data. Total policy scores were 11 for both facilities in this pilot study.

Discussion

The pilot study did prove to be a useful way of testing the measures proposed and difficulties that occurred were addressed so as to eliminate problems in the main study. It was apparent, however, that as many of the measures were new they were untested. The small amount of data collected in this pilot study meant that statistical interpretations of their reliability and validity were not possible. This in hindsight was an error that could have been addressed if more data had been collected. Given the restrictions of time and resources, however, this was not feasible or possible.

APPENDIX 2

Measures used in Main Study

a) BDS

Behaviour Development Survey

Please complete for every client separately

Adaptive and Maladaptive Behaviour

Date .....

Time .....

Respondents Name .....

Clients name for whom the BDS is being completed.....

Age of client.....

Gender of client.....

Please fill in the following questionnaire by completing each question and writing a number in each corresponding circle. The number should correspond to the level which the client is able to perform. So for example, in Question 1, if a client had no difficulty in seeing you would enter the number 1. Remember enter the number that most nearly corresponds to their ability level and please do not leave any question out.

Questions where you are asked to check all statements which apply please do not write a number in the circle but instead put a tick by all those which a person is able to do and a cross by all those they are not able to do. If they can do none of the statements given tick the category 'NONE OF THE ABOVE' as well.

For maladaptive behaviour question please enter a number for each question that corresponds to the frequency of behaviour observed by using the key provided.

Thank you for your time and co-operation.

Enter number

1. VISION with glasses if used

4 No difficulty in seeing
3 Some difficulty in seeing
2 Great difficulty in seeing
1 No vision at all

2. HEARING with hearing aid if used

4 No difficulty in hearing
3 Some difficulty in hearing
2 Great difficulty in hearing
1 No hearing at all

3. AMBULATION/WALKING

4 Walks with no difficulty
3 Limps or walks unsteadily
2 Walks only with help
1 Unable to walk

4. WALKING AND RUNNING with cane, crutches, walker if used (Check all that apply)

___ a Walks alone
___ b Walks up and downstairs alone
___ c Walks downstairs by alternating feet
___ d Runs without falling down
___ e Hops, skips or jumps
___ NONE OF THE ABOVE

5. SPEECH (Not including signing)

5 Speech easily understood
4 Speech somewhat difficult to understand
3 Speech very difficult to understand
2 Speech is not understandable but makes signs
1 Makes no sounds

6. VOCABULARY (including signing)

5 Talks about action when describing pictures
4 Names people or objects when describing pictures
3 Uses names of familiar objects
2 Asks for at least ten things by their appropriate name
1 Is nearly non-verbal

7. BODY BALANCE

6 Stands on 'tiptoe' for ten seconds if asked
5 Stands on one foot for two seconds if asked
4 Stands without support
3 Stands with support
2 Sits without support
1 Can do none of the above

8. USE OF TABLE UTENSILS

7 Use knife and fork correctly and neatly
6 Uses table knife for cutting or spreading
5 Feeds self with spoon or fork neatly
4 Feeds self with spoon - considerable spilling
3 Feeds self with spoon neatly
2 Feeds self with spoon - considerable spilling
1 Feeds self with fingers or must be fed

9. EATING IN PUBLIC

4 Orders complete meals in restaurants
3 Orders simple meals like hamburgers or hot dogs
2 Orders soft drinks in cafe or canteen
1 Does not order food in public eating places

10. DRINKING

4 Drinks without spilling, holding glass in one hand
3 Drinks from one cup or glass unassisted
2 Drinks from cup or glass - considerable spilling
1 Does not drink from cup or glass

11. CONTINENCE

5 Never has soiling accidents
4 Never has soiling accidents in the day
3 Occasionally has soiling accidents during the day
2 Frequently has soiling accidents during the day
1 Is not able to use the toilet independently at all

12. SELF CARE IN TOILET (Check ALL statements that apply)

___ a Lowers garments at the toilet without help
___ b Sits on toilet seat without help
___ c Uses toilet paper appropriately
___ d Flushes toilet after uses
___ e Puts on clothes without help
___ f Washes hands without help

13. WASHING HANDS AND FACE (Check all statements that apply)

___ a Washes hands and face with soap
___ b Washes face with soap
___ c Washes hands and face with water
___ d Dries hands and face with water
___ NONE OF THE ABOVE

14. BATHING

7 Prepares and completes bathing unaided
6 Washes and dries self completely without prompting or helping
5 Washes and dries self reasonably well with prompting
4 Washes and dries self with help
3 Attempts to soap and wash self
2 Co-operates when being washed and dried by others
1 Makes no attempt to wash or dry self

15. CARE OF CLOTHING (Check all statements that apply)

___ a Cleans shoes when needed
___ b Puts clothes in drawer or chest neatly
___ c Puts soiled clothes in proper place for washing without being reminded
___ d Hangs up clothes without being reminded
___ NONE OF THE ABOVE

16. DRESSING

6 Completely dresses self
5 Completely dresses self with verbal prompting only
4 Dresses self by pulling or putting on all clothes with verbal prompting and by fastening (zipping, buttoning, tying)
3 Dresses self with help in pulling or putting on most clothes and fastening them
2 Co-operates when dressed by extending arms or legs
1 Must be dressed completely

17. SHOES (Check ALL statements that apply)

___ a Puts on shoes correctly without assistance
___ b Ties shoe laces without assistance
___ c Unties shoe laces without assistance
___ d Removes shoes without assistance
___ NONE OF THE ABOVE

18. SENSE OF DIRECTION

4 Goes several streets from home without getting lost
3 Goes around the garden or a few streets from home without getting lost
2 Goes around house/unit without getting lost
1 Gets lost whenever s/he leaves own living room

19. MONEY HANDLING

5 Uses banking facilities independently
4 Obtains correct change but does not use banking/post office facilities
OR uses banking/post office facilities but does not obtain correct change
3 Adds coins up to one pound
2 Uses money but does not obtain the correct change
1 Does not use money

20. PURCHASING

6 Chooses and buys all own clothes without help
5 Chooses and buys some of own clothing without help
4 Makes minor purchase without help (sweets, cigarettes etc.)
3 Does shopping with slight supervision
2 Does shopping with close supervision
1 Does no supervision

21. WRITING

6 Writes sensible and understandable letters
5 Writes short notes and memos
4 Writes or prints 40 words
3 Writes or prints 10 words
2 Writes or prints own name
1 Cannot write or print any words

22. PREVERBAL EXPRESSION (Check ALL statements that apply)

___ a Is able to say (sign) at least a few words (If yes, enter 6 in circle)
___ b Nods head or smiles to express happiness
___ c Indicates hunger
___ d Indicates wants by pointing or verbal noises
___ e Expresses pleasure or anger by vocal noises
___ f Chuckles or laughs when happy
___ NONE OF THE ABOVE

23. SENTENCES

4 Sometimes uses complex sentences containing 'because', 'but', etc.
3 Asks questions using words such as 'why', 'how', 'what', etc.
2 Speaks in simple sentences
1 Is non-verbal or nearly verbal

24. READING

6 Reads books suitable for children nine years or older
5 Reads book suitable for children seven years old
4 Reads simple stories or comics
3 Recognises 10 or more words by sight
2 Recognises various signs such as 'TOILET', 'NO ENTRY'
1 Recognises no words or signs

25. COMPLEX INSTRUCTIONS (Check ALL statements that apply)

___ a Understands instructions containing prepositions e.g. 'on', 'in', 'behind' etc.
___ b Understands instructions referring to the order in which things must be done, e.g. 'first do.....then do'
___ c Understands instructions requiring a decision 'If...do this, but if not, do...'
___ d NONE OF THE ABOVE

26. NUMBERS

6 Does simple addition and/or subtraction
5 Counts 10 or more objects
4 Mechanically counts to 10
3 Counts 2 objects by saying 'one..two...'
2 Discrimination between 'one' and 'many' or 'a lot'
1 Has no understanding of numbers

27. TIME (Check all statements that apply)

___ a Tells time by clock or watch correctly
___ b understands time intervals e.g.. there is 1 hour between 3.30 and 4.30
___ c Understands time equivalent e.g.. '9.15' is the same as 'quarter past 9'
___ d Associates time on clock with various actions and events
___ NONE OF THE ABOVE

28. ROOM CLEANING

3 Cleans room well e.g. dusting, hoovering etc.
2 Cleans room but not thoroughly
1 Does not clean room at all

29. FOOD PREPARATION

4 Prepares an adequate complete meal (may use canned or frozen food)
3 Mixes and cooks simple food e.g. chips, eggs, TV dinners etc.)
2 Prepares simple food requiring no mixing or cooking
1 Does not prepare food at all

30. TABLE DECORATION

3 Clears table of breakable dishes and glassware
2 Clears table of unbreakable dishes and silverware
1 Does not clear table at all

31. JOB COMPLEXITY

3 Competitive employment or goes to sheltered employment
2 In pre-vocational training, in school, retired or ATC
1 Performs no work

32. INITIATIVE

4 Initiates most of his/her own activities e.g. tasks, activities
3 Asks if there is something for him/her to do or explores surroundings, e.g. home, garden etc.
2 Will engage in assigned activities only if assigned or directed
1 Will not engage in assigned activities e.g. putting away toys etc.

33. ATTENTION

5 Will pay attention to **purposeful** activities for more than 15 minutes e.g. playing games, reading, cleaning up etc.
4 Will pay attention to purposeful activities for at least 15 minutes
3 Will pay attention to purposeful activities for at least 10 minutes
2 Will pay attention to purposeful activities for at least 5 minutes
1 Will not pay attention to purposeful activities for as long as 5 minutes

34. PERSONAL BELONGINGS

4 Very dependable - always takes care of personal belongings
3 Usually dependable - usually takes care of personal belongings
2 Unreliable - seldom takes care of personal belongings
1 Not responsible at all - does not take care of personal belongings

35. AWARENESS OF OTHERS (Check all that apply)

___ a Recognises own family
___ b Recognises people other than family
___ c Knows information about others e.g. job, address, relation to self
___ d Knows the names of people close to him/her e.g. workmates, neighbours
___ e Knows the names of people not regularly encountered
___ NONE OF THE ABOVE

36. INTERACTION WITH OTHERS

4 Interacts with others in group activities
3 Interacts with others for at least a short period of time e.g. showing or offering objects, clothing etc.
2 Interacts with others in an imitative way with little interaction
1 Does not respond to others in a socially acceptable manner

37. PARTICIPATION IN GROUP ACTIVITIES

4 Initiates groups activities at least some of the time (leader and organiser)
3 Participates inn group activities spontaneously and eagerly (active participant)
2 Participates in group activities if encouraged to do so (passive participant)
1 Does not participate in group activities

MALADAPTIVE BEHAVIOUR

(Enter a code number for each question that corresponds to the frequency of behaviour observed by using the key provided)

4 Never observed
3 Not observed within the last 4 weeks
2 Occasionally (5 times or less per week) within the past 4 weeks
1 Frequently (more than 5 times per week) within the last 4 weeks

38. Threatens or does physical violence to others

39. Damages own or other's property

40. Disrupts other's activities

41. Uses swearing or hostile language

42. Is rebellious e.g. ignores regulations, resists following instructions

43. Runs away or attempts to run away

44. Is untrustworthy, e.g. takes other's property, lies or cheats

45. Displays stereotyped behaviour e.g.. rock body back and forward, hand flaps ○

46. Removes or tears off own clothing inappropriately ○

47. Injures staff ○

48. Is hyperactive, e.g. will not sit still for any length of time ○

49. Displays sexual behaviour (heterosexual or homosexual) that is socially unacceptable e.g. forcible advances, public masturbation, public exposure etc. . ○

50. Requires physical restraint, or time out of the situation/environment on occasions ○

51. Is withdrawn, e.g. extreme inactivity, extreme shyness, extreme unresponsiveness ○

b) Consequences Schedule

Interview Schedule

Tell respondent :

I want to talk to you today about the kind of tasks which you do at work and the persons whom you come into contact with in the course of your work. After this I would like you to fill in a brief questionnaire about how stressful your work is. Before we start, let me emphasise that all you replies will be treated in the strictest confidence.

Complete the first sheet in which date, time etc. is recorded and respondent is asked several questions about themselves.

The respondent is presented with a task which they do at work (the order of tasks will be altered for each respondent).

The respondent may be prompted if they are unable to understand definition of task suggested, with the examples given.

Prompt questions as specified can also be used if respondent has difficulty in understanding question asked.

Prompt with list of persons specified in relation to questions that ask respondent to name persons whom they associate with specific consequences.

Tell respondent :

Thank you very much for participating in this study.

Task : Paperwork : These are tasks like filling in residents files, writing in a daily diary, writing reports.

I want you to think about the kind of paperwork and administration tasks which you do at work. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** do these paperwork tasks? (can repeat the paperwork tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do***, do these paperwork tasks? (can repeat the paperwork tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write persons identified next to each consequence). Prompt questions is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do these paperwork tasks? (can repeat the paperwork tasks which the person has identified). Prompt question : what makes it easier for you to do this task?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake paperwork tasks ?

What sorts of things prevent you from doing .....? (repeat the paperwork tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake paperwork tasks ?

Task : Unit Management : These are tasks like giving out medication, answering the phone, dealing with enquires.

I want you to think about the kind of unit management tasks which you do at work, like giving out medication, or dealing with enquires. **<u>What sort of tasks do you do like this ?</u>**

Would (Does) anything happen to you, good or bad, if you ***don't*** do these unit management tasks? (can repeat the unit management tasks which the person has identified). **<u>What would happen?</u>** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

<u>Who would</u> .....? (repeat the consequences identified one by one and write the persons identified next to each consequence.) Prompt questions is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do***, do these unit management tasks? (can repeat the unit management tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of conseqùences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt questions is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the unit management tasks which the person has identified). Prompt question : what makes it easier for you to do this task?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake unit management tasks ?

What sorts of things prevent you from doing .....? (repeat the unit management tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties (repeat constraints identified)? Prompt question : who creates the situation where you are less able to undertake unit management tasks ?

Task : Attending staff meetings or supervision sessions

I want you to think about attending staff meetings or supervision sessions. **Do you do either of these tasks at work ?**

Would anything happen to you, good or bad, if you ***don't*** attend staff meetings or supervision sessions ? (can repeat the staff meetings or supervision sessions which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you , good or bad, if you ***do*** attend staff meetings or supervision sessions.....? (can repeat the staff meetings and supervision tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the staff meetings and supervision tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake staff meetings and supervision tasks ?

What sorts of things prevent you from doing .....? (repeat the staff meetings and supervision tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake staff meetings and supervision tasks ?

Task : Domestic tasks which are undertaken without the involvement of residents : These are tasks like cleaning.

I want you to think about the kind of domestic tasks which are undertaken without the involvement of residents. In other words the domestic tasks which you do by yourself. **What sort of tasks do you do like this ?**

Would anything happen to you, good or bad, if you ***don't*** do these domestic tasks without the residents? (repeat the domestic tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would anything happen to you, good or bad, if you ***do,*** do these domestic tasks without the involvement of the residents? (repeat the domestic tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the domestic tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake domestic tasks ?

What sorts of things prevent you from doing .....? (repeat the domestic tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake domestic tasks ?

Task : Domestic tasks which are undertaken with the involvement of residents : These are tasks like supporting a resident in cooking their own meal.

I want you to think about the kind of domestic tasks which are undertaken with the involvement of residents. In other words when you support the resident to do it for themselves. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** do these domestic tasks with residents? (can repeat the domestic tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do,*** do these domestic tasks involving residents? (can repeat the domestic tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task? Or how would do you feel if you do this task ?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the domestic tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake domestic tasks involving the residents?

What sorts of things prevent you from doing .....? (repeat the domestic tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake domestic tasks involving residents ?

Task : Personal care tasks which you do for the resident : These are tasks like bathing them, feeding them.

I want you to think about the kind of personal care tasks which you do for the resident. In other words when you do it for them rather than supporting them to do it for themselves. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** do these personal care tasks for residents? (repeat the personal care tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt questions is : Which people at work would be most likely to do this/enforce these consequences ?

Would anything happen to you, good or bad, if you ***do,*** do these personal care tasks for residents? (can repeat the personal care tasks which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the personal care tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake personal care tasks ?

What sorts of things prevent you from doing .....? (repeat the personal care tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake personal care tasks ?

Task : Personal care tasks which you help the resident to do for themselves.

I want you to think about the kind of personal care tasks which you help residents to do for themselves rather than doing it for them. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** help residents to do personal care tasks for themselves? (repeat the personal care tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** help residents to do personal care tasks for themselves? (can repeat the personal care tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the personal care tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake personal care tasks involving the residents ?

