THE GLASGOW SOCIAL SELF-EFFICACY SCALE - A NEW SCALE FOR MEASURING SOCIAL SELF-EFFICACY IN PEOPLE WITH A LEARNING DISABILITY: PSYCHOMETRIC PROPERTIES AND ASSOCIATIONS WITH SOCIAL SUPPORT AND DEPRESSIVE SYMPTOMATOLOGY

AND

RESEARCH PORTFOLIO

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Contents

Appendices

1. Small Scale Service-related Project

2. Major Research Project Literature Review

3. Major Research Project Proposal

4. Major Research Project Paper

Small Scale Service-Related Project

REFERRAL PRACTICE: A COMPARISON OF GPs' PERCEPTIONS AND CLINICAL PSYCHOLOGY'S EXPECTATIONS

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Target Journal:- *Health Bulletin*
(See Appendix 1.1)

Abstract

Objective: to compare GPs' perception of their referral practice to Adult Mental Health services with Clinical Psychology's expectations of their referral practice in a small Clinical Psychology Department in the West of Scotland.

Design and Subjects: face-to-face interviews with GPs referring to the Clinical Psychology Department and the Clinical Psychologist in the Department.

Results: twelve out of 15 area GPs participated in the study. Three-quarters of GPs over-estimated the waiting list for Clinical Psychology. Five of these nine said they would refer more patients if there was no waiting list for Clinical Psychology. There was a fair degree of concordance between GPs and Clinical Psychology about what should affect GPs' referral practice, although Clinical Psychology rated previous psychiatric history, length of time problem has existed and presence of physical symptoms with no evident physical symptomatology as more important than GPs. Referral to Psychiatry and Clinical Psychology were both mentioned as being indicated by presence or absence of specific variables by GPs, with referral to Community Psychiatric Nursing (CPNs) being mentioned less often.

Conclusion: recent liaison with GPs appears to have been more effective in conveying information about appropriate indications for referral than in providing GPs with accurate knowledge about waiting times for Clinical Psychology services. Further attempts to keep GPs updated about waiting times need to consider the potential impact on referral rates. There is some evidence that some GPs' current referral practice differs from Clinical Psychology's expectations of their referral practice. The introduction of explicit referral criteria may help alter this.

Introduction

From 1st April 1999 the changes to the Scottish NHS outlined in the white paper 'Designed to Care' were introduced[1]. GPs have been given an increasingly important role in the design of health care services, including mental health services. The effective development of mental health services will require an assessment of referrers', users' and health care providers' expectations of services. This study explores referrers' and health care providers' expectations of an Adult Mental Health Clinical Psychology Service by considering their beliefs about factors affecting referral practice. This may lead to the development of written referral criteria and assist in ensuring more effective use of mental health resources.

When considering factors affecting referral decisions it is important to distinguish between factors which the referrer may be consciously aware of when making their decision and factors of which they are not aware. The designs of studies looking at factors affecting referral process tend to reflect this distinction. Some studies take a correlative or regressive approach, identifying different referral rates from different GPs, controlling for any differences in the nature of the patient's condition and then identifying additional factors which account for variance in referral practice. Other studies involve the referrer in more detail by asking them to self-report on their decision process. This study fits into this second methodological group. Given the difficulties inherent in the ability to accurately self-report it is important to interpret the results of this study as being a reflection of what GPs' believe influences their referral decision rather than necessarily an accurate picture of what does influence their decision.

Although the clinical condition of the patient, for instance severity and duration of mental health problem would intuitively seem to be important in determining referral practice, it may not be the only or most influential determinant of referral practice.[2] Kincey & Creed[3] suggested six factors which may affect referral practice to mental health services: GPs' knowledge of mental health problems, GPs' ability to detect mental health problems, GPs' general referral tendency across all services, health benefits / attitudes of the patient, mental health service referral criteria and availability of services. Whereas Kincey & Creed[3] generated their list of factors from previous literature and their own experience, Burton & Ramsden[4] chose to ask GPs about factors affecting their decision to refer to mental health services. Factors identified were: chronicity of presenting problem, presence of physical symptomatology, patient motivation, patient preference, patient psychological mindedness, risk factors (e.g. suicide), service accessibility and waiting times. It was unclear whether these categories were spontaneously mentioned by GPs or were presented as a checklist. GPs were not asked to assign a level of importance to each factor but, by calculating percentages of GPs mentioning particular factors, Burton & Ramsden[4] were able to suggest that certain factors were generally believed to be of greater importance. Factors mentioned by at least 90 per cent of GPs were service accessibility and risk factors.

In addition to considering GPs' perceptions of what affects their referral practice it is also important to ask mental health service providers about what they believe should affect referral practice. Reid, Coupar & Riley[5] asked Clinical Psychologists and Counsellors about factors they believed should be considered by GPs when making a referral decision. Level of social support available to the patient and previous psychiatric history were added to Burton & Ramsden's[4] list, giving 10 factors which were then ranked by eight Clinical Psychologists and five Counsellors. Risk of self-harm and chronicity of presenting problem were identified as the two most important factors by Clinical Psychologists with Counsellors identifying risk of self-harm and patient preference as their top two factors.

This study uses nine of the ten variables identified by Burton & Ramsden[4]. Patient psychological mindedness was excluded as it was considered to be an element of the patient motivation variable. Nine variables were added, guided in part by suggestions from studies of GP referrals to general medical services.[6,7]

This study builds on previous studies in three important ways. Firstly, whereas some studies[3,4] have focused on the GP end of the referral process and others have focused on the receiving service[5], this study brings both ends of the referral process together by asking both GPs and Clinical Psychologists about variables affecting referral practice. Secondly, it has been suggested that when considering factors affecting referral practice it is important to consider factors influencing GPs against making a referral as well as factors influencing them to make a referral[6]. This study incorporated this suggestion by being explicit that consideration of a referral may lead to a decision not to refer. Finally, this study attempts to explore factors which may be particularly useful in indicating referral to particular mental health professions. Burton & Ramsden[4] explored this in relation to Counsellors and Clinical Psychologists but this study asked GPs about factors indicating referral to all NHS mental health professions available in the area of the study.

Methodology

Following discussion with the Chair of the Local Medical Committee, letters were sent to all 15 local GPs requesting their participation in the project (see appendix 1.2). Follow-up telephone calls were used to ascertain their willingness to participate and to arrange appointment times. The small population size made it important to maintain the integrity of GPs' responses to maximise the amount of useable data. Face-to-face audio taped interviews were chosen to enhance the quality of information provided by enabling the interviewer to respond directly to any queries GPs had about the task. Interviews lasting between ten and twenty minutes were conducted in GP surgeries or the Clinical Psychology Department. The interview text is given in appendix 1.3. This text was adhered to except when answering GPs' queries. Interviews were split into three sections. The first section contained background questions to elicit GP related information previously suggested as having an impact on referral rates,[3] including length of time as a GP and perceived knowledge of mental health services. The second section asked GPs to give an open-ended account of their perception of the decision process when considering a referral to Clinical Psychology. The final section asked GPs to assign from nought to ten points to 19 variables to indicate how important it was in determining their referral practice. GPs were also asked whether each variable affected where any referral would be made.

The second and third sections of the interview were introduced by asking GPs to reflect on the decision process they go through when considering a referral to Clinical Psychology. It was explained that this decision process may lead to a referral to Clinical Psychology or to Psychiatry or to CPN or may lead to a decision not to refer.

The Clinical Psychologist received a similar audio taped interview (see appendix 1.4 for text of interview).

Audio tapes were transcribed by the interviewer. Answers to the questions in section one and weightings of importance in section three were encoded directly onto Statistical Package for the Social Sciences 7.5 for Windows. The recordings of open-ended answers in section two were analysed into 31 separate statements about referral practice. Expanding Cummins, Jarman & White's[8] distinction between factors affecting referral that are related to the doctor (e.g. length of time since training) and factors relating to the patient (e.g. age) these statements were then put into one of the following categories: problem-related characteristics of the patient (e.g. panic attacks), non-problem related characteristics of the patient (e.g. motivation), practice-related characteristics (e.g. size of practice) and GP-related characteristics (e.g. age).

A Clinical Psychologist not involved in the project or service was asked to categorise the same 31 statements into these categories. The percentage agreement was 74% (see discussion for implications of low reliability). The addition of two additional categories: previous experience of what Clinical

Psychology had been useful for and previously tried other interventions increased the percentage agreement on repeat rating by researcher and Clinical Psychologist to 90%.

Results

Response Rate

One GP chose not to participate. Two other GPs were not available to participate leaving twelve GPs who were interviewed.

Referrals

Annual referrals per GP ranged from nought to twelve with a median of 8.5. Table 1 shows that five out of eleven GPs who estimated their annual referrals were accurate within 25% either way of their actual referral rate. A paired-sample t-test comparing estimated and actual annual referrals was not significant ($t = -0.837$, $p = 0.422$, two-tailed) although the small sample size may have prevented small but real differences being detected.

[INSERT TABLE 1 ABOUT HERE]

Waiting List

The waiting list for Clinical Psychology at the time of the study was between six and eight weeks. Nine of the twelve GPs believed it was higher than two months, with five believing it was six months or more. The seven GPs saying they would refer more patients if there were no waiting list placed more importance on the waiting list (mean 8.6) than the five GPs saying they would refer the same (mean 2.4). GPs with an accurate (and lower) perception of waiting list length seemed to place a similarly high value on the importance of waiting list length in affecting their referral practice as GPs who perceived the waiting list to be longer.

GPs' Knowledge of Mental Health Professions

GPs' knowledge of mental health professions was assessed in section one of the interview by asking them to rate their knowledge on a five-point scale (0 = very little knowledge, 5 = a great deal of knowledge). On average GPs' perceived knowledge of Psychiatry (mean 4.0) was greater than their perceived knowledge of Community Psychiatric Nurses (CPNs) (mean 2.7) which was similar to their knowledge of Clinical Psychology (mean 2.6).

Referral Criteria

There are no current written referral criteria for Clinical Psychology. Five GPs believed there were referral criteria at present. These five included three who felt there were written criteria. Five of the other seven GPs supported the Clinical Psychologist's belief that referral criteria would be useful.

Self-reported Referral Process

Table 2 shows factors identified in the textual analysis of GPs' and Clinical Psychology's responses to the open-ended second section of the interview asking them to describe the decision process they go through when considering a referral to Clinical Psychology.

Problem-related characteristics were mentioned fifteen times, nine times as reasons for referral to Clinical Psychology and six times as reasons for not referring to Clinical Psychology. Rape or other sexual abuse, anxiety and family or marital problems were mentioned by five, four and two GPs respectively as reasons for referring to Clinical Psychology. Depression was mentioned by just one GP.

[INSERT TABLE 2 ABOUT HERE]

Importance of Variables in Determining Referral Practice

Results from the third section of the interview showed GPs' responses varied widely in the importance attached to variables affecting their referral practice.

Eleven of the 19 variables were rated as of no importance by at least one GP and of extreme importance by at least one GP. Most consistent agreement of the importance of a variable in affecting referral practice was found for self-harm, use of alcohol or drugs, presence of psychosis and personality disorder. Most consistent agreement for a variable having limited impact on referral practice was financial circumstances of the patient.

Table 3 compares GPs' and Clinical Psychologist's rank ordering of the 19 variables which may affect referral practice. Table 3 also indicates if a particular variable was mentioned by 25% or more GPs or by the Clinical Psychologist as indicating referral to a particular profession. For example, presence of psychosis was ranked 1st by GPs and 1st equal by the Clinical Psychologist and both the Clinical Psychologist and at least 25% of GPs mentioned this variable as indicating referral to Psychiatry.

Five of the 19 factors potentially affecting referral practice were identified by 25% or more GPs as indicating referral to Psychiatry, four to Clinical Psychology, two for GPs to treat themselves and one to Social Work. No variable was identified as indicating referral to CPNs by 25% or more GPs. Personality disorder was the only variable where two specific referral directions were mentioned: to Clinical Psychology and Psychiatry.

The use of Spearman's *rho* when comparing two judges' rankings of a set of variables is discussed by Howell[9] and regarded as a valid procedure for this purpose. However, given the relatively low *n* in this study a conservative approach was taken when considering significance of any observed effects. In particular a significance level of $p<0.01$ was used and correlations were considered in terms of estimated variance. Clinical Psychology's ranking of the variables was significantly correlated with the GPs' Median Rankings of the variables (Spearman's *rho* = 0.707 $p<0.01$, two-tailed) and was significantly correlated with seven out of the twelve individual GP's rankings (Spearman's *rhos* 0.518 to 0.821 $p<0.03$ to $p<0.001$, two-tailed). Considering r^2 values three of these seven associations accounted for greater than 50% of the variance. Of the five GPs whose rankings were not significantly correlated with Clinical Psychology's two were single-handed practices and two were rural practices. Median time as a GP was 22 years compared to 15 years for GPs whose rankings were correlated with Clinical Psychology's.

Table 4 presents variables used in this study that had been used in a previous study[5]. The rankings given by the Clinical Psychologist in this study and the mean rank given by eight Clinical Psychologists in the previous study are also shown. These rankings are significantly correlated (Spearman's *rho* 0.962 $p<0.01$ two-tailed) suggesting the views of the Clinical Psychologist in this study were consistent with the views of Clinical Psychologists in the previous study.

[INSERT TABLE 3 ABOUT HERE]

[INSERT TABLE 4 ABOUT HERE]

Discussion

Response Rate

The 80% response rate is favourable compared to other studies involving GPs and Clinical Psychology[10,11]. The high response rate may have resulted in part from the good local formal and informal links between Clinical Psychology and GPs. These links are enhanced by the small size of the department and the length of time both GPs and Clinical Psychologists have been in post.

Only limited information is available about the three GPs not participating in the study. They referred between one and 13 patients a year compared to a range of nought to 12 referrals for the 12 participating GPs. There was no apparent difference in terms of location or size of practice between responders and non-responders.