What sorts of things prevent you from doing .....? (repeat the personal care tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake personal care tasks involving residents ?

Task : Following a training or therapy programme with a resident such as money handling or travel training.

I want you to think about the kind of tasks which you do which involve following a training or therapy programme with a client. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** follow a training/therapy programme with a resident? (can repeat the training/therapy tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** follow a training or therapy programme with a resident ? (can repeat the tasks which involve following a training or therapy programme with a client which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt questions is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the tasks which involve following a training or therapy programme with a client which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake tasks which involve following a training or therapy programme with a client ?

What sorts of things prevent you from doing .....? (repeat the tasks which involve following a training or therapy programme with a client which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake tasks which involve following a training or therapy programme with a client ?

Task : Escorting a client somewhere : These are tasks like escorting them to the training centre, to the doctors, to appointments, etc.

I want you to think about the kind of tasks that involve escorting a client somewhere.
What sort of tasks do you do like this ?

Would (Does) anything happen to you, good or bad, if you ***don't*** escort a resident somewhere ? (can repeat the tasks which involve escorting a client somewhere which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** escort a resident somewhere ? (can repeat the tasks which involve escorting a client somewhere which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the tasks which involve escorting a client somewhere which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake escorting a client somewhere ?

What sorts of things prevent you from doing .....? (repeat the tasks which involve escorting a client somewhere which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake escorting a client somewhere ?

Task : Advocating or representing for a client : These are tasks like attending meetings or reviews.

I want you to think about the kind of tasks which you do which involve advocating or representing for a resident. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** advocate or represent for a resident ? (can repeat the tasks which involve advocating or representing for a resident which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** advocate or represent for a resident ? (can repeat the tasks which involve advocating or representing for a resident which the person has identified). **What would happen?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the tasks which involve advocating or representing for a resident which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake tasks involving advocating or representing for a resident ?

What sorts of things prevent you from doing .....? (repeat the tasks which involve advocating or representing for a resident which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake tasks which involve advocating or representing for a resident ?

Task : Socialising with a resident : These are tasks like going out to the pub, to the cinema, watching a video.

I want you to think about the kind of tasks you do which involve socialising with a resident. **What sort of tasks do you do like this ?**

Would (Does) anything happen to you, good or bad, if you ***don't*** socialise with a resident? (can repeat the socialising tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the person identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** socialise with a resident? (can repeat the tasks which involve socialising with a resident which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the tasks which involve socialising with a resident which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake tasks which involve socialising with a resident ?

What sorts of things prevent you from doing .....? (repeat the tasks which involve socialising with a resident which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake tasks which involve socialising with a resident ?

Task : Non-work tasks : These are tasks like having a break, having a cigarette, chatting about subjects not related to work.

I want you to think about the kind of non-work tasks which you do. **What sort of tasks do you do like this ?**

Would (Does) anything happens to you, good or bad, if you ***don't*** undertake non-work tasks? (can repeat the non-work tasks which the person has identified). **What would happen ?** (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***didn't*** do these tasks?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

Would (Does) anything happen to you, good or bad, if you ***do*** undertake non-work tasks? (can repeat the non-work tasks which the person has identified). **What would happen** ? (What does happen?) Prompt question is : What sort of consequences, good or bad, would occur for you if you ***do*** this task?

Who would .....? (repeat the consequences identified one by one and write the persons identified next to each consequence). Prompt question is : Which people at work would be most likely to do this/enforce these consequences ?

What sorts of things help you to do .....? (repeat the non-work tasks which the person has identified). Prompt question : what makes it easier for you to do this task ?

Who do you identify with making .....(supports identified) possible ? Prompt question : who creates the situation where you are more able to undertake non-work tasks ?

What sorts of things prevent you from doing .....? (repeat the non-work tasks which the person has identified). Prompt question : what makes it more difficult for you to do this task ?

Who do you identify with making/creating these difficulties ? Prompt question : who creates the situation where you are less able to undertake non-work tasks ?

People

The residents

Upper managers

Your co-workers

Your house manager

Your senior or deputy

Professionals

Yourself

The general public

Residents families

Workers in Other Services for the Learning Disabled

Coding Schedule for Consequences Data

Organisation Identifier_____ Facility Identifier_____

Original or reliability _____ Staff identifier _____

Consequences (see below for scoring)

Task	Range										
Unit Management do/performed											
Unit Management do not do/not performed											
Paperwork do											
Paperwork do not											
Escorting do											
Escorting do not											
Socialising do											
Socialising do not											
Supported Personal Care do											
Supported Personal Care do not											
Personal Care do											
Personal Care do not											
Supported Domestic Tasks do											
Supported Domestic Tasks do not											
Domestic Tasks do											
Domestic Tasks do not											

Advocacy do											
Advocacy do not											
Training/Therapy do											
Training/ Therapy do not											
Staff meetings/Supervision do											
Staff meeting supervisions do not											
Staff Training do											
Staff Training do not											
Non-Work Tasks do											
Non-Work Tasks do not											

Coding Categories for Consequences Schedule

1 - weak negative uncertain: (Uncertainty) respondents are uncertain if weak negative consequences will follow. Use words like might, maybe, not sure, I think, I suppose. (Weak negative) Respondent is dealt with indirectly (e.g. a message passed on in a communication book). Others may be aware that respondent has not performed a task correctly (e.g. through a review of notes or via observation) but nothing results. Respondents identifies that someone's expectations are unmet or suggests that someone may feel that they are lacking in their duty. Weak, less obvious or intangible effects are identified e.g. a lack of co-operation, someone looks scruffy, mild CB, poor communication, lack of information.

2 – weak negative certain: respondents are certain that weak negative consequences will occur. (Certainty) Uses words like would, definitely, I know, for sure, I'm certain, always.

3 – strong negative uncertain: Respondents are uncertain if strong negative consequences will occur. (Strong negative) Respondents are dealt with personally, are told off or directly asked for an explanation or is questioned about their behaviour. Respondent is disciplined, receives a written or verbal warning. The issue is taken up the organisational hierarchy to be dealt with by a more senior figure. Respondent identifies obvious and serious effects occurring such as serious/definite challenging behaviour (property damage, SIB, aggression) serious effect on well-being, job satisfaction or a major disturbance results.

4 – strong negative certain: Respondent certain (definitely, I'm certain) that strong negative consequences will occur

5 - no consequences uncertain: Respondent uncertain if no consequences would occur.

6 – no consequences certain: Respondent certain that no consequences will occur.

7 – weak positive uncertain: (Weak positive) Respondent receives only indirect feedback, praise or encouragement (e.g. might be written in a communication book) or receives the above as part of a team rather than personally. Respondent suggests that they feel people are aware that they have done a task correctly but no feedback is given as a result (for example, persons keep a review of records or observe participant performing the task). Respondent suggests that someone's expectations have been met or that part of their duty has been completed. Respondent identifies only weak or less obvious decreases in disruptive behaviour or less obvious or an indefinite increase in benefits such as small or intangible improvements in behaviour, well-being or job satisfaction. Respondents identifies intangible or impersonal benefits such as access to more information or better communication.

8 – weak positive certain: Respondent is certain (definitely, I would) that weak positive consequences will occur.

9 – strong positive uncertain: Respondent names but is uncertain (might, I think etc.) if strong positive consequences will occur. (Strong positive) Respondent receives personal feedback, praise or encouragement. Respondent identifies personal promotion or career

enhancement prospects or personal rewards or money, access to training or resources. Respondent identifies a definite or obvious decrease in a serious disruptive behaviour or an obvious and definite increase in benefits such as improved behaviour, well-being or job satisfaction.

10- strong positive certain: Respondent is certain that strong positive consequences will occur (definitely, I'm certain, I know etc)

Codes for Audiences

1. Residents: persons with a learning disability living permanently in a facility.
2. Upper Mangers: Managers of a service above the level of house manager, for example regional manager or area manager.
3. Co-workers: Persons who are work in a service and who occupy the employment status of 'direct-care worker'.
4. House Manager: Manager of an individual facility
5. Deputy Manager/Senior: Manager who is below the rank of house manager, i.e. their deputy or a direct-care worker with management
6. 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).
7. Yourself: The direct-care worker themselves
8. 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.
9. Resident's families: Family members related to the residents in a facility and who have contact with that resident.
10. 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.
11. 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.
12. Other: A person or persons not identified as belonging to any of the other categories listed.

13. 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.
14. 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.

Record entries as follows eg.10/4 =s strong positive consequences from a manager.

Range

0 = no involvement in tasks

1 = involved in a limited range of tasks

2 = involved in to a great degree in this task.

Examples of Coding Categories for Consequences Schedule

1 - weak negative uncertain:

'staff might pick up on it if the clients went backwards'

'The psychologist might be aware so I might have to say something if I hadn't done it'

2 – weak negative certain:

'the service user would miss out and the service user would become bored'

'I would not be popular with the D.O.C. (Day Opportunities Centre)'

'The co-workers would be aware if I didn't do it'.

3 – strong negative uncertain:

'The key-workers would probably want to sit down with me and talk about it'.

'I think I would expect a ticking off. I'd probably get a bollocking'.

4 – strong negative certain:

'I would be severely disciplined or sacked. It is recorded. The next person would advise and tell the Team Leader or deputy and if it was serious it would go up the line'.

'I would definitely be taken to one side by the team leader and be asked to explain what had happened. She oversees and follows it up. I would have to tell her the outcome'.

5 - no consequences uncertain:

'I don't know'.

'I don't think anything would happen'.

'I'm not sure what would happen'.

6 – no consequences certain:

'Nothing would happen'.

'No-one notices. Nobody says anything'.

7 – weak positive uncertain:

'I think the manager or deputy might be aware if you've achieved something but I don't think they'd feedback'.

'I think people are aware of what you've done'.

8 – weak positive certain:

'her mother and the Team Leader are aware when I've advocated and it's recorded in the files'.

9 – strong positive uncertain:

'I suppose if I did something different the co-workers might tell me personally that it was good'.

' People would probably say directly to me if I'd done well'.

10- strong positive certain:

'I find the Team Leader very encouraging and he gives feedback in supervision. They always give recognition for a job well done. They give feedback at the time or in a supervision'.

' Clients are full of gratitude for what you do for them and they always say thank you. I love going out with clients. I personally enjoy it'.

c) Management Practices Scale and Index of Community Involvement

Management Practices Scale and Index of Community Involvement

---

Date.....

Time.....

Name.....

House/Unit Name.....

Interviewer.....

Strictly Confidential

I want to talk to you today about the residents in your facility. First, I want to go through the daily activities with you as they happened YESTERDAY. After this, I want to discuss some other aspects of the residents' lives. Before we start, let me emphasise that all your replies will be treated in the strictest confidence.

---

1. What time did the residents get up yesterday?

First resident_____

Last resident _____

Number of residents now in the unit/house_____

.....

2. Do the residents always get up at this time?

(2) All yes_____

(1) Yes except on a specified day_____

(0) All no_____

Other _____

.....

3. What time was breakfast?

Began_____ Ended _____

.....

4. Is it always at that time?

(2) Always_____

(1) Different on specified day_____

(0) Different on weekends _____

.....

5. What did they do after breakfast and before work/day centre?

_____

_____

.....

6. How many residents went out to work or to a day program/centre? _

_____

First left _____

Last left _____

.....

7. How did residents get to work ?

Private bus _____

Public Transport _____

Walk_____

Other

_____

.....

7b. Do residents travel together?

(2) All in one group _____

(1) Mixed pattern _____

(0) No more than 3 in a group_____

.....

8. What time did residents return from work?

First returned _____

Last returned_____

.....

9. What happened after return from work and before dinner?

_____

_____

.....

10. What time was dinner?

Began _____

Ended _____

.....

11. Is it always at that time?

(2) Always _____

(1) Different on specified days _____

(0) Different on weekends _____

.....

12. What happened after dinner yesterday?

_____

_____

.....

13. How many residents had a bath/shower yesterday?

_____

.....

14. Are there set times when the residents have their baths/showers?

(2) Yes all scheduled _____

(1) Some scheduled _____

(0) Individual choice _____

.....

15. What time did the residents go to bed last night?

First resident _____

Last resident _____

.....

16. Do they always go to bed at that time?

(2) All yes _____

(1) Yes except on specified days _____

(0) All no _____

Other _____

.....

17. Are residents woken up to go to the toilet at night?

(2) All residents _____

(1) Some residents _____

(0) None _____

.....

18. Are there rules about when the TV, music etc. can be played?

(2) Strictly scheduled _____

(1) Some time rules _____

(0) Residents' own discretion _____

.....

19. Is there a time when residents have to be in the house at night?

_____

What is that time? _____

.....

20. Is it the same every night?

(2) Yes_____

(1) Yes, except specified nights _____

(0) None_____

.....

21. Is it the same for all residents?

(2) Yes all _____

(1) Yes, except for specified people _____

(0) No, or none _____

.....

22. Is the main door to the unit/house ever locked?

_____

If yes how many residents have their own keys?

(2) None _____

(1) Some _____

(0) All _____

.....

23a. When can relatives visit the house/unit?

(2) Certain days only _____

(1) Any day, but set times _____

(0) Any time _____

.....

23b. When can friends visit the house/unit?

(2) Certain days only _____

(1) Any day, but set times _____

(0) Anytime _____

.....

24. Are there any rules about resident's relationships?

(2) Relationships not allowed _____

(1) Allowed under specified conditions or times _____

Probe: What specific conditions? _____

(0) No restrictions_____

.....

25. Are there any restrictions about when residents can use their bedrooms?

(2) Only to change/nightime _____

(1) Under specified conditions _____

Probe: What specific conditions ? _____

(0) Any time _____

.....

26. When may residents use the kitchen?

(2) Not at all _____

(1) Under supervision, specified times _____

Probe: Which residents? _____

(0) Any time _____

.....

27. Are there restrictions on the use of any other area of the residence?

(2) Certain areas restricted always _____

(1) Certain areas restricted certain times _____

(0) No restrictions _____

Other: _____

.....

Now I want to talk about a number of other aspects of the residents' lives.

.....

28. How/where do residents keep their clothes and toiletries?

(2) Stored communally (altogether) _____ (Some/All)

(1) Stored shared _____ (Some/All)

(0) Stored privately _____ (Some/All)

Other: _____

.....
.....

29. How many of the residents have T.Vs, Music Centres, Videos of their own?

Number _____

(2) None_____

(1) Some _____

(0) All _____

.....

30. What is done with these items?

(2) Kept and used under specific conditions_____

(1) Used communally _____

(0) Used and shared at owner's discretion _____

Other: _____

.....

31. How many of the residents have been clothes shopping in the past month?
_____

.....

32. How are meals planned at the house/unit?

(2) Staff only _____

(1) Staff and certain residents _____

(0) Residents only _____

Other: _____

.....

33. Who shops for the groceries?

(2) Staff only _____

(1) Staff and certain residents _____

(0) Residents only _____

Other:

.....

34. Who shops for residents' personal articles and clothing?

(2) Staff only _____

(1) Staff and certain residents _____

(0) Residents only _____

Other: _____

.....

35. How many residents have bank/post office accounts?

_____

More than one account? _____

How many residents have been to the bank in the last month? _____

.....

36. How is the banking handled?

(2) Staff only for all _____

(1) Staff and certain residents _____

(0) Residents only _____

.....

37. How are the household duties allocated (e.g., washing up, hoovering etc.).

(2) Staff decide who'll do it_____

(1) Staff and residents decide _____

(0) Residents decide _____

Other: _____

.....

38. How often are parties or social events held in the house/unit?

_____

.....

39. Who organises parties?

(2) Staff only _____

(1) Staff and certain residents _____

(0) Residents only _____

Other: _____

.....

40. Do staff invite their friends and relatives to parties too?

_____

How often do friends and relatives of staff visit ?

(2) Rarely _____

(1) Sometimes (once/month or so) _____

(0) Frequently (once/week) _____

.....

41. Do staff eat with residents at meals?

(2) Seldom, usually supervise during meals _____

(1) Some staff sit but don't eat _____

(0) All staff frequently _____

.....

42. Do the residents watch TV as a group in the evenings?

_____

Do staff sit and watch TV with the residents?

(2) Seldom, Usually supervise only _____

(1) Someone sometimes does _____

(0) Someone usually does _____

.....

43. How are birthdays celebrated in the house/unit?

(2) Joint parties/no individual recognition_____

(1) Mixed pattern (some joint/some individuals) _____

(0) Individual presents, parties _____

Other: _____

.....

44. Can a resident have a pet?

(2) None allowed _____

(1) Common only _____

(0) Individual pets allowed _____

.....

45. What hobbies, crafts, etc. do the residents enjoy?

_____

_____

Do the staff work on these hobbies with residents?

(2) Rarely _____

(1) Someone sometimes does _____

(0) Someone usually does with at least some residents

_____

.....

46. How are the residents' medical needs usually met?

(2) Doctor comes to the residence for all _____

(1) Residents all go to the same doctors _____

(0) Residents have their own individual personal doctors

_____

.....

47. How are the residents' dental needs met?

(2) One dentist for all _____

(1) Mixed pattern _____

(0) Individual dentist _____

Other: _____

.....

48. How many residents have been to stay with a relative for a night or longer during the past three months ?

_____

.....

49. How many residents have been out to a friend's house in the last month?

_____

.....

50. How many residents have had friends in for a meal in the last month?

_____

.....

51. How many residents have been to the activities listed below in the last month, and how did they go to the activity in each instance?

(2) Whole group

(1) Mixed

(0) Individual

Activity	No. in last month	Whole group	Mixed	Individual	With staff (tick)
Hairdresser					
Restaurant or cafe					
Museum					

Place of worship					
Concert					
Theatre					
Sports event e.g. swimming					
Social club					
Pub					
Cinema					
Continuing education					

Summary score for typical pattern above: (2) Whole group (1) Mixed (0) Individual

.....

53. How many of the residents have been on an outing with staff in the last ***three*** months then?

(2) None _____

(1) Some _____

(0) All _____

.....

54. How many of the residents went away on holiday this past year?

_____

.....

55. Where/how did they go?

(2) All went as a group _____

(1) Mixed _____

(0) Individual trips_____

Other: _____

.....

Thank you very much for your help in completing this questionnaire.

d) Index of Participation in Domestic Life

Client Identifier _____ Facility Identifier_____

Date_____

DOES THE CLIENT DO OR HELP TO DO ANY OF THE FOLLOWING JOBS (PUT TICK IN APPROPRIATE BOX)

JOB	Does alone or with other residents. No staff help. (2)	Helps staff with (1)	Does not do (0)
Shopping for food			
Preparing meals			
Setting table			
Serving meals			
Washing up			
Cleaning kitchen			
Cleaning living and dining rooms			
Cleaning own bedroom			
Cleaning bathroom and toilet			
Shopping for supplies			
Doing own washing			
Doing own ironing			
Looking after the garden			
TOTAL SCORE = Client Identifier =	6x2 =12	4x1 = 4	3x0 =0

e) Malaise Inventory

Unit/House Name.....

Date.....

Name/Staff Idenitifer.....

Now, more generally, we would like to ask you about particular problems you may recently have had with your health :

PLEASE RING EITHER YES OR NO FOR EACH ITEM

Do you often have backache ?

Yes No

Do you feel tired most of the time ?

Yes No

Do you often feel miserable or depressed ?

Yes No

Do you usually have great difficulty in falling asleep or staying asleep ?

Yes No

Do you usually wake unnecessarily early in the morning ?

Yes No

Do you wear yourself out worrying about your health ?

Yes No

Do you often get into a violent rage ?

Yes No

Do people often annoy or irritate you ?

Yes No

Have you at times had a twitching of the face, head or shoulders ?

Yes No

Do you suddenly become scared for no good reason ?

Yes No

Are you scared to be alone when there are no friends near you ?

Yes No

Are you easily upset or irritated ?

Yes No

Are you frightened about going out alone or of meeting people ?

Yes No

Are you constantly keyed up or jittery ?

Yes No

Do you suffer from indigestion ?

Yes No

Do you often suffer from an upset stomach ?

Yes No

Is your appetite poor ?

Yes No

Does every little thing get on your nerves and wear you out ?

Yes No

Does your heart often race like mad ?

Yes No

Do you often have bad pains in your eyes ?

Yes No

Are you troubled with rheumatism or fibrositis ?

Yes No

Have you ever has a nervous breakdown ?

Yes No

f) Client Engagement and Challenging Behaviour Rating Scale

Facility Identifier _____ Date_____

Time _____ Observer_____

Reliability Observer_____ Number of Staff _____

Number of Clients_____

Client Identifier	Engaged in Meaningful Activity	Type of Activity Engaged In	Challenging Behaviour Frequency	Challenging Behaviour Severity

Engaged in Meaningful Activity

0 = largely disengaged – this category is defined by the fact that the person spends almost all (95%>) of the observation disengaged. Person is also classified as disengaged if they are only fleetingly engaged during an observation. For example, if during the whole observation a client only touches a spoon when staff asks them to be involved then this will count as largely disengaged.

1 = engaged < 50% of the time

2 = engaged > 50% but less than 75%

3 = engaged > 75% of the time

Type of Activities Engaged In

0 = none

1 = largely childish or pretend – Pretend refers to activities which either make more work (i.e. Being asked to hoover a floor after it has already been done) or which staff re-do or take over (i.e. client just stands there whilst staff do the task).

2 = mixed child/adult- Real and meaningful tasks are those which make a useful contribution to the work of the house or which provide meaningful or constructive activity for the client i.e. partaking in an adult hobby. Staff do not re-do the task afterwards and client participates rather than the task being 'taken over' by staff.
3 = largely adult and real

Challenging Behaviour Frequency

0 = none
1 = occasional (< 25% of the time)
2 = moderate (25-75% of the time)
3 = frequent (> 75% of the time)

Challenging Behaviour Severity

0 = none
1 = mild- that behaviour which causes only minor disruption to the environment – e.g. mild stereotyping, repetitive verbalisation, repetitive noises
2 = moderate – that behaviour which causes moderate disruption to the environment – e.g. loud wailing, rocking furniture, slapping furniture, inappropriate verbalisations that are sexual or swearing, accentuated stereotyping (e.g. very pronounced rocking or constant twirling).
3 = severe – that behaviour which causes serious disruption to the environment e.g. SIB, property damage, aggression towards others (threatened or real), sexually inappropriate behaviour (public masturbation, exposure, sexual aggression) pica etc.

g) Active Support Schedule

Active Support Measure
Jim Mansell and Teresa Elliott

Observer:		House code:	
Reliability:		Start time:	Date:
No clients present:	No staff present:		Duration:

QUALITY: RATE 0-3 as definitions; COVERAGE: applies to about ¼, ½, ¾ or all clients

Age-appropriateness — QUALITY | COVERAGE

0 Not applicable because no activities provided
1 Most client activities/materials are childish eg form-boards, building bricks
2 Childish and adult client activities and materials equally represented
3 Most client activities and materials are adult

'Real' activities

0 Not applicable because no activities provided
1 Most client activities are pretend or make-work (eg staff redo task afterwards)
2 Most client activities are real, but very simple (eg getting out and putting away)
3 Most client activities are real and include complex client activities like cooking, using equipment

Choice of activities

0 Not applicable because no activities provided
1 Client activities vary over time but no choice
2 Choice of activities offered to clients at start but then clients expected to stick at it
3 More than one activity going on at a time and clients move between them when ready

Demands presented carefully

0 Not applicable because no activities provided
1 Activities not prepared (so clients kept waiting or have 'false starts') or clumsily presented (eg too tentative or too oppressive).
2 Some demands presented appropriately but many mistakes
3 Materials well prepared and tasks presented using appropriate communication eg handing materials, gestures as well as speech.

Tasks analysed to offer components of appropriate developmental level

0 Not applicable because no activities provided
1 Most opportunities to involve clients (eg in simple parts of tasks) missed
2 Some opportunities to involve clients (eg in simple parts of tasks) taken but many missed
3 Most opportunities to involve clients (eg in simple parts of tasks) taken

Sufficient staff contact

0 Clients typically left alone by staff
1 Occasional contact from staff
2 Moderate levels of contact from staff but many instances where needed support is not immediately available because staff are otherwise occupied
3 Help and support for clients of all levels of disability always on hand

Graded assistance to ensure client success

0 Not applicable because no assistance provided
1 Occasional assistance from staff or assistance of only one level (eg instructions) provided
2 Moderate levels of assistance from staff but many instances where needed assistance not given (missing or wrong level of assistance given)
3 Graded assistance frequently given

Speech matches developmental level of client

0 Not applicable because no speech provided
1 Most speech much too complicated or much too simple for client ability level
2 Some speech matches client ability level but some too complicated or too simple
3 Most speech matches client ability level

Interpersonal warmth

0 Not applicable because no interaction
1 Interactions typically cold, formal and/or disrespectful (eg teasing, offensive)
2 Mixed interactions (perhaps because staff differ)
3 Most interactions warm and respectful

Differential reinforcement of other behaviour

0 Not applicable because no contact provided
1 Most staff attention contingent on maladaptive behaviour
2 Apparently near-random allocation of staff attention
3 Most staff attention contingent on adaptive behaviour

Staff notice and respond to client communication

0 Not applicable because no contact provided by staff
1 Few attempts by clients to communicate responded to by staff
2 Some communication responded to but some overlooked or ignored
3 Most attempts to communicate by clients noticed and responded to

Staff manage serious challenging behaviour well

0 Not applicable because no attempted aggression or self-injury or significant property damage (eg smashing, breaking)
1 Major disruption caused by challenging behaviour; staff responses either uncoordinated, ineffective or punitive
2 Staff cope moderately well
3 Staff manage challenging behaviour well; respond effectively, non-punitively, in a co-ordinated way and do not allow challenging behaviour to disrupt flow of activity

Staff work as a team

0 Staff apparently uncoordinated, working as individuals
1 Staff work to a rigid timetable irrespective of client needs or circumstances
2 Staff plan as they go, co-ordinating and liaising but not planning ahead. Clients are sometimes accidentally lost between staff, activities overlooked.
3 Staff plan what they do in advance and adjust plan to reflect client needs. Clients pass from one activity to another without big gaps and with support they need available to them

Teaching embedded in everyday activities

0 Not applicable because no teaching or no activities
1 Most opportunities to teach clients incidentally missed
2 Some opportunities to teach clients incidentally missed
3 Most opportunities to teach clients incidentally taken

Specific, written individual programmes in routine use

0 No written individual programmes (eg for teaching, behaviour management or therapy) in use
1 One or two written programmes observed in use
2 Some written programmes observed in use
3 Written programmes extensively observed in use

Jim Mansell
active4.doc
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Coding Schedule for Active Support Schedule

Age Appropriateness

Activities can be defined as a definite pursuit that has a beginning and end, i.e. a timescale, and usually indicate a structure and process. Activities could include laying a table, preparing vegetables, using equipment to cook a meal. Activities would not include intangible or passing events like the simple act of passing someone a cup, flapping a piece of paper etc.

Childish activities are those that you would not normally expect an adult to be involved in (irrespective of gender or ability) for example playing with a child's toy with staff, reading a child's book with staff etc. Remember that these must constitute an activity as suggested above. Adult activities are those which you would normally expect an adult to be involved in (irrespective of gender or ability) such as cleaning a room, watering plants, preparing a meal, reading an adult book with staff etc.

Real Activities

Simple activities are those which do not involve the resident in more elaborate or multiple structured tasks. Simple activities would be where the client, for example is involved in making a cup of tea but purely at the level of getting cups our and putting teabags in a pot rather than using the kettle, pouring hot water in, pouring tea out etc.

Complex activities are those which involve elaborate actions, use of equipment or a degree of risk. For example operating the washing machine, operating a hoover, cooking food rather than preparing it etc.

Choice of Activities

This is an attempt to ascertain if the resident is involved in more than one activity over the course of an observation and whether the client exercises a choice over their involvement in an activity.

Demands Presented Carefully

This is an attempt to judge the extent to which materials/activities are prepared prior to client involvement and the way the demands are presented whilst an activity is in operation. Unprepared or badly presented tasks will be seen when the resident involved spends periods of time waiting for the next stage to commence or they begin a task and then have to stop and start throughout the time which the activity takes. Tentative presentations are evident when the staff member seems unsure of how to make a demand or are faltering. Oppressive demands are evident when the staff member makes overwhelming demands which the resident is unable to cope with or when they insist on a demand being followed.

Well-prepared materials and tasks should show evidence or prior groundwork being undertaken by staff. Staff will be seen to be working in a non-oppressive manner and will orientate their demands to the needs and ability level of the client – i.e. by using a range of techniques to present the demands, using verbal and non-verbal cues, hand-over-hand etc.

Tasks Analysed to Offer Components of Appropriate Developmental Level.

This is an attempt to gauge the extent to which staff involve residents in as many opportunities as exist during the observation. For example, if the rubbish needs to be bagged up and taken out to the dustbin do staff involve the client and to what extent? Does the resident just carry the rubbish out or do they become involved in the whole process or are they not involved at all and the opportunity is missed?

Sufficient Staff Contact

This is an attempt to gauge the extent to which clients receive contact (whether verbal or non-verbal) by staff especially when the resident is in need of support from staff. For example, is the resident left alone during the observation period, are there occasional or gestural contacts from staff or are there some instances where support and contact are forthcoming from some or all staff but others where the support is missing or from only one member of staff (others ignore) or is there a sufficient amount of contact relative to the needs of the clients and staff always respond to clients offering appropriate support?

Graded Assistance

This is an attempt to judge the complexity of support offered to clients present. Occasional assistance or simple assistance would be when only limited or simplistic assistance is given when more complex assistance is preferable or needed. Moderate levels of assistance are when staff give a reasonable degree of help but there are obvious occasions when it is note given or when help is inappropriate, i.e. using hand-over-hand instead of allowing the client to complete the task alone – using only instructions when explanations are obviously necessary – taking over part of the task when the resident may have been able to complete it. Graded assistance frequently given will be evident when staff offer assistance as and when it is required and when staff match the assistance needed to the situation, the clients ability and the complexity of the task, i.e. using gestural, physical or verbal prompts when required, providing needed explanations, asking questions of the client etc.

Speech Matches Developmental Level of Client

Speech can include signing and non-verbal communication as well as the verbal instances observed. Judgement must take place on that communication observed even if it is slight. Speech that is too complicated for a client will be evident if the resident has obviously not understood the instruction or responds inappropriately to staff speech. Too simple communication would be evident when the client has been seen to use complex speech but the staff member uses simple and non-complex words or gestures.

Interpersonal Warmth.

Cold formal interactions – staff appear to distance themselves from clients by only addressing formal comments to them. There is no engagement in informal discussions with the residents about themselves or unrelated topics such as likes or dislikes, hobbies or interests etc. Speech or gestures might only be evident around requesting a resident to do something and no other speech or interaction is observed. Disrespectful interactions would be evident when the staff talk about the resident in front of them or tease the resident in a way that humiliates them and which they do obviously not enjoy or participate in or when the interaction is abusive.

Staff may differ both in their response to different residents or the same resident at different times during the interaction or there may be differences between staff members.

Warm and respectful interactions are evident when the resident is included in most discussions many of which will be about topics unrelated to instructions around task performance. Jokes will include the resident and will not be at their expense such as when they are teased. Interactions will display patience and will respect both the age, gender, ethnicity or other characteristics of the residents. For example, younger staff will acknowledge and respect the age of an older resident (i.e. young staff not calling an older man darling etc).

Differential Reinforcement of Other Behaviour

Maladaptive behaviour is that which is disruptive, unproductive or challenging. For example, verbal abuse, repetitive verbalisations, stereotyping, throwing objects, ripping clothes etc.

Adaptive behaviour is that which is productive, shows use of skills, appropriate verbalisations etc.

Staff Notice and Respond to Client Communication

Client communication can be either verbal or non-verbal (e.g. gestural, attempts to gain eye contact etc). Communication should be considered appropriate in the sense of adaptive, i.e. if staff ignore repetitive comments from a resident after telling them that they have answered their question and would rather talk about something elase then this is appropriate and adaptive.

Staff Manage Serious Challenging Behaviour Well

Aggression can be considered as those physical behaviours which are directed at another person by the resident – e.g. hitting , scratching, hair pulling etc.

SIB are those acts of aggression which the resident directs towards themselves and which cause obvious effects e.g. eye-poking, head banging, self-mutilation, self-slapping etc.

Property damage are those behaviours when cause damage to inanimate objects in the environment, e.g. smashing a sup, throwing a piece of furniture, ripping up a book etc.

Uncoordinated, ineffective or punitive responses will be evident when staff appear to react in a way that makes no difference to the behaviour displayed, when it increases the behaviour, when each member of staff acts in a different way or when the resident is punished in some way for the behaviour or the reaction of staff is inappropriate. For example, in some situation it may be appropriate for the person to leave the room but this may not be appropriate if the person is poking their eye and they are sent to their bedroom. Also is staff are uncoordinated or ineffective in response, then the event, even if serious, will be handled in a way that will cause major upset rather than limiting the effects.