Referral Rate

Previous studies of GPs found median annual referral rates of six[12]. In this study the median referral rate was 8.5 suggesting a relatively high rate of referral, possibly as a result of good links between Clinical Psychology and GPs. However, the ratio of one clinical psychologist to fifteen GPs represents a good level of resource compared to other parts of Scotland (Drewett, personal communication)[13] and the high rate of referral may just reflect this high level of resource availability. The reduction in waiting list from four to five months to six to eight weeks in the last year does not seem to have resulted in an increased rate of referral, possibly due to GPs not being aware of the reduction. Indeed referrals had actually decreased by approximately 20%, probably contributing to the reduction in waiting time.

Waiting List

Given the relative strength of links between GPs and Clinical Psychology a surprisingly large mismatch between actual and perceived waiting list was found. This may reflect a time-lag, with GPs responding on the basis of historic waiting times but it may also reflect a general tendency for GPs to perceive Clinical Psychology waiting lists as long. The Department's policy of sending a letter to GPs following their referral advising them there may be a delay in seeing their patient may maintain their perception that Clinical Psychology has a longer waiting list than it actually does.

Given seven GPs said they would increase their referrals if there was no waiting list and given waiting lists were ranked tenth equal in importance out of eighteen variables, the provision of accurate information about the waiting list during this study may increase referrals to Clinical Psychology. Any attempts to reduce the waiting list further may result in increased referrals, thereby increasing the waiting list. However, adequate discussion with GPs about a reduction in the waiting list may pre-empt an unmanageable increase in referrals.

Self-reported Referral Process

Of 31 specific comments made by GPs in their self-report of the referral process, only 15 referred to particular clinical conditions (table 2). This is consistent with Verhaak's[14] report that clinical indications are the decisive factor in only 40% of mental health referrals. As expected, anxiety was the most frequently mentioned condition leading to referral but depression was mentioned by only one out of 15 GPs. This fits with the Clinical Psychologist's anecdotal report that GPs in the area either managed depression within Primary Care or referred to Psychiatry. Given the growing body of evidence of the efficacy of Clinical Psychology for depression, this is an area that future liaison with GPs needs to cover. Six of the 31 comments made by GPs mentioned referral to Clinical Psychology being prompted by the lack of effectiveness of other treatments (table 2). This is consistent with Robertson's finding[2] that 35% of mental health referrals resulted from lack of progress using GP care alone. The department should explore this area, as earlier referral may increase the probability that psychological input will be effective.

As previously noted the attempt to categorise the 31 comments into four categories based on Cummins, Jarman & White's[8] distinction between doctor-related and patient-related factors resulted in poor inter-rater reliability. The addition of two further categories: *previous experience of what Clinical Psychology has been useful for* and *previously tried other interventions* improved reliability to an acceptable level. This suggests Cummins, Jarman & White's[8] categorisation may have been insufficient and future research should include the expanded set of factors.

Importance of Variables in Determining Referral Practice

As only one Clinical Psychologist was involved in this study it was important to compare their ranking of variables with that of a previous study[5] (table 4). Encouragingly there was a highly significant correlation suggesting the views of the Clinical Psychologist in this study may be consistent with Clinical Psychologists elsewhere.

Although seven GPs' rankings of importance of variables affecting referral practice were significantly correlated with Clinical Psychology's rankings, five were not. This suggests further work is required to help ensure a shared understanding of appropriate referral practice. The development of written referral criteria may help this process and would require particular care in those areas where the perception of Clinical Psychology and particular GPs may be most discrepant. These areas appear to include: the importance of previous psychiatric history, the relevance of physical symptoms with no evident physical pathology and the length of time the problem has existed.

The only variable for which more than one specific direction of referral was mentioned by at least 25% of GPs was personality disorder (table 3). Evidence from interview transcripts suggests this may reflect different approaches to different types of personality disorder. Two GPs suggested that if the personality disorder led to other people being at risk then Psychiatry would be involved. However if the personality disorder did not affect other people then referral to Clinical Psychology was preferred. In addition, three GPs felt that no service took ownership of personality disorder, one suggesting this may be a result of the lack of proven therapeutic techniques.

Although four variables were mentioned as suggesting specific referral to Clinical Psychology, no variable was mentioned by 25% or more GPs as indicating referral to CPNs. Indeed only four of the twelve GPs made any reference to CPNs. Referral to CPNs was mentioned as an option when Clinical Psychology waiting lists were high by two GPs. Two GPs also mentioned patients' mobility problems as indicating a referral to CPNs as they offered a more comprehensive domiciliary service. Anecdotally, some GPs did not directly mention CPNs but assumed that one of the benefits of referral to Psychiatry would be subsequent involvement from CPNs.

Plausibility of Model of Referral Implicit in Methodology

Both the second and third sections of the interview were introduced by asking GPs to reflect on the decision process they go through when considering a referral to Clinical Psychology. It was explained that this decision process may lead to a referral to Clinical Psychology or to Psychiatry or to CPN or may lead to a decision not to refer. This model was consistent with King, Bailey and Newton's[6] suggestion that it is important to consider reasons for not referring as well as reasons for referring. One GP seemed confused by the instructions and reported that consideration of a referral always led to a referral. Other GPs seemed to understand the instructions given.

Beyond these initial instructions the second section of the interview made no further assumptions about the model of referral practice, however in the third section it was assumed that a referral decision involved considering and balancing a range of variables. Some GPs felt they were being asked to rate each variable in isolation and thought this was an unrealistic depiction of their actual practice. The system of weighting variables was intended to model a decision process which involved considering many variables simultaneously. However, it is likely that the importance of particular variables varies depending on what other variables were present in a given patient presentation. For instance level of social support may be more important in determining referral practice if it occurs in conjunction with personality disorder than if it occurs alone. In effect what GPs were being asked to do was give a weighting for the importance of a particular variable averaged across all the possible patient presentations they see. It may have been useful to have made this explicit at the start of interviews.

Another useful refinement to the study would have been to ask GPs to indicate whether a particular variable increased or decreased the likelihood of referral. Although for some variables (e.g. presence of psychoses) it was clear GPs rating it highly were suggesting it increased likelihood of referral, King, Bailey & Newton[6] highlight that a variable may not consistently affect referral practice in the same way.

Conclusion

Recent liaison with GPs appeared to have conveyed accurate information about appropriate indications for referral, however GPs still overestimated waiting times. Further attempts to keep GPs updated about waiting times need to consider the potential impact on referral rates. There was some evidence that some GPs' current referral practice differed from Clinical Psychology's expectations of their referral practice. The introduction of explicit referral criteria may help alter this.

This type of study may in itself have an effect on knowledge of waiting lists and GPs' referral practice[4] and it will be important for the Department to monitor any changes in GP referral practice over the next year.

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Table 1: Actual and Estimated Annual Referral Rates of GPs

GP	Actual Referrals	GPs' Estimate of Current Referrals
A	0	6
B	1	2
C	2	4
D	3	3
E	6	15
F	7	22
G	10	6
H	10	8
I	10	8
J	12	8
K	12	9
L	12	didn't know
Total	85	91

Table 2: Factors mentioned spontaneously by GPs when considering referral to Clinical Psychology

FACTOR	NUMBER OF GPs MENTIONING	MENTIONED BY CLINICAL PSYCHOLOGIST
Problem-related characteristics indicating referral	9	
Problem-related characteristics contraindicating referral	6	Yes
Non-problem related characteristics of the person	3	Yes
Service-related characteristics	4	
GP-Related Characteristics	1	
Practice-Related characteristics	1	
Previous experience of what Clinical Psychology has been useful for	1	
Previously tried other interventions (inc medication and GP support)	6	Yes

Table 3: Variables affecting referral practice ranked in order of weighting attached by GPs and Clinical Psychologist with indication of any specific referral direction mentioned

	GPs		CLINICAL PSYCHOLOGIST	
VARIABLE	Ranked Order	Referral Direction (mentioned by >25%)	Ranked Order	Referral Direction
Psychosis	1	Psychiatry	1=	Psychiatry
Self-harm	2	Psychiatry	1=	CPN Psychiatry
Motivation	3=	Psychology	6=	
Use of alcohol/drug	3=	Psychiatry	6=	CPN
Patient preference	5=		6=	
Personality Disorder	5=	Psychiatry Psychology	3	Psychiatry
Complexity of problem	7=		6=	
Quality of clinical psychology	7=	Psychology	11=	
Certainty of diagnosis	9		11=	
Clinical psychology waiting list	10=		14=	CPN
Psychiatric history	10=	Psychiatry	4=	
Normal life change	12	GP	11=	Psychology GP
Physical symptoms no evidence physical cause	13=	Psychology	6=	Psychology
Social support	13=		14=	
Length of problem	15=		4=	
Accommodation	15=		14=	
Intelligence	17		14=	
Financial Circumstances	18=	Social Work	14=	
Mobility	18=		14=	

Table 4: rankings of variables common to current study and Reid, Coupar & Riley's study[5] (ranking for patient psychological mindedness from previous study and rankings for other variables in current study not included)

VARIABLE	RANKING OF CLINICAL PSYCHOLOGIST IN THIS STUDY	MEAN RANKING OF EIGHT CLINICAL PSYCHOLOGISTS IN PREVIOUS STUDY[5]
Self-harm	1	1
Length of time had problem	2=	2
Previous psychiatric history	2=	3=
Patient preference	4=	3=
Physical symptomatology (no evident physical cause)	4=	5
Normal life change	6	6
Social support	7=	7
Waiting list	7=	8
Accessibility / mobility	7=	9

Literature Review

THE LACK OF COGNITIVE MEASURES IN DEPRESSION IN PEOPLE WITH A LEARNING DISABILITY: THE CASE FOR DEVELOPING A MEASURE OF SOCIAL SELF-EFFICACY IN PEOPLE WITH A LEARNING DISABILITY

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Target Journal:- *Journal of Intellectual Disability Research*
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Abstract

Despite major changes in service provision in the last few decades, people with a learning disability continue to face social isolation. Although research suggests that lack of social support is associated with increased depression in this client group, the underlying psychological mechanisms have not been explored in detail. In the general population, increased social self-efficacy has been shown to be predictive of both increased social support and decreased depression. This suggests that in addition to the objective measure of social support, a full account of the impact of social factors in depression in people with a learning disability needs to examine the potential role of the cognitive variable social self-efficacy.

Introduction

There have been major changes in the nature of services provided to people with a learning disability in the last three decades. However, the impact of policies such as deinstitutionalisation on quality of life has often been surprisingly limited (Jahoda et al 1990; Cullen et al 1995). In particular, people with a learning disability continue to face social isolation (e.g. Ralph & Usher 1995) which represents a potential increased vulnerability factor to depression in this client group (Reed 1997). The relationship between social isolation and depression established in the general population by Brown & Harris (1978) has since been explored in people with a learning disability (e.g. Benson et al 1985; Laman & Reiss 1987; Nezu et al 1995; Reiss & Benson 1985). Although these studies have found correlations between social support and depression they have not considered the possible underlying psychological mechanisms in detail.

In the general population, in addition to the objective constructs of social support and social skill, the cognitive construct of social self-efficacy, or belief in social ability, has been shown to be predictive of both social support and depression (Bandura 1999; Holahan & Holahan 1987). This suggests that a full account of the impact of social factors in depression in people with a learning disability should also take account of the potential role of social self-efficacy in addition to the role of social support and social skill. The development of a valid and reliable measure of social self-efficacy in people with a learning disability would help in developing this account as well as adding to the limited range of cognitive measures available for clinical use with this client group.

This review considers the development of a measure of social self-efficacy for people with a learning disability in the context of a general deficit of self-report measures for use in depression in this client group. Reasons for this deficiency are considered. These include concerns about the reliability of self-report in people with a learning disability and lack of belief or support for the role of cognitive factors in depression in this client group. Preliminary evidence is presented suggesting that these concerns may be unwarranted. It is argued that cognitive accounts of depression in people without a learning disability should be tested in people with a learning disability. The importance of social factors in depression in people with a learning disability is then considered and previous research exploring the relationship between objective measures of social support and social skill and depression in this client group is explored. Social self-efficacy is introduced as a cognitive construct related to social support and social skill that has been found to be predictive of depression in people without a learning disability. The potential importance of social self-efficacy in people with a learning disability is identified. The review concludes by highlighting that if methodological difficulties can be overcome, a measure of social self-efficacy for people with a learning disability could offer a valuable addition to the limited range of cognitive measures available for clinical and research use with this client group.

Self-report Measures of Depression in People with a Learning Disability

Prevalence rates for depression in people with a learning disability have been estimated as between three and six per cent (Reiss, 1990), in line with prevalence rates in the general population (e.g. Robins & Regier, 1991). However, the development of self-report measures for specific use in depression in this client group has so far been very limited. Self-report measures of general depressive symptomatology have usually been adapted from existing measures rather than developed *de novo* for the client group. For example, various adaptations of the original Zung Depression Scale (ZDS; Zung, 1965) have been made. Kazdin et al (1983) used the original language and the original four choice response format (a little of the time, some of the time, good part of the time, most of the time) but added a bar graph to facilitate understanding of the response choices. Reiss & Benson (1985) removed the question about enjoyment of sex but again retained the original language and response format. Dagnan & Sandhu (1999) retained the original language but replaced the four point response format with a yes / no response. The reliability of these various adaptations to the ZDS has not always been assessed and studies have rarely involved a consideration of the suitability of their chosen response format.

An alternative to piecemeal adaptations of existing depression scales is the development of measures specifically designed for the client group. The 32-item Self-report Depression Questionnaire (SRDQ - Reynolds, personal communication; Reynolds & Baker 1988) includes a three-point response format (almost never, sometimes, most of the time) and a practice section. This practice section uses the same response format as the main section and consists of 15 items for which there is a correct answer. For example when asked *Do cars get flat tyres* the participant is expected to answer *sometimes*, thus demonstrating their understanding of the response category *sometimes*. This represents an important improvement on the various adaptations to the ZDS as it allows an assessment of a person's ability to understand the response format. In addition the SRDQ has been reported as having acceptable internal (0.90) and test-retest reliability (0.63) (Reynolds & Baker 1988).