CB that is managed well is when staff act in a coordinated way (especially acting in the same manner) that demonstrates evidence of prior preparation should the event occur. Responses that are obviously effective in that the behaviour deceases, or even if the behaviour is serious staff act to limit the effect and act quickly to restore order/calm for both the resident/s involved and others around. Staff will also be non-punitive in their approach.

Incidents in which staff 'cope moderately well' will display some but not all of the above characteristics.

Staff Work as a Team.

This is an attempt to gauge the extent to which staff coordinate with each other and plan beforehand what will occur during a period of time.

Staff that appear to be working as individuals will demonstrate no or insignificant attempts to liase with other staff around them and no evidence of pre-planning will be apparent, i.e. staff will move around doing their own thing, may be disrupting other staff or clients activities, redoing tasks that other staff and clients have already done etc.

There may be little or no evidence or pre-planning but staff may demonstrate some attempts at teamwork in that they liase between each other as activities progress to say what they will do next or plan the next stage.

Good teamwork will be evident when there has been pre-planning and also when staff are able to coordinate activities between each other so that maximum client engagement is possible (for all clients), a range of activities are in operation, possible contingencies are anticipated and a system is in operation which ensures support relative to the needs which occur and regardless of the number of staff on duty.

Teaching Embedded in Everyday Activities.

Teaching must be interpreted as those incidences where residents are engaged in a learning capacity. In other words it is not just at the level of involvement but staff also attempt to give/encourage the client to learn a new skill. The resident will b engaged therefore in acquiring something from the interaction. For example, a resident may be helped hand-over-hand to wipe a table but this is purely involvement. An incidence of teaching would be when the staff member asks the client to think about what would be the best tool to do the job with, they explain why it might be best to use a cloth rather than a sponge, explain why we wipe a table, point out the areas which the resident has done well or badly.

Specific, Written Individual Programmes in Routine Use.

If written programmes are in use it will be evident in that staff refer to a programme and work through it with a resident referring to it as the task progresses and recording outcomes (hopefully with the resident) when the task is completed.

h) Policy Schedule Scoring

Organisational Identifier_____ Facility Identifier _____

Variable Name	Category	Score (see below)	Reliability
AgApCa	Policy addresses the issue of age-appropriateness for clients		
RealCa	Policy addresses the issue of involving clients in real and meaningful activities		
ChoiCa	Policy addresses the issue of providing a choice of activities for clients		
DemCa	Policy addresses the issue of how to present demands to clients		
OppCa	Policy addresses the issue of involving clients in maximum opportunities		
SuppCa	Policy addresses the issue of the degree of help and support to be given to clients		
AssCa	Policy addresses the issue of the types assistance to be given to clients		
SpeeCa	Policy addresses the issue of speech corresponding to client ability levels.		
WarmCa	Policy addresses the issue to interpersonal warmth towards clients		
AdapCa	Policy addresses the issue of responding to client communication		
CommCa	Policy addresses the issue of responding to client communication		
CBCA	Policy addresses the issue of how to manage challenging behaviour		
TeamCa	Policy addresses the issue of co-ordinating team-work		
TeachCa	Policy addresses the issue of providing teaching opportunities to clients		
ProgCa	Policy addresses the issue of the use of written, individual programmes for clients		

3 – Document refers to this category in detail and suggests total practices by which the outcome can be achieved.

2 – Document refers to this category in limited detail or suggests only partial practices by which outcomes can be achieved.

1 – Document refers to this category only in the sense of mentioning it but no details are given of how outcomes can be practically achieved.

0 – Category not mentioned

99 - missing

APPENDIX 3

Correlation Statistics for Regression Analysis

Table a: Spearman's Bivariate Statistics for Client Variables

Name of Client Variable	**Correlated with :**	**Spearman's rho**
Client Age	None	
Behaviour Development Survey (re-scaled as per Conroy 1980;1985)	Community Involvement	-0.400
	Total Active Support Measure	0.531
	Net consequences Co-workers Administration	0.411
	Net Consequences All Audiences Client Enabling	0.467
	Net Consequences Managers Client Enabling	0.414
	Net Consequences Co-workers Non-Enabling	-0.407
Maladaptive Behaviour Score	None	

Table b: Spearman's Bivariate Statistics for Staff Characteristic Variables

Name of Staff Variable	**Correlated with :**	**Spearman's rho**
Length of Time in Service (Staff)	Net Consequences All Audiences	-0.447
	Net Consequences Co-workers Other (Non-Work) Tasks	-0.543
Promotion	None	
Intention to Leave	Balance of Consequences Residents	0.400
Hours Worked	Net Consequences All Audiences Non-Enabling	-0.406
Stress	None	

Table c: Spearman's Bivariate Statistics for Staff Consequences Variables

Name of Staff Consequences Variable	**Correlated with :**	**Spearman's rho**
Net Consequences All Admin	Net Consequences Managers Administration	0.650
	Net Consequences Co-workers Administration	0.670
	Net Consequences All Audiences Client-Enabling	0.440
	Net Consequences Residents Client-Enabling	0.447
Net Consequences Manager Admin	Net Consequences All Administration	0.650
	Net Consequences Managers Client Enabling	0.433
	Balance Managers	-0.529
Net Consequences Residents Administration	Net Consequences Residents Other (Non-Work Tasks)	-0.756
Net Consequences Co-workers Admin	BDS (as re-scaled by Conroy)	0.411
	Net Consequences All Administration	0.670
	Net Consequences All Client-Enabling	0.403
Net Consequences All Client Enabling	BDS (as re-scaled by Conroy)	0.467
	Net Consequences All Audiences Administration	0.440
	Net Consequences Co-workers Administration	0.403
	Net Consequences Managers Client Enabling	0.727
	Net Consequences Residents Client Enabling	0.599
	Net Consequences Co-workers Client Enabling	0.690
	Balance All	0.524

Table c continued : Spearman's Bivariate Statistics for Staff Consequences Variables

Name of Staff Consequences Variable	**Correlated with :**	**Spearman's rho**
Net Consequences Managers Client Enabling	BDS (as re-scaled by Conroy)	0.414
	Net consequences Managers Administration	0.433
	Net consequences All Audiences Client Enabling	0.727
	Net Consequences Co-workers Client Enabling	0.414
	Balance All	0.435
Net Consequences Resident Client Enabling	Net Consequences All Audiences Administration	0.447
	Net Consequences All Audiences Client Enabling	0.599
	Balance Residents Client Enabling	0.498
Net Consequences Co-workers Client Enabling	None	
Net Consequences All non-Enabling	Hours worked	-0.406
	Net Consequences Managers Non-enabling	0.513
	Net Consequences Co-workers Non-enabling	0.743
Net Consequences Managers Non-Enabling	Age of Project	0.410
	Net Consequences All Audiences Non-Enabling	0.513
Net Consequences Residents Non-Enabling	Net Consequences Residents Other (Non-work tasks)	-0.417
Net Consequences Co-workers Non-Enabling	Net Consequences All Audiences Non-enabling	0.743

Table c continued : Spearman's Bivariate Statistics for Staff Consequences Variables

Name of Staff Consequences Variable	**Correlated with :**	**Spearman's rho**
Net Consequences All Other (Non-Work)	Length of time in Service (staff)	-0.447
	Net Consequences Managers Other (Non-work tasks)	0.687
	Net consequences Co-workers Other (Non-work tasks)	0.823
Net Consequences Manager (Non-work)	Net Consequences All Audiences (Non-work tasks)	0.687
Net Consequences Residents (Non-Work)	Net Consequences Residents Administration	-0.756
	Net Consequences Residents Non-enabling	-0.417
Net Consequences Co-workers (Non-Work)	Length of Service	-0.543
	Net Consequences All Audiences Other (Non-work tasks)	0.823
Balance all Consequences all Audiences	Length of Time Manager in Service	0.400
	Net Consequences All Audiences Client Enabling	0.524
	Net Consequences Managers Client Enabling	0.435
Balance all Consequences Managers	Net Consequences Managers Administration	-0.529
Balance all consequences Residents	Intention to Leave (staff)	0.400
	Net Consequences Residents Client Enabling	0.498
Balance all Consequences Co-workers	None	

Table d: Spearman's Bivariate Statistics for Facility Variables

Name of Facility Variable	**Correlated with :**	**Spearman's rho**
Number of Staff in Project	Number of clients in project	0.445
	Staff/Client Ratio	0.518
	Age Of Project	0.483
Number of Clients in Project	Number of staff in project	0.445
	Staff/Client Ratio	-0.475
	Age of Project	0.466
	Management Practices	0.437
Staff/Client Ratio	Number of Staff in Project	0.518
	Number of Clients in Project	-0.475
Age of Project	Number of Staff in Project	0.483
	Number of Clients in Project	0.466
	Net Consequences Manager Non-Enabling	0.410
Length of Time Manager in Post	Balance of Consequences Manager	0.410
Management Practices (Group Home Management Scale)	Number of clients in project	0.437
	Community Involvement	0.574
Community Involvement (Group Home Management Scale)	Management Practices	0.574
	Net Consequences Co-workers Administration	-0.489
Total Of Active Support Measure	Behaviour Development Survey (BDS)	0.531
	Net Consequences for all Audiences Client Enabling	0.473

APPENDIX 4

Inter-rater reliability for the Consequences Questionnaire

Table a: Inter-rater reliability for the Consequences questionnaire

Variable	Kappa	Variable	Kappa	Variable	Kappa
Coworker1 do	0.96	Others1 do	0.78	Team1 do	0.91
Coworker1 don't	0.89	Others1 don't	0.84	Team1 don't	0.91
Coworker2 do	0.87	Others2 do	-	Team2 do	0.90
Coworker2 don't	0.85	Others2 don't	1.00	Team2 don't	1.00
Coworker3 do	1.00	Others3 do	-	Team3 do	1.00
Coworker3 don't	0.94	Others3 don't	-	Team3 don't	1.00
Consequence no person1 do	0.95	Professionals1 do	0.85	Upper Manager1 do	1.00
Consequence no person1 don't	0.74	Professionals1 don't	0.87	Upper Manager1 don't	0.64
Consequence no person2 do	0.91	Professionals2 do	-	Upper Manager2 do	1.00
Consequence no person2 don't	0.86	Professionals2 don't	1.00	Upper Manager2 don't	-
Consequence no person3 do	0.88	Professionals3 do	-	Upper Manager3 do	-
Consequence no person3 don't	0.89	Professionals3 don't	0.64	Upper Manager3 don't	-

Table a : Inter-rater reliability for the Consequences questionnaire continued

Variable	Kappa	Variable	Kappa	Variable	Kappa
General public1 do	1.00	Residents1 do	0.93	Workers in other services1 do	1.00
General public1 don't	0.67	Residents 1 don't	0.82	Workers in other services1 don't	0.86
General public2 do	-	Residents2 do	0.93	Workers in other services2 do	-
General public2 don't	-	Residents2 don't	0.84	Workers in other services2 don't	-
General public3 do	-	Residents3 do	0.93	Workers in other services3 do	
General public3 don't	-	Residents3 don't	1.00	Workers in other services3 don't	-
House Manager1 do	0.97	Residents families1 do	0.68	Yourself 1 do	1.00
House Manager1 don't	0.86	Residents families1 don't	0.66	Yourself1 don't	1.00
House Manager2 do	0.92	Residents families2 do	-	Yourself2 do	0.89
House Manager2 don't	0.98	Residents families2 don't	-	Yourself2 don't	0.62
House Manager3 do	1.00	Residents families3 do	-	Yourself3 do	0.73
House Manager3 don't	0.79	Residents families3 don't	-	Yourself3 don't	0.56

Table a : Inter-rater reliability for the Consequences questionnaire continued

Variable	Kappa	Variable	Kappa
No consequence no person1 do	0.89	Senior/Deputy1 do	0.95
No consequence no person1 don't	0.87	Senior/Deputy1 don't	0.88
No consequence no person2 do	1.00	Senior/Deputy2 do	0.92
No consequence no person2 don't	-	Senior/Deputy2 don't	0.77
No consequence no person3 do	-	Senior/Deputy3 do	-
No consequence no person3 don't	-	Senior/Deputy3 don't	1.00

APPENDIX 5

Results of Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-0.317	1.696	-0.19	0.852			
Const(2)	0.699	1.698	0.41	0.681			
Const(3)	1.867	1.716	1.09	0.276			
NC_ALL_2	-0.04083	0.01625	-2.51	0.012	0.96	0.93	0.99
NC_MAN_2	0.009603	0.008447	1.14	0.256	1.01	0.99	1.03
NC_RES_2	0.008891	0.008046	1.10	0.269	1.01	0.99	1.02
NC_COW_2	-0.003902	0.007932	-0.49	0.623	1.00	0.98	1.01
BAL_ALL	0.02881	0.01321	2.18	0.029	1.03	1.00	1.06
BAL_MAN	-0.009671	0.008003	-1.21	0.227	0.99	0.97	1.01
BAL_RES	0.02283	0.01410	1.62	0.105	1.02	1.00	1.05
BAL_COW	0.00413	0.01062	0.39	0.697	1.00	0.98	1.03

Log-likelihood = -147.386
Test that all slopes are zero: G = 17.798, DF = 8, P-Value = 0.023

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	134.058	100	0.013
Deviance	123.163	100	0.058

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	4627	67.5%	Somers' D	0.38
Discordant	2027	29.6%	Goodman-Kruskal Gamma	0.39
Ties	197	2.9%	Kendall's Tau-a	0.19
Total	6851	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	100
	1	25
	2	13
	3	9
	Total	147

147 cases were used
61 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.991	1.028	1.94	0.053			
Const(2)	2.985	1.045	2.86	0.004			
Const(3)	3.993	1.079	3.70	0.000			
TOTBDS	0.004494	0.006073	0.74	0.459	1.00	0.99	1.02
MBS	-0.03092	0.02147	-1.44	0.150	0.97	0.93	1.01

Log-likelihood = -138.222
Test that all slopes are zero: G = 2.527, DF = 2, P-Value = 0.283

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	419.726	424	0.549
Deviance	276.444	424	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	3020	56.3%	Somers' D	0.14
Discordant	2277	42.4%	Goodman-Kruskal Gamma	0.14
Ties	70	1.3%	Kendall's Tau-a	0.07
Total	5367	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	111
	1	27
	2	16
	3	9
	Total	163

163 cases were used
45 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.416	2.123	1.14	0.255			
Const(2)	3.419	2.132	1.60	0.109			
Const(3)	4.575	2.151	2.13	0.033			

S_RATIO	0.1600	0.2956	0.54	0.588	1.17	0.66	2.09
PROAGE	0.0441	0.2553	0.17	0.863	1.05	0.63	1.72
MANLEN	-0.2338	0.2525	-0.93	0.355	0.79	0.48	1.30
TOTPOLIC	-0.09755	0.04650	-2.10	0.036	0.91	0.83	0.99
MANAGE	-0.02389	0.02831	-0.84	0.399	0.98	0.92	1.03
LENGTH	-0.0690	0.2892	-0.24	0.811	0.93	0.53	1.65
PROMO	-0.0053	0.6227	-0.01	0.993	0.99	0.29	3.37
INTENT	1.0659	0.9115	1.17	0.242	2.90	0.49	17.33
HOURS	-1.0596	0.9473	-1.12	0.263	0.35	0.05	2.22
STRESS	-0.3716	0.1586	-2.34	0.019	0.69	0.51	0.94

Log-likelihood = -148.791
Test that all slopes are zero: G = 11.216, DF = 10, P-Value = 0.341

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	146.600	98	0.001
Deviance	127.158	98	0.025

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	4214	63.9%	Somers' D	0.32
Discordant	2118	32.1%	Goodman-Kruskal Gamma	0.33
Ties	259	3.9%	Kendall's Tau-a	0.16
Total	6591	100.0%		

ASM2

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	29
	2	67
	3	46
	4	33
	Total	175

175 cases were used
33 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	10.964	3.479	3.15	0.002			
Const(2)	15.690	3.718	4.22	0.000			
Const(3)	18.358	3.782	4.85	0.000			
TOTBDS	-0.04635	0.01012	-4.58	0.000	0.95	0.94	0.97
MBS	0.04536	0.02530	1.79	0.073	1.05	1.00	1.10
S_RATIO	-1.4806	0.5585	-2.65	0.008	0.23	0.08	0.68
PROAGE	1.9417	0.3733	5.20	0.000	6.97	3.35	14.49
MANLEN	-1.3906	0.3224	-4.31	0.000	0.25	0.13	0.47