Cognitive Measures in Depression in People with a Learning Disability

Both the adapted ZDS and the SRDQ are broad measures of depression sampling a range of domains but they include only a minority of cognitive items. However, in the general population a range of specifically cognitive measures have been developed for use in depression (e.g. Dysfunctional Attitudes Scale - Weissman & Beck 1978; Automatic Thoughts Questionnaire – Hollon & Kendall 1980; Cognitions Checklist - Beck et al 1987; Beck Hopelessness Scale - Beck & Steer 1993). Cognitive measures have sometimes been adapted for use by people with a learning disability. Nezu et al (1995) did use adapted versions of the Automatic Thoughts Questionnaire and the Beck Hopelessness Scale but the psychometric properties of these adapted scales have not been reported. Dagnan & Sandhu (1999) have also used adapted versions of Rosenberg's (1982) Self-esteem Scale and Gilbert & Allen's (1994) Social Comparison Scale. These studies (whose results are mentioned later) provide useful demonstrations of the potential to adapt existing measures when exploring cognitive factors in depression in people with a learning disability.

Castles & Glass's (1986a, b & c; personal communication) Interpersonal Self-efficacy Scale (ISES) is a rare example of a cognitive measure developed specifically for people with a learning disability. The ISES refers to six interpersonal problems at work, at home and in the community. For example, one problem refers to a member of staff criticising a person for not making their bed in accordance with a house rule the person feels is unnecessary. The participant is asked to rate on a five-point scale how sure they are that they could 'handle' this situation. A potential problem with this scale is that each participant's interpretation of 'handling' a situation may differ. In addition, as suggested by Bandura (personal communication) using 'happy' and 'sad' facial expressions in the response format may prompt participants to rate their happiness or sadness rather than their belief in their ability to perform a certain action.

Reasons for Lack of Cognitive Measures

The lack of cognitive measures in depression in people with a learning disability may represent the general lack of published research on depression in people with a learning disability (Reiss 1994). Indeed, it may be seen as a manifestation of Reed's (1997) claim that only in the last two decades has there been general professional acceptance that people with learning disabilities can experience depression. However, as highlighted by Kroese (1997) there may be more specific reasons why cognitive measures have not been developed. Firstly, the assessment of cognitive factors in people with a learning disability may be seen as unreliable and secondly, there may be a lack of belief in or support for the relevance of cognitive factors in depression in people with a learning disability.

Within the clinical field, developments in cognitive therapy in people with a learning disability are predicated on an assumption that cognitive factors can be assessed with acceptable reliability in people with a learning disability. Reynolds & Baker (1988) and Lindsay et al (1994) reported high correlations between different measures of depression, however only a minority of items on depression measures are cognitive. Although further studies demonstrating both internal reliability and test-retest reliability on purely cognitive measures would be helpful, the clinical application of cognitive techniques to people with a learning disability has already begun to be demonstrated in a range of clinical conditions (Chiodo & Maddux 1985; Howells et al 2000; Lindsay 1998) including depression (Lindsay et al 1993). These studies suggest that cognitive factors can be assessed in people with a learning disability with sufficient reliability for clinical use.

Clinical and research studies are beginning to build on the above findings regarding the potential reliability of cognitive reports in people with a learning disability. Lindsay et al (1993) used cognitive components in the treatment of depression in two adults with a mild learning disability. Components included: agenda setting, identification of negative thoughts, elicitation of underlying assumptions, generation of alternative ways of thinking and reviewing evidence for underlying assumptions. Significant improvements in depression were reported. Although larger scale controlled trials are needed, these studies provide promising support for the use of cognitive techniques with people with a mild learning disability.

Theoretical explorations of cognitive factors in depression in people with a learning disability have also begun to be made in the last few years. Nezu et al (1995) found depression to be correlated with the frequency of negative automatic thoughts and feelings of helplessness in people with a mild learning disability, and Dagnan & Sandhu (1999) found a significant negative correlation between depression and positive self-esteem. These studies highlight the viability of exploring cognitive variables in depression in people with a learning disability and the potential to test whether findings from the general population hold with this client group.

Social Factors and Depression

A consideration of the role of social factors in depression offers a good example of findings from the general population beginning to be tested in people with a learning disability. However, this area also highlights the general paucity of research in learning disability focusing on the role cognitive factors may play in the development and maintenance of depression. Research has tended to focus on the objective social factors of social support and social skill rather than cognitive variables that may also be relevant, for example social self-efficacy.

In the general population, social support has been found to be predictive of depression (e.g. Brown & Harris 1978; Brown et al 1986). Lack of social support has been associated with both onset and relapse of depression (Paykel 1994). Given these findings it is likely that social support may be a key factor in depression in people with a learning disability. In addition, the relevance of social factors in depression in people with a learning disability could also be predicted from an understanding of the life experiences of people with a learning disability. People with a learning disability have been shown to value friendship but to have limited opportunities for meaningful personal relationships (Landesman et al 1984; Firth & Rapley 1990). Improvements in services over the last few decades have often failed to bring significant improvements in the social lives of people with a learning disability (Cullen et al 1995). In particular, opportunities for relationships with non-learning disabled people often remain limited (Jahoda et al 1990; Ralph & Usher 1995). These findings suggest social isolation remains a reality for many people with a learning disability.

In people with a learning disability, both self-reports and informant reports of reduced social support have been found to be significantly associated with increased self-reported depressive symptomatology (Reiss & Benson 1985). Nezu et al (1995) explored this association in more detail. Although they did not report results linking self-reported *total* social support and self-reported depression, they did find that increased levels of *negative* social support were associated with increased depressive symptomatology. Significant associations were not found between practical or emotional social support and depression, suggesting certain elements of social support may be particularly important in depression in people with a learning disability.

The relationship between social skills and depression has also been explored in people with a learning disability. Laman & Reiss (1987) conclude from their own and previous studies (Benson et al 1985; Reiss & Benson 1985) that 'depressed mood is associated with social skill,' (page 226). However, close examination of these studies reveals a more complicated picture. Firstly, as noted above, Reiss & Benson (1985) considered the relationship between social support and depression and did not consider social skills specifically. Secondly, Benson et al (1985) found no significant association between an informant rating of social skill and a self-report measure of depression suggesting that social skill is not associated with depressed mood. However, Benson et al (1985) and Laman & Reiss (1987) did find that reduced informant ratings of social skill were associated with increased informant ratings of depression. Although this may reflect a relationship between social skill and depression it may instead reflect a confounding of variables. Informant reports of depression rely heavily on how the target person comes across. This may be affected as much by the person's level of social skill as by their actual level of depression.

In the general population, in addition to the objective constructs of social support and social skill, the cognitive construct of social self-efficacy, or belief in social ability, has also been implicated in the development and maintenance of depression. Bandura (1997) identifies two routes by which social self-efficacy may have a causal effect on the development of depression. Firstly, social self-efficacy may have a direct effect on depression; lack of confidence in ability to have fulfilling interpersonal relationships causing depressed affect. Secondly, social self-efficacy may effect the availability of social support which then has a direct effect on increasing depressive symptomatology. Empirical evidence for these postulated routes comes from both correlational and longitudinal studies. Correlational studies have found reduced levels of social self-efficacy to be significantly associated with increased depressive symptomatology in college students (Cane & Gotlib 1985, Houston 1995; Kanfer & Zeiss 1983) and adolescents (McFarlane et al 1995).

These findings suggest that social self-efficacy may be important in understanding the impact of social factors on depression in people without a learning disability. It also highlights that the existing research associating poor social support with depression in people with a learning disability needs to include a consideration of the role social self-efficacy may play in this client group. In addition to the findings from the general population there are specific reasons why social self-efficacy may be of particular relevance to people with a learning disability. Firstly, a deficit in social ability is central to current diagnostic criteria for learning disability (e.g. DSM-IV; American Psychiatric Association 1994). If, as Jahoda et al (1988) concluded, people with a learning disability do have 'insight into their situation as stigmatised individuals,' (page 113) it is possible this awareness will include some insight into their social (dis)ability. Secondly, as noted by Reed (1997), people with a learning disability often have to contend with the experience of repeated failures in their life. The previously identified continuing social isolation of this client group provides an example of a failure to achieve a desired outcome in life. Therefore, social self-efficacy may be a key cognitive variable involved in how social isolation is interpreted by people with a learning disability. The ultimate impact of social isolation on an individual's mental health status may be mediated through the cognitive variable of social self-efficacy.

Developing a Social Self-efficacy Measure

The development of a valid and reliable measure of social self-efficacy for people with a learning disability has the potential to: enhance understanding of cognitive factors in depression in this client group; test findings from the general population that social self-efficacy is predictive of depressive symptomatology; and add to the limited range of cognitive measures available for clinical use in depression with this client group. However, there are important methodological issues to be addressed when developing a social self-efficacy measure for people with a learning disability.

Response Format

In measuring self-efficacy, Bandura (1997 and personal communication) advocates the use of a response format incorporating a wide range of possible responses. This maximises the discriminative potential of self-efficacy scales. Examples include Sherer et al's (1982) use of a 14 point Likert-type scale or Bandura's (personal communication) use of a percentage rating between 0 and 100. The use of such broad response formats requires a degree of conceptual understanding (and suspension of reality) that may make their use with people with a learning disability unreliable.

Dagnan & Ruddick (1995) explored the reliability of using an analogue scale with people with a mild to moderate learning disability. A five-inch line was drawn between two pictures representing the bipolar responses to each of three questions. The questions were presented twice with the position of the pictures reversed on second presentation. Correlations between presentations were significant ($p<0.05$) for two of the three questions. Dagnan & Ruddick (1995) concluded that this showed people with a learning disability could consistently use an analogue scale. However, the lack of a comparison with answers to the same question using a different response format (e.g. yes / no) prevents confirmation that people understood the meaning of placing a mark at a particular point on the scale. Until more conclusive evidence is available, the use of analogue scales is probably not advised in measures of social self-efficacy in people with a learning disability. Instead, drawing on Bandura (1997 and personal communication), the response format should include the largest number of distinct categories that can be managed with reasonable reliability.

Previous studies using four choice response formats in self-reports of depression in people with a learning disability (e.g. Kazdin et al 1983; Reiss & Benson 1985; Helsel & Matson 1988) have added bar graphs as visual aids to enhance understanding of each response choice. Despite assertions that this technique is effective (e.g. Lindsay 1991), its reliability remains at best unproven. Indeed in a previous paper looking at an anxiety-rating scale, Lindsay & Michie (1988) concluded that a four choice format was too confusing for participants and was less reliable than a two choice format. Helsel & Matson (1988) was the only study to attempt to assess reliability of the four choice format within depression. They included a series of screening items for which there were correct answers, to determine individuals' understanding of the response format. They reported that it was 'rare' (numbers not given) for someone not to get at least half of the unspecified number of screening questions correct. There was insufficient information to conclude with confidence that participants were able to reliably use the four-point response format with added bar graph.

As previously mentioned, the Self-report Depression Questionnaire (Reynolds, personal communication; Reynolds & Baker 1988) used a three-point response format (almost never, sometimes, most of the time). It also included screening items to assess participants' understanding of the response categories. Although no reports of the numbers of participants meeting the criteria of 10 out of 15 screening items correct were found, an internal reliability coefficient of 0.90 is encouraging. Mindham (1999) using a similar three choice response format reported an internal reliability coefficient of 0.96 on the Glasgow Anxiety Scale for people with a learning disability. These studies suggest that the maximum number of responses that has so far been demonstrated as reliable with people with a learning disability is three. As well as increasing the discriminative power of a scale, an additional benefit of a three as opposed to two choice response is that it reduces the need to use yes / no answers and therefore reduces the danger of responses being invalidated through acquiescence or naysaying (the tendency to answer yes or no regardless of question content; see Shaw & Budd, 1982; Sigelman et al 1981).

Construct Validity

As a construct, social self-efficacy may be contrasted to social skill and social support. Theoretically there is a clear distinction between belief in your social ability and your actual social ability (Bandura 1997). One is a cognitive construct and one a behaviour, and potentially an individual's level of social self-efficacy does not have to match their level of social ability. For example someone with high social self-efficacy may actually exhibit poor social ability. Similarly social support is clearly theoretically distinct from social self-efficacy and is also distinct from social skill. For example someone may have a lot of social support despite not being particularly socially skilled. It is important that these theoretical distinctions are maintained within scale development. One way of doing this is through analysis of associations between scales measuring each construct. Therefore Castles & Glass (1986a) interpret a 'modest' correlation between social skill and social self-efficacy as demonstrating that these two constructs are 'by no means identical,' (page 328). A major difficulty with this approach is that, although theoretically distinct, there are good reasons why strong associations might be found between these constructs. For example a strong association between social self-efficacy and social support may reflect the previously cited evidence that social self-efficacy effects subsequent levels of social support. An alternative or complementary method for assessing construct validity, is to ensure that close attention is given to the wording of scales to try and ensure they are adequately discriminating between the constructs of social support, social skill and social self-efficacy.

Conclusion

This review has identified the lack of cognitive measures available for use in depression in people with a learning disability. Clinical studies have begun to alleviate concerns about the reliability of self-report in this client group and are highlighting the potential value of adopting cognitive approaches to treating depression in people with a learning disability. The study of social self-efficacy should provide further knowledge about the cognitive factors involved in the development and maintenance of depression in people with a learning disability.

Previous findings in the general population suggest that social self-efficacy is not only associated with depressive symptomatology but is predictive of future levels of depression even when the impact of social support is controlled for. Increasingly, research exploring cognitive factors in depression in the general population is being replicated with people with a learning disability. The development of a reliable and valid measure of social self-efficacy for people with a learning disability would allow this exploration to continue. In addition it could provide additional assessment and outcome information for clinical interventions aimed at treating and preventing depression in this client group.

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Major Project Research Proposal

THE DEVELOPMENT OF A MEASURE OF SOCIAL SELF-EFFICACY FOR PEOPLE WITH A MILD OR MODERATE LEARNING DISABILITY.

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Summary

A new measure of social self-efficacy for people with a learning disability (the Glasgow Social Self-efficacy Scale; GSSES) will be developed, taking into account Bandura's guidelines for self-efficacy test construction (Bandura 1997 and personal communication). A pool of items will be generated from existing measures and tested for relevance with the client group in focus groups of people with a learning disability. A draft measure will be passed for comment to clinicians working with the client group and piloted on six people with a learning disability. Final choice of items and response format will be guided by clinician feedback and ease of use during pilot study.