TOTPOLIC	-0.44547	0.07629	-5.84	0.000	0.64	0.55	0.74
MANAGE	-0.09261	0.03518	-2.63	0.008	0.91	0.85	0.98
LENGTH	-3.2057	0.6723	-4.77	0.000	0.04	0.01	0.15
PROMO	5.0166	0.9338	5.37	0.000	150.90	24.20	940.89
INTENT	-8.356	1.838	-4.55	0.000	0.00	0.00	0.01
HOURS	0.939	1.257	0.75	0.455	2.56	0.22	30.08
STRESS	-1.0915	0.2346	-4.65	0.000	0.34	0.21	0.53
NC_ALL_2	-0.02474	0.02240	-1.10	0.270	0.98	0.93	1.02
NC_MAN_2	-0.02687	0.01348	-1.99	0.046	0.97	0.95	1.00
NC_RES_2	-0.12553	0.01937	-6.48	0.000	0.88	0.85	0.92
NC_COW_2	0.09941	0.01766	5.63	0.000	1.10	1.07	1.14
BAL_ALL	0.03559	0.02250	1.58	0.114	1.04	0.99	1.08
BAL_MAN	-0.07292	0.01586	-4.60	0.000	0.93	0.90	0.96
BAL_RES	0.10222	0.02758	3.71	0.000	1.11	1.05	1.17
BAL_COW	-0.02912	0.01589	-1.83	0.067	0.97	0.94	1.00

Log-likelihood = -125.329
Test that all slopes are zero: G = 215.280, DF = 20, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	393.673	502	1.000
Deviance	250.659	502	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	10038	90.9%	Somers' D	0.82
Discordant	990	9.0%	Goodman-Kruskal Gamma	0.82
Ties	17	0.2%	Kendall's Tau-a	0.59
Total	11045	100.0%		

Sub-groups again

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.494	1.299	1.92	0.055			
Const(2)	4.313	1.320	3.27	0.001			
Const(3)	5.844	1.352	4.32	0.000			

NC_ALL_2	-0.00438	0.01156	-0.38	0.705	1.00	0.97	1.02
NC_MAN_2	-0.003966	0.006566	-0.60	0.546	1.00	0.98	1.01
NC_RES_2	-0.025447	0.006562	-3.88	0.000	0.97	0.96	0.99
NC_COW_2	-0.001056	0.006470	-0.16	0.870	1.00	0.99	1.01
BAL_ALL	-0.00239	0.01038	-0.23	0.818	1.00	0.98	1.02
BAL_MAN	-0.027910	0.006177	-4.52	0.000	0.97	0.96	0.98
BAL_RES	-0.01472	0.01126	-1.31	0.191	0.99	0.96	1.01
BAL_COW	0.010491	0.008072	1.30	0.194	1.01	0.99	1.03

Log-likelihood = -253.174
Test that all slopes are zero: G = 50.925, DF = 8, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	626.165	100	0.000
Deviance	506.348	100	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11201	72.4%	Somers' D	0.45
Discordant	4257	27.5%	Goodman-Kruskal Gamma	0.45
Ties	10	0.1%	Kendall's Tau-a	0.33
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.513	1.282	1.96	0.050			
Const(2)	4.332	1.302	3.33	0.001			
Const(3)	5.863	1.335	4.39	0.000			
NC_ALL_2	-0.00533	0.01029	-0.52	0.605	0.99	0.97	1.01
NC_MAN_2	-0.004071	0.006493	-0.63	0.531	1.00	0.98	1.01
NC_RES_2	-0.025667	0.006513	-3.94	0.000	0.97	0.96	0.99
BAL_ALL	-0.00182	0.01003	-0.18	0.856	1.00	0.98	1.02
BAL_MAN	-0.028159	0.006032	-4.67	0.000	0.97	0.96	0.98
BAL_RES	-0.01451	0.01125	-1.29	0.197	0.99	0.96	1.01
BAL_COW	0.009941	0.007480	1.33	0.184	1.01	1.00	1.02

Log-likelihood = -253.185
Test that all slopes are zero: G = 50.903, DF = 7, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	625.226	98	0.000
Deviance	506.369	98	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11171	72.2%	Somers' D	0.44
Discordant	4297	27.8%	Goodman-Kruskal Gamma	0.44
Ties	0	0.0%	Kendall's Tau-a	0.33
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.574	1.248	2.06	0.039			
Const(2)	4.391	1.269	3.46	0.001			
Const(3)	5.923	1.303	4.55	0.000			
NC_ALL_2	-0.006008	0.009576	-0.63	0.530	0.99	0.98	1.01
NC_MAN_2	-0.004301	0.006319	-0.68	0.496	1.00	0.98	1.01
NC_RES_2	-0.025682	0.006510	-3.95	0.000	0.97	0.96	0.99
BAL_MAN	-0.028459	0.005896	-4.83	0.000	0.97	0.96	0.98
BAL_RES	-0.01525	0.01050	-1.45	0.146	0.98	0.96	1.01
BAL_COW	0.009486	0.007100	1.34	0.182	1.01	1.00	1.02

Log-likelihood = -253.203
Test that all slopes are zero: G = 50.866, DF = 6, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	626.018	99	0.000
Deviance	506.407	99	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11231	72.6%	Somers' D	0.45

Discordant	4195	27.1%	Goodman-Kruskal Gamma	0.46
Ties	42	0.3%	Kendall's Tau-a	0.34
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.418	1.239	1.95	0.051			
Const(2)	4.232	1.260	3.36	0.001			
Const(3)	5.753	1.292	4.45	0.000			
NC_MAN_2	-0.006785	0.004996	-1.36	0.174	0.99	0.98	1.00
NC_RES_2	-0.026364	0.006388	-4.13	0.000	0.97	0.96	0.99
BAL_MAN	-0.028754	0.005829	-4.93	0.000	0.97	0.96	0.98
BAL_RES	-0.01613	0.01012	-1.59	0.111	0.98	0.96	1.00
BAL_COW	0.008928	0.007026	1.27	0.204	1.01	1.00	1.02

Log-likelihood = -253.440
Test that all slopes are zero: G = 50.393, DF = 5, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	618.165	100	0.000
Deviance	506.880	100	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11431	73.9%	Somers' D	0.48
Discordant	3953	25.6%	Goodman-Kruskal Gamma	0.49
Ties	84	0.5%	Kendall's Tau-a	0.36
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	3.319	1.070	3.10	0.002			
Const(2)	5.124	1.101	4.65	0.000			
Const(3)	6.648	1.142	5.82	0.000			
NC_MAN_2	-0.007346	0.004981	-1.47	0.140	0.99	0.98	1.00
NC_RES_2	-0.026358	0.006361	-4.14	0.000	0.97	0.96	0.99
BAL_MAN	-0.027827	0.005779	-4.81	0.000	0.97	0.96	0.98
BAL_RES	-0.01795	0.01009	-1.78	0.075	0.98	0.96	1.00

Log-likelihood = -254.270
Test that all slopes are zero: G = 48.732, DF = 4, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	577.649	92	0.000
Deviance	453.666	92	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11133	72.0%	Somers' D	0.45
Discordant	4129	26.7%	Goodman-Kruskal Gamma	0.46
Ties	206	1.3%	Kendall's Tau-a	0.33
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper

Const(1)	3.037	1.052	2.89	0.004			
Const(2)	4.820	1.082	4.46	0.000			
Const(3)	6.337	1.121	5.65	0.000			
NC_RES_2	-0.028537	0.006298	-4.53	0.000	0.97	0.96	0.98
BAL_MAN	-0.029674	0.005623	-5.28	0.000	0.97	0.96	0.98
BAL_RES	-0.01903	0.01003	-1.90	0.058	0.98	0.96	1.00

Log-likelihood = -255.253
Test that all slopes are zero: G = 46.765, DF = 3, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	318.405	63	0.000
Deviance	308.549	63	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	10434	67.5%	Somers' D	0.39
Discordant	4436	28.7%	Goodman-Kruskal Gamma	0.40
Ties	598	3.9%	Kendall's Tau-a	0.29
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	46
	2	70
	3	52
	4	37
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	Upper
Const(1)	1.2947	0.4643	2.79	0.005			
Const(2)	3.0681	0.5006	6.13	0.000			
Const(3)	4.5501	0.5521	8.24	0.000			
NC_RES_2	-0.029757	0.006285	-4.73	0.000	0.97	0.96	0.98
BAL_MAN	-0.029372	0.005629	-5.22	0.000	0.97	0.96	0.98

Log-likelihood = -256.921
Test that all slopes are zero: G = 43.431, DF = 2, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	263.741	52	0.000
Deviance	249.062	52	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	9890	63.9%	Somers' D	0.38
Discordant	3994	25.8%	Goodman-Kruskal Gamma	0.42
Ties	1584	10.2%	Kendall's Tau-a	0.28
Total	15468	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	41
	2	70
	3	52
	4	37
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-0.255	1.654	-0.15	0.877			
Const(2)	1.721	1.658	1.04	0.299			
Const(3)	3.325	1.666	2.00	0.046			
S_RATIO	0.2496	0.2360	1.06	0.290	1.28	0.81	2.04
PROAGE	0.8629	0.2062	4.19	0.000	2.37	1.58	3.55
MANLEN	-0.5340	0.1776	-3.01	0.003	0.59	0.41	0.83
TOTPOLIC	-0.16398	0.03630	-4.52	0.000	0.85	0.79	0.91
MANAGE	0.03160	0.02097	1.51	0.132	1.03	0.99	1.08
LENGTH	-0.8017	0.2461	-3.26	0.001	0.45	0.28	0.73
PROMO	1.2976	0.4779	2.72	0.007	3.66	1.43	9.34
INTENT	-2.0598	0.7106	-2.90	0.004	0.13	0.03	0.51
HOURS	0.6607	0.7490	0.88	0.378	1.94	0.45	8.40
STRESS	-0.2896	0.1090	-2.66	0.008	0.75	0.60	0.93

Log-likelihood = -233.641
Test that all slopes are zero: G = 74.605, DF = 10, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	531.381	98	0.000
Deviance	467.283	98	0.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	10794	73.6%	Somers' D	0.47
Discordant	3879	26.4%	Goodman-Kruskal Gamma	0.47
Ties	0	0.0%	Kendall's Tau-a	0.35
Total	14673	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	33
	2	67
	3	46
	4	33
	Total	179

179 cases were used
29 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.0523	0.7955	1.32	0.186			
Const(2)	3.1991	0.8304	3.85	0.000			
Const(3)	4.7272	0.8695	5.44	0.000			
TOTBDS	-0.034552	0.005397	-6.40	0.000	0.97	0.96	0.98
MBS	-0.02892	0.01699	-1.70	0.089	0.97	0.94	1.00

Log-likelihood = -214.132
Test that all slopes are zero: G = 51.618, DF = 2, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	555.985	514	0.097
Deviance	417.173	514	0.999

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	8409	72.3%	Somers' D	0.45
Discordant	3163	27.2%	Goodman-Kruskal Gamma	0.45
Ties	57	0.5%	Kendall's Tau-a	0.33
Total	11629	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	31
	2	58
	3	44
	4	34

Total	167

167 cases were used
41 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.1775	0.5620	-2.10	0.036			
Const(2)	0.9000	0.5560	1.62	0.106			
Const(3)	2.4508	0.5913	4.14	0.000			
TOTBDS	-0.041158	0.005890	-6.99	0.000	0.96	0.95	0.97
CLIAGE	0.3602	0.1578	2.28	0.022	1.43	1.05	1.95

Log-likelihood = -197.931
Test that all slopes are zero: G = 56.828, DF = 2, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	439.046	388	0.037
Deviance	332.405	388	0.981

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	7576	74.0%	Somers' D	0.48
Discordant	2616	25.6%	Goodman-Kruskal Gamma	0.49
Ties	44	0.4%	Kendall's Tau-a	0.36
Total	10236	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
TotASM2	1	34
	2	69
	3	48
	4	36
	Total	187

187 cases were used
21 cases contained missing values

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			
TOTBDS	-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%		

Back to emac using just the consequences variables

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.410	1.003	2.40	0.016			
Const(2)	3.424	1.022	3.35	0.001			
Const(3)	4.592	1.064	4.32	0.000			
TOTPOLIC	-0.04811	0.03269	-1.47	0.141	0.95	0.89	1.02
STRESS	-0.2707	0.1260	-2.15	0.032	0.76	0.60	0.98
NC_ALL_2	-0.03366	0.01237	-2.72	0.006	0.97	0.94	0.99
BAL_ALL	0.02925	0.01170	2.50	0.012	1.03	1.01	1.05

Log-likelihood = -148.590
Test that all slopes are zero: G = 15.390, DF = 4, P-Value = 0.004

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	135.774	104	0.020
Deviance	125.571	104	0.074

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	4586	66.9%	Somers' D	0.37

Discordant	2060	30.1%	Goodman-Kruskal Gamma	0.38
Ties	205	3.0%	Kendall's Tau-a	0.18
Total	6851	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	2.0217	0.9393	2.15	0.031			
Const(2)	3.0212	0.9576	3.15	0.002			
Const(3)	4.187	1.000	4.19	0.000			
STRESS	-0.2468	0.1245	-1.98	0.047	0.78	0.61	1.00
NC_ALL_2	-0.03275	0.01215	-2.70	0.007	0.97	0.95	0.99
BAL_ALL	0.02858	0.01148	2.49	0.013	1.03	1.01	1.05

Log-likelihood = -149.687
Test that all slopes are zero: G = 13.197, DF = 3, P-Value = 0.004

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	133.774	96	0.007
Deviance	127.764	96	0.017

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	4501	65.7%	Somers' D	0.34
Discordant	2149	31.4%	Goodman-Kruskal Gamma	0.35
Ties	201	2.9%	Kendall's Tau-a	0.17
Total	6851	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable Value Count

EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

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%		

So:

Using individual level rather than house level data (so more cases, though note that most variables still averaged at house level)

For ASM as dv; totbds significant (more able clients get more active support) - not brilliant model but fits well.

For emac as dv; nc_all2 and bal_all significant (lower bal_all higher emac - check this) - not brilliant model but model fits well.

Bal_all is the percent of staff in the setting who report more consequences for enabling than for admin.

Running univariate regressions for these two variables on emac

Worksheet size: 1000000 cells
Retrieving project from file: D:\!DATA\TERESA~1\TEREGR~3.MPJ

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.6284	0.7425	2.19	0.028			
Const(2)	2.5737	0.7602	3.39	0.001			
Const(3)	3.7061	0.8077	4.59	0.000			
NC_ALL_2	-0.009763	0.008410	-1.16	0.246	0.99	0.97	1.01

Log-likelihood = -155.563
Test that all slopes are zero: G = 1.445, DF = 1, P-Value = 0.229

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	18.287	20	0.569
Deviance	18.944	20	0.525

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	2416	35.3%	Somers' D	0.04
Discordant	2150	31.4%	Goodman-Kruskal Gamma	0.06
Ties	2285	33.4%	Kendall's Tau-a	0.02
Total	6851	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27
	2	16
	3	9
	Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	0.1274	0.6031	0.21	0.833			
Const(2)	1.0755	0.6127	1.76	0.079			
Const(3)	2.2041	0.6638	3.32	0.001			
BAL_ALL	0.008675	0.007480	1.16	0.246	1.01	0.99	1.02

Log-likelihood = -155.648
Test that all slopes are zero: G = 1.275, DF = 1, P-Value = 0.259

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	24.471	20	0.222
Deviance	27.198	20	0.130

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	3410	49.8%	Somers' D	0.17
Discordant	2261	33.0%	Goodman-Kruskal Gamma	0.20
Ties	1180	17.2%	Kendall's Tau-a	0.08
Total	6851	100.0%		

Neither significant on its own, so some kind of interaction important

Correlation between bds, ncall2 and balman

Correlations (Pearson)

	TOTBDS	NC_ALL_2
NC_ALL_2	0.298	
	0.000	
BAL_ALL	0.253	0.694
	0.000	0.000

Cell Contents: Correlation
P-Value

Re-run emac against policy and stress

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	116
	1	27

2	16
3	9
Total	168

168 cases were used
40 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.8435	0.4515	4.08	0.000			
Const(2)	2.8192	0.4864	5.80	0.000			
Const(3)	3.9693	0.5627	7.05	0.000			
TOTPOLIC	-0.04580	0.03186	-1.44	0.151	0.96	0.90	1.02
STRESS	-0.2764	0.1200	-2.30	0.021	0.76	0.60	0.96

Log-likelihood = -152.873
Test that all slopes are zero: G = 6.825, DF = 2, P-Value = 0.033

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	139.265	103	0.010
Deviance	132.951	103	0.025

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	3959	57.8%	Somers' D	0.20
Discordant	2589	37.8%	Goodman-Kruskal Gamma	0.21
Ties	303	4.4%	Kendall's Tau-a	0.10
Total	6851	100.0%		

Saving file as: D:\!DATA\TERESA~1\TEREGR~3.MPJ
* NOTE * Existing file replaced.
Saving file as: D:\!DATA\TERESA~1\TEREGR~3.MPJ
* NOTE * Existing file replaced.