The GSSES will be administered to 34 people with a mild or moderate learning disability attending Adult Resource Centres and its internal reliability assessed. The British Picture Vocabulary Scale II (Dunn et al 1997) will be used as a guide to level of receptive language ability. The GSSES will also be administered to 20 non-learning disabled participants. Their scores on the GSSES will be compared with their scores on Sherer et al's (1982) Social Self-efficacy sub-scale to assess concurrent validity. Principal components analysis of the GSSES will assist in understanding factors underlying the scale.

The Reynolds Self-Report Depression Questionnaire (appendix 3.1, SRDQ; Reynolds, personal communication and Reynolds & Baker 1988), the Adapted Zung Depression Scale (appendix 3.2, ZDS; Kazdin et al 1983), the Communication Skills Rating Chart (Rinaldi 1992) and the Reiss-Peterson Social Support Scale (Benson, personal communication and Reiss & Benson 1985) will also be administered. Correlational analysis comparing scores on GSSES,

depression, social skill and social support measures will assist in understanding the extent to which the GSSES is measuring an important and previously neglected facet of depression in people with a learning disability.

Introduction

Social self-efficacy refers to a person's belief in his or her ability to obtain and maintain rewarding social supports and interpersonal relationships (e.g. Bandura 1997). Social self-efficacy has been implicated theoretically in the development and maintenance of depression (Bandura 1997). In the context of Beck's cognitive model of depression (Beck et al 1979), low social self-efficacy can be seen as an element of the depressive cognitive triad of negative view of self, future and world (Maddux & Meier 1995). This suggests measures of social self-efficacy may be useful in the assessment and ongoing monitoring of depression, particularly where social support and interpersonal relationships are key features of the clinical formulation.

Bandura (1997) identifies two routes by which social self-efficacy may have a causal effect on the development of depression. Firstly, social self-efficacy may have a direct effect on depression; lack of confidence in ability to have fulfilling interpersonal relationships causing depressed affect. Secondly, social self-efficacy may affect social support available in a person's life which then has a direct effect on increasing depressive symptomatology. It is also possible that depression may itself affect levels of social self-efficacy.

Kanfer & Zeiss (1983), Holahan & Holahan (1987) and Bandura et al (1999) have found significant associations between levels of depression and levels of social self-efficacy in college students, older adults and children respectively. Employing a longitudinal design, Holahan & Holahan (1987) found social self-efficacy to be predictive of depression at one-year follow-up. They also found social self-efficacy to be predictive of social support at follow-up, which in turn they showed to be predictive of depression at follow-up. Importantly this association held, even when ongoing depression was controlled for, providing support for social self-efficacy having a causal role in the development of depression.

The historically impoverished social circumstances of many people with a learning disability and the continuing difficulties many people have in developing rewarding interpersonal relationships suggest these factors may be particularly important in the development and maintenance of depression in this client group. A history of feeling unable to influence the social circumstances in a person's life and / or repeated experiences of poor social support are suggested to lead to reduced levels of confidence in that person's ability to develop and sustain interpersonal relationships which may then feed back both directly into depressive symptomatology and into further reduced levels of individually organised social support.

Previous measures of social self-efficacy have either used sub-scales from general measures of self-efficacy (e.g. Sherer et al 1982) or been developed *de novo* for specific client groups, including older adults (Holahan & Holahan 1987) and children (Bandura et al 1999). Only one measure of social self-efficacy has been reported as being used with people with a learning disability. The Interpersonal Self-efficacy Scale (ISES) was specifically designed for this client group (Castles & Glass 1986 and personal communication). The ISES included only six items, covering interpersonal situations at work, at home and in the community. The ISES was written for an American population and the language would need to be adapted for use in Britain. In addition as suggested by Bandura (personal communication) their use of 'happy' and 'sad' facial expressions in the response format may have been misinterpreted by participants as asking them to rate their happiness or sadness rather than their belief in their ability to perform a certain action.

The development of a new measure of social self-efficacy for people with a learning disability would assist in the assessment and monitoring of a concept that may have particular clinical utility in the context of depression arising as a result of pessimism about ability to develop and sustain rewarding interpersonal relationships. If, as in other client groups, social self-efficacy is found to have a causal role in the development of depression in people with a learning disability it may have the additional value of serving as a predictive measure of vulnerability to future depression.

Validity

The method of scale construction outlined in the plan of investigation coupled with the use of a pilot study will help maximise content and face validity. Concurrent validity will be assessed by comparing the scores of non-learning disabled participants on Sherer et al's (1982) Social Self-efficacy sub-scale with their scores on the Glasgow Social Self-efficacy Scale.

Reliability

Bandura (1997) suggests that test-retest reliability of self-efficacy scales need not be high, as an accurate measure of self-efficacy does not necessarily demand high temporal stability. However test-retest reliability and internal reliability will be assessed.

Aims and Hypotheses

This study has four aims:

- To develop a measure of social self-efficacy for use with people with a mild or moderate learning disability (the Glasgow Social Self-efficacy Scale; GSSES).

- To assess internal reliability of the GSSES.
- To assess concurrent validity of the GSSES.
- To explore the relationship between the GSSES and measures of depression, social skill and social support.

Specific hypotheses are:

- Social self-efficacy can be measured in people with a learning disability.
- Previous findings associating social self-efficacy with social support and depressive symptomatology in other clients groups will also be found in people with a learning disability.

Plan of Investigation

Scale Construction

Development of the GSSES will be guided by Bandura's unpublished *Guide for Constructing Self-efficacy Scales* (personal communication). Particular recommendations include:

- identifying important factors associated with the domain under investigation,
- exploring the degree to which a person's belief in a specific ability (efficacy) changes in different contexts,
- avoiding multi-barrelled items potentially tapping into different self-efficacy domains,
- pre-testing for readability and clarity,
- using as wide a response scale as possible (e.g. 100-point scale from 0 – certain cannot do to 100 – certain can do).

Potential items for inclusion in the scale will be generated from existing measures of social self-efficacy, (Bandura et al 1999; Castles & Glass 1986; Holahan & Holahan 1987; Sherer et al 1982). Focus groups will then be used to establish the relevance of these items to people with a learning disability. Issues appearing relevant will be incorporated into a draft GSSES. The draft GSSES will then be sent for comment to five Clinical Psychologists with experience of working with people with a learning disability. The draft measure will then be piloted with six volunteers from the focus groups to identify an appropriate response format. A range of response formats will be considered including an analogue scale of a line anchored by bipolar points, a four point Likert-type scales accompanied by a bar graph (e.g. Kazdin et al 1983) and a three point Likert-type scale.

Participants

Focus Groups and Pilot Study

Three Resource Centre Managers, one each in Falkirk, Stirling and West Lothian District Social Work Departments will be asked to identify up to six centre users with a mild or moderate learning disability to participate in focus groups which will be led by the researcher. The person will be given an information sheet about the study and a consent form (appendix 3.3). Consent forms will be returned to Resource Centre Managers who will contact the researcher with the person's details. Focus groups will be held in the centre over a two-hour period. Up to six volunteers from these groups will then take part in the pilot study at a subsequent date. These individual sessions will last about an hour and will take place in private rooms in each resource centre.

Main Study

Based on a power calculation (see below) 34 participants (17 men and 17 women) will be recruited. Day Care Officers in Adult Resource Centres in Falkirk, Stirling and West Lothian District Social Work Departments will be asked to identify potential participants with a mild or moderate learning disability fulfilling the following criteria: aged between 18 and 65, judged able to understand and communicate about relationships, no previous history of psychotic illness or autism, and not exhibiting behavioural difficulties deemed likely to seriously affect their participation.

People interested in taking part will be given an information sheet about the study and asked to complete a consent form (appendix 3.3). Day Care Officers will contact the researcher with the details of people agreeing to take part. Each participant would then be seen individually in private rooms in each resource centre. Ten participants will be seen on two occasions (with a four-week interval in between) to assess test-retest reliability. Participants' key-workers will be asked to complete the measure of social communication skill (see below).

Twenty people without a learning disability will be approached through personal contacts of the researcher. They will be given an information and consent form (see appendix 3.3). People choosing to participate would then complete the questionnaire independently.

Measures

In addition to the final version of the Glasgow Social Self-efficacy Scale (GSSES), questions from the revised Zung Depression Scale (appendix 3.2, ZDS; Kazdin et al 1983) and the Reynolds Self-Report Depression Questionnaire (appendix 3.1, SRDQ; Reynolds, personal communication and Reynolds & Baker 1988) will be administered to participants with a learning disability as will the British Picture Vocabulary Scale II (Dunn et al 1997) and the Reiss-Peterson Social Support Scale (Benson, personal communication and Reiss & Benson 1985). Participants' key-workers will be asked to complete the Communication Skills Rating Chart (Rinaldi 1992). Non-learning disabled participants will be given the final version of the GSSES and Sherer's (1982) Social Self-efficacy sub-scale.

Analysis

Transcriptions from the focus groups will be analysed to assess the relevance of items from previous social self-efficacy measures to people with a learning disability.

Internal consistency of the final GSSES will be measured by Cronbach's α. A Pearson's correlation will be used to assess concurrent validity of final GSSES by comparing the scores of non-learning disabled participants on the Sherer et al (1982) Social Self-efficacy Sub-scale and the GSSES. Pearson's correlations will be used to compare scores on social support, social skill and depression measures and the GSSES. A principal components analysis will be conducted on the GSSES to identify potential factors underlying the items.

Power Calculation

A power calculation was conducted using University College of Los Angeles on-line power calculator. Holahan & Holahan (1987) in older adults found a correlation of 0.42 between social self-efficacy and depressive symptomatology one year later when controlling for the effects of ongoing depression. This study involved a non-clinical sample and may therefore be used as a good estimate of potential effect size in the current study. To achieve a power of 0.8 and assuming a significance level of $p<0.05$ a sample size of 34 will be needed if the correlation is 0.42.

Ethical Approval (see appendix 3.4 for letter granting approval)

Ethical approval will be sought from Greater Glasgow Primary Care NHS Trust as the researcher's employing authority and from West Lothian, Falkirk and Stirling District Social Work Departments, as participants will be recruited though Adult Resource Centres managed by these authorities.

A submission will be made to Greater Glasgow Primary Care Trust NHS Trust's Ethics' Committee meeting in July 2000. None of the Social Work Departments have a formal ethics' committee but instead ask potential researchers to submit proposals to their research officer for approval by them or a senior management team. Submissions will be made to each social work department in July 2000.

Potential Benefits

Social Self-efficacy has been shown as having clinical and research utility in other client groups. The development of the GSSES will assist in determining whether these benefits may also be made available to researchers and clinicians working with people with a learning disability. In particular it may assist in:

- improving knowledge of the interpersonal understanding and beliefs of people with a learning disability
- exploring the association between belief about ability to influence interpersonal relationships and depressive symptomatology
- identifying potential targets for therapeutic intervention
- improving the assessment and monitoring of features of depressive symptomatology
- predicting future vulnerability to depressive symptomatology.

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Major Paper

THE GLASGOW SOCIAL SELF-EFFICACY SCALE - A NEW SCALE FOR MEASURING SOCIAL SELF-EFFICACY IN PEOPLE WITH A LEARNING DISABILITY: PSYCHOMETRIC PROPERTIES AND ASSOCIATIONS WITH SOCIAL SUPPORT AND DEPRESSIVE SYMPTOMATOLOGY

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Target Journal:- *Journal of Intellectual Disability Research*
(See Appendix 4.1)

Structured Summary

Background

The impact of social isolation on the mental health status of people with a learning disability is reflected by studies associating low levels of social support with increased depressive symptomatology. However, the psychological mechanisms underlying this association remain largely unexplored. In the non-learning disabled population, social self-efficacy has been shown to be an important cognitive factor predictive of both social support and depression. Despite increasing recognition of the value of considering cognitive factors in depression in people with a learning disability, the association between social self-efficacy and depression remains unexplored. This study aimed to develop a reliable and valid measurement of social self-efficacy for people with a learning disability (the Glasgow Social Self-efficacy Scale) and to examine the associations between social self-efficacy, social support and depression in this client group.

Results

The Glasgow Social Self-efficacy Scale demonstrated strong internal and test-retest reliability. In addition it had acceptable concurrent validity with an existing measure of social self-efficacy. Previous findings associating increased social self-efficacy with reduced depressive symptomatology were replicated with non-learning disabled participants. However, in participants with a learning disability, increased social self-efficacy was associated with increased depressive symptomatology.

Conclusions

This study provides encouraging support for the viability of assessing social self-efficacy in people with a learning disability. However, it provides preliminary evidence that the relationship between social self-efficacy and depression may be different in people with a learning disability compared to the non-learning disabled population.

Introduction

Despite major changes in services in the last few decades, people with a learning disability continue to face social isolation (e.g. Ralph & Usher 1995). The association between social isolation and depression established in the general population (e.g. Brown & Harris 1978), suggests this may represent an increased vulnerability factor to depression in this client group (Reed 1997). In support of this assertion, empirical studies with people with a learning disability have found low levels of both social support (Nezu et al 1995; Reiss & Benson 1985) and social skills (Benson et al 1985; Laman & Reiss 1987) to be associated with increased depressive symptomatology.

Studies considering social factors in depression in people with a learning disability highlight the potential role that skill deficits and impoverished social circumstances may have in depression in people with a learning disability. However, there has been limited research on the underlying psychological mechanisms by which an external social impoverishment or behavioural deficit may be translated into a depressed emotional state. In the general population, in addition to the objective constructs of social support and social skill, the cognitive construct of social self-efficacy, or belief in social ability, has been shown to be predictive of both social support and depression (Bandura 1999; Holahan & Holahan 1987). This suggests that a full account of the impact of social factors in depression in people with a learning disability may need to take account of the potential role of social self-efficacy in addition to the role of social support and social skill.

In addition to findings in the general population, there are specific reasons for believing social self-efficacy may be of particular relevance to people with a learning disability. Firstly, a deficit in social ability is central to current diagnostic criteria for learning disability (e.g. DSM-IV; American Psychiatric Association 1994). If, as Jahoda et al (1988) concluded, people with a learning disability do have 'insight into their situation as stigmatised individuals,' (page

113) it is possible this awareness will include some insight into deficits in their social ability. Secondly, as noted by Reed (1997), people with a learning disability often have to contend with the experience of repeated failures in their life. The previously identified continuing social isolation of this client group provides an example of a failure to achieve a desired outcome in life. Therefore social self-efficacy may be a key cognitive variable involved in how social isolation is interpreted by people with a learning disability. Indeed, the ultimate impact of social isolation on an individual's mental health status may be dependent on its impact on social self-efficacy.

This study aimed to develop a reliable and valid measurement of social self-efficacy for people with a learning disability and to examine the associations between depression and social self-efficacy in this client group. Two self-report measures of depression were used: the Self-report Depression Questionnaire (SRDQ: Reynolds personal communication; Reynolds & Baker 1988) and the adapted Zung Depression Scale (adapted Zung; Kazdin et al 1983). This enabled further exploration of the concurrent validity of the SRDQ and allowed the internal reliability of the adapted Zung to be reported for the first time. Given the previously identified associations between reduced levels of social support and social skill, and increased depressive symptomatology, this study also included measures of social skill and social support. This enabled the distinction between these constructs and the developed measure of social self-efficacy to be explored.

Method

Phase I - Development of the Glasgow Social Self-efficacy Scale (GSSES)

Focus groups were held in three Adult Training Centres, which provide day services for adults with a learning disability. Fourteen participants were recruited by Day Care Officers. The purpose of the focus groups was to stimulate discussion of items covered by previous measures of social self-efficacy, (Bandura et al 1999; Castles & Glass 1986a, b, c; Connolly 1989; Holahan &

Holahan 1987; Sherer et al 1982), and to establish their relevance to people with a learning disability. Issues found to be relevant to focus group participants were: friendship, meeting new people, standing up for yourself and coping with group situations. These issues were incorporated in the draft GSSES. The draft GSSES was sent to five clinical psychologists with experience of working with people with a learning disability who were asked to give a rating of face validity (from 0-100) and to provide comments on the scale. Ratings of face validity ranged from 65 to 82.5 with a mean of 74.5. Changes made as a result of their feedback included splitting the GSSES into two sections to reduce the possibility of participant fatigue. The draft measure was piloted with six participants attending three Adult Training Centres, providing day services for people with a learning disability. A key issue for the pilot study was to establish an appropriate response format. A range of response formats was piloted, including an analogue scale and three and four point Likert-type scales accompanied by a bar graph (e.g. Kazdin et al 1983). As a result of the pilot study, and in line with previous research (Mindham 1999; Reynolds & Baker 1988), a three point Likert-type scale was chosen as the most reliable response format.

Phase II – Main Study

Participants

Seventy-seven individuals participated in the main study: 38 participants with a learning disability, 20 key-workers of all these participants (some participants shared key-workers) and 19 participants without a learning disability.

Thirty-eight participants were recruited from six Adult Training Centres providing day services to adults with a learning disability in three local authority areas. An original cohort of forty-five potential participants was identified by Day Care Officers using the following selection criteria: aged between 18 and 65, judged able to understand and communicate about relationships, no previous history of psychotic illness or autism, and not exhibiting behavioural difficulties deemed likely to seriously affect their participation. Seven of these participants were excluded following concerns about the reliability of their responses to one or more of the measures outlined below. Table 1 shows demographic details for the final 38 participants. It includes their scores on the British Picture Vocabulary Scale, a measure of receptive vocabulary (Dunn et al 1997).

[INSERT TABLE ONE ABOUT HERE]

The key-workers of the 38 participants identified above were approached directly by the researcher to complete a measure of participants' communication skill. In addition, nineteen participants, aged 18 to 65 without a learning disability were recruited from postgraduate students and associated non-clinical groups.

Measures & Design

The following measures were chosen on the basis of their previous usage with people with a learning disability and their ability to address the main research questions as described below.

1. The Glasgow Social Self-efficacy Scale (GSSES; see appendix 4.2), developed for this study, included seventeen questions covering belief in ability to perform a number of communication acts. Communication acts included telling people you are happy, telling people you are sad, telling someone you think they are wrong and talking to someone when they are busy. Each type of act was considered in relation to talking to a range of different people: key-worker (or boss for non-learning disabled participants), family member and best friend. For example 'when you feel sad can you say to KEY-WORKER's NAME 'I feel sad'? and if KEY-WORKER's NAME says something wrong can you say 'KEY-WORKER's NAME you are wrong'? Participants were also asked about their belief in their ability to talk to a (pretend) new person starting at their resource centre (or work for non-learning disabled participants), a (pretend) new person moved in next door to them and finally their belief in their ability to talk in a (pretend) group of new people.

A three-point response format was used for each answer: not at all (scored 0), a little bit (scored 1) or a lot (scored 2). Seventeen items scored from 0 to 2 gives a range of total self-efficacy scores from 0 to 34. The GSSES was administered to all 38 participants with a learning disability and all 19 non-learning disabled participants to assess its internal reliability. The GSSES was re-administered after four weeks to nine participants with a learning disability to assess test-retest reliability.

2. Sherer's Social Self-efficacy Scale (Sherer et al 1982) a sub-test of six items from Sherer's General Self-efficacy Scale was administered to the 19 non-learning disabled participants to assess concurrent validity of the GSSES.

3. The Communication Skills Rating Chart is part of the Social Use of Language Programme (Rinaldi, 1992) and is an informant-completed checklist of communication skills. It was chosen as it covered the skills most closely related to the items included in the GSSES. Therefore it would help to establish whether the GSSES was measuring a cognitive construct rather than an actual skill level. It was administered to key-workers of all 38 participants with a learning disability.

4. The Reiss-Peterson Social Support Scale (Benson, personal communication; Reiss & Benson, 1985) is a self-report scale covering amount and type of social support available to participants. It was administered to the 38 participants with a learning disability to establish whether the GSSES was measuring something other than social support and to allow the association between social support and depression to be tested.

5. The Self-Report Depression Questionnaire (SRDQ; Reynolds, personal communication; Reynolds & Baker, 1988) was designed specifically for people with a learning disability. The SRDQ has a three choice response format analogous to the GSSES response format. Therefore the SRDQ's screening

section designed to assess participants' understanding of the SRDQ's response format also provided a screen of their ability to complete the GSSES. It was administered to all 38 participants with a learning disability and all 19 non-learning disabled participants to enable the association between social support, social self-efficacy and depression to be examined.

6. The Zung Depression Scale (Zung, 1965) has been adapted for people with a learning disability (adapted Zung; Kazdin et al, 1983) by simplifying the language, replacing the initial four choice response format with a yes / no format and removing the question about enjoyment of sex. The adapted Zung was administered to all 38 participants with a learning disability and all 19 non-learning disabled participants to assess internal reliability. Internal reliability has not previously been reported for the adapted Zung. Using the adapted Zung also enabled an assessment of the concurrent validity of the SRDQ.

Procedure

Participants with a learning disability were seen in private rooms in their Adult Training Centre. Twenty-nine participants were seen once and nine participants were seen twice (with a four week interval) to assess test-retest reliability. These nine participants were selected on the pragmatic basis that they all came from the same Adult Training Centre. The Glasgow Social Self-efficacy Scale was split into two sections as shown in appendix 4.2. Section one was completed at the start of the interview, followed by the Reiss-Peterson Social Support Scale, the Self-Report Depression Questionnaire and the adapted Zung, ending with the second section of the Glasgow Social Self-efficacy Scale. The order of presentation of these sub-sections was reversed for half the participants. Interviews lasted between 35 and 75 minutes. The Communication Skills Rating Chart was completed by participants' key-workers. Non-learning disabled participants were given copies of the adapted Zung, the Self-Report Depression Questionnaire, the Glasgow Social Self-efficacy Scale and Sherer's Social Self-efficacy Scale and asked to complete them and return them by post to the researcher.

Results

Results are covered in the following five sections: 1) the relationship between participants' demographic factors and their scores on all measures; 2) an examination of the psychometric properties of the Glasgow Social Self-efficacy Scale; 3) a factor analysis of items in the GSSES; 4) an examination of the psychometric properties of the two depression scales and 5) an exploration of the associations between social self-efficacy, social support, communication skill and depression.

Unfortunately, on the Glasgow Social Self-efficacy Scale (GSSES) five participants with a learning disability did not complete the section about best friends and three did not complete the section on family members as they did not identify a best friend or family member. To maximise the number of GSSES items available for analysis these participants were excluded from all analyses involving the GSSES, leaving 30 participants for these sections. All 38 participants with a learning disability were included when examining the psychometric properties of the depression scales.

1. Demographic Features

T-tests found no significant differences at the 0.05 level between male and female participants' scores on the GSSES, Zung, SRDQ, RPSSS or CSRC. However, men performed significantly better than women on the BPVS ($t=2.05$ $p<0.05$ two-tailed). No significant differences at the 0.05 level were found between participants living with family or living in residential accommodation on the GSSES, Zung, SRDQ, BPVS or CSRC. However, participants living at home scored significantly higher than participants living in residential accommodation on the measure of social support ($t=3.13$ $p<0.05$ two-tailed). Age was not significantly correlated at the 0.05 level with scores on SRDQ, RPSSS, BPVS, CSRC or GSSES but was significantly correlated with the adapted Zung Depression Scale (Pearson's correlation $r=-0.39$ $p<0.05$ two-tailed) suggesting older participants reported more depressive symptomatology.

2. Psychometric Properties of the Glasgow Social Self-efficacy Scale (GSSES)

No significant difference at the 0.05 level was found on a t-test between the two orders of presentation of sections of the GSSES, suggesting order of presentation did not unduly influence scores on this measure.

Test-retest correlation coefficient for the nine participants completing the GSSES on two occasions was 0.90 representing acceptable test-retest reliability (Foster 1998). Cronbach's α for internal reliability of the GSSES was 0.78 for participants with a learning disability and 0.90 for the non-learning disabled group, representing acceptable levels of internal reliability (Foster 1998). Pearson's correlation r=0.42 ($p<0.05$) between the Glasgow Social Self-efficacy Scale and Sherer's Social Self-efficacy Scale (1982) for non-learning disabled participants suggests significant but low concurrent validity.

3. Factor Structure of the Glasgow Social Self-efficacy Scale (GSSES)

Given the limited number of participants, non-learning disabled participants and participants with a learning disability were all included in the factor analysis. Principal components analysis using varimax rotation for the 30 participants with a learning disability and 19 non-learning disabled participants revealed 72% of total variance was accounted for by five factors. Table 2 identifies GSSES items with loadings greater than 0.6 for each factor. These factors appeared to relate to assertiveness, meeting new people, conflict in informal relationships, formal relationships with authority and sharing emotions within a family context.

[INSERT TABLE TWO ABOUT HERE]

4. Psychometric Properties of the Depression Scales

Cronbach's α reliability coefficient for the SRDQ was 0.89 for participants with a learning disability and 0.88 for non-learning disabled participants. This is consistent with the previously reported coefficient of 0.90 (Reynolds & Baker 1988) and represents an acceptable level of internal reliability (Foster 1998). Cronbach's α reliability coefficient for the adapted Zung was 0.50 for participants with a learning disability and 0.73 for the non-learning disabled group. No previous record of internal reliability for the adapted Zung was found. This represents a rather poor level of internal reliability for its use with people with a learning disability (Foster 1998). Therefore in the analyses exploring the relationship between social self-efficacy, social support, communication skill and depression, the SRDQ is used as the measure of depression for participants with a learning disability. However, both adapted Zung and SRDQ are used for non-learning disabled participants.

The Pearson correlation between the adapted Zung and SRDQ was $r=0.73$ for participants with a learning disability ($p<0.05$) and $r=0.79$ for non-learning disabled participants ($p<0.05$). This compares favourably with the correlation of $r=0.65$ between the SRDQ and Hamilton Rating Scale of Depression (Reynolds & Baker 1988) and suggests an acceptable degree of concurrent validity.

5. Relationship between communication skill, social support, social self-efficacy and depression

The relationship between communication skill, social support, social self-efficacy and depression is examined using both correlational and regression analysis.

Correlations – Table 3 shows Pearson correlations between participants' scores on social self-efficacy, communication skill, social support and depression measures. For participants with a learning disability, a significant negative correlation was found between the SRDQ and CSRC, suggesting decreased communication skills were associated with increased depressive symptomatology. As expected, a significant positive correlation was found between GSSES and RPSSS, suggesting increased levels of social self-efficacy were associated with increased levels of social support. In contrast, the significant positive correlation between GSSES and SRDQ was not expected, and suggested that increased levels of social self-efficacy were associated with increased rather than decreased levels of depressive symptomatology. However, for the non-learning disabled participants, significant negative correlations were found between SRDQ and adpated Zung, and the GSSES and the SRDQ and SSES. This suggests that, as expected, increased levels of social self-efficacy were associated with decreased levels of depressive symptomatology.

[INSERT TABLE THREE ABOUT HERE]

Regression Analysis – The relationship between social support, communication skill, social self-efficacy and depression in participants with a learning disability was also examined in more detail using Enter regression analysis (Foster 1998). The significant co-linearity between social support and social self-efficacy prevented these variables being included within the same regression analysis. Table 4 shows regression analyses with depression (SRDQ) as the criterion variable and firstly social support and social self-efficacy as predictor variables and secondly communication skill and social support as predictor variables. None of these variables were found to be significant independent predictors of depression.

[INSERT TABLE FOUR HERE]

The relationship between depression and social self-efficacy in non-learning disabled participants was also explored using Enter regression analysis (Foster 1998) (table 5). Social self-efficacy (GSSES) was found to be a significant predictor of depression as measured by the adapted Zung ($p<0.05$) but not as measured by the Self-Report Depression Questionnaire.

[INSERT TABLE FIVE HERE]

Discussion

Although this study did not provide a justification of the underlying principles of self-efficacy theory it did suggest that social self-efficacy can be measured in people with a learning disability. A new scale, the Glasgow Social Self-efficacy Scale for people with a learning disability (GSSES), appeared to have acceptable internal and test-retest reliability. Face validity of a pilot version of the measure appeared acceptable. Eight of the 38 participants were unable to complete one or more sections on the GSSES as they were unable to name a best friend or family member. Future refinement of the GSSES should consider whether alternative sections can be substituted when people do not have best friends or family members.