Re-do pdl as dv (using client level data)

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	7
	1	3
	2	12
	3	7
	4	5
	5	12
	6	10
	7	21
	8	9
	9	8

10	8
11	18
12	12
13	14
14	6
15	8
16	4
17	4
18	3
19	2
20	3
21	3
22	1
Total	180

180 cases were used
28 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-5.0661	0.8489	-5.97	0.000			
Const(2)	-4.6896	0.8226	-5.70	0.000			
Const(3)	-3.8142	0.7861	-4.85	0.000			
Const(4)	-3.4825	0.7775	-4.48	0.000			
Const(5)	-3.2819	0.7730	-4.25	0.000			
Const(6)	-2.8731	0.7652	-3.75	0.000			
Const(7)	-2.5819	0.7603	-3.40	0.001			
Const(8)	-2.0492	0.7522	-2.72	0.006			
Const(9)	-1.8361	0.7493	-2.45	0.014			
Const(10)	-1.6498	0.7469	-2.21	0.027			
Const(11)	-1.4630	0.7447	-1.96	0.049			
Const(12)	-1.0226	0.7407	-1.38	0.167			
Const(13)	-0.7009	0.7392	-0.95	0.343			
Const(14)	-0.2615	0.7399	-0.35	0.724			
Const(15)	-0.0320	0.7420	-0.04	0.966			
Const(16)	0.3493	0.7485	0.47	0.641			
Const(17)	0.5935	0.7552	0.79	0.432			
Const(18)	0.9021	0.7674	1.18	0.240			
Const(19)	1.2062	0.7842	1.54	0.124			
Const(20)	1.4679	0.8035	1.83	0.068			
Const(21)	2.0419	0.8667	2.36	0.018			
Const(22)	3.441	1.225	2.81	0.005			
TOTBDS	0.004562	0.004493	1.02	0.310	1.00	1.00	1.01
MBS	0.03492	0.01589	2.20	0.028	1.04	1.00	1.07

Log-likelihood = -524.489
Test that all slopes are zero: G = 6.940, DF = 2, P-Value = 0.031

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	4070.577	3804	0.001
Deviance	1035.116	3804	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	8582	56.5%	Somers' D	0.14
Discordant	6383	42.0%	Goodman-Kruskal Gamma	0.15
Ties	236	1.6%	Kendall's Tau-a	0.14

Total 15201 100.0%

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	12
	1	4
	2	16
	3	7
	4	5
	5	12
	6	10
	7	21
	8	9
	9	9
	10	8
	11	19
	12	12
	13	14
	14	6
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	196

196 cases were used
12 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-4.3450	0.7856	-5.53	0.000			
Const(2)	-4.0342	0.7715	-5.23	0.000			
Const(3)	-3.2371	0.7482	-4.33	0.000			
Const(4)	-2.9894	0.7433	-4.02	0.000			
Const(5)	-2.8316	0.7405	-3.82	0.000			
Const(6)	-2.4947	0.7351	-3.39	0.001			
Const(7)	-2.2443	0.7315	-3.07	0.002			
Const(8)	-1.7701	0.7253	-2.44	0.015			
Const(9)	-1.5768	0.7231	-2.18	0.029			
Const(10)	-1.3850	0.7211	-1.92	0.055			
Const(11)	-1.2133	0.7195	-1.69	0.092			
Const(12)	-0.7862	0.7166	-1.10	0.273			
Const(13)	-0.4899	0.7158	-0.68	0.494			
Const(14)	-0.0892	0.7168	-0.12	0.901			
Const(15)	0.1160	0.7185	0.16	0.872			
Const(16)	0.4948	0.7244	0.68	0.495			
Const(17)	0.7061	0.7295	0.97	0.333			
Const(18)	1.0361	0.7408	1.40	0.162			
Const(19)	1.3928	0.7587	1.84	0.066			

Const(20)	1.6257	0.7745	2.10	0.036			
Const(21)	2.3369	0.8503	2.75	0.006			
Const(22)	3.736	1.213	3.08	0.002			
MBS	0.03398	0.01523	2.23	0.026	1.03	1.00	1.07

Log-likelihood = -574.836
Test that all slopes are zero: G = 5.430, DF = 1, P-Value = 0.020

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	617.519	681	0.961
Deviance	435.330	681	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	9581	53.1%	Somers' D	0.11
Discordant	7507	41.6%	Goodman-Kruskal Gamma	0.12
Ties	967	5.4%	Kendall's Tau-a	0.11
Total	18055	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	Upper
Const(1)	-3.458	1.580	-2.19	0.029			
Const(2)	-3.183	1.575	-2.02	0.043			
Const(3)	-2.541	1.567	-1.62	0.105			
Const(4)	-2.275	1.565	-1.45	0.146			
Const(5)	-2.106	1.563	-1.35	0.178			
Const(6)	-1.705	1.561	-1.09	0.275			
Const(7)	-1.433	1.560	-0.92	0.358			
Const(8)	-0.924	1.558	-0.59	0.553			
Const(9)	-0.717	1.558	-0.46	0.645			
Const(10)	-0.490	1.557	-0.31	0.753			
Const(11)	-0.308	1.557	-0.20	0.843			
Const(12)	0.149	1.556	0.10	0.924			
Const(13)	0.501	1.557	0.32	0.747			
Const(14)	0.972	1.558	0.62	0.533			
Const(15)	1.232	1.560	0.79	0.430			
Const(16)	1.642	1.563	1.05	0.294			
Const(17)	1.871	1.566	1.19	0.232			
Const(18)	2.217	1.572	1.41	0.158			
Const(19)	2.578	1.581	1.63	0.103			
Const(20)	2.813	1.589	1.77	0.077			
Const(21)	3.529	1.627	2.17	0.030			
Const(22)	4.930	1.840	2.68	0.007			
S_RATIO	0.5218	0.1971	2.65	0.008	1.69	1.15	2.48
PROAGE	0.5102	0.1866	2.73	0.006	1.67	1.16	2.40
MANLEN	-0.4933	0.1638	-3.01	0.003	0.61	0.44	0.84
TOTPOLIC	-0.08893	0.03279	-2.71	0.007	0.91	0.86	0.98
MANAGE	-0.03544	0.01957	-1.81	0.070	0.97	0.93	1.00
LENGTH	-0.6868	0.2275	-3.02	0.003	0.50	0.32	0.79
PROMO	0.6337	0.4426	1.43	0.152	1.88	0.79	4.49
INTENT	1.1281	0.6513	1.73	0.083	3.09	0.86	11.07
HOURS	-0.1563	0.7000	-0.22	0.823	0.86	0.22	3.37
STRESS	-0.3455	0.1007	-3.43	0.001	0.71	0.58	0.86

Log-likelihood = -574.344
Test that all slopes are zero: G = 30.804, DF = 10, P-Value = 0.001

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1338.020	804	0.000
Deviance	631.846	804	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11846	63.0%	Somers' D	0.29
Discordant	6298	33.5%	Goodman-Kruskal Gamma	0.31
Ties	665	3.5%	Kendall's Tau-a	0.28
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-3.628	1.407	-2.58	0.010			
Const(2)	-3.354	1.402	-2.39	0.017			
Const(3)	-2.712	1.393	-1.95	0.052			
Const(4)	-2.447	1.390	-1.76	0.078			
Const(5)	-2.277	1.389	-1.64	0.101			
Const(6)	-1.877	1.386	-1.35	0.176			
Const(7)	-1.605	1.384	-1.16	0.246			
Const(8)	-1.096	1.382	-0.79	0.428			
Const(9)	-0.889	1.381	-0.64	0.520			
Const(10)	-0.662	1.380	-0.48	0.631			
Const(11)	-0.480	1.380	-0.35	0.728			
Const(12)	-0.022	1.379	-0.02	0.987			
Const(13)	0.331	1.379	0.24	0.810			
Const(14)	0.802	1.381	0.58	0.561			
Const(15)	1.062	1.383	0.77	0.442			
Const(16)	1.473	1.387	1.06	0.288			
Const(17)	1.703	1.390	1.22	0.221			
Const(18)	2.049	1.397	1.47	0.143			
Const(19)	2.410	1.407	1.71	0.087			
Const(20)	2.645	1.416	1.87	0.062			
Const(21)	3.362	1.459	2.30	0.021			
Const(22)	4.762	1.694	2.81	0.005			
S_RATIO	0.5223	0.1961	2.66	0.008	1.69	1.15	2.48
PROAGE	0.5074	0.1859	2.73	0.006	1.66	1.15	2.39
MANLEN	-0.4949	0.1639	-3.02	0.003	0.61	0.44	0.84
TOTPOLIC	-0.08811	0.03224	-2.73	0.006	0.92	0.86	0.98
MANAGE	-0.03534	0.01957	-1.81	0.071	0.97	0.93	1.00
LENGTH	-0.6884	0.2275	-3.03	0.002	0.50	0.32	0.78
PROMO	0.6172	0.4348	1.42	0.156	1.85	0.79	4.35
INTENT	1.1434	0.6490	1.76	0.078	3.14	0.88	11.19

STRESS	-0.3456	0.1007	-3.43	0.001	0.71	0.58	0.86

Log-likelihood = -574.367
Test that all slopes are zero: G = 30.759, DF = 9, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1352.147	805	0.000
Deviance	631.892	805	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11775	62.6%	Somers' D	0.29
Discordant	6298	33.5%	Goodman-Kruskal Gamma	0.30
Ties	736	3.9%	Kendall's Tau-a	0.28
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	Upper
Const(1)	-2.990	1.332	-2.25	0.025			

Const(2)	-2.718	1.326	-2.05	0.040			
Const(3)	-2.076	1.317	-1.58	0.115			
Const(4)	-1.811	1.314	-1.38	0.168			
Const(5)	-1.641	1.313	-1.25	0.211			
Const(6)	-1.243	1.310	-0.95	0.343			
Const(7)	-0.971	1.309	-0.74	0.458			
Const(8)	-0.461	1.308	-0.35	0.725			
Const(9)	-0.250	1.307	-0.19	0.848			
Const(10)	-0.019	1.307	-0.01	0.988			
Const(11)	0.166	1.307	0.13	0.899			
Const(12)	0.626	1.308	0.48	0.632			
Const(13)	0.978	1.309	0.75	0.455			
Const(14)	1.449	1.312	1.10	0.269			
Const(15)	1.708	1.314	1.30	0.194			
Const(16)	2.114	1.319	1.60	0.109			
Const(17)	2.339	1.322	1.77	0.077			
Const(18)	2.681	1.330	2.02	0.044			
Const(19)	3.040	1.340	2.27	0.023			
Const(20)	3.274	1.349	2.43	0.015			
Const(21)	3.988	1.394	2.86	0.004			
Const(22)	5.387	1.634	3.30	0.001			
S_RATIO	0.5321	0.1945	2.74	0.006	1.70	1.16	2.49
PROAGE	0.4465	0.1820	2.45	0.014	1.56	1.09	2.23
MANLEN	-0.5308	0.1640	-3.24	0.001	0.59	0.43	0.81
TOTPOLIC	-0.07539	0.03095	-2.44	0.015	0.93	0.87	0.99
MANAGE	-0.03029	0.01927	-1.57	0.116	0.97	0.93	1.01
LENGTH	-0.5739	0.2138	-2.68	0.007	0.56	0.37	0.86
INTENT	1.2009	0.6492	1.85	0.064	3.32	0.93	11.86
STRESS	-0.3604	0.1008	-3.57	0.000	0.70	0.57	0.85

Log-likelihood = -575.329
Test that all slopes are zero: G = 28.835, DF = 8, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1391.422	806	0.000
Deviance	633.816	806	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11824	62.9%	Somers' D	0.29
Discordant	6327	33.6%	Goodman-Kruskal Gamma	0.30
Ties	658	3.5%	Kendall's Tau-a	0.28
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7

4	5
5	13
6	10
7	21
8	9
9	10
10	8
11	19
12	13
13	15
14	7
15	9
16	4
17	5
18	4
19	2
20	4
21	3
22	1
Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-3.013	1.323	-2.28	0.023			
Const(2)	-2.741	1.317	-2.08	0.037			
Const(3)	-2.106	1.308	-1.61	0.107			
Const(4)	-1.844	1.306	-1.41	0.158			
Const(5)	-1.676	1.304	-1.29	0.199			
Const(6)	-1.286	1.302	-0.99	0.323			
Const(7)	-1.020	1.301	-0.78	0.433			
Const(8)	-0.520	1.299	-0.40	0.689			
Const(9)	-0.315	1.299	-0.24	0.808			
Const(10)	-0.088	1.298	-0.07	0.946			
Const(11)	0.093	1.298	0.07	0.943			
Const(12)	0.545	1.299	0.42	0.675			
Const(13)	0.894	1.300	0.69	0.492			
Const(14)	1.367	1.303	1.05	0.294			
Const(15)	1.628	1.305	1.25	0.212			
Const(16)	2.037	1.309	1.56	0.120			
Const(17)	2.263	1.313	1.72	0.085			
Const(18)	2.608	1.320	1.98	0.048			
Const(19)	2.970	1.331	2.23	0.026			
Const(20)	3.207	1.340	2.39	0.017			
Const(21)	3.925	1.386	2.83	0.005			
Const(22)	5.324	1.632	3.26	0.001			
S_RATIO	0.5513	0.1932	2.85	0.004	1.74	1.19	2.53
PROAGE	0.3075	0.1618	1.90	0.057	1.36	0.99	1.87
MANLEN	-0.4771	0.1555	-3.07	0.002	0.62	0.46	0.84
TOTPOLIC	-0.05350	0.02791	-1.92	0.055	0.95	0.90	1.00
LENGTH	-0.5491	0.2136	-2.57	0.010	0.58	0.38	0.88
INTENT	0.7743	0.6105	1.27	0.205	2.17	0.66	7.18
STRESS	-0.28970	0.09253	-3.13	0.002	0.75	0.62	0.90

Log-likelihood = -576.521
Test that all slopes are zero: G = 26.451, DF = 7, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1314.745	807	0.000
Deviance	636.200	807	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11704	62.2%	Somers' D	0.28
Discordant	6514	34.6%	Goodman-Kruskal Gamma	0.28
Ties	591	3.1%	Kendall's Tau-a	0.26
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.6023	0.7006	-2.29	0.022			
Const(2)	-1.3291	0.6889	-1.93	0.054			
Const(3)	-0.6900	0.6710	-1.03	0.304			
Const(4)	-0.4274	0.6667	-0.64	0.521			
Const(5)	-0.2604	0.6646	-0.39	0.695			
Const(6)	0.1286	0.6616	0.19	0.846			
Const(7)	0.3937	0.6609	0.60	0.551			
Const(8)	0.8903	0.6621	1.34	0.179			

Const(9)	1.0935	0.6635	1.65	0.099			
Const(10)	1.3186	0.6655	1.98	0.048			
Const(11)	1.4994	0.6674	2.25	0.025			
Const(12)	1.9469	0.6737	2.89	0.004			
Const(13)	2.2893	0.6797	3.37	0.001			
Const(14)	2.7556	0.6897	4.00	0.000			
Const(15)	3.0153	0.6962	4.33	0.000			
Const(16)	3.4188	0.7083	4.83	0.000			
Const(17)	3.6415	0.7164	5.08	0.000			
Const(18)	3.9835	0.7316	5.45	0.000			
Const(19)	4.3449	0.7525	5.77	0.000			
Const(20)	4.5811	0.7698	5.95	0.000			
Const(21)	5.2984	0.8487	6.24	0.000			
Const(22)	6.698	1.212	5.53	0.000			
S_RATIO	0.5311	0.1924	2.76	0.006	1.70	1.17	2.48
PROAGE	0.3278	0.1600	2.05	0.041	1.39	1.01	1.90
MANLEN	-0.4730	0.1554	-3.04	0.002	0.62	0.46	0.85
TOTPOLIC	-0.04683	0.02742	-1.71	0.088	0.95	0.90	1.01
LENGTH	-0.6106	0.2060	-2.96	0.003	0.54	0.36	0.81
STRESS	-0.27373	0.09169	-2.99	0.003	0.76	0.64	0.91