The GSSES was not significantly correlated with a measure of communication skill. This may indicate that belief in ability and actual ability are separate constructs. However, as belief in ability was self-related and actual ability was informant-related it may reflect a difference between raters rather than a difference between the content of the measures. Reduced scores on the GSSES were significantly associated with reduced social support for people with a learning disability. In line with previous findings in non-learning disabled participants, increased social self-efficacy was both significantly associated with and predictive of decreased levels of depressive symptomatology on the adapted Zung. In contrast, in people with a learning disability, increased social self-efficacy was significantly associated with increased levels of depressive symptomatology on the SRDQ.

Psychometric Properties of the Glasgow Social Self-efficacy Scale (GSSES)

Internal reliability for the GSSES was higher than that found for Sherer et al's (1982) measure of social self-efficacy (SSSES). Concurrent validity of the GSSES with the SSSES was poor. This may reflect the poor internal reliability of the SSSES which in turn may reflect the limited number of items in this scale.

Future studies should assess concurrent validity of the GSSES by including other measures of social self-efficacy that have been found to be associated with depression.

Although both communication skill and scores on the GSSES were associated with depression (see below) they were not significantly correlated with each other. This suggests the GSSES was not simply measuring a level of actual skill and provides some evidence for the validity of the social self-efficacy construct in people with a learning disability. Social support was significantly positively correlated with scores on the GSSES. However, increased scores on the GSSES, but not increased levels of social support, were significantly associated with decreased depressive symptomaotology. This suggests that the GSSES was not simply measuring level of social support and is consistent with previous findings that social self-efficacy is associated with but not synonymous with social support (Bandura 1999, Holahan & Holahan 1987).

Preliminary factor analysis identified five factors underlying the GSSES. These factors appeared to relate to assertiveness, meeting new people, conflict in informal relationships, formal relationships with authority and sharing emotions within a family context. Unfortunately previous studies of social self-efficacy have not included factor analyses, preventing comparisons between GSSES and other social self-efficacy measures. Given the limited numbers in the current factor analysis, this factor structure will need to be ratified by further studies. In addition, it would be useful to undertake separate factor analyses with people with and without learning disability to identify any differences in underlying factor structure between client groups.

Psychometric Properties of the Depression Scales

In line with previous findings (Reynolds & Baker 1988), the Self-report Depression Questionnaire was found to have an acceptable level of internal reliability and good concurrent validity with another measure of depression (adapted Zung). However, internal reliability of the adapted Zung, which had not previously been reported, was found to be poor with people with a learning disability. This may reflect its susceptibility to acquiescence or naysaying (Sigelman et al 1981; Shaw & Budd 1982; Heal & Sigelman 1995) and raises doubts about its suitability as a measure of depression in this client group.

Social Skill, Social Support, Social Self-efficacy and Depression

Previous research (Benson et al 1985; Laman & Reiss 1987) has found reduced levels of social skill to be significantly associated with increased *informant* ratings of depression in people with a learning disability. This study provides evidence that increased communication skills (which may be considered as a subset of social skills) may be associated with reduced *self-reported* ratings of depressive symptomatology.

Significant correlations associating increased levels of social support with decreased depression, found in previous research with people with a learning disability (Nezu, et al 1995; Reiss & Benson, 1985), were not found in this study. There are several possible reasons for this discrepancy. Firstly, scores on the Reiss-Peterson Social Support Scale in the current study were lower than in Reiss & Benson's (1985) study. One reason for receiving a low score is a participant not having either or both parents alive. Therefore scores are weighted in favour of people with parents still alive regardless of whether alternative sources of social support are available. As precise details of Reiss & Benson's (1985) scores are not available it is not possible to determine whether there were more 'missing' parents in the current study. Secondly, Reiss & Benson (1985) had specifically recruited some participants with a clinical diagnosis of depression. It is possible the range of depressive symptomatology in the current study was not sufficient to establish a significant association in participants with a learning disability.

In line with previous research (Bandura 1999; Cane & Gotlib 1985; Holahan & Holahan 1987; Houston 1995; Kanfer & Zeiss 1983; McFarlane et al 1995), lower levels of social self-efficacy were associated with higher levels of depressive symptomatology in a non-clinical group of non-learning disabled participants. A significant correlation was also found between social self-efficacy and depressive symptomatology in people with a learning disability. However, this correlation was positive, suggesting that higher levels of social self-efficacy were associated with higher rather than lower levels of depressive symptomatology. There are at least two possible theoretical explanations of this finding. Someone with a learning disability may have a high level of belief in their ability, but as a member of a stigmatised group, outcomes in their life may be determined more by external than internal factors. This external locus of control could create a situation of learned helplessness (e.g. Abramson et al 1978), in which they believe positive social outcomes are unattainable (see Reed 1997), which may increase vulnerability to depression. Alternatively, drawing on work on the discrepancy between actual and ideal selves in people with a learning disability (e.g. Leahy et al 1992; Zigler et al 1972) ratings of social self-efficacy may represent the person's belief in their ideal self rather than their actual self. Someone with a high score on a measure of social self-efficacy may be responding on the basis of their ideal self rather than their actual self. In this case a high score may in fact signal a large discrepancy between actual and ideal levels of self-efficacy. In theory, larger discrepancies between actual and ideal self-efficacy might be expected to increase vulnerability to depression. The inclusion of methods to assess locus of control and the difference between actual and ideal selves would help to test these alternative theoretical explanations in future research.

Future Research

The significant association found in this study between increased social self-efficacy and increased depressive symptomatology warrants exploration in greater detail. Future research should allow the causative nature of this association to be tested, potentially through the use of a longitudinal design. The inclusion of a clinical group of depressed participants would also be useful. This would help clarify whether the association between social self-efficacy and depressive symptomatology holds for people with more severe symptomatology than was present in the current study.

A limitation to the current version of the Glasgow Social Self-efficacy Scale was that over one in five participants with a learning disability were unable to complete the section on best friend or family member. Although this may have reflected an important social reality for people with a learning disability it did restrict the number of items available for analysis. Consideration should be given in future studies to adding further items to the scale to compensate for these missing sections.

Conclusion

The GSSES seemed to provide a reliable measure of at least a partial aspect of social self-efficacy, a cognitive construct which has been implicated in depression in the general population. It has a range of potential clinical and research uses. Clinical uses identified by experienced clinicians include a role in the assessment and ongoing monitoring of progress in anxiety (especially of a social nature), and assertiveness training. The GSSES may also have a clinical role in the assessment and treatment of depression. Previous research in the client group has replicated findings from the general population associating reduced social support with increased depressive symptomatology. However, contrary to findings from the general population, this study found that higher social self-efficacy was associated with *higher* rather than *lower* levels of depressive symptomatology. This highlights the importance of exploring cognitive factors in depression in people with a learning disability but also warns against assuming the cognitive content and process of depression in this client group is necessarily the same as in the general population.

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Tables to be Inserted as Indicated in Main Text

Table 1 – Demographic details of the 38 participants with a learning disability.

Age	Range 20 to 61 years	Mean 39 years SD 11.7
Sex	22 women	16 men
Accommodation	23 with family	15 in supported accommodation
BPVS II	Interquartile range 53 to 88 Age equivalent 5y 2m to 8y 8m	Mean 72 SD 22.7

Table 2 – Factor structure of GSSES – Items with factor loadings of greater than 0.6 on each factor identified by principal components analysis with varimax rotation

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Variance accounted for	31%	15%	10%	9%	7%
	Talking to keyworker / boss when busy	Talking to new people in a group	Telling family member they are wrong	Telling keyworker / boss you are happy	Telling family member you are sad
	Talking to family member when busy	Talking to new next door neighbour	Telling best friend they are wrong	Telling keyworker / boss you are sad	Telling family member you are happy
	Talking to best friend when busy	Talking to new person at work / resource centre		Telling keyworker / boss they are wrong	

Table 3 – Pearson correlations between measures of social support, communication skill, social self-efficacy and depression for participants with a learning disability and between measures of social self-efficacy and depression for non-learning disabled participants.

PARTICIPANTS WITH A LEARNING DISABILITY			
	Social support (RPSSS)	Communication skill (CSRC)	Social self-efficacy (GSSES)
Communication skill (CSRC)	0.10		
Social self-efficacy (GSSES)	0.35*	-0.21	
Depression (SRDQ)	0.14	-0.43*	0.31*

NON-LEARNING DISABLED PARTICIPANTS			
	Social self-efficacy (Sherer et al)	Social self-efficacy (GSSES)	Depression (adapted Zung)
Social self-efficacy (GSSES)	0.42*		
Depression (adapted Zung)	-0.43*	-0.57*	
Depression (SRDQ)	-0.22	-0.43*	0.79*

*$p<0.05$

Table 4 - Data for the regression of depression on to: i) social support and communication skill and ii) social self-efficacy and communication skill in participants with a learning disability.

	B	Standard error of B	Beta	t value	Significance
(Constant)	45.86	6.04		7.59	.00
Social self-efficacy	.44	.26	.30	1.71	.10
Communication skill	-.52	.41	-.23	-1.28	.21
	B	Standard error of B	Beta	t value	Significance
(Constant)	46.89	6.96		5.62	.00
Social support	.17	.14	.23	1.25	.22
Communication skill	-.49	.42	-.22	-1.18	.25

Table 5 - Data for the regression of depression on to social self-efficacy for the non-learning disabled participants.

Using adapted Zung as Depression Measure					
	B	Standard error of B	Beta	t value	Significance
(Constant)	10.49	2.51		4.18	.00
Social self-efficacy	-.21	.07	-.57	-2.87	.01
Using Self-report Depression Questionnaire as Depression Measure					
	B	Standard error of B	Beta	t value	Significance
(Constant)	59.01	6.50		9.09	.00
Social self-efficacy	-.38	.19	-.44	-2.02	.06

Clinical Case Research Study (abstract)

A COMPARISON OF INITIAL AND MAINTAINED EFFECTIVENESS OF REDUCING PARENTAL TEASING AND INTRODUCING TIME-OUT: A CONTROLLED CASE STUDY IN A CHILD WITH AGGRESSIVE BEHAVIOUR

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Target Journal:- *Behaviour Research and Therapy*
(See Appendix 1)

Abstract

Aggressive behaviour in children is a common reason for referral to child and adolescent mental health services. Parent management training has been identified as being effective in reducing aggressive behaviour. Altering parental behaviour antecedent to child aggression and altering parental management strategies consequent to child aggression are two treatment components that may be included within parent management training. Parent management studies tend to involve a package of treatment components, making comparison of the effectiveness of these individual strategies difficult to assess. This study aimed to examine the impact of each approach within a single case study of child aggression. Impact was assessed both in terms of initial reduction in aggression and ongoing maintenance of change. Altering parental antecedent behaviour ('teasing') was initially successful but failed to be maintained, whereas altering parental consequential management (time-out) despite not being as initially effective was maintained more successfully. Results suggest that the emphasis in clinical practice on altering parental consequential management may reflect the difficulty with maintaining changes to parental antecedent behaviour. This emphasis may also correspond to enhanced ratings of face validity for parental consequential management. Future research should explore methods of enhancing the maintenance of change when implementing parental antecedent behaviour change.

Appendix 1.1: notes for contributors to Health Bulletin

Notes for Contributors

Papers. articles and other contributions should be sent to the Editor, *Health Bulletin*, Scottish Executive Health Department, Room IE05, St Andrew's House, Edinburgh EH1 3DE. They must be submitted exclusively for *Health Bulletin*. Acceptance is on the understanding that editorial revision may be necessary. All papers are reviewed by the Editor and by peer review, referees being drawn from a panel of appropriate professionals. No correspondence can be entered into in relation to articles found to be unsuitable and returned to authors.

Potential contributions can be submitted in two ways. Material submitted for publication must be typewritten on one side of the paper only, in double spacing and with adequate margins, and each page should be numbered. The top typed copy should be submitted, with four other copies. We are willing to receive one copy typewritten in the above format and accompanied by a disk (Microsoft Word version 98, Excel for tables and figures). All papers should be prefaced by a structured Abstract, of about 250 words in length. It should normally contain six clearly headed sections entitled Objective, Design, Setting, Subjects, Results and Conclusion. The name, appointment and place of work of the authors should be supplied on a separate title page. This same page should include the full postal address of one author, to whom correspondence and reprints will be directed. There should be adequate references to any relevant previous work on the subject; these references should appear at the end of the material on a separate page or pages, using the Vancouver style, which in the case of papers in journals includes:

Surname and initials of author(s)

Title of paper

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Year published

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Reprints

Ten reprints will be supplied free of charge.

Appendix 1.2: letter inviting GPs to participate in project

Dear Dr

As part of my clinical placement in I am assisting the Clinical Psychology Department to review current referral practice within the context of the current waiting list for Clinical Psychology Services. Part of this review involves a brief discussion with General Practitioners to ask them about their current referral practice and the possible impact on referral practice of any changes in the waiting list for services.

I have spoken to Dr xxxx who suggested I contact each of you directly to arrange to meet for about fifteen minutes to undertake this piece of work. I am happy to meet with you either in your surgery or in . I plan to contact you by telephone in the next week to arrange a suitable time and location for these brief interviews.

This work will form part of my Doctoral Research submission and I would be happy to discuss the findings of the work with you as requested.

Thank you for any assistance you may be able to give to this research.

Yours sincerely

Richard Payne
TRAINEE CLINICAL PSYCHOLOGIST

Appendix 1.3: outline of interview with a GP

Introduction

This interview should last about fifteen minutes and is split into three sections: the first asks some background questions about yourself and the Clinical Psychology service, the second asks you to describe your decision process when considering referral to Clinical Psychology and the third asks you to rate how important a certain set of variables are when you consider referral to Clinical Psychology.

Section 1

1. How long have you worked as a GP?
2. How long have you worked in the area?
3. Do you work full-time or part-time?
4. What do you think the current waiting list for Clinical Psychology is?
5. Over the last year how many of your patients have been referred to Clinical Psychology?
6. If there was no waiting list to Clinical Psychology would you refer about the same, more or less patients?
7. In relation to other GPs do you think you refer about the same as average, more than average or less than average to Clinical Psychology?
8. In relation to other GPs do you think you refer about the same as average, more than average or less than average to other mental health services?
9. In relation to other GPs do you think you refer about the same as average, more than average or less than average to general secondary medical services?
10. What services (if any) are available for people with mental health problems in your practice?
11. On a scale of 1 to 5 (with 1 being very little knowledge and 5 being a great deal of knowledge) can you rate your knowledge of the way in which clinical psychologists work?
12. On the same scale can you rate your knowledge of the way in which psychiatrists work?
13. On the same scale can you rate your knowledge of the way community psychiatric nurses work?

14. Are you aware of any explicit or implicit referral criteria for Clinical Psychology services?

(If answers no to first part of question 14 ask question 15.)

15. Would you find it useful to have explicit referral criteria for Clinical Psychology services or not?

Section 2

Thinking of your actual clinical practice can you describe the decision process you go through when considering a referral to Clinical Psychology? (This decision process may lead to a referral to Clinical Psychology or to a referral elsewhere or to continued management within the Primary Care setting.)

Section 3

Again considering your actual clinical practice could you allocate from 0 to 10 points to each of the following factors which may affect your decision to refer to Clinical Psychology? (A score of 0 would indicate that a factor is of no importance in your decision and a score of 10 would indicate that a factor is of extreme importance in your decision.)

Could you also say how a particular factor may increase or decrease the probability of referring to Clinical Psychology?

Possible presence of psychosis
Possible presence of alcohol or drug abuse
Patient's financial circumstances
Clinical Psychology waiting list
Patient's availability of social support
Patient's level of intelligence
Patient's motivation
Degree of risk of self-harm
Your perception of the quality of the Clinical Psychology service
Presence of physical symptoms with no evident physical pathology

Presenting problem seems to result from normal life changes
Degree of complexity of presentation
Length of time patient has had problem
Your degree of certainty of diagnosis
History of previous psychiatric problems
Patient's preference for type of treatment
Patient's accommodation circumstances
Patient's mobility
Possible presence of personality disorder

Appendix 1.4: outline of interview with a clinical psychologist

Introduction

This interview should last about fifteen minutes and is split into three sections: the first asks some background questions about yourself and the Clinical Psychology service. the second asks you to describe the decision process you believe GPs should go through when considering referral to Clinical Psychology and the third asks you to rate how important a certain set of variables should be when GPs consider referral to Clinical Psychology.

Section 1

1. What is the current waiting list for Clinical Psychology is?
2. If there was no waiting list do you think GPs would refer about the same, more or less patients?
3. On a scale of 1 to 5 (with 1 being very little knowledge and 5 being a great deal of knowledge) how do you think GPs on average would rate their knowledge of the way in which clinical psychologists work?
4. On the same scale how do you think GPs on average would rate their knowledge of the way in which psychiatrists work?
5. On the same scale how do you think GPs on average would rate their knowledge of the way community psychiatric nurses work?
6. On the same scale can you rate your knowledge of the way in which psychiatrists work?
7. On the same scale can you rate your knowledge of the way in which psychiatrists community psychiatric nurses work?
8. What referral criteria are there for Clinical Psychology services?
9. Would you find it useful to have explicit referral criteria for Clinical Psychology services or not?

Section 2

Given your knowledge and experience as a Clinical Psychology can you describe the decision process you believe GPs should go through when considering a referral to Clinical Psychology? (This decision process may lead to a referral to

Clinical Psychology or to a referral elsewhere or to continued management within the Primary Care setting.)

Section 3

Again given your knowledge and experience as a clinical psychologist and focusing on your perception of variables GPs should bear in mind when considering a referral to Clinical Psychology could you allocate from 0 to 10 points to each of the following factors? (A score of 0 would indicate that a factor should be of no importance in their decision and a score of 10 would indicate that a factor is of extreme importance in your decision.)

Could you also say how a particular factor should increase or decrease the probability of referring to Clinical Psychology?

Possible presence of psychosis
Possible presence of alcohol or drug abuse
Patient's financial circumstances
Clinical Psychology waiting list
Patient's availability of social support
Patient's level of intelligence
Patient's motivation
Degree of risk of self-harm
Your perception of the quality of the Clinical Psychology service
Presence of physical symptoms with no evident physical pathology
Presenting problem seems to result from normal life changes
Degree of complexity of presentation
Length of time patient has had problem
Your degree of certainty of diagnosis
History of previous psychiatric problems
Patient's preference for type of treatment
Patient's accommodation circumstances
Patient's mobility
Possible presence of personality disorder

Appendix 2.1 The Journal of Intellectual Disability Research Instructions for Authors

Papers (in English) should be sent to:
The Editor
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e-mail: winsladeb@cf.ac.uk.

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A structured summary should be given at the beginning of each article, incorporating the following headings: Background, Method, Results, Conclusions. These should outline the questions investigated, the design, essential findings and main conclusions of the study.

The text should proceed through sections of Abstract, Introduction, Materials and Methods, Results and Discussion. Pages should be numbered consecutively in arabic numbers, but tables, footnotes, figure legends, including magnifications and acknowledgements, should be submitted on separate sheets. Tables and figures should be referred to in the text together with an indication of their approximate position recorded in the text margin. The reference list should be in alphabetical order thus:

Giblett E.R. (1969) *Genetic markers in Human Blood.*
Blackwell Scientific Publications, Oxford.

Moss T.J. & Austin G.E. (1980) Preatherosclerotic lesions in Down's syndrome. *Journal of Mental Deficiency Research* **24**, 137- 41.

Journal titles should be in full. References in text with more than two authors should be abbreviated to (Brown *et al.* 1977). Authors are responsible for the accuracy of their references.

Spelling should conform to *The Concise Oxford Dictionary of Current English* and units of measurements, symbols and abbreviations with those in *Units, Symbols and Abbreviations* (1977) published and supplied by the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE. This specifies the use of SI units.

Illustrations should be labelled with the figure number and author's name in soft pencil on the back identifying the top edge. Photographs should be glossy bromide prints of good contrast and well matched, preferably with a transparent overlay for protection. Magnifications should be notified to the exclusion of the insertion of scales on prints. Colour photographs will be allowed only in special circumstances and the author will be asked to contribute towards the cost of reproduction. Line diagrams should be drawn with black ink on tracing paper or white card, or supplied as glossy prints. Papers may be judged to require extra-rapid publication by the Editor and referees.

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Appendix 3.1 Self-report Depression Questionnaire (Reynolds & Baker 1988)

DIRECTIONS FOR ADMINISTRATION OF THE SRDQ PRETEST PART II

[SAY:]

Find Part II on your answer sheet.

[Make sure that examinee is on question 1 of Part II]

[SAY:]

On these items we want to find out how well you can answer some general questions. Some will be easy and some will be hard. Be sure to answer all questions, even if you have to guess. I will read a number and a sentence to you two times. Wait until I am through reading and then think if the sentence is something you do or that happens: 1, almost never; 2, sometimes; or 3, most of the time. Mark an X on the number that shows how you feel.

Do you have any questions? [Examiner should answer any questions that the examiner may have regarding the questionnaire.]

[SAY:]

Number 1. The sun shines late at night. **[Repeat item]**

(check to see that the examinee is on the correct item)

Number 2. People eat milk with a fork. [repeat item]

Number 3. People listen to the radio. [repeat item]

Number 4. The rain makes grass wet. [repeat item]

Number 5. People smile when they are sad. [repeat item]

Number 6. Cars get flat tires. [repeat item]

Number 7. It snows in the summer. [repeat item]

Number 8. People eat breakfast in the bathtub. [repeat item]

Number 9. People go to movies. [repeat item]

Number 10. It rains in the morning. [repeat item]

Number 11. You sleep in a bed. [repeat item]

Number 12. Cats fly in the sky. [repeat item]

Number 13. You eat ice cream for breakfast. [repeat item]

Number 14. If someone accidentally bumps into you, you should hit that person in the nose. [repeat item]

Number 15. People eat chicken for dinner. [repeat item]

Scoring

Listed below are the SRDQ-P item numbers and the correct answer. It is important to note that sometimes situations or circumstances arise for which a different answer may be valid for an examinee. If an examinee can adequately explain his or her answer, or the examiner is aware of the circumstances and feels that the examinee is correct or partially correct, credit may be given. For example, Item 11 "You sleep in a bed." Some examinees may give a "almost never" response to this item, and on inquiry indicate that no, they sleep on a cot or other type arrangement (e.g., sofa bed, mattress on the floor, etc.). In such cases, credit should be given for the examinee's response.

As noted in the general instructions, a score of 10 or more correct should be used for determining the ability of the respondent to take the SRDQ. In cases where a low score is obtained, and this score has resulted due to incorrect responses to many of the items keyed "sometimes" (i.e., items 3, 5, 6, 9, 10, and 15), the examiner should attempt to explain the concept of "sometimes" using SRDQ-P items as examples. If in the examiner's judgement, the examinee has a basic grasp of this concept, the SRDQ may be administered. In such cases, care should be taken in the evaluation and interpretation of the results of the SRDQ.

SRDQ-P [Part II] Item	**Correct Response**
1	1. ALMOST NEVER
2	1. ALMOST NEVER
3	2. SOMETIMES
4	3. MOST OF THE TIME
5	2. SOMETIMES
6	2. SOMETIMES
7	1. ALMOST NEVER
8	1. ALMOST NEVER
9	2. SOMETIMES
10	2. SOMETIMES
11	3. MOST OF THE TIME
12	1. ALMOST NEVER
13	1. ALMOST NEVER
14	1. ALMOST NEVER
15	2. SOMETIMES

RDQ-P/Reynolds

SRDQ PRETEST PART II

1.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
2.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
3.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
4.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
5.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
6.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
7.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
8.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
9.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
10.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
11.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
12.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
13.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
14.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
15.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME

SCORE: ____________

SELF-REPORT DEPRESSION QUESTIONNAIRE [SRDQ]

Directions

[READ TO THE EXAMINEE]

PEOPLE SOMETIMES FEEL SORT OF SAD OR BAD ABOUT THEMSELVES OR THINGS. OTHER TIMES THEY FEEL GOOD ABOUT THINGS AND THEMSELVES. I AM GOING TO READ YOU SOME SENTENCES ABOUT HOW PEOPLE SOMETIMES FEEL.

I WANT TO KNOW HOW YOU HAVE BEEN FEELING FOR THE PAST TWO WEEKS.

FOR EACH SENTENCE I READ, I WANT YOU TO TELL ME IF YOU HAVE BEEN FEELING THIS WAY: ALMOST NEVER; or SOMETIMES; or MOST OF THE TIME.

[At this time give the examinee the SRDQ ANSWER SHEET]
FOR EXAMPLE, IF I SAY TO YOU: HOW OFTEN DO YOU WATCH TV? YOU WOULD MARK ON THE PAPER EITHER: 1 - ALMOST NEVER, WHICH MEANS THAT YOU USUALLY DO NOT WATCH TELEVISION, or YOU WOULD MARK: 2 - SOMETIMES, WHICH MEANS THAT YOU SOMETIMES WATCH TELEVISION, or IF YOU WATCH TELEVISION ALMOST ALL OF THE TIME, YOU WOULD MARK THE NUMBER 3.

[Point to the item marked EXAMPLE and say:]

SEE WHERE I AM POINTING? MARK THE NUMBER THAT TELLS ME HOW OFTEN YOU WATCH TELEVISION.

[After examinee has responded to the example, continue with:]
REMEMBER, MARK THE ANSWER THAT BEST DESCRIBES YOU AND HOW YOU ARE FEELING. DO YOU UNDERSTAND?

OK, NOW I WILL READ SOME SENTENCES ABOUT HOW PEOPLE FEEL. PLEASE PUT AN X OR A MARK ON THE NUMBER THAT TELLS HOW YOU HAVE BEEN FEELING FOR THE PAST TWO WEEKS. REMEMBER, THERE ARE NO RIGHT OR WRONG ANSWERS, JUST HOW YOU HAVE BEEN FEELING.

[Read each item twice. Repeat the response format if necessary.]

OKAY, LET'S START:

1. I FEEL TIRED. [REPEAT ITEM]
2. I FEEL HAPPY. [REPEAT ITEM]
3. I FEEL SICK. [REPEAT ITEM]
4. I FEEL PEOPLE DON'T LIKE ME. [REPEAT ITEM]
5. I FEEL HUNG~~R~~RY. [REPEAT ITEM]
6. I FEEL LIKE HIDING FROM PEOPLE. [REPEAT ITEM]
7. I FEEL SAD. [REPEAT ITEM]

SELF-REPORT DEPRESSION QUESTIONNAIRE PAGE TWO.