Log-likelihood = -577.234
Test that all slopes are zero: G = 25.025, DF = 6, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1271.236	808	0.000
Deviance	637.626	808	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11572	61.5%	Somers' D	0.26
Discordant	6601	35.1%	Goodman-Kruskal Gamma	0.27
Ties	636	3.4%	Kendall's Tau-a	0.25
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13

13	15
14	7
15	9
16	4
17	5
18	4
19	2
20	4
21	3
22	1
Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.7388	0.6955	-2.50	0.012			
Const(2)	-1.4678	0.6838	-2.15	0.032			
Const(3)	-0.8370	0.6660	-1.26	0.209			
Const(4)	-0.5775	0.6616	-0.87	0.383			
Const(5)	-0.4120	0.6595	-0.62	0.532			
Const(6)	-0.0284	0.6563	-0.04	0.965			
Const(7)	0.2326	0.6554	0.35	0.723			
Const(8)	0.7241	0.6563	1.10	0.270			
Const(9)	0.9256	0.6574	1.41	0.159			
Const(10)	1.1486	0.6592	1.74	0.081			
Const(11)	1.3273	0.6610	2.01	0.045			
Const(12)	1.7696	0.6667	2.65	0.008			
Const(13)	2.1072	0.6721	3.14	0.002			
Const(14)	2.5662	0.6812	3.77	0.000			
Const(15)	2.8226	0.6873	4.11	0.000			
Const(16)	3.2227	0.6988	4.61	0.000			
Const(17)	3.4442	0.7066	4.87	0.000			
Const(18)	3.7849	0.7214	5.25	0.000			
Const(19)	4.1459	0.7422	5.59	0.000			
Const(20)	4.3814	0.7594	5.77	0.000			
Const(21)	5.0980	0.8387	6.08	0.000			
Const(22)	6.500	1.205	5.39	0.000			
S_RATIO	0.4270	0.1870	2.28	0.022	1.53	1.06	2.21
PROAGE	0.2283	0.1478	1.54	0.123	1.26	0.94	1.68
MANLEN	-0.4152	0.1535	-2.70	0.007	0.66	0.49	0.89
LENGTH	-0.4947	0.1968	-2.51	0.012	0.61	0.41	0.90
STRESS	-0.25710	0.09111	-2.82	0.005	0.77	0.65	0.92

Log-likelihood = -578.667
Test that all slopes are zero: G = 22.160, DF = 5, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1190.480	809	0.000
Deviance	640.491	809	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11340	60.3%	Somers' D	0.24
Discordant	6824	36.3%	Goodman-Kruskal Gamma	0.25
Ties	645	3.4%	Kendall's Tau-a	0.23

Total 18809 100.0%

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used
8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.2857	0.6229	-2.06	0.039			
Const(2)	-1.0143	0.6103	-1.66	0.097			
Const(3)	-0.3851	0.5919	-0.65	0.515			
Const(4)	-0.1281	0.5877	-0.22	0.827			
Const(5)	0.0355	0.5858	0.06	0.952			
Const(6)	0.4161	0.5837	0.71	0.476			
Const(7)	0.6758	0.5837	1.16	0.247			
Const(8)	1.1643	0.5865	1.99	0.047			
Const(9)	1.3640	0.5885	2.32	0.020			
Const(10)	1.5837	0.5913	2.68	0.007			
Const(11)	1.7596	0.5938	2.96	0.003			
Const(12)	2.1980	0.6013	3.66	0.000			
Const(13)	2.5340	0.6081	4.17	0.000			
Const(14)	2.9889	0.6188	4.83	0.000			
Const(15)	3.2419	0.6257	5.18	0.000			
Const(16)	3.6387	0.6386	5.70	0.000			
Const(17)	3.8592	0.6473	5.96	0.000			
Const(18)	4.1987	0.6635	6.33	0.000			
Const(19)	4.5592	0.6862	6.64	0.000			

Const(20)	4.7948	0.7050	6.80	0.000			
Const(21)	5.5116	0.7904	6.97	0.000			
Const(22)	6.913	1.174	5.89	0.000			
S_RATIO	0.4238	0.1869	2.27	0.023	1.53	1.06	2.20
MANLEN	-0.3398	0.1460	-2.33	0.020	0.71	0.53	0.95
LENGTH	-0.3977	0.1860	-2.14	0.032	0.67	0.47	0.97
STRESS	-0.26881	0.09047	-2.97	0.003	0.76	0.64	0.91

Log-likelihood = -579.979
Test that all slopes are zero: G = 19.534, DF = 4, P-Value = 0.001

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1203.102	810	0.000
Deviance	643.116	810	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11034	58.7%	Somers' D	0.21
Discordant	7013	37.3%	Goodman-Kruskal Gamma	0.22
Ties	762	4.1%	Kendall's Tau-a	0.20
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	13
	3	7
	4	5
	5	13
	6	10
	7	21
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	200

200 cases were used

8 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.7666	0.5669	-3.12	0.002			
Const(2)	-1.4931	0.5527	-2.70	0.007			
Const(3)	-0.8613	0.5316	-1.62	0.105			
Const(4)	-0.6049	0.5265	-1.15	0.251			
Const(5)	-0.4430	0.5241	-0.85	0.398			
Const(6)	-0.0695	0.5207	-0.13	0.894			
Const(7)	0.1839	0.5199	0.35	0.724			
Const(8)	0.6582	0.5210	1.26	0.206			
Const(9)	0.8513	0.5223	1.63	0.103			
Const(10)	1.0639	0.5242	2.03	0.042			
Const(11)	1.2346	0.5261	2.35	0.019			
Const(12)	1.6609	0.5321	3.12	0.002			
Const(13)	1.9878	0.5380	3.69	0.000			
Const(14)	2.4299	0.5478	4.44	0.000			
Const(15)	2.6774	0.5545	4.83	0.000			
Const(16)	3.0711	0.5676	5.41	0.000			
Const(17)	3.2920	0.5767	5.71	0.000			
Const(18)	3.6330	0.5941	6.12	0.000			
Const(19)	3.9952	0.6185	6.46	0.000			
Const(20)	4.2317	0.6388	6.62	0.000			
Const(21)	4.9513	0.7303	6.78	0.000			
Const(22)	6.356	1.130	5.63	0.000			
S_RATIO	0.3099	0.1803	1.72	0.086	1.36	0.96	1.94
MANLEN	-0.3696	0.1459	-2.53	0.011	0.69	0.52	0.92
STRESS	-0.28170	0.09055	-3.11	0.002	0.75	0.63	0.90

Log-likelihood = -582.343
Test that all slopes are zero: G = 14.807, DF = 3, P-Value = 0.002

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1175.527	811	0.000
Deviance	647.844	811	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11055	58.8%	Somers' D	0.21
Discordant	7132	37.9%	Goodman-Kruskal Gamma	0.22
Ties	622	3.3%	Kendall's Tau-a	*0.20*
Total	18809	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17

3	7
4	5
5	13
6	10
7	22
8	9
9	10
10	8
11	19
12	13
13	15
14	7
15	9
16	4
17	5
18	4
19	2
20	4
21	3
22	1
Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.1693	0.4563	-2.56	0.010			
Const(2)	-0.8969	0.4396	-2.04	0.041			
Const(3)	-0.1176	0.4127	-0.28	0.776			
Const(4)	0.1175	0.4092	0.29	0.774			
Const(5)	0.2678	0.4079	0.66	0.511			
Const(6)	0.6181	0.4071	1.52	0.129			
Const(7)	0.8585	0.4081	2.10	0.035			
Const(8)	1.3369	0.4133	3.24	0.001			
Const(9)	1.5253	0.4162	3.67	0.000			
Const(10)	1.7341	0.4199	4.13	0.000			
Const(11)	1.9027	0.4233	4.50	0.000			
Const(12)	2.3267	0.4330	5.37	0.000			
Const(13)	2.6543	0.4418	6.01	0.000			
Const(14)	3.1002	0.4557	6.80	0.000			
Const(15)	3.3486	0.4648	7.20	0.000			
Const(16)	3.7429	0.4818	7.77	0.000			
Const(17)	3.9659	0.4933	8.04	0.000			
Const(18)	4.3089	0.5147	8.37	0.000			
Const(19)	4.6699	0.5436	8.59	0.000			
Const(20)	4.9052	0.5669	8.65	0.000			
Const(21)	5.6227	0.6691	8.40	0.000			
Const(22)	7.026	1.092	6.44	0.000			
MANLEN	-0.4195	0.1433	-2.93	0.003	0.66	0.50	0.87
STRESS	-0.29464	0.08730	-3.37	0.001	0.74	0.63	0.88

Log-likelihood = -594.258
Test that all slopes are zero: G = 16.308, DF = 2, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	930.807	658	0.000
Deviance	567.837	658	0.995

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11519	58.4%	Somers' D	0.21
Discordant	7435	37.7%	Goodman-Kruskal Gamma	0.22
Ties	786	4.0%	Kendall's Tau-a	0.20
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.841	1.254	-2.27	0.023			
Const(2)	-2.569	1.248	-2.06	0.039			
Const(3)	-1.799	1.236	-1.46	0.145			
Const(4)	-1.570	1.233	-1.27	0.203			
Const(5)	-1.422	1.232	-1.15	0.248			
Const(6)	-1.079	1.230	-0.88	0.380			
Const(7)	-0.842	1.229	-0.69	0.493			
Const(8)	-0.350	1.227	-0.29	0.775			
Const(9)	-0.153	1.227	-0.12	0.901			
Const(10)	0.064	1.227	0.05	0.958			
Const(11)	0.240	1.227	0.20	0.845			
Const(12)	0.675	1.228	0.55	0.582			

Const(13)	1.005	1.230	0.82	0.414			
Const(14)	1.457	1.233	1.18	0.237			
Const(15)	1.714	1.236	1.39	0.165			
Const(16)	2.112	1.241	1.70	0.089			
Const(17)	2.327	1.245	1.87	0.062			
Const(18)	2.663	1.253	2.13	0.034			
Const(19)	3.023	1.265	2.39	0.017			
Const(20)	3.258	1.275	2.56	0.011			
Const(21)	3.971	1.323	3.00	0.003			
Const(22)	5.369	1.583	3.39	0.001			
NC_ALL_2	-0.02961	0.01091	-2.71	0.007	0.97	0.95	0.99
NC_MAN_2	0.002738	0.006212	0.44	0.659	1.00	0.99	1.02
NC_RES_2	0.000584	0.005919	0.10	0.921	1.00	0.99	1.01
NC_COW_2	0.000246	0.006138	0.04	0.968	1.00	0.99	1.01
BAL_ALL	0.025562	0.009619	2.66	0.008	1.03	1.01	1.05
BAL_MAN	0.000627	0.005527	0.11	0.910	1.00	0.99	1.01
BAL_RES	-0.00822	0.01032	-0.80	0.426	0.99	0.97	1.01
BAL_COW	0.012734	0.007445	1.71	0.087	1.01	1.00	1.03

Log-likelihood = -592.157
Test that all slopes are zero: G = 20.509, DF = 8, P-Value = 0.009

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1114.271	806	0.000
Deviance	654.830	806	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11658	59.1%	Somers' D	0.22
Discordant	7298	37.0%	Goodman-Kruskal Gamma	0.23
Ties	784	4.0%	Kendall's Tau-a	0.21
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7

15	9
16	4
17	5
18	4
19	2
20	4
21	3
22	1
Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.784	1.167	-2.39	0.017			
Const(2)	-2.512	1.160	-2.17	0.030			
Const(3)	-1.743	1.148	-1.52	0.129			
Const(4)	-1.513	1.145	-1.32	0.186			
Const(5)	-1.366	1.144	-1.19	0.232			
Const(6)	-1.024	1.142	-0.90	0.370			
Const(7)	-0.786	1.140	-0.69	0.491			
Const(8)	-0.294	1.139	-0.26	0.796			
Const(9)	-0.098	1.139	-0.09	0.932			
Const(10)	0.120	1.139	0.11	0.916			
Const(11)	0.296	1.139	0.26	0.795			
Const(12)	0.732	1.140	0.64	0.521			
Const(13)	1.062	1.142	0.93	0.352			
Const(14)	1.514	1.145	1.32	0.186			
Const(15)	1.772	1.148	1.54	0.123			
Const(16)	2.170	1.154	1.88	0.060			
Const(17)	2.385	1.158	2.06	0.039			
Const(18)	2.721	1.167	2.33	0.020			
Const(19)	3.081	1.179	2.61	0.009			
Const(20)	3.316	1.190	2.79	0.005			
Const(21)	4.029	1.242	3.24	0.001			
Const(22)	5.427	1.515	3.58	0.000			
NC_ALL_2	-0.02978	0.01089	-2.73	0.006	0.97	0.95	0.99
NC_MAN_2	0.002709	0.006210	0.44	0.663	1.00	0.99	1.01
NC_RES_2	0.000370	0.005723	0.06	0.948	1.00	0.99	1.01
NC_COW_2	0.000469	0.005941	0.08	0.937	1.00	0.99	1.01
BAL_ALL	0.025969	0.009101	2.85	0.004	1.03	1.01	1.04
BAL_RES	-0.00845	0.01013	-0.83	0.404	0.99	0.97	1.01
BAL_COW	0.012536	0.007335	1.71	0.087	1.01	1.00	1.03

Log-likelihood = -592.163
Test that all slopes are zero: G = 20.497, DF = 7, P-Value = 0.005

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	1047.097	763	0.000
Deviance	629.143	763	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11562	58.6%	Somers' D	0.22
Discordant	7269	36.8%	Goodman-Kruskal Gamma	0.23
Ties	909	4.6%	Kendall's Tau-a	0.21

Total	19740	100.0%

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.791	1.165	-2.40	0.017			
Const(2)	-2.519	1.158	-2.17	0.030			
Const(3)	-1.749	1.146	-1.53	0.127			
Const(4)	-1.520	1.143	-1.33	0.184			
Const(5)	-1.373	1.142	-1.20	0.229			
Const(6)	-1.030	1.140	-0.90	0.366			
Const(7)	-0.793	1.139	-0.70	0.486			
Const(8)	-0.301	1.137	-0.26	0.791			
Const(9)	-0.104	1.137	-0.09	0.927			
Const(10)	0.113	1.137	0.10	0.920			
Const(11)	0.289	1.137	0.25	0.799			
Const(12)	0.725	1.138	0.64	0.524			
Const(13)	1.055	1.140	0.93	0.355			
Const(14)	1.507	1.143	1.32	0.187			
Const(15)	1.765	1.146	1.54	0.124			
Const(16)	2.163	1.152	1.88	0.060			
Const(17)	2.379	1.156	2.06	0.040			
Const(18)	2.714	1.165	2.33	0.020			
Const(19)	3.075	1.177	2.61	0.009			

Const(20)	3.310	1.188	2.79	0.005			
Const(21)	4.023	1.240	3.24	0.001			
Const(22)	5.421	1.514	3.58	0.000			
NC_ALL_2	-0.02978	0.01080	-2.76	0.006	0.97	0.95	0.99
NC_MAN_2	0.002694	0.006209	0.43	0.664	1.00	0.99	1.01
NC_COW_2	0.000527	0.005907	0.09	0.929	1.00	0.99	1.01
BAL_ALL	0.026049	0.009099	2.86	0.004	1.03	1.01	1.04
BAL_RES	-0.00833	0.01009	-0.83	0.409	0.99	0.97	1.01
BAL_COW	0.012460	0.007329	1.70	0.089	1.01	1.00	1.03

Log-likelihood = -592.165
Test that all slopes are zero: G = 20.493, DF = 6, P-Value = 0.002

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	997.719	720	0.000
Deviance	602.015	720	0.999

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11561	58.6%	Somers' D	0.22
Discordant	7211	36.5%	Goodman-Kruskal Gamma	0.23
Ties	968	4.9%	Kendall's Tau-a	0.21
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.799	1.159	-2.42	0.016			
Const(2)	-2.527	1.152	-2.19	0.028			
Const(3)	-1.757	1.140	-1.54	0.123			
Const(4)	-1.528	1.137	-1.34	0.179			
Const(5)	-1.381	1.136	-1.22	0.224			
Const(6)	-1.039	1.134	-0.92	0.360			
Const(7)	-0.801	1.132	-0.71	0.479			
Const(8)	-0.310	1.131	-0.27	0.784			
Const(9)	-0.113	1.131	-0.10	0.920			
Const(10)	0.105	1.131	0.09	0.926			
Const(11)	0.280	1.131	0.25	0.804			
Const(12)	0.715	1.132	0.63	0.527			
Const(13)	1.046	1.134	0.92	0.356			
Const(14)	1.498	1.137	1.32	0.188			
Const(15)	1.755	1.140	1.54	0.124			
Const(16)	2.153	1.146	1.88	0.060			
Const(17)	2.369	1.150	2.06	0.039			
Const(18)	2.705	1.159	2.33	0.020			
Const(19)	3.065	1.171	2.62	0.009			
Const(20)	3.300	1.182	2.79	0.005			
Const(21)	4.013	1.234	3.25	0.001			
Const(22)	5.412	1.509	3.59	0.000			
NC_ALL_2	-0.029263	0.009426	-3.10	0.002	0.97	0.95	0.99
NC_MAN_2	0.002753	0.006141	0.45	0.654	1.00	0.99	1.01
BAL_ALL	0.025845	0.008925	2.90	0.004	1.03	1.01	1.04
BAL_RES	-0.00840	0.01008	-0.83	0.404	0.99	0.97	1.01
BAL_COW	0.012698	0.006929	1.83	0.067	1.01	1.00	1.03

Log-likelihood = -592.169
Test that all slopes are zero: G = 20.486, DF = 5, P-Value = 0.001

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	888.398	633	0.000
Deviance	545.006	633	0.995

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent
Concordant	11342	57.5%
Discordant	7079	35.9%
Ties	1319	6.7%
Total	19740	100.0%

Summary Measures	
Somers' D	0.22
Goodman-Kruskal Gamma	0.23
Kendall's Tau-a	0.20

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.729	1.151	-2.37	0.018			
Const(2)	-2.457	1.144	-2.15	0.032			
Const(3)	-1.689	1.132	-1.49	0.135			
Const(4)	-1.461	1.129	-1.29	0.196			
Const(5)	-1.314	1.128	-1.16	0.244			
Const(6)	-0.972	1.126	-0.86	0.388			
Const(7)	-0.734	1.125	-0.65	0.514			
Const(8)	-0.243	1.124	-0.22	0.829			
Const(9)	-0.046	1.123	-0.04	0.967			
Const(10)	0.171	1.123	0.15	0.879			
Const(11)	0.347	1.124	0.31	0.758			
Const(12)	0.782	1.125	0.69	0.487			
Const(13)	1.112	1.127	0.99	0.324			
Const(14)	1.564	1.130	1.38	0.166			
Const(15)	1.823	1.133	1.61	0.108			
Const(16)	2.221	1.139	1.95	0.051			
Const(17)	2.438	1.143	2.13	0.033			
Const(18)	2.774	1.152	2.41	0.016			
Const(19)	3.134	1.164	2.69	0.007			
Const(20)	3.369	1.175	2.87	0.004			
Const(21)	4.083	1.228	3.32	0.001			
Const(22)	5.481	1.505	3.64	0.000			
NC_ALL_2	-0.027509	0.008356	-3.29	0.001	0.97	0.96	0.99
BAL_ALL	0.026767	0.008719	3.07	0.002	1.03	1.01	1.04
BAL_RES	-0.009048	0.009954	-0.91	0.363	0.99	0.97	1.01
BAL_COW	0.012430	0.006906	1.80	0.072	1.01	1.00	1.03

Log-likelihood = -592.275
Test that all slopes are zero: G = 20.274, DF = 4, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	787.528	568	0.000
Deviance	507.762	568	0.967

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11331	57.4%	Somers' D	0.22
Discordant	7062	35.8%	Goodman-Kruskal Gamma	0.23
Ties	1347	6.8%	Kendall's Tau-a	0.20
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-3.5146	0.7902	-4.45	0.000			
Const(2)	-3.2415	0.7800	-4.16	0.000			
Const(3)	-2.4751	0.7614	-3.25	0.001			
Const(4)	-2.2481	0.7577	-2.97	0.003			
Const(5)	-2.1021	0.7556	-2.78	0.005			
Const(6)	-1.7619	0.7515	-2.34	0.019			

Const(7)	-1.5257	0.7491	-2.04	0.042			
Const(8)	-1.0390	0.7450	-1.39	0.163			
Const(9)	-0.8448	0.7437	-1.14	0.256			
Const(10)	-0.6297	0.7426	-0.85	0.396			
Const(11)	-0.4559	0.7419	-0.61	0.539			
Const(12)	-0.0240	0.7411	-0.03	0.974			
Const(13)	0.3044	0.7417	0.41	0.682			
Const(14)	0.7561	0.7447	1.02	0.310			
Const(15)	1.0143	0.7478	1.36	0.175			
Const(16)	1.4138	0.7553	1.87	0.061			
Const(17)	1.6303	0.7610	2.14	0.032			
Const(18)	1.9663	0.7729	2.54	0.011			
Const(19)	2.3272	0.7910	2.94	0.003			
Const(20)	2.5625	0.8066	3.18	0.001			
Const(21)	3.2770	0.8808	3.72	0.000			
Const(22)	4.679	1.236	3.78	0.000			
NC_ALL_2	-0.027342	0.008354	-3.27	0.001	0.97	0.96	0.99
BAL_ALL	0.025327	0.008433	3.00	0.003	1.03	1.01	1.04
BAL_COW	0.013064	0.006839	1.91	0.056	1.01	1.00	1.03

Log-likelihood = -592.655
Test that all slopes are zero: G = 19.513, DF = 3, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	667.656	481	0.000
Deviance	442.429	481	0.896

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	11164	56.6%	Somers' D	0.23
Discordant	6655	33.7%	Goodman-Kruskal Gamma	0.25
Ties	1921	9.7%	Kendall's Tau-a	0.22
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15

14	7
15	9
16	4
17	5
18	4
19	2
20	4
21	3
22	1
Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-2.4839	0.5864	-4.24	0.000			
Const(2)	-2.2126	0.5733	-3.86	0.000			
Const(3)	-1.4547	0.5512	-2.64	0.008			
Const(4)	-1.2309	0.5475	-2.25	0.025			
Const(5)	-1.0866	0.5457	-1.99	0.046			
Const(6)	-0.7504	0.5426	-1.38	0.167			
Const(7)	-0.5170	0.5412	-0.96	0.339			
Const(8)	-0.0400	0.5402	-0.07	0.941			
Const(9)	0.1489	0.5403	0.28	0.783			
Const(10)	0.3595	0.5407	0.66	0.506			
Const(11)	0.5310	0.5413	0.98	0.327			
Const(12)	0.9567	0.5437	1.76	0.078			
Const(13)	1.2815	0.5467	2.34	0.019			
Const(14)	1.7317	0.5530	3.13	0.002			
Const(15)	1.9904	0.5581	3.57	0.000			
Const(16)	2.3928	0.5692	4.20	0.000			
Const(17)	2.6112	0.5772	4.52	0.000			
Const(18)	2.9489	0.5932	4.97	0.000			
Const(19)	3.3097	0.6167	5.37	0.000			
Const(20)	3.5449	0.6365	5.57	0.000			
Const(21)	4.2621	0.7276	5.86	0.000			
Const(22)	5.669	1.130	5.01	0.000			
NC_ALL_2	-0.029538	0.008337	-3.54	0.000	0.97	0.96	0.99
BAL_ALL	0.028708	0.008309	3.45	0.001	1.03	1.01	1.05

Log-likelihood = -594.532
Test that all slopes are zero: G = 15.760, DF = 2, P-Value = 0.000

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	444.074	328	0.000
Deviance	332.268	328	0.424

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	9449	47.9%	Somers' D	0.15
Discordant	6410	32.5%	Goodman-Kruskal Gamma	0.19
Ties	3881	19.7%	Kendall's Tau-a	0.15
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

Logistic Regression Table

Predictor	Coef	StDev	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-1.7775	0.5554	-3.20	0.001			
Const(2)	-1.5047	0.5418	-2.78	0.005			
Const(3)	-0.7460	0.5206	-1.43	0.152			
Const(4)	-0.5230	0.5177	-1.01	0.312			
Const(5)	-0.3803	0.5164	-0.74	0.461			
Const(6)	-0.0495	0.5149	-0.10	0.923			
Const(7)	0.1778	0.5148	0.35	0.730			
Const(8)	0.6336	0.5165	1.23	0.220			
Const(9)	0.8127	0.5177	1.57	0.116			
Const(10)	1.0127	0.5193	1.95	0.051			
Const(11)	1.1750	0.5209	2.26	0.024			
Const(12)	1.5772	0.5255	3.00	0.003			
Const(13)	1.8849	0.5300	3.56	0.000			
Const(14)	2.3106	0.5380	4.29	0.000			
Const(15)	2.5534	0.5438	4.70	0.000			
Const(16)	2.9380	0.5557	5.29	0.000			
Const(17)	3.1525	0.5642	5.59	0.000			
Const(18)	3.4862	0.5810	6.00	0.000			
Const(19)	3.8447	0.6054	6.35	0.000			
Const(20)	4.0789	0.6258	6.52	0.000			
Const(21)	4.7934	0.7190	6.67	0.000			
Const(22)	6.196	1.125	5.51	0.000			

NC_ALL_2	-0.010124	0.005869	-1.73	0.085	0.99	0.98	1.00

Log-likelihood = -600.794
Test that all slopes are zero: G = 3.236, DF = 1, P-Value = 0.072

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	168.751	153	0.182
Deviance	156.564	153	0.405

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	7133	36.1%	Somers' D	0.07
Discordant	5812	29.4%	Goodman-Kruskal Gamma	0.10
Ties	6795	34.4%	Kendall's Tau-a	0.06
Total	19740	100.0%		

Ordinal Logistic Regression

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	14
	1	4
	2	17
	3	7
	4	5
	5	13
	6	10
	7	22
	8	9
	9	10
	10	8
	11	19
	12	13
	13	15
	14	7
	15	9
	16	4
	17	5
	18	4
	19	2
	20	4
	21	3
	22	1
	Total	205

205 cases were used
3 cases contained missing values

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

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%		

Ordinal Logistic Regression: EMAC versus CLIAGE, TOTBDS, MBS

Link Function: Logit

Response Information

Variable	Value	Count
EMAC	0	95
	1	23
	2	9
	3	6
	Total	133

133 cases were used
75 cases contained missing values

Logistic Regression Table

Predictor	Coef	SE Coef	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	1.767	1.169	1.51	0.131			
Const(2)	2.939	1.192	2.47	0.014			

Const(3)	3.937	1.236	3.19	0.001			
CLIAGE	-0.1869	0.2037	-0.92	0.359	0.83	0.56	1.24
TOTBDS	0.012609	0.007329	1.72	0.085	1.01	1.00	1.03
MBS	-0.01598	0.02338	-0.68	0.494	0.98	0.94	1.03

Log-likelihood = -113.043
Test that all slopes are zero: G = 4.226, DF = 3, P-Value = 0.238

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	398.128	393	0.418
Deviance	226.087	393	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	2429	60.6%	Somers' D	0.22
Discordant	1535	38.3%	Goodman-Kruskal Gamma	0.23
Ties	45	1.1%	Kendall's Tau-a	0.10
Total	4009	100.0%		

Not significant

Now include age in block for pdl

Ordinal Logistic Regression: PDL versus CLIAGE, TOTBDS, MBS

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	7
	1	3
	2	10
	3	7
	4	5
	5	11
	6	10
	7	20
	8	8
	9	8
	10	8
	11	14
	12	12
	13	14
	14	6
	15	7
	16	2
	17	3
	18	2
	19	2
	20	3
	21	2
	Total	164

164 cases were used
44 cases contained missing values

Logistic Regression Table

Predictor	Coef	SE Coef	Z	P	Odds Ratio	95% CI Lower	Upper

Const(1)	-5.3187	0.9528	-5.58	0.000			
Const(2)	-4.9351	0.9292	-5.31	0.000			
Const(3)	-4.1519	0.8993	-4.62	0.000			
Const(4)	-3.7848	0.8902	-4.25	0.000			
Const(5)	-3.5639	0.8856	-4.02	0.000			
Const(6)	-3.1469	0.8779	-3.58	0.000			
Const(7)	-2.8212	0.8725	-3.23	0.001			
Const(8)	-2.2560	0.8636	-2.61	0.009			
Const(9)	-2.0429	0.8606	-2.37	0.018			
Const(10)	-1.8325	0.8577	-2.14	0.033			
Const(11)	-1.6195	0.8551	-1.89	0.058			
Const(12)	-1.2235	0.8510	-1.44	0.151			
Const(13)	-0.8495	0.8489	-1.00	0.317			
Const(14)	-0.3211	0.8498	-0.38	0.706			
Const(15)	-0.0293	0.8531	-0.03	0.973			
Const(16)	0.4188	0.8633	0.49	0.628			
Const(17)	0.5840	0.8691	0.67	0.502			
Const(18)	0.8888	0.8833	1.01	0.314			
Const(19)	1.1519	0.9001	1.28	0.201			
Const(20)	1.4982	0.9301	1.61	0.107			
Const(21)	2.429	1.077	2.25	0.024			
CLIAGE	-0.1710	0.1482	-1.15	0.248	0.84	0.63	1.13
TOTBDS	0.008658	0.004796	1.81	0.071	1.01	1.00	1.02
MBS	0.04973	0.01705	2.92	0.004	1.05	1.02	1.09

Log-likelihood = -468.618
Test that all slopes are zero: G = 13.407, DF = 3, P-Value = 0.004

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	3754.622	3420	0.000
Deviance	937.235	3420	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	7521	59.7%	Somers' D	0.20
Discordant	4957	39.3%	Goodman-Kruskal Gamma	0.21
Ties	120	1.0%	Kendall's Tau-a	0.19
Total	12598	100.0%		

Ordinal Logistic Regression: PDL versus TOTBDS, MBS

Link Function: Logit

Response Information

Variable	Value	Count
PDL	0	7
	1	3
	2	12
	3	7
	4	5
	5	12
	6	10
	7	21
	8	9
	9	8
	10	8
	11	18
	12	12
	13	14
	14	6
	15	8

16	4
17	4
18	3
19	2
20	3
21	3
22	1
Total	180

180 cases were used
28 cases contained missing values

Logistic Regression Table

Predictor	Coef	SE Coef	Z	P	Odds Ratio	95% CI Lower	95% CI Upper
Const(1)	-5.0661	0.8489	-5.97	0.000			
Const(2)	-4.6896	0.8226	-5.70	0.000			
Const(3)	-3.8142	0.7861	-4.85	0.000			
Const(4)	-3.4825	0.7775	-4.48	0.000			
Const(5)	-3.2819	0.7730	-4.25	0.000			
Const(6)	-2.8731	0.7652	-3.75	0.000			
Const(7)	-2.5819	0.7603	-3.40	0.001			
Const(8)	-2.0492	0.7522	-2.72	0.006			
Const(9)	-1.8361	0.7493	-2.45	0.014			
Const(10)	-1.6498	0.7469	-2.21	0.027			
Const(11)	-1.4630	0.7447	-1.96	0.049			
Const(12)	-1.0226	0.7407	-1.38	0.167			
Const(13)	-0.7009	0.7392	-0.95	0.343			
Const(14)	-0.2615	0.7399	-0.35	0.724			
Const(15)	-0.0320	0.7420	-0.04	0.966			
Const(16)	0.3493	0.7485	0.47	0.641			
Const(17)	0.5935	0.7552	0.79	0.432			
Const(18)	0.9021	0.7674	1.18	0.240			
Const(19)	1.2062	0.7842	1.54	0.124			
Const(20)	1.4679	0.8035	1.83	0.068			
Const(21)	2.0419	0.8667	2.36	0.018			
Const(22)	3.441	1.225	2.81	0.005			
TOTBDS	0.004562	0.004493	1.02	0.310	1.00	1.00	1.01
MBS	0.03492	0.01589	2.20	0.028	1.04	1.00	1.07

Log-likelihood = -524.489
Test that all slopes are zero: G = 6.940, DF = 2, P-Value = 0.031

Goodness-of-Fit Tests

Method	Chi-Square	DF	P
Pearson	4070.577	3804	0.001
Deviance	1035.116	3804	1.000

Measures of Association:
(Between the Response Variable and Predicted Probabilities)

Pairs	Number	Percent	Summary Measures	
Concordant	8582	56.5%	Somers' D	0.14
Discordant	6383	42.0%	Goodman-Kruskal Gamma	0.15
Ties	236	1.6%	Kendall's Tau-a	0.14
Total	15201	100.0%		

age doesn't remain in model