8. I FEEL LIKE CRYING. [REPEAT ITEM]

9. I FEEL THAT NO ONE CARES ABOUT ME. [REPEAT ITEM]

10. I FEEL LIKE RUNNING AWAY. [REPEAT ITEM]

11. I FEEL LIKE KILLING MYSELF. [REPEAT ITEM]

12. I BLAME MYSELF WHEN SOMETHING BAD HAPPENS. [REPEAT ITEM]

13. I FEEL I AM NO GOOD. [REPEAT ITEM]

r 14. I FEEL LIKE SMILING. [REPEAT ITEM]

15. I CAN'T FALL ASLEEP AT NIGHT. [REPEAT ITEM]

16. I FEEL I HAVE NO ENERGY. [REPEAT ITEM]

17. I FEEL WORRIED. [REPEAT ITEM]

18. I GET STOMACHACHES. [REPEAT ITEM]

19. I FEEL SORT OF JUMPY. [REPEAT ITEM]

20. I FEEL BORED. [REPEAT ITEM]

21. I WAKE UP VERY EARLY IN THE MORNING AND CAN'T GO BACK TO SLEEP. [REPEAT ITEM]

22. I FEEL UPSET ABOUT THINGS. [REPEAT ITEM]

23. I FEEL NOTHING I DO HELPS ANYMORE. [REPEAT ITEM]

24. IT'S HARD FOR ME TO GET UP IN THE MORNING. [REPEAT ITEM]

25. WHEN SOMETHING BAD HAPPENS, I THINK IT IS MY FAULT. [REPEAT ITEM]

26. I GET MAD REAL EASILY. [REPEAT ITEM]

27. I DON'T FEEL LIKE DOING ANYTHING. [REPEAT ITEM]

28. ITS HARD FOR ME TO THINK ABOUT WHAT I AM DOING. [REPEAT ITEM]

29. I FEEL SORRY FOR MYSELF. [REPEAT ITEM]

30. I SLEEP TOO MUCH. [REPEAT ITEM]

31. I EAT TOO MUCH. [REPEAT ITEM]

32. FOR THE LAST ITEM, PUT AN X ON THE FACE THAT SHOWS HOW YOU HAVE BEEN FEELING FOR THE PAST TWO WEEKS.

Wm. Reynolds

me:________________________ Date ________ ID Number________

e:________ Sex: M F Race:__________ Site Name:____________

ABOUT ME

AMPLE: 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	9.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	10.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	11.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	12.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	13.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	14.	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	15	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME
	1 ALMOST NEVER	2 SOMETIMES	3 MOST OF THE TIME	16	1 ALMOST NEVER	2 SOMETIMES	MOST OF THE TIME

7. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

8. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

9. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

0. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

1. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

2. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

3. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

4. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

25. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

26. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

27. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

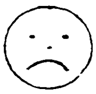
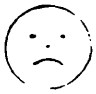
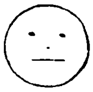
28. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

29. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

30. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

31. 1 ALMOST NEVER 2 SOMETIMES 3 MOST OF THE TIME

32. PUT AN X OVER THE FACE THAT SHOWS HOW YOU HAVE BEEN FEELING

Appendix 3.2: adapted Zung Depression Scale (Kazdin et al 1983)

Answer Yes or No to the following questions.

I feel downhearted and blue.

Morning is when I feel best.

I have crying spells or feel like it.

I have trouble sleeping at nights.

I eat as much as I used to.

I notice that I am losing weight.

I have trouble with constipation.

My heart beats faster than usual.

I get tired for no reason.

My mind is as clear as it used to be.

I find it easy to do the things I used to.

I am restless and can't keep still.

I feel hopeful about the future.

I am more irritable than usual.

I find it easy to make decisions.

I feel that I am useful and needed.

My life is pretty full.

I feel others would be better off if I were dead.

I still enjoy the things I used to.

Appendix 3.3 Patient Information Sheets and Consent Forms

Greater Glasgow Primary Care NHS Trust: Patient Information Sheet (for people with a learning disability)

Development of a measure of Social Self-efficacy for people with mild or moderate learning disability.

It is up to you whether to take part. It does not matter if you say no. You are allowed to say no even if you said yes to start with. No-one will mind if you say no.

What we are trying to do
We want to ask about how you are feeling.
How we get on with people may change how we feel.
We want to find out how good you think you are at getting on with people.

How we will do this
We will do this by talking to fifty-four people who attend Adult Resource Centres.
We have some questions that will help us work out how you are feeling.
We also have some questions, which will help us work out how good you think you are at getting on with people.

Any benefits of what we are doing
What we are doing may help staff to help people who feel unhappy.

How what we are doing might affect you
It will be up to you to decide whether to talk about things. There may be some things we talk about that are upsetting. If this happens we will talk about how you want to deal with them.

How long it will take
We will meet you once for about one hour.

Privacy
The things we talk about will be private unless you say things that make us worry someone may be unhappy or hurting. If this happens we will talk to you about what we should do.

Greater Glasgow Primary Care NHS Trust: Patient Information Sheet (concurrent validity element – non-learning disabled participants)

Development of a measure of Social Self-efficacy for people with mild or moderate learning disability.

It is up to you whether to take part. It does not matter if you say no. You are allowed to say no even if you said yes to start with. No-one will mind if you say no.

What we are trying to do
We want to ask about how you are feeling.
How we get on with people may change how we feel.
We want to find out how good you think you are at getting on with people.
We want to compare your scores on a measure we have developed for people with a learning disability with an existing measure.

How we will do this
We will do this by giving the two measures to 17 people.

Any benefits of what we are doing
What we are doing may help staff to help people with a learning disability who feel unhappy.

How what we are doing might affect you
It will be up to you to decide whether to answer questions. There may be some things we talk about that are upsetting. If this happens we will talk about how you want to deal with them.

How long it will take
We will meet you once for about one hour.

Privacy
The things we talk about will be private unless you say things that make us worry someone may be unhappy or hurting. If this happens we will talk to you about what we should do.

Greater Glasgow Primary Care NHS Trust: Patient Consent Form (for people with a learning disability)

Development of a measure of Social Self-efficacy for people with mild or moderate learning disability.

I have read the Patient Information Sheet. I understand what it says. I have got a copy to keep for myself. I have met Richard Payne. I have talked to him about what he wants to do. I have been able to ask Richard Payne questions about what he wants to do.

I understand that I can choose to stop helping Richard Payne at anytime. If I decide to stop helping no-one will mind. If I decide to stop helping it will not change the way people are with me or what people do with me.

The things we talk about will be private unless things are said that make us worry someone may be unhappy or hurting. If this happens I will be told what will happen.

I agree to take part in this research.

……………………	……………..
Participant	Independent Witness Position

Date ……………..

Greater Glasgow Primary Care NHS Trust: Patient Consent Form (concurrent validity element – non-learning disabled participants)

Development of a measure of Social Self-efficacy for people with mild or moderate learning disability.

I have read the Patient Information Sheet. I understand what it says. I have got a copy to keep for myself. I have met Richard Payne. I have talked to him about what he wants to do. I have been able to ask Richard Payne questions about what he wants to do.

I understand that I can choose to stop helping Richard Payne at anytime. If I decide to stop helping no-one will mind. If I decide to stop helping it will not change the way people are with me or what people do with me.

The things we talk about will be private unless things are said that make us worry someone may be unhappy or hurting. If this happens I will be told what will happen.

I agree to take part in this research.

……………………	………………
Participant	Independent Witness Position

Date ……………..

Appendix 3.4 Letter granting ethical approval

GREATER GLASGOW
PRIMARY CARE
NHS TRUST

Ref: AmcM/0027

18 October, 2000

Mr Richard Payne
Department of Psychological Medicine
Gartnavel Royal Hospital
1055 Gt Western Road
Glasgow
G12 0XH

Dear Mr Payne

PROJECT: Development of a measure of social self-efficacy for people with mild or moderate learning disability

Many thanks for sending the amendments for the above named submission. I am pleased to be able to tell you that the Committee now has no objections from an ethical point of view, to this project proceeding and ethical approval is formally granted.

Before your project commences you will also require to obtain management approval via the Research & Development Directorate, Gartnavel Royal Hospital.

I would also like to take this opportunity to remind you that you should notify the Committee if there are any changes, or untoward developments, connected with the study – the Committee would then require to further reconsider your application for approval. The Committee expect to receive a brief regular update every 6 months, and then a brief final report on your project when the study reaches its conclusion. (Failure to keep the Committee abreast of the status of the project can eventually lead to ethical approval being withdrawn)

May I wish you every success with your study.

Yours sincerely

A W McMAHON
Administrator – Research Ethics Committee

cc B Rae

Appendix 4.1 The Journal of Intellectual Disability Research Instructions for Authors

Papers (in English) should be sent to:

The Editor
Journal of Intellectual Disability Research
University of Wales College of Medicine
Meridian Court
North Road
Cardiff, CF4 3BL
Wales
UK
e-mail: winsladeb@cf.ac.uk.

Production Editor

Papers are accepted on the understanding that they have not been and will not be published elsewhere. The original and two copies of the manuscript should be submitted to aid refereeing and these should be typed (with a wide margin), double spaced, on one side of standard paper (A4-30 x 21 cm). A title page should contain the author's name(s), place of work, address for correspondence, email address, full title and short running title. Authors should retain one copy of the text, tables and illustrations as the editor cannot accept responsibility for damage or loss of manuscripts. Final versions of accepted manuscripts should be accompanied by disks.

A structured summary should be given at the beginning of each article, incorporating the following headings: Background, Method, Results, Conclusions. These should outline the questions investigated, the design, essential findings and main conclusions of the study.

The text should proceed through sections of Abstract, Introduction, Materials and Methods, Results and Discussion. Pages should be numbered consecutively in arabic numbers, but tables, footnotes, figure legends, including magnifications and acknowledgements, should be submitted on separate sheets. Tables and figures should be referred to in the text together with an indication of their approximate position recorded in the text margin. The reference list should be in alphabetical order thus:

Giblett E.R. (1969) *Genetic markers in Human Blood.*
Blackwell Scientific Publications, Oxford.

Moss T.J. & Austin G.E. (1980) Preatherosclerotic lesions in Down's syndrome. *Journal of Mental Deficiency Research* **24**, 137- 41.

Journal titles should be in full. References in text with more than two authors should be abbreviated to (Brown *et al.* 1977). Authors are responsible for the accuracy of their references.

Spelling should conform to *The Concise Oxford Dictionary of Current English* and units of measurements, symbols and abbreviations with those in *Units, Symbols and Abbreviations* (1977) published and supplied by the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE. This specifies the use of SI units. Illustrations should be labelled with the figure number and author's name in soft pencil on the back identifying the top edge. Photographs should be glossy bromide prints of good contrast and well matched, preferably with a transparent overlay for protection. Magnifications should be notified to the exclusion of the insertion of scales on prints. Colour photographs will be allowed only in special circumstances and the author will be asked to contribute towards the cost of reproduction. Line diagrams should be drawn with black ink on tracing paper or white card, or supplied as glossy prints. Papers may be judged to require extra-rapid publication by the Editor and referees.

Page proofs will be sent to the author's address on the title page and should be returned within 3 days of receipt. Alterations in the text, other than corrections, may be charged to the author. One free copy of the relevant issue will be distributed by the corresponding author to each co-author. Offprints may be published at prices determined by the Publisher by returning the form enclosed with page proofs.

Disks

The journal welcomes the submission of **accepted** articles on disk. Do not justify the lines of text. All disks must be accompanied by a hard copy of the paper together with details of the type of computer used, the software employed and the disk system, if known. Particular attention shoud be taken to ensure that any articles submitted in this form adhere exactly to the journal style. Further details may be obtained from the Publisher.

Royal Society for Mentally Handicapped Children and Adults (MENCAP)

The Royal Society for Mentally Handicapped Children and Adults is the largest national organization exclusively concerned with the intellectual disability and their families. The primary objective of the Society is to secure for intellectually disabled people provision commensurate with their needs. To this end, the Society aims to increase public knowledge and awareness of the problems faced by intellectually disabled people and their families, and thus create a sympathetic climate of public opinion as a necessary pre-requisite of their acceptance into the community.

The Royal Society for Mentally Handicapped Children and Adults provides:

- through a network of Local Societies and Regional Offices in all parts of the country;
- funds and support for research;
- specialist advisory and information services for the lay public and for professional workers;
- books and literature and, bimonthly, the *Journal of Intellectual Disability Research, Parents Voice* and *Viewpoint,* MENCAP's new newspaper;
- an ongoing programme to facilitate the sharing of knowledge by means of symposia, conferences and information exchange;
- residential facilities for further education and for care and holidays;
- support for developing countries to scholarships and journal subscriptions.

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Fax: + 44 (0) 171608 3254

RSMHC & A is a registered charity, supported entirely by voluntary contributions.

Applications for membership, or information, are invited by the Secretary General.

Appendix 4.2 The Glasgow Social Self-efficacy Scale (GSSES)

THE GLASGOW SOCIAL SELF EFFICACY SCALE: A QUESTIONNAIRE TO ASSESS SELF-EFFICACY IN PEOPLE WITH MILD TO MODERATE LEARNING DISABILITY

Answers to all questions are:

A LOT, A LITTLE BIT, NOT AT ALL

Participants' understanding of the response categories will be assessed using the fifteen practice items developed by Reynolds & Baker (1988). Participants scoring below 10 on these items will be deemed not to have sufficient grasp of the response categories needed in this study.

Visual prompts will not be used for these categories as they were not found to be helpful in the pilot study nor by Mindham (2000) who used similar response categories.

SECTION ONE

KEY-WORKER

Please tell me the name of your KEY-WORKER in the centre.

1. When you feel happy can you say to KEY-WORKER'S NAME 'I feel happy'?
2. When you feel sad can you say to KEY-WORKER's NAME 'I feel sad'?
3. If KEY-WORKER's NAME says something wrong can you say 'KEY-WORKER's NAME you are wrong'?
4. Can you talk to KEY-WORKER's NAME when he / she is busy?

FAMILY MEMBER

Please tell me the name of SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH.

5. When you feel happy can you say to SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH 'I feel happy'?

6. When you feel sad can you say to SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH 'I feel sad'?

7. If SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH says something wrong can you say 'SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH you are wrong'?

8. Can you talk to SOMEONE IN YOUR FAMILY YOU GET ON WELL WITH when he / she is busy?

BEST FRIEND

Have you got a best friend?

If yes: please tell me the name of YOUR BEST FRIEND.

Is your BEST FRIEND a member of staff in this centre?

If no and person lives in supported accommodation: is your BEST FRIEND a member of staff where you live?

If BEST FRIEND is a member of staff: have you got a BEST FRIEND who is not a member of staff?

If yes: please tell me the name of your best friend.

9. When you feel happy can you say to BEST FRIEND's NAME 'I feel happy'?
10. When you feel sad can you say to BEST FRIEND's NAME 'I feel sad'?
11. If BEST FRIEND's NAME says something wrong can you say 'BEST FRIEND's NAME you are wrong'?
12. Can you talk to BEST FRIEND's NAME when he / she is busy?

SECTION TWO

NEW PEOPLE

Please think about meeting new people.

What are you like at meeting new people?

If a new person, you don't know started at NAME OF THE RESOURCE CENTRE

13. Could you talk to him / her?

If a new person, you don't know moved in next door to you

14. Could you talk to him / her?

Skip question 15 if no BEST FRIEND was identified.

If you met a new person, you don't know at BEST FRIEND's NAME's house

15. Could you talk to him / her?

If you visited NAME OF ANOTHER RESOURCE CENTRE IN THE AREA and met someone new, you did not know

16. Could you talk to him / her?

If you are in a group of new people you don't know

17. Could you talk in the group?